

Outstanding Science and Service in IUFRO

Three Awards of the International Union
of Forest Research Organizations:
1953 – 2020

By
Victor K. Teplyakov

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This book presents short biographical stories of forest scientists granted with the Honorary Membership (since 1953), Scientific Achievement Award (SAA, since 1971), and Distinguished Service Award (DSA, since 1981) of the International Union of Forest(ry) Research Organizations (IUFRO).

The book should be of interest to forestry students, researchers and administrators, and for those who keen to learn more about IUFRO, founded in 1892, forest research development, and national and international processes in the forest sector over time.

Editorial team:

Walter Liese, Don Koo Lee, Heinrich Schmutzenhofer and Victor K. Teplyakov

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The International Union of Forest Research Organizations (IUFRO) is a non-profit, voluntary, international scientific union open to all organizations and individuals involved in forestry and forest products research. Currently, more than 120 countries are represented with approximately 15,000 participating scientists from more than 600 member institutions.

This publication is available online at <https://www.iufro.org/publications/general-publications>

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Foreword

Since its establishment in 1892, 130 years ago, IUFRO has provided a “home” for forest scientists from around the world to share the results of their work, develop collaborative activities, and advance all fields of forest science and their application for the benefit of forests and people. IUFRO’s success over the years has depended on the commitment, hard work and creativity of countless officeholders and the support of our member organizations.

Over the past many decades, IUFRO has recognized the extra efforts of individuals who contribute to strengthening our global network for forest science collaboration. Among the various forms of public recognition offered by IUFRO, two special awards stand out, given to individuals who have made major contributions to IUFRO’s work. These are the Honorary Membership and the Distinguished Service Award (DSA). The Honorary Membership award, created in 1953, is IUFRO’s highest award and acknowledges persons who have rendered particularly important and outstanding services to IUFRO. The DSA, created in 1981, recognizes those whose work has substantially contributed to furthering the scientific, technical, and organizational aims of IUFRO. In addition, during each IUFRO World Congress since 1971, the prestigious Scientific Achievement Award has been given to several individuals across forest science disciplines in recognition of outstanding research that advances regional or world forestry or forest research.

In this book, Professor Victor K. Teplyakov - himself a recipient of IUFRO’s Distinguished Service Award in 2019 - has painstakingly prepared individual bio-sketches of all recipients of these important IUFRO awards through 2019. This was no easy task, one that involved considerable effort to collect, verify, and assemble information from a variety of sources, including the IUFRO archives, the scientific literature and media resources, from awardees themselves and, in the case of colleagues who have passed on from this life, from colleagues and family members of the awardees.

This tremendous work is a significant contribution to documenting IUFRO’s long and rich history. For this, on behalf of the International Union of Forest Research Organizations, I would like to both congratulate and sincerely thank our colleague and dear friend Prof. Teplyakov – as well as the members of the editorial team who assisted him in this work.

Dr. John A. Parrotta
USDA Forest Service & IUFRO President (2019-2024)

Congratulatory message

I would like to extend my deepest appreciation to the all of the related officials for their full support to give this remarkable biography of Forest Scientists of IUFRO to the public. It is pleased to make a commemorative publication for IUFRO Honorary Membership, winners of Scientific Achievement Award (SAA), and winners of Distinguished Service Award (DSA) so that we can have an opportunity to look back the distinguished forest scientists of IUFRO.

Since 2002, the National Institute of Forest Science (NIFoS) has been leading the forest research cooperation with IUFRO to promote international collaboration in forest science research and to disseminate scientific knowledge to the contribution in the forest policy and management. Both organisations have developed forest science technology quantitatively and qualitatively with a mission to improve the completeness of forest science research. In particular, IUFRO World Congress 2010 in Seoul led by the NIFoS and IUFRO significantly contributed to raising awareness of forests by declaring the importance of forests globally as a critical value of low carbon green growth.

This year marks 100-years of forest science research that has begun in the Republic of Korea. NIFoS will take a big leap based on the forest research science, which was the cornerstone of success story of forest restoration in the past. By closely collaborating IUFRO, NIFoS will lead forest research cooperation by paying more attention to the value and role of forests in dealing with the link between forests and human health.

In closing, I hope that this publication will serve as a model for young forest scientists and various stakeholders responsible for the future of forest science.

President of NIFoS
Hyun Park, Ph.D



Preamble and Acknowledgements

The book consists of three parts, based on the following publications, each of which are also available online at <https://www.iufro.org/publications/general-publications>

- Part One is dedicated to the 41 persons awarded with the IUFRO Honorary Membership and based on the publication Teplyakov, Victor K. 2019. *Honorary Members of IUFRO: 1953–2019*. Vienna, IUFRO. 102 p.
- Part Two includes 96 bio-sketches of the winners of the IUFRO Scientific Achievement Award and based on the e-book Teplyakov, Victor K. 2019. *The Scientific Achievement Award of the International Union of Forest Research Organizations: 1971–2019*. Vienna, IUFRO. 120 p.
- Part Three comprises 115 names of the recipients of the IUFRO Distinguished Service Award and based on the e-book Teplyakov, Victor K. 2020. *The Distinguished Service Award of the International Union of Forest Research Organizations: 1981–2019*. Vienna, IUFRO. 139 p.

Each Part includes the original introductory and concluding sections from the above-mentioned publications. This publication includes also combined Bibliography, Acronyms and Abbreviations, and Name Index for all of the more than 250 Awardees.

Although acknowledgements are listed in each part of the book, I would like to express once again my deep appreciation to all people who supported my project over last few years. I am sincerely grateful to the researchers and scientists, relatives, colleagues and friends of living and deceased laureates of the IUFRO awards, to the librarians, officers of numerous research institution, governmental agencies, private businesses and non-governmental organizations, as well as readers, whose letters helped me to improve a number of the bio-sketches as well as the design of the book.

I am indebted to IUFRO's senior management, the IUFRO Secretariat, Coordinators of IUFRO Divisions and units for their support and encouragement during all my time with IUFRO, and, of course, my deep gratitude should go to Professor John L. Innes, the editor of my publications on the IUFRO awards.

I would like to express my heartfelt thanks to the National Institute of Forest Science, Republic of Korea, for the financial support of this publication, and Professor Don Koo Lee and Dr. Ho Sang Kang for being mediators in the process of fundraising for this effort.

The author

Part One

Honorary Members of IUFRO: 1953–2020



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*To all researchers and scientists
who dedicate their professional lives
to studying forests, trees, forest products
and related subjects ...*

FOREWORD

During the past 12 months, I have had the pleasure of speaking at the launch of two books relating to the history of IUFRO. One of these was the most recent History of IUFRO launched on the occasion of IUFRO's 125th Anniversary. And the other was the launch of the English translation of the book on Russia's role in the history of IUFRO. In both cases, I noted how important it is for us to record the history of IUFRO as deeply as possible. And it is an equally great pleasure for me to provide these introductory remarks on the completion of another substantial and important contribution to our history. In this case, an impressive documentation of the 40 past recipients of IUFRO's Honorary Membership.

All of these extraordinary individuals had a profound impact on IUFRO and contributed to the growth and development of this unique organization. Their personal stories and professional careers also reflect how the discipline of forest research has evolved and under which social, economic and political conditions this has happened. Our Honorary Members are prime examples of how wise leadership can support a formidable cause and how hurdles can be overcome and opportunities can be grasped. Their experiences constitute a very valuable resource from which lessons can be learned and a foundation on which future plans can be built. Recording these experiences is incredibly important for the future of IUFRO. And these experiences are surely most valuable for those of us currently involved in steering IUFRO into the future.

I have had the great privilege of knowing many of the more recent recipients of IUFRO's Honorary Membership. These for example include Past Presidents and Vice-Presidents from whom I have learned a great deal over the years. Their biographies have served to remind of the many contributions that they have made to IUFRO. Yet I have been especially pleased to have the opportunity to learn more about the lives and experiences of many earlier IUFRO leaders who for obvious reasons, I was not able to know. I am convinced that current and future members of IUFRO will derive as much pleasure and value as I have from the biographies presented in this book.

I am personally deeply indebted to Victor Teplyakov for the tremendous effort that he has made to assemble a magnificent collection of biographies of all past IUFRO Honorary Members. I am also grateful to the editorial team including past IUFRO Presidents Don Koo Lee and Walter Liese as well as past IUFRO Executive Secretary Heinrich Schmutzenhofer, who contributed to the completion of the book and incidentally, who are all honorary members of IUFRO. Importantly, my appreciation is expressed on behalf of the IUFRO Management Committee, the IUFRO Board and all of IUFRO's stakeholders globally. IUFRO is "the" global network for forest science co-operation superbly summarized in our new slogan launched at the recent 125th Anniversary Congress "Interconnecting, Forests, Science and People". Our great Union is substantially richer for having the biographies of the 40 incredible leaders that have contributed deeply to its history and who have been recognized with IUFRO's highest honour. We salute them and I trust that you will enjoy reading these biographies as much as I have done.

Mike Wingfield
IUFRO PRESIDENT 2014–2019

INTRODUCTION

Established in 1892 in Eberswalde and having celebrated its 125 Anniversary in Eberswalde and Freiburg, the International Union of Forestry Research Organizations (IUFRO) has united forest researchers from around the world over many decades. In doing so, it has promoted the use of science in forest cultivation and management globally.

The forest is as vulnerable as a child who does not understand the reasons for the gross or simply stupid behaviour of adults. However, the forest cannot respond with silent tears or bitter weeping ... it quietly dies under the pressure of the inadequate actions of people. These reflections over decades display the very true feeling of many foresters and people concerned about forest protection and sustainable forest management, both nationally and internationally.

This booklet takes a look at the most distinguished and prominent IUFRO officials and officers. In 1953, the Honorary Membership Award was established at the IUFRO Congress in Rome. Only 40 individuals, among those one woman, have been honoured so far by IUFRO with this highest recognition. The very first awards were made on impulse by the grateful participants of the 1953 Congress to three former IUFRO Presidents: Erik Lönnroth (Finland), Gyula Roth (Hungary) and Philibert Guinier (France).

At that moment, there was no formal description of the award or preconditions for its granting. The years have passed, and in the 1990s the first "IUFRO Honours and Awards" booklet was published, and the most recent edition of the booklet (2010) states that "IUFRO's highest award acknowledges persons who have rendered particularly important and outstanding services to IUFRO". Para 1.2.3 of Article III Membership (Statutes of IUFRO 2012) states: "Persons who have rendered particularly important service to the Union may receive Honorary Membership. The International Council approves their appointments on the recommendation of the Board".

This brochure was initially planned as a series of very short biographical sketches about IUFRO Honorary Members – people who dedicated their time, knowledge and expertise at the highest level to the Union's operation, development and promotion at national and international levels. However, through my work on these personal bio-sketches, I came to the realization that by strictly limiting the material to be included, there was a risk that the full extent of the achievements of each Honorary Member might be missed. On the other hand, too much detail would make it difficult to read the entire booklet. A balance was found in the form of a two-page story, including a brief description of the family, education, career development, professional activities at the national and international levels and recognition of the individuals' merits, their work at the IUFRO that led to their award of IUFRO Honorary Membership, a short list of important publications (Selected research sources), and the references that underlie this narration (Personal sources).

One of the main problems in this work is information, including its existence, availability and scope. The information for each person was collected from open sources, such as the Internet, books, journals, booklets and newspaper articles as well as correspondence with their relatives and colleagues. Since the language of the booklet is English, another serious obstacle was the lack of information about a person, not only in English, but also in their native language. Compiling diverse materials in different languages requires checking the translations. In addition, some biographical data, dates, relationships, affiliations, organizations' names and other information required double-checking as errors were found in some accounts.

Most of biographical sketches were discussed with several people, but the main contacts and names are presented in the Personal sources section of each account. All photographs in this publication were provided by relatives, the personal archives of individuals and organizations (including IUFRO), or taken from articles about IUFRO Honorary Members; the sources are named in the Personal sources' section.

ACKNOWLEDGEMENTS

There is only one name on the title page... However, this is not a fair representation of the people who contributed to this work. The study would have been impossible without the help of many colleagues from different organizations and countries, of the relatives of IUFRO Honorary Members and of the many people made tremendous efforts to link us with each other and across borders and languages. For each person, colleague and friend, whom I name below, as well as many others whom I have never seen or heard, I am indebted for their quick communication, comprehensive answers, and provision of information, advice, valuable comments and suggestions, for their kindness and desire to help. They represent different countries and languages, organizations and companies, the retired individuals at home as well as extremely busy persons in high positions in their own offices...

About 70 people.

To all of you, my heartfelt thanks!

First, I am sincere grateful to the relatives of IUFRO Honorary Members, and especially to their children: Rosemary Hillis (Australia), Rudolf Plochmann (Germany), Professor Roberto De Philippis, Francesca and Gualberto Fugalli and Simone Morandini (Italy), Roely Bol (The Netherlands), Tora Samset (Norway), Professor Emeritus Vladimir I. Melekhov (Russia), Dr. Gorazd Mlinšek and Professor Juri Diaci (Slovenia), Dr. Bernhard Schmithüsen (Switzerland), Mary Buckman and Cristopher R. Hermann (USA); grandson – Eduard van Vloten (The Netherlands); and stepson of Ulf Sundberg – Forest Licentiate Magnus J. Larsson, former Chief Scientific Officer at the Forestry Research Institute (Sweden).

Special thanks should go to my old and new colleagues and friends, who helped me to establish contacts with the right people within their countries and abroad as well as by providing valuable information, photos and other materials about IUFRO Honorary Members. They are Prof. Yoshi Yazaki, Monash University (Australia); Kaitlin DeBoer, Great Lakes Forestry Centre, Natural Resources Canada, Dr. Werner Kurz, Sylvie M. Gauthier and Dr. Ken Farr, Canadian Forest Service (Canada); Timo Leinonen, Regional Council of North Karelia (Finland); Associate Professor Frank Norbert, University of Sopron (Hungary); Giovanna Puccioni, Academy of Forest Sciences (Italy); Drs. C.H.J. (Ckees) van Oijen, Van Oijen Sustainability (the Netherlands); Elena Katkova, WWF (Russia); Robert Matthews, Forest Research at Forestry Commission (United Kingdom); Caryn Davis, Professor Klaus J. Puettmann, Dr. Michele Marie Justice, Professor Jim Johnson, and Katie Burgher, Oregon State University; Sarah Negley and Professor Wayne H. Smith, University of Florida, and Halle Mares, The Ohio State University (USA).

I am indebted to both my friends and the colleagues who provided not only invaluable information but also their service in the verification of the texts translated from 11 languages¹ and to Professor John Innes, the editor of the booklet in English, the 12th language. They are Prof. Emeritus Matti Leikola, Helsinki University (Finland), Michèle and Jean-René Cussenot (France), Prof. Konstantin von Teuffel, FORST, Forest Research Institute Baden-Württemberg, Freiburg, Prof. Dr. Uwe E. Schmidt, University of Freiburg (Germany), Professor Dr. Ir. GMJ (Frits) Mohren, Wageningen University and Research Center (the Netherlands), Research Prof. Dag Fjeld, Norwegian Institute of Bioeconomy Research (Norway), Dr. Ewa Zin, Forest Research Institute in Białowieża (Poland), Prof. Juri Diaci, University of Ljubljana (Slovenia), Prof. Sten B. Nilsson, CEO, Forest Sector Insights AB (Sweden), Dr. Hans-Caspar Bodmer, the Swiss Federal Institute for Forest, Snow and Landscape Research – WSL, and Alfred Kammerhofer, Swiss Federal Office for the Environment–FOEN (Switzerland). In addition, Giovanna Puccioni made my communication with the Italian correspondents much easier by translating messages in both directions.

I have received enthusiastic and spirited support from the IUFRO Honorary Members, Professors Emeritus, Professors and Doctors Walter Liese (Germany), Robert Z. Callaham (USA), Dušan Mlinšek (Slovenia), Robert L. Youngs (USA), Salleh Bin Mohd. Nor (Malaysia), Jacob L. Whitmore (USA), Heinrich Schmutzenhofer (Austria), Jeffery Burley (United Kingdom), Risto J. Seppälä (Finland), Eric Teissier du Cross (France), Don Koo Lee (Republic of Korea) and Su See Lee (Malaysia).

¹ French, Finnish, German, Hungarian, Italian, Dutch, Norwegian, Polish, Swedish, Russian and Slovenian. Selected research sources are presented in the language of publication and its English translation placed in brackets [].

I am thankful to IUFRO President Michael Wingfield, Vice Presidents *Björn Hånell* and John A. Parrotta for their support and the IUFRO Secretariat, particularly Brigitte Burger, Renate Prüller, and Gerda Wolfrum for providing information from the IUFRO archives.

I would like to express my deep gratitude to my colleagues in the editorial board – Walter Liese, Don Koo Lee and Heinrich Schmutzenhofer, for their navigation, support and encouragement during my work on this brochure.

The author

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HONORARY MEMBERS:



LÖNNROTH, Erik Johannes

Erik Johannes Lönnroth received the IUFRO Honorary Membership in 1953.

Erik Lönnroth was born on 2 August 1883 in Porvoo², the Grand Duchy of Finland (Russian Empire), into the family of Alfons Johan Alexander (1854–1930) and Gabriella (née Leinberg) (1857–1943) Lönnroth.

His father belonged to an old noble family – a well-known builder of railways in Russia. The baron and secret adviser Knut Adolf Ludvig Stjernvall (1819–1899) was the brother of his grandmother on his father's side. He had two elder brothers – Onni (1880–1920) and Arvo (1881–1964) and a younger sister, Gertrud (1896–1993).

In 1921, Erik Lönnroth married Licentiate of Medicine Elisa Sillman (1888–1968), who had two younger brothers.

In 1901, after finishing the Finnish Secondary School in Helsinki, Erik Lönnroth entered, and in 1906 graduated from the Geodesy Department of the Polytechnic Institute with a diploma in land surveying (engineer). Later, he expanded his capacity in forest management after graduating from the Evo Forest Institute.

He began teaching in 1908 at Tuomarniemi (*Domarnäs*) Forest School in Ähtäri (*Etseri*), and continued in 1914–1928 at the University of Helsinki in the field of forest mensuration and management. In 1919, he finished his Master's program and in 1926 he graduated as Licentiate of Agriculture and Forestry.

He obtained the degree of Doctor of Science in Agriculture and Forestry in 1927. In 1928, he was appointed as a Professor in Forest Mensuration and Management. In 1930–1934, he served as a Vice-Dean, and in 1934–1945 – Dean of the Faculty of Agriculture and Forestry at the University of Helsinki. In 1945–1950 he was Pro-Rector, and in 1950–1953 Rector of the University. As Rector he had major successes in building facilities: the *Metsätalo* (Forestry Building) and the *Porthania Institute Building*.

Professor Lönnroth was a prominent public figure in forestry, geographical, educational, scientific, cultural, political, and many other issues: in the Finnish Forestry Society he was a Fund Manager of (1919–1929) and its Chairman (1930–1931); in the Finnish Geographical Society he began as a member (1920) and became its Vice Chairman (1935) and Chairman (1936); in the Finnish Forestry Association he was the Vice Chairman (1924–1929); in 1934 he was appointed as Member of the Finnish Academy of Science and Letters. He was involved with the Fanny and William Ruth Foundation³, beginning as a member of the Board in 1934 and becoming Vice Chairman in 1944 and Chairman in 1947.

For his outstanding role in the life of Finland, Erik Lönnroth was decorated with a number of Finnish medals and orders starting in 1918, including the Order of the White Rose of Finland I (1953) and the Grand Cross of the Order of the Lion of Finland (1958). He was also decorated in foreign countries such as Latvia – Three Star 3 (1938), and Sweden – Order of the Polar Star 2 (1946) and its Grand Cross (1952).

Professor E. Lönnroth was one of the best-known Finnish scientists in his time. His research and scientific publications covered the growth and structure of forests, tree measurement, forest taxation, and the organization of forestry in general. He was member of a number of professional societies including the Finnish Forestry Society, which decorated him with the Silver Cajander Medal (1957), the Finnish Forestry Association, the Agroforestry Association, the Italian Academy of Forest Sciences and others.

He made important contributions to the development of theoretical conceptual tools as well as empirical research methods. For example, his 1929 mathematical model of forest growth has been a key factor in assessing the forest ecosystem's total biomass and comparing the continuous output (yield) and

² *Borgå* (in Swedish) – a commune and a small town 50 km East of Helsinki; a historical place where at the Sejm in Porvoo (*Borgå*) Alexander I personally declared Finland's entry into the Russian Empire, with all possible rights and freedoms that existed before that. <http://russian7.ru/post/velikoe-knyazhestvo-finlyandskoe-zhizn/>

³ This Foundation is still operational. <http://www.european-funding-guide.eu/scholarship/14622-scholarship>

biomass-based results of “one-to-one” investments. He published a 500-page manual on forest taxation and management that was actually used as a textbook until the 1940s. He developed devices for measuring tree height (hypometer) and diameter (dendrometer). Most of his research results were published in the internationally renowned series *Acta Forestalia Fennica*.

Professor Erik Lönnroth strongly promoted forestry science and participated in many conferences and congresses. Over a 60-year period starting in 1908, he visited many European countries.

In 1936, Professor Erik Lönnroth, was elected President of the International Union of Forest Research Organizations (IUFRO) for the period 1937–1940. However, circumstances predestined him for a serious challenge: guarding and protecting the Union through World War Two until the IUFRO Congress in Switzerland in 1948. Thus, he was IUFRO President for 10 years! He did tremendous work in upholding the sovereignty of IUFRO following the formation of the Food and Agriculture Organization of the United Nations (FAO) with which he signed an agreement on cooperation. In 1953, he was awarded with the newly established and first IUFRO price – IUFRO Honorary Membership Award – the highest recognition for a person making a significant impact on the activities of the Union as its long-term President.

Erik Lönnroth had many hobbies, including playing the violin, tourism, sport fishing and others.

Professor Erik Lönnroth passed away in Helsinki on 23 December 1971.

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ROTH, Gyula

Gyula Roth received the IUFRO Honorary Membership in 1953.

Gyula Roth was born on 26 September 1873 in Sopron, Hungary. His father Gyula Roth (1846–1919) was a well-known baker, and his mother, Emilia (née Hackstock) (1850–1942) was a carpenter's daughter. He was married to Mojzer (née Margit) (1886–1945). They had a daughter, Emmi (1908–1989), and a son Gyula Imre (1909–1980).

He finished the Evangelical Lyceum (today: Dániel Berzsenyi Evangelic High School) in Sopron and passed a maturity examination in 1892. Following that, he served his volunteer year, ending with an honorary examination and receiving the rank of reserve lieutenant. In 1893, he became a student at the Hungarian Royal Mining and Forestry Academy in *Selmecebánya*⁴. He studied forestry and various systems of natural and artificial forest restoration; he was also engaged in seed testing, wild game breeding and protection against game damage.

In 1896, he completed his studies with distinction. That same year he began his public service at the Lugo Forestry Directorate and, after two years of apprenticeship, he took the forestry state examination on 29 October 1898 in Budapest. He successfully obtained his diploma and then worked for two years in Lugo. Significant changes occurred in the 1900s; he was transferred to *Görgényszentimre* (now the settlement of *Gurghiu* in Romania) and, besides teaching, he also led the forestry experimental station at *Săbed*, Romania. At that time, he began to explore the possibilities and problems of forestry and forestry experimentation; these which would be a major determinant of his further professional activity.

In 1904, Jenő Vadas encouraged him to move to *Selmecebánya*'s Central Forest Experiment Station. In 1907, he was teaching forestry practices and a separate subject called "forestry experiments" at the Hungarian Royal Mining and Forestry College in *Selmecebánya*. Prior to this, he started his forestry experimentation. He was the first person in Hungarian forestry to draw the attention of forestry professionals to possible methods of sustainable forest management and maintaining an "everlasting or eternal forest".

In 1911, Gyula Roth was appointed as Chief Engineer and Experimental Adjunct. Starting in 1914, during World War One, he was repeatedly sent to Serbia, Bosnia and Herzegovina, and Montenegro to arrange and guide the collection of pine resin. In 1917, he became a Forest Counsellor. In 1919, he joined the research institute and college in Sopron. In 1922, he took over the Department of Forestry, Wildlife and Fisheries, which he led until 1947. From 1924, he also headed the research institute, and immediately started to rebuild it. At the Department, he taught forestry, wildlife, hunting, and fish farming. He also took over the experiment station and restarted the "Forestry Experiments" journal magazine in 1926.

In 1922, the College in Sopron was renamed the Hungarian Royal College for Mining and Forestry. In 1934, the Hungarian Royal József Nádor University of Technology and Economics was established in Budapest, and the College became part of this University as the Faculty of Mining, Metallurgy and Forestry. In 1937–1938, Professor Gyula Roth served as Dean of this Faculty. He retired in 1944, but as an invited lecturer, he taught in the Faculty in 1944–1952 and 1957–1959. The latter period is significant as many of the faculty members and students left Sopron in 1956, leaving behind a greatly diminished institution.

With changes in Hungarian politics and the progress of the Second World War, the financial situation of the research institute deteriorated markedly in the 1930s and it was gradually dismantled. Gyula Roth resigned in 1940 from the management of the institute. However, when the Forest Research Institute was re-established in 1949, he began to work actively again there. He was elected Chairperson of the National Forestry Association.

In the recognition of his merits, in 1952 he was awarded the title of Doctor of Agricultural Sciences (Forestry), in 1954 he received the Golden Degree of the Merit Order, and in 1955, the Kossuth Prize II degree as well as the White Rose Order and honorary member of the Finnish Forestry Association.

⁴ *Selmecebánya* (Hungarian), or *Schemnitz* (German), and now – *Banská Štiavnica* (Slovak) is a settlement near Zvolen in Slovakia.

He participated and gave presentations at the International Agricultural Congress in Austria (1906), two IUFRO Congresses in Germany (1907) and Belgium (1910), at the International Forestry Congress in Paris (1913). In 1929, at the 7th IUFRO Congress he was elected IUFRO Vice-Chairman. He had an excellent knowledge of languages: in 1932, he gave a speech on behalf of the foreign delegates thanking the Congress organizers, starting it French, continuing in German and completing it in English. At that Congress, he was elected President of the Union for 1933–1936. He proposed that Congresses should be held less often than every 3 years, as American colleagues had suggested and, emphasized that the Statutes of the Union specified an interval of 3–5 years. In addition, he suggested that to enhance continuity the outgoing President of the Union should remain on the Permanent Committee as its honorary member. Professor Roth, as Head of the Hungarian Forest Research Service, was in charge of preparations for the 9th IUFRO Congress in Hungary. The Congress took part in 1936 in several cities, including Sopron, Pécs, Szeged, Budapest, Debrecen and Lillafüred.

At the 12th IUFRO Congress in Rome in 1953, the Congress introduced a new IUFRO Award: Honorary Membership – the highest award to acknowledge persons, usually from the top management of the organization, who rendered particularly important and outstanding service to the Union. Professor Gyula Roth was one of three first recipients of this Honorary Membership Award along with former Presidents Professors Erik Lönnroth (Finland) and Philibert Guinier (France).

His hobbies were hunting and the art of painting.

Professor Gyula Roth died on 7 January 1961. His tomb is in the Sopron Evangelical Cemetery (parcel VII, 30–31).

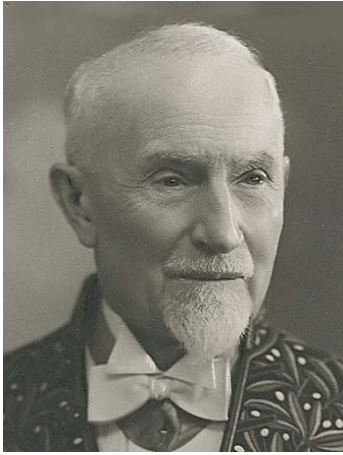
In honour of Professor Gyula Roth, a respected citizen of Sopron, a street in Sopron has been named after him.

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GUINIER, Philibert M.J.J.B.

Philibert M.J.J.B. Guinier received the IUFRO Honorary Membership in 1953.

Philibert Guinier was born on 21 June 1876 in Grenoble, France, into the family of Ernest (1837–1908), Inspector of Waters and Forests, Head of the Reforestation Department in Gap and a naturalist who was the first teacher of Philibert⁵, and Sylvie (née Vullierme) Guinier.

In 1907, he married Lucie-Mathilde Le Monnier (1882–?), the daughter of the botanist and politician Georges Le Monnier and he became the brother-in-law of the philosopher Jacques Rennes. Philibert and Lucie-Mathilde had three children: George-Ernest (born 1908), André-Jean⁶ (born 1911) and Elisabeth-Sylvie (born 1917).

After finishing high school and obtaining field skills from his father, in 1895, Philibert was admitted in the Agronomical Institute. In 1897, he graduated as engineer or, more precisely, he became a biologist and even more specifically, a tree geneticist. In the same year, he entered the National School of Water and Forests (*l'École Nationale des Eaux et Forêts de Nancy* – ENEF) in Nancy where he studied forestry until 1899, and then he began his professional career in the Alpine forest in Dauphiné.

From 1901 to 1904, he was an Assistant at the Forest Research and Experiment Station (*Station de recherches et expériences forestières*) of the ENEF where he was free to pursue his university studies at the Faculty of Sciences. There he met two scientists who influenced him: the botanist Georges Le Monnier and the biologist Lucien Cuénot. His teaching service started in 1904, when he returned the ENEF as a teacher of Forest Botany, and in 1924 became a holder of this chair.

During World War One Guinier was called to the service of the Aviation Industries, and then to the Ministry of Armament. He was in charge of the Technical Secretariat of the GÉ574 Inspection. This gave him the opportunity to expand his knowledge of timber used for aeronautical construction and artillery equipment. The timber had to meet certain physical and mechanical standards that required precise measurements of the wood structure, chemical composition, physical and mechanical properties. After the war, he introduced into the timber industry many of the methods developed for the Army.

In 1921, he became a Professor (on 18 February) and then Director (on 12 March) of the ENEF in Nancy. He reorganized the Forest Research and Experiment Station, and amongst other activities made a comparative study of races of exotic forest species, tested the acclimatization of some of them in France, studied tree pathology, organized a wood test laboratory, and created a course on xylology. In 1928, he established the Commission for the Study of Enemies of Trees, Felled Timber and Timber Use (*Commission d'Etudes des Ennemis des Arbres, des Bois Abattus et des Bois Mis en Oeuvre*), became its first Secretary-General, and then Vice-President. In 1935, under the impetus of Philibert Guinier, the National Wood Institute, the Central Wood Testing Laboratory and the Forest High School⁷ were founded in Paris. In 1935, invited by the Government of Argentina, he toured through the main forest regions and delivered lectures on forestry in France and forest situation in the country.

In 1941, Professor Guinier retired after working over 20 years as Director of the ENEF in Nancy. He taught forest botany there from 1903 to 1941. He trained over 780 French and 225 foreign foresters in biological sciences. The list of his publications includes more than 300 titles.

Following retirement, he moved away from Nancy, taking a well-deserved rest after such an active career. However, after World War Two, he realized how important timber production was to the economies of European countries, and that this depended on forest restoration. Ph. Guinier began his “second life”: more research and less administrative work. Fast-growing tree species such as poplar became his primary interest, and he dived deep into poplar silviculture: “*Populiculture*” as he called it. In 1942, he created a National Poplar Commission under the Directorate General of Water and Forests (*Commission nationale du*

⁵ Philibert’s full name was Philibert Marie Joseph Jean Baptiste Guinier.

⁶ Future scientist and Academician André Guinier (1911–2000), French physicist who did important work in the field of X-ray diffraction and solid-state physics.

⁷ *L’Institut National du bois* (INB), *Laboratoire central d’essai du bois*, *L’Ecole Supérieure du bois* (ESB)

peuplier, *Direction générale des Eaux et Forêts*), and in 1947 nine European countries established the International Poplar Commission (IPC) of which he became Chairman and which he linked to the Food and Agriculture Organization of the United Nations (FAO). In accordance with the International Code of Botany, Ph. Guinier developed a nomenclature of poplars that was adopted by the FAO's IPC; it later named him as the Commission's Honorary Founder-Chairman.

In France, Professor Guinier held many distinguished positions: as President of the Botanical Society (1946–1947), President of the Academy of Agriculture (1948), corresponding-member from 1923 and then full member in 1943, member of the Academy of Sciences in Rural Economy section (from 1938, full member in 1953). As a good mycologist, he was elected President of the French Mycological Society (*Société mycologique de France* – SMF). Ph. Guinier actively campaigned for the protection of nature. He was President of the Nature Protection Section of the Acclimatization Society and Member of the National Council for the Protection of Nature (*Section de protection de la nature à la Société d'acclimatation, Conseil national de protection de la nature*); this worked in close cooperation with the International Union for the Protection of Nature (IUPN, now – IUCN) following its establishment in 1948 in Fontainebleau, France. In 1933, Professor Guinier was elected as a member of the Royal Swedish Academy of Agriculture and Forestry.

When in 1929 at the 7th Congress in Stockholm, Sweden, the International Union of Forest Experiment Stations resumed its work Professor Ph. Guinier was among the leaders of the Union's revival. He was elected President of IUFRO for a term extending from 1 January 1930 to 31 December 1932. He demonstrated his outstanding leadership in organizing the 8th IUFRO Congress in Paris (France 1932) at the headquarters of the National School of Forestry. At that Congress, he was elected to the IUFRO Permanent Committee (1933–1936). For his dedication and valuable work for the Union, Professor Philibert Guinier was awarded IUFRO Honorary Membership at the 11th IUFRO Congress in Rome (Italy 1953), one of the first three scientists who received this high recognition from IUFRO.

Professor Philibert Guinier, honorary director of the National School of Waters and Forests, Nancy, passed away in Paris on 3 April 1962.

In commemoration of his input into the development of forest ecology and botany, forest science, practice and education in France, a crossroad in the forest of Fontainebleau bears his name.

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BURGER, Hans

Hans Burger received the IUFRO Honorary Membership in 1959.

Hans Burger was born on 11 February 1889 in Bremgarten, in the canton of Aargau (AG), Switzerland, into the family of the farmer Christian Burger and his wife Verena Burger (née Müller). In the family, there were several children who all passed away very early. In 1917, Hans married Ella Wälty, of Schöftland (AG), but they were unable to conceive children.

From 1908, he began his study of Forestry in Zurich at the Federal Polytechnic School Zurich (*Eidgenössische Polytechnikum*, later *Eidgenössische Technische Hochschule* – ETH – the Swiss Federal Institute of Technology), from which he obtained the Diploma of Forestry Engineer

(1911).

Hans Burger began his professional research career in 1913, when he passed the eligibility test for a higher forestry post. In 1914, he joined the Forestry Research Institute as an Assistant and would stay there almost his entire life. Director A. Engler hired Burger to carry soil analyses, evaluating and drawing the figures for the final report. Engler asked him to teach the methods used without losing contact with practice and if possible to improve them and to combine this examination with the solution of important forestry questions. Forestry experimentation thus became one of the fields of Hans Burger's expertise.

In 1921, he received a Doctorate degree in Forestry from the ETH under Professor Arnold Engler. His thesis was on the physical properties of forest and field soils. Many of his papers dealt with soils and their relationship to trees, stands and the environment. From 1934 until his retirement in 1954, Dr. Hans Burger was Director of the Swiss Federal Institute for Forest Research (*Eidgenössische Anstalt für das forstliche Versuchswesen* – EAFV; later, Swiss Federal Institute for Forest, Snow and Landscape Research – *Eidgenössische Forschungsanstalt für Wald, Schnee und Landschaft* – EFWSL; abbreviated to WSL) in Birmensdorf, Switzerland. At the same time (1935–1954), he had assignments at the Swiss Federal Institute of Technology (ETH) in Zurich delivering lectures on forestry experimentation, nature and homeland protection, forestry, wood science and use.

During this term, Dr. Burger authored and co-authored over 150 scientific publications representing an uncommon scientific accomplishment in terms of their scope, the universality of the issues, and the thoroughness of the work and interpretation of results. He was a well-known specialist in many forest-related fields including forest hydrology, forest meteorology in relation to forest and bare land, soil improvement by silvicultural measures, moisture and formation of tree crowns, botany and dendrology, structure of forest stands and wood formation.

His achievements in forestry research, research administration and forest education both nationally and internationally were highly valued. In 1943, he was awarded the status of Honorary Professor of the Swiss Federal Institute of Technology. In 1949, the Ludwig-Maximilian University of Munich and The Finnish Society of Forest Science recognized him as Honorary Doctor (*Dr. h.c.*). In 1958, the Italian Academy of Forest Sciences (*Accademia Italiana di Scienze Forestali*) accepted him as a Member. Professor Burger was also a member of the Royal Swedish Academy of Agriculture and Forestry.

Dr. Hans Burger participated in several IUFRO Congresses. On the first occasion, he made a presentation at the 9th IUFRO Congress in Hungary (1936). He then participated in the 10th IUFRO Congress in Zurich (1948) and the 11th Congress in Rome (1953), where he was elected as Member of the Executive Committee (now – Board) of IUFRO. He invested much time in the organization of the Congress in Zurich where he was elected as IUFRO President for 1949–1953. At the same Congress, as Chair of the Sub-Committee on Forest Bibliography he defended the Flury bibliographical system. At the 12th IUFRO Congress in Oxford (1956), Professor Hans Burger was proposed and in 1959, he received the award of IUFRO Honorary Membership.

Professor Dr. Hans Burger died on 31 October 1973 in Köniz, in the canton of Bern.

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VLOTEN, Heinrich (Hendrik) van

Heinrich van Vloten received the IUFRO Honorary Membership in 1962.

Heinrich van Vloten was born on 2 August 1895 in Dortmund Hörde, North Rhine-Westphalia, Germany, into the family of Willem (1855–1925) and Marie Helena (née Wagner) (1863–1933) van Vloten. His father came to Germany as a technician but soon became and was for many years a manager in the industrial zone of Ruhr. Heinrich had three elder siblings, Margarethe, Else and Johannes, and a younger sister, Johanna. In 1922, he married Octavie van den Bergh (1898–1944), who bore him four children – Berni, Willem Hendrik, Helenus (Helli) and Jannie Marie. Heinrich married Elizabeth Perrin (1903–1972) after his first wife died.

After finishing gymnasium in his hometown, Hendrik⁸ van Vloten studied forestry and graduated as an engineer from the National Higher College of Agriculture, Horticulture and Forestry (*Rijks Hoogere Land-, Tuin- en Boschbouwschool*) in Wageningen. He was then called up for military service, after which, in 1916, he entered and in 1921 graduated from the National Agricultural College (*Landbouwhogeschool*, now Wageningen University & Research), and from which in 1932, he obtained his doctorate degree. He began his professional career as a researcher at the “*De Dorschkamp*” National Forestry Test Station (*Rijksbosbouw proefstation*) where he stayed until 1927. His research interest in forest diseases brought him as a phytopathologist to the Institute for Mycology where he remained until mid-1946.

At the end of 1945, H. van Vloten was requested by the Chair of the Agricultural Department of the Netherlands Organization for Applied Scientific Research (*Nederlandse Organisatie voor toegepast-natuurwetenschappelijk onderzoek opgericht – T.N.O.*) at Wageningen to prepare for the establishment of the current Forestry Research Station. From 1 July 1946, he became its first director, but the Station did not become operational until 25 September 1947. Developing an idea that provenance studies could help control forest tree diseases, he made selection and breeding major parts of the Station’s research program. To get better results, he joined the Association of Seed Extraction Kilns and Forest Tree Nurseries in order to guarantee the provenance of seed and plants of Scots pine (W.H.G. – *Vereniging Waarborg Herkomst Groveden*) and the Dutch General Inspection Service for Forest Nurseries (*Nederlandse Algemene Keuringsdienst voor Boomkwekerijgewassen – N.A.K.B.*), becoming Chair of its Advisory Committee for deciduous and softwood species. In 1946 he became part of the Commission for the selection and breeding of Scots pine, the forerunner of the Foundation for Improvement of Plantation Forests (*Stichting Verbetering Houtopstanden*), which he chaired from 1954 until his retirement in 1961. He was also a member of the Dutch elm disease committee, the Commission for the Regionalization of Forestry (*Commissie Onderzoek Rationalisatie Bosbouw – C.O.R.B.*) and many others. As a forest owner, in 1947, van Vloten, became co-founder, then Chair and later –Treasurer and member of the Board of the Dutch Association of Forest Owners (*Nederlandse Vereniging van Bouseigenaren*).

At the Research Station, van Vloten started off being in charge of the Department of Pathology, and from 1957, of the selection and breeding work. He soon acquired a general international recognition in this area. For example, at the 7th through the 10th International Botanical Congresses (Stockholm 1950, Paris 1954, Montreal 1959, and Edinburgh 1964), he spoke about the connections between diseases and selection (breeding). The European Association for Research on Plant Breeding (in shorter EUCARPIA)⁹ recognized his achievements in this field of research and invited him to make a presentation on *The development and organization of forest tree improvement in the Netherlands* at its congress held in Wageningen in 1958. In 1960, he was head of the Netherlands official delegation at the 5th World Forestry Congress in Seattle, USA.

Dr. van Vloten was a member of the Royal Netherlands Society of Plant Pathology (K.N.V.P. – *Koninklijke Nederlandse Plantenziektkundige Vereniging*) and the Royal Botanical Society of the Netherlands (K.N.B.V. – *Koninklijke Nederlandse Botanische Vereniging*). He was also member of the Dutch Forestry

⁸ After moving in the Netherlands, Heinrich has changed his name to Hendrik, spoken Henk, or Heini as his sisters and parents called him at home.

⁹ European Society of Breeding Research was founded in 1956 and has its headquarters in Wageningen.

Association (from 1925, Vice-Chair in 1933–1938, and Chair in 1942–1947), Dutch National Poplar Commission and its Chair (from 1957), and a member of the Permanent Committee of the International Poplar Commission under Food and Agriculture Organization of the United Nations (FAO). From 1947 until 1963, he was Chair of the Editorial Board of the Dutch Forestry Journal (*Nederlands bosbouw tijdschrift* = *Nederlands Bosbouw Tijdschrift*), and an advisory member in the “Committee of Four” of the journal.

He was recognized with the title Honorary Director of the Forest Research Station at Wageningen, and became an honorary member of the *Societas Forestalis Fenniae*.

Hendrik van Vloten was active in IUFRO from his first IUFRO Congress (Zurich, Switzerland 1948) when he was elected as member of the Board for 1949–1953. At the 11th IUFRO Congress in Rome (Italy 1953), he was re-elected as Leader of Section 24 Forest Protection for 1954–1956 as well as being elected IUFRO Vice President and a member of the Permanent Committee. In 1954, in Wageningen, he organized a conference on root and butt rot of forest trees by *Fomes annosus* and in 1960, a larger conference and study tour was held in Scotland¹⁰. At the 12th IUFRO Congress in Oxford (UK 1956), he became a member of the team dealing with the revision of the IUFRO Statutes – the changes were adopted at the 13th IUFRO Congress in Vienna (Austria 1961). In 1957, when he resigned as Leader of Section 24, he became a member of a working group on International Disease Resistance Studies. At the 9th Botanical Congress (Montreal 1959), he ran the Forest Botany Section.

For his service to IUFRO and achievements in developing and advancing the Union, in 1962 Professor H. van Vloten was awarded IUFRO Honorary Membership.

Professor Dr. Ir. Hendrik van Vloten passed away on his family property in Nunspeet, Gemeente Nunspeet, Gelderland, Netherlands, on 15 October 1964 at the age of 69.

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Special conference on root and butt rots of forest trees. IUFRO Section 24. Wageningen, July 22–26. 1962.



MACDONALD, James

James MacDonald received the IUFRO Honorary Membership in 1962.

James MacDonald was born on 3 August 1898 in Blairgowrie, Perthshire, in Scotland. After finishing Blairgowrie High School in 1915, he was sent to the battlefields of World War One as an Officer in the Royal Flying Corps.

In summer 1923, he earned his B.Sc. degree in Forestry from Edinburgh University and in November began his professional career in the Research Branch of the Forestry Commission (FC = The State Forest Service). This organization was established by the Forest Act of 1919 for England, Wales and Scotland, enabling it to make surveys, experiments and research. James

MacDonald was among the pioneers of sample plots, working on these from 1924. In 1930, he became a Research Officer in Scotland and from 1932, also in England and Wales, enabling him to collect further data and start compiling growth and yield tables. He also adjusted old and developed new methods and instructions for sample plot establishment and measurement. These positions gave him an opportunity to publish a number of research papers on silviculture and mensuration, for example on the growth and yield of conifers (1928), the form of the stem in coniferous trees (1932–1934), and on experimental methods used in Britain (1933) that was submitted to the 8th IUFRO Congress held in Nancy, France in 1932, and others. In 1936, he was promoted to be in charge for the former East Anglia Division in Cambridge, from where he began implementing his plan on a series of experiments dealing with spacing in plantations.

During the World War Two, he was an officer at the Home Timber Production Department at the Ministry of Supply, first at Cambridge and later in Scotland. He was responsible for timber supply operations in several regions of England and Scotland. During this period, James MacDonald became acquainted with the large areas of private woodlands in England and Scotland. Later, in October 1960, at a symposium on natural resources held at the Scotland's National Academy of Science and Letters (the Royal Society of Edinburgh), he recognized that the country needed a wood processing industry. That became the turning point in the commercialization of the Forestry Commission and of its active marketing of wood products to end-users. At the end of the war, he returned to the Commission, and in 1946, he was promoted to the rank of Conservator of Forests in the Office of the Director, Scotland, in Edinburgh.

On 1 July 1948, he became Director of Research and Education, and from 1 January 1960 until the end of 1962, he was Deputy Director General of the Forestry Commission. His duties also included the control of all the Commission's publications, and he made a great contribution to the dissemination of forestry research results through the publication of the first *Report on Forest Research* for 1949. This has been regularly published ever since. In addition, he made the *Journal of the Forestry Commission* (JFC) publicly available. From 1948, he was a member of the JFC Editorial Committee, acting its Chairman from 1959 to 1962.

James MacDonald made a great contribution to the centenary celebration of the Royal Scottish Forestry Society – he published a paper on *Forestry Research and Experiment in Scotland 1845–1953*. However, he felt that separate directions of forest research meant that the system as a whole was ignored, and that this was true for the whole country. From this point of view, he stressed that research should be more concentrated on understanding the ecological functions of the forests.

James MacDonald was elected Fellow of the Royal Society of Edinburgh (1957), and appointed a Commander of the British Empire (CBE).

James MacDonald was active in the IUFRO from the 1950s. At the 11th IUFRO Congress in Rome (1953), he was the person authorized to convey the offer of the UK to host the next Congress. He was a member of the International Council; at the Congress, he was elected a member of the IUFRO Permanent Committee, and he made provided remarks of gratitude during the closing ceremony. As Director of Research and Education at the Forestry Commission, he actively participated in the preparations for the 12th IUFRO Congress that was held in Oxford, UK in 1956. At the Congress, he was elected President of the Union for 1957–1961. The Congress also decided that he should be the editor of the technical papers submitted to the Congress as well as the Proceedings of the Congress.

During his Presidency, the IUFRO Statutes were revised, which resulted in the creation of the Enlarged Committee that included the Leaders of the twelve Research Sections in decision making along with the Permanent Committee. In addition, the first logo of IUFRO was designed and since that time, it had been placed on the proceedings of IUFRO Congresses. President MacDonald, when the Forestry and Forest Industries Division of the Food and Agriculture Organization of the United Nations (FAO)s asked to be released from its duties of the Secretariat for the Union, sought and obtained support from the Forestry Commission, and from 1957 until 1973, the voluntary Assistants to him as well Presidents J. Speer, G. Jemison and I. Samset undertook the IUFRO Secretariat functions. Many international meetings of IUFRO were held with the FAO and the Commonwealth Forestry Association. He was awarded with Honorary Membership of IUFRO in 1962.

In late January 1963, James MacDonald was denied his post as Deputy Director General of the Forestry Commission for health reasons, and on 28 April 1963, he died at the age of 64.

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KREUTZINGER, Maksymilian

Maximillian Kreutzinger received the IUFRO Honorary Membership in 1967.

Maximillian Kreutzinger was born on 3 December 1904 in the village of Kiełczewo, Poland, about 40 km south-west of the regional capital Poznań into the family of schoolteachers Feliks and Leokadia Kreutzinger. In 1945, he married Teresa Jolanta Przybylska from Warsaw, and they raised a son Krzysztof Witold (1946) and a daughter Krystyna Aleksandra (later Fangrat) (1953).

After finishing secondary school at the state gymnasium in Kościan in 1923, Maksymilian graduated in 1929 from the Faculty of Agriculture and Forestry at the University of Poznań with the title of Forestry Engineer. After military service in the Artillery Cadet School of the Officer Reserve in Włodzimierz Wołyński (1929–1930) in October 1930, he began his professional career at the Department of Forest Management of the Directorate of the State Forests in Toruń, which he continued until 1939. In 1939, at the very beginning of the World War Two, he was mobilized as a commander in artillery, but after the capitulation of Warsaw in October 1939, he spent over 5 years in German captivity in four different prisoner-of-war camps. Even in such harsh conditions, Maksymilian was active. His fluent German, English and French made him one of the leaders of various forms of activity, such as leadership in the Association of Foresters lecturing on forest issues and drafting “Basic principles of forest management”.

In April 1945, the British Army released him and, in 1947, he returned to Poland and began working as an inspector at the Department of Forest Management in the Ministry of Forestry (1947–1948). In 1948, he assumed the position of head of the Department of Forest Management at the Forest Research Institute (*Instytut Badawczy Leśnictwa – IBL*) in Warsaw. From 1949 until 1962, he was Director of the Institute. He not only advanced research activities, but also built a new team of specialists, re-built the Institute’s Council, and erected a new building for the Institute as well as many new outlets in Warsaw.

In parallel to his research activities, from 1952 he worked as an Assistant and from 1954 until 1962 – as an Associate Professor at the Faculty of Forestry in the newly established (1951) University of Agriculture (*Wyższa Szkoła Rolnicza – WSR*) in Poznań. In 1961, he defended his doctoral degree thesis entitled “The impact of economic integration on the distribution and classification of Polish forests”. In 1964, he was given the title of Associate Professor.

In 1962, he left his position to join the Forestry Department of the Food and Agriculture Organization of the United Nations (FAO). He moved to Pakistan to participate in the development of the Pakistan Forest Research Institute in Peshawar. However, due to severe illness, he returned to Poland after a few months. In 1963, he resumed his work at the Forest Research Institute as an independent researcher in the Department of Water Management, and became its head on 1 March 1969.

Dr. Kreutzinger was the author or co-author of over 40 publications, scientific reports, instructions and manuals on forest management, on forestry in the national economy, and on the management and use of natural resources and their conservation. He was a member of many editorial committees of professional forest journals. He was an organizer and editor (1949–1952) of *Las Polski* (Polish Forest) as well as a national magazine for foresters *Sylwan* (1953–1954), *Folia Forestalia Polonica* and *Postępy Techniki w Leśnictwie* (Technology Advances in Forestry).

As a member of many national governmental agencies, scientific and technical councils, and advisory boards, and as a member of various non-governmental organizations and societies, including the Polish Academy of Sciences, Dr. Kreutzinger exerted great influence on the development of the forest management and nature conservation sectors in Poland. He was member of the National Council of Nature Conservation (1950–1969) and also its Deputy Chairman (1956–1958), a member of the Presidium and Deputy Chairman of the Committee on Forest Sciences at the Polish Academy of Sciences (1952–1962), and the President (1956–1958) of the Main Board of the Nature Conservation League (*Zarząd Główny Ligi Ochrony Przyrody –*

ZG LOP). He was also active in the FAO, the European Forestry Commission, and the Council for Mutual Economic Assistance¹¹.

In recognition of his national and international achievements he was awarded with the Cross of Valour (1939); he was distinguished for his professional merits, among others with the Golden Cross of Merit (1955), the Knight's Cross (1959) and the Commander's Cross of the Order of Polish Rebirth (*Polonia Restituta*) (1965) and various medals and marks. He became a corresponding member of the Finnish Forest Society in 1962.

Dr. Kreutzinger represented Polish foresters and forestry at many international congresses and conventions. He participated actively in IUFRO starting at its 10th Congress in Zurich, Switzerland (1948) where he was elected member of the Permanent Committee for 1949–1953 and at the next Congress in Rome, Italy (1953) where he was re-elected for another term – 1954–1956. At the 12th IUFRO Congress in Oxford (UK 1956), before closing the session, Professor Kreutzinger announced the Polish government's decision to give a pair of European bison to the Forestry Commission of Great Britain. He was a member of the team that revised the IUFRO Statutes, with the revision being adopted at the 13th IUFRO Congress in Vienna, Austria (1961), during which he was elected to the Permanent Committee for a third time. In 1967, at the IUFRO Congress in Munich, Germany, Professor Kreutzinger was elected an Honorary Member of IUFRO.

Because of a progressive disease, Professor Maximilian Kreutzinger died in Warsaw on 15 August 1969. He was buried in Warsaw's historic Stare Powązki Military Cemetery.

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¹¹ An international organization of the Eastern Bloc countries operated from 25 January 1949 to 28 June 1991.



SAARI, Eino Armas

Eino Armas Saari received the IUFRO Honorary Membership in 1967.

Eino Saari was born on 7 October 1894 in Turku¹², in the Grand Duchy of Finland (Russian Empire), into the family of the guardian Juho Paavali Saari (other transcription: Johan Paulus Saari) and Ida Loviisa Lindgren.

In 1913, Eino Saari matriculated from Turku's Finnish Real Lyceum and entered the University of Helsinki, from which he graduated in 1916 as a Forest Manager. He got his Master of Philosophy in 1919, and defended his PhD thesis in 1923. His Ph.D. thesis was on the domestic consumption of wood in rural areas in Turku and Pori provinces and was published a year prior to the defense – in 1922. In 1925, Eino Saari married Aino Helmi Koivisto, and the couple had two daughters – Maija (1927) and Leena (1934–1937).

On the way to his highest degree, from 1916 until 1922, Eino Saari served as assistant in Forestry at the University of Helsinki and as a researcher at the Finnish Forest Research Institute, where he later also served as the Head of the Wood Utilization Research Programme in 1927–1932. During 1922–1925, he served as Head of the Statistics Office at the National Board of Forestry. This experience allowed him to direct the First National Wood Utilization Census of Finland that yielded much information, such as the national forest balance of Finland.

In 1925, at the age of 31, Eino Saari was appointed as a Professor of Forest Policy, later Forest Economics at the University of Helsinki. From 1942 until 1948, he also was the leading expert for the Central Association of Finnish Forest Industries.

Professor Saari gave lectures, undertook research, and published papers on a variety of topics dealing with agriculture and forestry and agrarian and forest policy, not only in Finnish but also in English and German languages. He presented the results of most of his research in the internationally renowned series *Acta Forestalia Fennica*, covering not only forestry policy and economics, but also the timber market, timber prices, wood consumption, and wood supply in Finland. He also provided the essential foundations for international timber market research.

To expand his capacity and scope of research, Prof. Saari studied at Oxford University in 1925 and London in 1934, as well as visited Central Europe (1928) and France (1939). As a fellow of the Rockefeller Foundation, he often visited North America. As a result of his research carried out in 1934–1936 on forest exploitation as a Rockefeller Foundation grant holder, Prof. Saari published several reports, including “Some features of the United States forest policy” / *Piirteitä Yhdysvaltain metsätalouspolitiikasta* (1934), “Sustainability of Finnish forestry” / *Die Nachhaltigkeit der finnischen Forstwirtschaft* (1934), “Exports of Finnish Forest Products in Relation to the Forest Resources” (1935), and “Methods employed in different countries in comparing the forest resources and the cut” (1936).

At a national level, Professor Saari chaired several state committees and advisory boards, and was a member of boards such as the Supervisory Board of the Finnish Cultural Foundation, Enso-Gutzeit Oy's Supervisory Board, and the Board of the Finnish Forest Research Institute, Finnish–American Association, Finnish Forest Association, Finnish Forest Research Society, Finnish Statistics Society, and others.

Professor Saari represented Finland in the Finland's UN delegation, and the Finnish delegation at the Food and Agriculture Organization of the United Nations (FAO) General Assembly. From 1948 to 1968, he served as Chairman of the National Finnish FAO Committee and Development Advisory Board as well as on several international bodies such as the UN Economic and Social Council and FAO European Forestry Commission. He worked as an FAO expert in forestry and timber farming policy in Paraguay in 1952–1953. In 1949, he was president of the 3rd World Forestry Congress, and he participated in the follow up congresses in Dehra Dun, India (1954) and in Seattle, USA (1960).

Professor Saari was a prominent public figure: in 1951, he was elected President of the Finnish People's Party, in 1954 as a Member of Parliament and as Chancellor of the Society of Social Sciences. In 1954–1958

¹² Swedish: *Åbo*.

he served on the Law Committee at the District Court of Uusimaa County and in 1956–1957, he worked as a Minister of Social Affairs in the Cabinet Fagerholm II.

Eino Saari was a visiting professor at the University of Oregon, USA, in 1961. He received several Honorary Doctors (*h.c. – honoris causa*), such as Doctor of Philosophy *h.c.* (University of Göttingen, 1953), Doctor of Forest Sciences *h.c.* (Humboldt University, 1960), Doctor of Science *h.c.* – University of Syracuse, 1961), and Doctor of Social Sciences *h.c.* (University of Tampere, 1965). He was decorated with a number of Finnish and foreign orders, such as the Swedish North Star Order, the Bounty Order with Star of the Federal Republic of Germany, and the French Merit Agricole Order.

Professor Eino Saari strongly promoted forestry science and participated in many conferences and congresses. He authoritatively influenced the development of international forestry science through the International Union of Forest Research Organizations (IUFRO), starting in 1936. Amongst other things, he was a long-term (over 30 years) advisor and Chairman of the Joint FAO/IUFRO Committee on Bibliography, as well as IUFRO Research Section 01 Leader. For his fruitful work in IUFRO, Professor Eino Saari was awarded with IUFRO Honorary Membership in 1967.

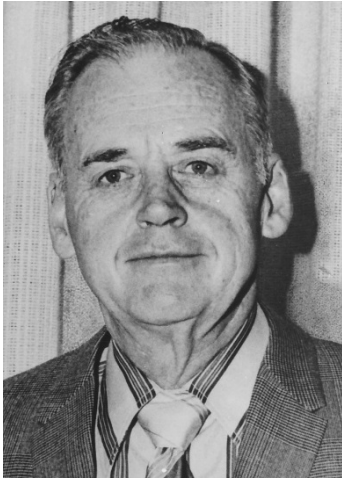
The founder and the leader of forest economics research in Finland, Professor Eino Saari passed away on 13 April 1971 at the age of 77 years.

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JEMISON, George Meredith

George Meredith Jemison received the IUFRO Honorary Membership in 1971.

George Jemison was born on 11 July 1908 in Spokane, Washington, USA, to George Homer (1877–1953) and Margaret Ellen (née Meredith) (born 1878) Jemison. He had a sister, Frances Margaret.

In 1931, he married Beatrice Gibbs, who died in 1990. His daughters, Meredith Ann Dick and Carol Reynolds, and since June 1992 his second wife, Emily Hislop Carlisle, have supported him. In 1927, he began his career at the USDA Forest Service in Idaho. In 1931, he graduated from the University of Idaho with a Bachelor of Science degree in Forestry; he got his Master of Forestry degree from Yale University in 1936, and earned a Ph.D. in Plant Physiology and Mensuration from Duke University in 1942.

After graduation, George resumed his career with the USDA Forest Service in forestry research on fire weather and danger studies at the Priest River Experimental Forest, Idaho, administrated by the Northern Rocky Mountain Forest and Range Experiment Station, Missoula, Montana. His first work there was actually as a student. In 1937, he went to the Southeastern Forest Experiment Station of the USDA Forest Service in Asheville, North Carolina, where he continued his research on forest fires and forest management, and from 1942 to 1950, he was Head of the Forest Management Division of that station.

In 1950, he moved to Missoula, Montana, where he was Director of the Northern Rocky Mountain Forest and Range Experiment Station. In 1954, he became director of the Pacific Southwest Forest and Range Experiment Station at Berkeley, California; and in 1957, he moved to Washington DC, being promoted as Associate Deputy Chief of the Branch of Research. In 1965, he was appointed Deputy Chief for Research at the USDA Forest Service. In 1959, George Jemison led the first group of U.S. foresters and business people ever to visit the USSR, where they observed forest conditions and forestry practices in the country. This was the first serious contact between the Ministry of Forestry, the Pulp and Paper and Woodworking Industry of the USSR and the US Forest Service.

After the 5th World Forestry Congress held in Seattle (1960), President John F. Kennedy in his *Special Message to the Congress on Agriculture* on 16 March 1961, stressed, “One of our most important natural resources, and one of our most neglected, is our forest land.”¹³ He also called for the expansion of forestry research that had been “too long neglected”. To solve the task, and “to produce the wealth of renewable forest resources needed by the year 2000”, in 1962 George Jemison was assigned full time to prepare the ten-year research plan for the USDA Forest Service with a forecast to the year 2000. Published in May 1964, *A National Forestry Research Program* became one of the leading documents for the USDA FS research system. Internationally, he directed USA-supported forest research programs in 20 countries for a few years.

Dr. George M. Jemison retired from government in 1969 after 38 years of distinguished service and a career in research and administration. He soon became a Professor of Forest Management at the School of Forestry, Oregon State University (OSU), Corvallis, Oregon, and retired for the second time in his life as a Professor Emeritus on 30 June 1974.

His contributions to forest research brought him many honours, including in the United States and abroad. From 1931, he was a member of the Society of American Foresters, became a Fellow in 1961, and member of Council (1962–1966). He received the SAF’s Barrington Moore Memorial Award for achievements in biological research in 1971, the USDA Distinguished Service Award, a honorary Doctor of Sciences from the University of Idaho, and Honorary Membership in the Italian Academy of Forest Science.

Dr. Jemison was an active IUFRO officer, starting in the early 1960s. He established IUFRO Section 26 *Forest Recreation and Wildlife*. From 1962 to 1967, he contacted many people, national institutions and international organizations including FAO, IUCN, WWF, the Committee of the Council of Europe and others totalling over 300 respondents from 56 countries. The discussion concerned how the activities of Section 26 might fit into the International Biological Program (IBP). The Section was established at the 14th IUFRO Congress in Munich, Germany (1967). At the same Congress, Dr. Jemison was elected President of IUFRO for

¹³ <https://www.presidency.ucsb.edu/documents/special-message-the-congress-agriculture-1> Retrieved 24.12.2017.

1968–1971. He became the first American President of IUFRO and arranged its 15th World Congress in Gainesville, Florida (1971) – the first one on the American continent.

Having gained good experience in strategic research planning while working for the USDA Forest Service, George Jemison made a great contribution to IUFRO during his Presidency. This was a challenging period of reorganization that included clarification and widening of IUFRO's goals, adoption of new Statutes and Internal Regulations, replacing the Permanent Committee with an Executive Board consisting of regional representatives and technical program coordinators (Division Coordinators), replacing the Research Sections with Subject Groups and Project Groups, combined into six Divisions, developing new operational procedures for the International Council, addressing the issue of the re-establishment of the Permanent Secretariat, and other organizational matters. In addition, for the first time, the Congress used a slogan *The Role of Research in the Intensification of Forestry Practices and Activities*, the IUFRO Scientific Achievement Award (SAA) was established, and IUFRO News (an information source for IUFRO members, officers and officeholders) was launched.

Considering all this, the IUFRO International Council unanimously elected Professor George Jemison to the rank of "Honorary Member" for his valuable contributions to IUFRO. He was the only person to receive this honour while also receiving another: appointment to the Executive Board as Past President, a post that he held until 1976. He participated in several more Congresses, including one in Tampere in 1995.

Professor Emeritus George Jemison passed away at the age of 94 in Medford, OR, on 8 December 2002 after an extended illness.

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SPEER, Julius

Julius Speer received the IUFRO Honorary Membership in 1971.

Julius Speer was born on 3 December 1905 in Talheim, in the State of Württemberg, Germany, into the family of protestant pastor Julius (1878–1945) and Gertrud (née Pleibel) (1881–1968) Speer. There were three other children in the family, Walter, Martin, and Ingeburg. From 1937 to 1954 Julius was married to Elisabeth Fandrey and, in 1954 he married Annemarie Neizert.

Until 1922, he attended elementary school and the Progymnasium in Korntal near Stuttgart. He then studied at the Eberhard Ludwig Gymnasium in Stuttgart where he passed the matriculation examination in 1924. He then studied forestry and national economics at the Eberhard Karls University in Tübingen, the Ludwig-Maximilian University of Munich, and the Albert Ludwig University in Freiburg im Breisgau. In 1928, he received a diploma in forestry sciences and began his professional forest career as a forestry trainee (*Forstreferendar*) at the Württemberg State Forestry Administration (*Württembergische Staatsforstverwaltung*). In 1929, he obtained a Ph.D. from the Faculty of Natural Sciences and Mathematics of the Albert Ludwig University. In 1930, he passed Great Forest State Examination (*Große Forstliche Staatsprüfung*) for the higher forest service in Württemberg and was sent to the WSFA's Stuttgart Center where he obtained extensive experience in wood sales and many contacts with forest owners and timber merchants. He also served there as a forest assessor (*Forstassessor*) in 1930–1932 and a forester (*Forstmeister*) in 1933–1934.

In the fall of 1934, he began as an assistant lecturer at the University of Freiburg, where he became Associate Professor (Dozent) in September 1935, was promoted to full Professor of Forest Policy and Forestry Management in 1942¹⁴ and served there until 1952 interrupted by the six years of World War Two. In 1952, Professor Speer accepted an offer to be a Professor of Forest Policy and Forestry Economics and a Chair of Forest Policy and Forest Management at the Ludwig-Maximilian University of Munich. He also served there as Dean of the Faculty of Natural Sciences and Mathematics, Dean of the State Economic Faculty (1955–1956) and Rector of the University (1960–1963) until his retirement as Professor Emeritus in 1964. All at once, he worked at the Bavarian Forest Research Institute¹⁵ (1952–1964) serving as its Chairman (1955–1957).

He combined his service in education with several presidential positions, at the German Forestry Council (DFWR – *Deutscher Forstwirtschaftsrat*) in 1953–1965, IUFRO (1962–1967), the West German University Rectors' Conference (*Westdeutsche Rektorenkonferenz*) in 1962–1964, the German Research Foundation (DFG – *Deutsche Forschungsgemeinschaft*) in 1964–1973, being also a member of its Science Council in 1965. As the DFG President, he introduced successful self-government in science and research planning, and during his tenure increased the DFG budget from 146 million to 540 million Deutschmarks. In addition, he had an impressive record of public service as a member of the Assessment Advisory Board at the Federal Ministry of Finance (1950), a member of the German Council for Landscape Management (1963), President of the Science Council (*Wissenschaftsrat*) in 1965–1974, Vice-President of the Alexander von Humboldt Foundation (until 1973), and the Fritz Thyssen Foundation (1964–1975).

His scientific work was mainly concerned with the increase in productivity of forests, the organization of forest management, forest taxation and forestry operational issues of cost accounting in a free market economy, the interaction between state power and private forest owners, and the relationship between forestry and timber industry. He influenced many important forest policy events. He introduced significant forest policy initiatives into parliamentary institutions and governments and thus gave the forestry sector in Germany great political weight.

Professor Speer made a great contribution not only to German forestry but also in the development of an international forest research network for which he was honoured with high national and international awards. Among the national awards were the Bavarian Order of Merit (1964), the Great Cross of Merit of the Federal Republic of Germany (1967), the Great Cross of Merit with Star of the Order of Merit of the Federal

¹⁴ His reputation and prestige were so high that he was appointed despite his absence in the University.

¹⁵ *Forstliche Forschungsanstalt München (FVA)*, later The Bavarian State Institute of Forestry = *Die Bayerische Landesanstalt für Wald und Forstwirtschaft (LWF)*

Republic of Germany (1973), the honorary plate of the Bavarian Ministry of Food, Agriculture and Forestry (1980), and the Bavarian Maximilian Order for Science and Art (1984). He was elected a corresponding member of the Bavarian Academy of Sciences in Munich, and made an honorary member of the German Forestry Council (1965).

Internationally, Professor Speer was recognized as a member of the Finnish Forestry Society (1963), the Society of American Foresters (1964) and with an Honorary Doctorate (h.c.) from Syracuse University, New York (1965), as a member of the Royal Swedish Academy of Agriculture and Forestry (1971, having been a corresponding member since 1967) and the Italian Academy of Forest Sciences in Florence (1971). He was decorated by the Republic of France with three orders: Commander of the Order of Merit (1967), Commander's Cross of the National Order of Merit (1968), and Commander of the Order of the Academic Palmes (*L'Ordre des Palmes académiques*) (1973).

At the 11th IUFRO Congress in Rome (Italy 1953) and the next congress in Oxford (UK 1956), Professor Speer became Leader of Section 31 Forestry Economics. At the 13th IUFRO Congress in Vienna in 1961, he was elected President of the Union for 1962–1967. At the 14th IUFRO Congress in Munich, Germany (1967), Professor Speer was awarded IUFRO Honorary Membership for his dedication to IUFRO and its further development. He participated in follow up IUFRO Congresses, and on 11 September 1981, he delivered the final key address to the IUFRO World Congress in Kyoto, Japan, stressing such key issues as demand, problems and prospects of international cooperation in forestry research.

Professor Emeritus Dr. rer.nat Julius Speer unexpectedly passed away from heart failure on 8 June 1984 in Miesbach, Oberbayern (Upper Bavaria) at the age of 78 years.

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HARPER, Verne (Les) Lester

Verne Lester Harper received the IUFRO Honorary Membership in 1971.

Les Harper was born on 13 August 1902 in Monroe, South Dakota, USA. He married Elizabeth Owen Harper (1907–1996), and they had a son, William Lester, and grandson, James W. Harper.

In 1926–1927, he received his Bachelor's and Master's degrees in Forestry from the University of California, Berkley.

He moved to Florida in 1927 to take up a position as a forestry research scientist at the Southern Forest Experiment Station of the USDA Forest Service in Starke, Florida. He was one of co-founders of the first field research unit of the Forest Service there. He also developed the Experimental Forest and Research Laboratory at Olustee, Florida (which closed in 1996). In 1931, the USDA Forest Service Research Center was established at Lake City, and the Southern Forest Experiment Station moved its research from Starke to Lake City near its Olustee Experimental Forest, in the Osceola National Forest. His research at that time mostly dealt with pine gum used by naval stores, and resulted in his participation in the preparation of the 200-page USDA handbook "A naval stores handbook dealing with the production of pine gum or oleoresin" (1935). He also worked on silvicultural issues and the use of prescribed burning, and was one of the first who described the effects of fire on the gum yields of longleaf and slash pines. In 1943, he made a presentation about this in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the Graduate School of Arts and Sciences of Duke University from which, he obtained his Ph.D. in Forest Economics.

For a few years, Verne Harper guided a research program to study the problems of forest management on the South-eastern Coastal Plain. He served as chief of the Forest Management Division (1935–1936) in New Orleans, Louisiana. He was then promoted and took up the office of Division Chief of Forest Management Research at the USDA Forest Service in Washington, D.C. where he served from 1937 to 1944, and as Principal Forester at the Division of Forest Economics Research until 1945.

In 1946, as Director of the Northeastern Forest Experiment Station (Philadelphia, PA), he expressed his motto in its Annual Report: "Forestry embraces much more than planting and growing timber and protecting it from fire." During his term in the Director's office, he improved research and administration to a new level by introducing not only new ideas in forestry research and its administration, but also developing the relationship between forestry research and the general public by creating the Station's Advisory Council, which raised awareness and converted this awareness into public responses. He introduced this based on his experience with an innovative approach to national research planning and management, multi-disciplinary research and collaborative research with universities.

Within a few years of Dr. Harper assuming its directorship, what had been the smallest experiment station in 1945 grew to be the largest one in 1950. He also placed much emphasis on increasing the personal capacity of the researchers and research administrators. One of his officers – John R. McGuire, recruited in 1946, later became the director of another forest research station and, in 1972, Chief of USDA Forest Service. Director Harper also hired a professional editor and writer who helped the staff to convert their research results into research papers and other publications.

In 1950, Dr. Harper left the Station after being appointed Deputy Chief for Research. He later became Chief for Research at the USDA Forest Service in Washington, D.C. During his term at the Washington office, he actively participated in the development of one of the most significant national forestry documents – *Multiple Use-Sustained Yield Act of 1960* (or MUSYA) that became Public Law 86–517. He retired from his position in 1966 and became a Professor of Forestry, and, later, Professor of Natural Resources Policy at the University of Florida's School of Forest Resources and Conservation, from which he retired in 1972 with emeritus status.

Dr. Harper was a Fellow of the Society of American Foresters (1959) and became an SAF Golden Member in 1985. He was the first recipient of the B. E. Fernow International Forestry Award (1965), a member of the American Forestry Association and German Forestry Association, received an Honorary

Doctor of Science from North Carolina State University (conferred in 1967), and on 23 April 2003, he was inducted into the Florida Society of American Foresters Hall of Fame.

Dr. Harper was influential in both national and international forestry. After the Second World War, the USDA Forest Service established a good relationship with the Forestry Division of the Food and Agriculture Organization of the United Nations (FAO) and resumed its membership in the IUFRO. Professor Harper actively participated in the activities of these and other international organizations until his retirement. He was President of the International Union of Societies of Foresters (IUSF)¹⁶, and he published a study entitled “Early History of the IUSF, 1964–1974” about this Union.

He participated in several IUFRO Congresses (UK 1956, Vienna, 1961, Germany 1967). He was elected IUFRO Vice-President for 1962–1967. In his speech to the 14th IUFRO Congress in Munich (1967), he talked about the scientific organization of the Union and the work of its Research Sections and Working Groups that had significantly grown in number and scope of work. During that Congress, the President noted that all the work to develop the terminological dictionary had been re-assigned to Vice-President Harper, who was substantially assisted by the U.S. Forest Service – these terminological dictionaries were published in 1971.

Professor Harper actively participated in the preparation of the 15th IUFRO Congress held in Gainesville, Florida, USA in 1971. In recognition of his active and fruitful work in IUFRO, Professor Harper was proposed as an IUFRO Honorary Member in 1967, and formally received this honour in 1971 along with Professor Julius Speer, who had also been nominated in 1967.

Professor Emeritus of University of Florida’s School of Forestry Verne L. Harper died in Gainesville on 12 November 1997 at the age of 95 years. He is buried next to his wife at Oak Lawn Cemetery, Lake City, Columbia County, Florida¹⁷.

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¹⁶ Established in 1960. Formally constituted in 1969. Source: <https://uia.org/s/or/en/1100027173>

¹⁷ Source: <https://www.findagrave.com/memorial/10006621/verne-lester-harper> Retrieved 18.12.2017.



PHILIPPIS, Alessandro De

Alessandro De Philippis received the IUFRO Honorary Membership in 1971.

Alessandro De Philippis was born on 6 November 1908 in Bellosguardo, Province of Salerno, Italy, into the family of Roberto, landowner and farmer, and Teresa (née Marmo) De Philippis. He had one sister, Giulia (1906–1970), and one brother, Giulio. In 1935, he married Avigail Vigodsky (1912–1958), and they raised two sons, Donato (1949) and Roberto (1952).

After finishing school at the Institute for Technical Geometers in Salerno, Alessandro began his university education at the Faculty of Agriculture of the “Federico II” University of Naples in Portici (Napoli), but then moved to the University of Florence, where in 1930 he obtained the Degree in Agriculture. In 1931, he was appointed as a researcher at the Forestry Research Experimental Station in Florence where he served until 1942. In 1941, he graduated in Agricultural and Forestry Sciences from the University of Florence, and in 1942 obtained the Chair of Forest Ecology and Silviculture at the Faculty of Agriculture of the University of Florence. He held this position until 1979, when he reached an age limit, and in 1984, he retired completely from the University.

From 1939, De Philippis was able to make many trips in Europe (Denmark, Hungary, France, Yugoslavia and other Countries) and later in America, Asia and Australia, during which he visited various forests and research institutes, and became acquainted with forestry in those areas and countries. In 1950, he spent time in Israel at the beginning of the re-forestation campaign to restore denuded lands in the country. He helped in establishing the Ilanot Forestry Research Station¹⁸ and in the preparation of the first issue of its proceedings. After coming back to Italy, in 1952 he founded and became the first Director of the Agricultural and Forestry Experimentation Centre¹⁹ of the Italian National Agency for Pulp and Paper (ENCC – *Centro di Sperimentazione Agricola e Forestale dell’Ente Nazionale Cellulosa e Carta*) in Rome-Casalotti, a position he held until 1973.

During his over 60-year professional career as a researcher and as a teacher, Alessandro De Philippis published 187 papers about the ecological foundations of silviculture, botanical, ecological and woody plants, including exotic (*Eucalyptus*) species of Mediterranean and mountainous regions. He also paid much attention to genetics, forest conservation, wood production, and to the economic and social aspects of Italian and international forestry. In the early 1950s, Alessandro De Philippis was among the researchers supporting the wider use of dendrochronology as a scientific method.

His efforts and achievements were recognized by various national and international organizations. Professor De Philippis was among the founders of the Italian Academy of Forest Sciences (*Accademia Italiana di Scienze Forestali*) in Florence. An ordinary member from 1951, he was elected President in 1980 and held this position until 1992. He was also Vice-President of the Italian Botanical Society, a member of the National Linnaean Academy in Rome (from 1973), of the Academy of Georgofili in Florence, of the National Academy of Agriculture in Bologna, of the Academy of Agriculture in Turin, and of the Italian Society of Ecology²⁰. He was a Chair of the Honours Committee of the World Academy of Art and Science and President of the scientific and cultural association *Silva Mediterranea*. In 1979, he received the W. L. Pfeil Prize from the Albert Ludwig University of Freiburg, Germany. He was elected a Fellow of the Society of American Foresters and an Honorary Member of the Israel Forestry Association.

His activity in IUFRO was of great importance to Professor De Philippis as well as being of mutual benefit for IUFRO itself. He actively participated in the 10th IUFRO Congress in Zurich, Switzerland (1948) and the next Congress in Rome, Italy (1953). In Rome, he moderated and then was elected Leader of Section 21 Research on Site Factors, and after changes in the IUFRO management (withdrawing of the Secretariat

¹⁸ Now part of Keren Kayemeth Lelsrael – Jewish National Fund (KKL–JNF), est. 1901. <http://www.kkl-jnf.org/tourism-and-recreation/forests-and-parks/ilanot-visitors-center.aspx> See also: Ilanot, Israel. Forest Research Station, 1952.

¹⁹ The inauguration of the Center took place on 21 September 1953, one day before the Opening ceremony of the 11th IUFRO Congress held in Rome on September 22 to 26, 1953.

²⁰ *Società Botanica Italiana, Accademia Nazionale dei Lincei, Accademia dei Georgofili, Accademia Nazionale di Agricoltura, Accademia di Agricoltura, Società Italiana di Ecologia.*

functions from the Food and Agriculture Organisation of the United Nations), in 1953, he became the first Technical Advisor to the IUFRO President, at that time – Professor Aldo Pavari. During the 12th IUFRO Congress in Oxford, UK (1956), he was re-elected as Leader of Section 21, was included in the working party on forest typology proposed by Professor Vladimir N. Sukachev (Russia), while remaining a representative of Italy on IUFRO's International Council. At the 13th IUFRO Congress in Vienna, Austria (1961), he moderated five sessions of Section 21 and was elected and a Member of the IUFRO Permanent Committee. At the 14th IUFRO Congress in Munich, Germany (1967) he was re-elected to this position, and was thus on the IUFRO Board from 1962 to 1971. He was also a member of an Organization Committee to draft revised IUFRO Statutes that were adopted at the 15th IUFRO Congress in Gainesville (USA 1971).

For his dedication to IUFRO and long-term service, Professor De Philippis was elected an Honorary Member of IUFRO in 1971.

Professor Alessandro De Philippis passed away in Florence on 6 April 2002. A ceremony dedicated to the centenary of his birth was held on 10 May 2008 in Bellosguardo, Province of Salerno. In commemoration of his input to Italian and international science, teaching and administration, a memorial plaque was mounted on the house of Professor Alessandro De Philippis' birthplace.

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SAMSET, Ivar

Ivar Samset received the IUFRO Honorary Membership in 1976.

Ivar Samset was born on 4 December 1918 in Gjerpen township of Telemark county, Norway to Jon Iversen (1888–1974), forest manager at Grenland Forest Management, and Kristi (née Sjøfteland) (1893–1973), Samset. Together with his siblings, Margrete, Olav and Aslaug, he grew up in the Skien district, and also enjoyed time at the Samset family farm in Romsdal. In 1948, Ivar married Eve Benterud (1922), and they raised two children, Tora and Jon.

In 1938, after finishing Skien Gymnasium and forestry school, he did his obligatory practical period as a forestry worker with Treschow-Fritzøe. In 1944, he graduated with honours from the Forestry Department of the Norwegian College of Agriculture (*Norges landbrukshøgskole* – NLH, now the Norwegian University of Life Sciences) at Ås. In 1945, he started as a teacher at Buskerud Agricultural School. In 1945–1947, he studied road construction, machinery and work organization in the Norwegian Technical College (*Norges tekniske høgskole* – NTH) at Trondheim, before joining the Norwegian Forestry Research Institute at Ås in Akershus.

When it was decided in 1946–1947 to develop a forest techniques group, the role of leader fell on Ivar Samset. He not only set up a research team for the development of forest operations and techniques, but also focused on raising awareness of technological development opportunities internationally as well as incorporating them into university forestry education in Norway.

From 1956 until his retirement at the end of 1988, Ivar Samset was both Professor of Forest Operations at the Norwegian College of Agriculture (NLH) and leader of the forest operations division at the Norwegian Forest Research Institute. At NLH, he published a series of manuals, compendiums and other study materials for training courses, practical exercises and demonstrations; a prolific synergy of research dissemination and education. Throughout these years many foresters, forest owners, businessmen and public decision-makers were influenced by his enthusiastic lectures. In 1959, he established the first experimental technical station *Silvi Futurum* in Hurdal (Akershus County) just north of Oslo. In 1970, he established a second station, *Silvi Montana*, in the village of Kviteseid (Telemark) to demonstrate the latest developments in forestry for mountainous terrain.

Over the years, Professor Ivar Samset developed an impressive international network of forest operations specialists. He travelled the world to deliver lectures and seminars, and to make presentations at scientific conferences and business meetings in order to accelerate forest operations research in Nordic and Central Europe, North America and Asia. He was also an influential member of the FAO/ECE/ILO Joint Committee on Forest Working Techniques and Training of Forest Workers after its establishment in 1955. He led the Study Group on manual and mechanized forest operations during 1959 to 1966 and the Study Group on the mechanization of forest work from 1962 to 1968.

Ivar Samset was a man who began his career during the period of heavy manual work in forestry. Through the chainsaw and tractor, he brought Norwegian forestry forward to modern mechanized harvesting and transportation technologies, and with them, a new wave of working methods. His research, education, international activities and life is reflected in his over 200 publications.

For his research, education and administrative achievements at national and international levels, Dr. Ivar Samset received recognition as a member of the Norwegian Academy of Sciences (1968) and of forestry academies in Sweden, Finland, Italy and the USA. He received an honorary doctorate at the Swedish University of Agricultural Sciences (1977) and in the same year – the Gold Mark of the Norwegian Forestry Society (*Det norske Skogselskap*), the highest recognition of a forester in Norway.

Professor Samset's ability to foster international cooperation was the driving factor for IUFRO's invitation to share his knowledge and experience. He made his first presentation at Section 32 *Operational efficiency* during the 11th IUFRO Congress in Rome, Italy (1953), and following that participated in every congress until 1995 in Tampere, Finland. He was elected Leader of Research Section 32 for 1962–1967 at the 13th Congress in Vienna, Austria (1961), and as Vice President for 1968–1971 at the 14th Congress in Munich, Germany (1967). Professor Samset was appointed to lead an Organization Committee tasked with drafting a

revision of the IUFRO Statutes. The revised Statutes were adopted at the 15th Congress in Gainesville, USA (1971), where Professor Samset was elected President of IUFRO for 1972–1976. It was during his presidential period that the negotiations concerning the Union's Permanent Secretariat were held and the Agreement with the Austrian Government was signed for the establishment of the permanent Secretariat in Vienna, where it has been since its opening on the 26 June 1973. Another initiative during his term was the launch of IUFRO News in 1972 as an information source for IUFRO members, officers and officeholders.

Professor Samset put much energy into hosting the 16th IUFRO World Congress in Oslo, Norway (1976). He made it possible for 50 young scientists from 27 developing countries to participate in the Congress under NORAD sponsorship. He also promoted IUFRO activities in his publications: 19 out of 205 were about the Union. For his longstanding and productive work in IUFRO, he was awarded IUFRO Honorary Membership at the IUFRO Congress in Oslo in 1976.

Professor emeritus Ivar Samset was also professionally active after his retirement. During his retirement, he wrote numerous books including his autobiography *Storm gjennom skogene* (Storm through the woods) in 2004. He passed away in Ås on 29 June 2015, nearly 97 years old.

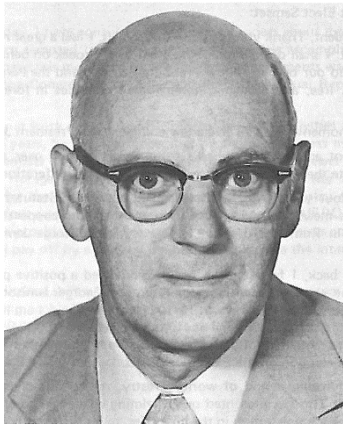
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²¹ MNIS – *Meddelelser fra Norsk institutt for skogforskning* (Communications of the Norwegian Forest Research Institute)



REDMOND, Douglas Rollen

Douglas Rollen Redmond received the IUFRO Honorary Membership in 1976.

Douglas Redmond was born on 30 August 1918 in Upper Musquodoboit, a forestry and farming community in Nova Scotia, Canada, into the family of Alfred Jones and Edith Pauline (née McIvor) Redmond. He had three siblings, Edna, Stewart and Pauline. In 1943, he married Hazel Augusta with whom he lived for 65 years and raised their four children, Sharon, Roderick, Peter and Ian.

After finishing High School in his hometown in 1933, he worked as a saw woodsman and sawmill worker until 1939. Then he moved to the Pacific coast of Canada – to British Columbia where worked as a fire fighter at the Trail Fire Department in the small township of Trail, BC. He was going to continue his education, but World War Two interrupted his plans, and he was called up for military service in the Royal Canadian Air Force (1941–1945).

After the war, he returned to the east coast of Canada, and in 1949 obtained a Bachelor degree in Forestry from the University of New Brunswick (UNB), Fredericton, NB. During the summer field seasons of 1947–1950, he worked on forest pathology issues in Ontario and the Maritimes. Having a good practical experience, he received his Master's degree with honour (*cum laude*) majoring in Forest Pathology from Yale University, USA, in 1950.

In 1951, Doug Redmond began his 39-year career with the federal government at the Forestry Branch of the Department of Resources and Development, which is now called the Canadian Forest Service (CFS). He joined the Unit of Forest Pathology at the CFS's Forest Biology Laboratory in Fredericton, N.B., as Officer-in-Charge of Forest Pathology Investigations in the Atlantic Provinces.

In 1954, he obtained his PhD in Forest Pathology from Yale University. He continued his work in the Laboratory, concentrating mostly on yellow birch and balsam fir diseases and mycorrhiza. In 1957, Dr. Redmond was selected as Chief of the Forest Research Division, Forestry Branch, Department of Northern Affairs and National Resources in Ottawa. After reorganization under the Department of Forestry Act, in 1960, he was promoted to Director of the Forest Research Branch at the newly established Department of Forestry, then in 1965 to the Department's Scientific Adviser, and in 1969 to Director of the Forestry Relations Branch of Environment Canada.

In 1976, Douglas Redmond was appointed Director of the Canadian Institute of Forestry (CIF/IFC) with responsibilities for research in forest ecology, forest management and forest protection from fire, insects and diseases. Actually, his life for many years has been linked with this Institute: he was first a regular member (from 1951), twice member of the Board of Directors, Host Annual Meeting Planning Committee (HAMPCO) Chairman (1967), President (1978–1979), Acting Secretary Manager (1982), and twice Acting Executive Director (1984, 1989). In addition, he was The Forestry Chronicle Production Manager (1986–1990), and Chairman of the Archival Committee (1991–1992).

His public service was also impressive – he was a member of the Canadian Forestry Association (CFA) and for a long time the CFA Board Member, Honorary Treasurer and President, and up to his death, he remained a director of the CFA's Canadian Forestry Foundation. He was also an active and highly efficient member in charitable fundraising in the Kiwanis Foundation and the Strategic Advisory Group of Experts – SAGE Kiwanis.

Dr. Redmond was also active in the international forest and forest-related arena. For example, he was General Chairman of the UN World Consultation on Use of Wood in Housing held in July 1971 at the University of British Columbia in Vancouver, BC, Canada. Upon retirement in 1980, he continued to author research papers on both Canadian and international forestry issues.

During his professional research career, Dr. Redmond authored and co-authored over 50 scientific papers. In 1975, in recognition of his contribution to world forestry, Dr. Redmond received the Bernhard Eduard Fernow Award granted by the American Forestry Association (AFA) together with the German Forestry Association (GFA).

Dr. Douglas Redmond was active as a member of the IUFRO Permanent Committee (1961–1971), and as a contributor of an Organization Committee that revised the IUFRO Statutes, which became effective in

March 15, 1971. At the 16th IUFRO Congress in Gainesville, USA (1971), he was elected as IUFRO Vice-President, Programme, for 1972–1976. In 1972, IUFRO President Ivar Samset and Douglas Redmond, following the decision of the Executive Council (Warsaw, 23–28 February 1972), visited Austria and Switzerland to explore the possibilities for opening the office of the Permanent Secretariat. The agreement on the establishment of the IUFRO secretariat in Vienna, Austria, was signed in 1973.

In 1976, Douglas Redmond became the first Canadian to receive Honorary Membership of IUFRO in recognition of his particularly important service to the Union.

Dr. Douglas R. Redmond passed away in Ottawa on 29 October 2008 in his 91st year.

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UDIN, Auguste C.A.H.M.

*Auguste C.A.H.M. Oudin*²² received the IUFRO Honorary Membership in 1976.

Auguste Oudin was born on 28 August 1886 in Pontivy, Morbihan, region Bretagne, France, into the family of Augustin René Marie (1852–1918), Counselor at the Court and Marie Angélique Julie (née Bouché) (1863–1956) Oudin. He had three brothers and sisters. In September 1919, Auguste married Madeleine Marie Mathilde Petetin (1891–1949). They had four children: Colette (1921), Anne (1922), Hubert (1924), Jacques-Christian (1931).

After finishing his secondary studies in 1906 Auguste entered and in 1908 graduated from the Polytechnic School (*L'École Polytechnique*) as an Engineer, then as an Engineer of Waters and Forests in 1911. He began his forestry career at Saumur, Maine-et-Loire.

Mobilized in the infantry from 1914 to 1918, Auguste Oudin was wounded in 1916 on the battlefield of Verdun to Armancourt. After demobilization, he resumed his career at Tours (1920). In 1923 he was employed as Inspector of Waters and Forests in Paris and in 1924, in Nancy where he was also head of the Forestry Research and Experiment Station and Director of the National School of Waters and Forests (*École Nationale des Eaux et Forêts*).

Subsequently, he was appointed Inspector General of Waters and Forests (*Inspecteur général des Eaux et Forêts*) on 3 February 1943 and Director of the National School of Waters and Forests in Nancy, on 1 January 1951. In this position, he taught soil science. He retired as Inspector General of Waters and Forests on 14 August 1957. By the Order of 28 August 1957, Mr. Oudin was appointed Honorary Director of the National School of Waters and Forests. He then settled in Paris where he became Director of the Wood School (*Ecole supérieure du bois*) (1957–1959).

Mr. Oudin was awarded many titles for his service to France, including Commander of the Legion of Honour, the War Cross 1914–1918, the Voluntary Military Services Cross, Commander of the Order of Agricultural Merit, Officer of Academy and Officer of Public Education²³. The latter two are Academic Decorations.

His scientific, educational and administrative achievements were recognized both nationally and internationally. He became a full member in 1962 and then President in 1971 of the French Academy of Agriculture. He was also a Member of the Royal Swedish Academy of Agriculture and Forestry (*Kungl. Skogs- och Lantbruksakademien*) and the Italian Academy of Forest Sciences (*Accademia Italiana di Scienze Forestali*). He was President of the International Chestnut Commission (ICC) and in 1954–1956 of the International Society of Soil Science (ISSS) of which he became an Honorary Member (1974).

During his active professional career, Auguste Oudin shared his time between forest and soil sciences. He created important courses on forest pedology and participated actively in the development of pedology (soil science: origin, formation and evolution). He was also interested in forestry and forestry technology, such as pine resin tapping.

Mr. Oudin was active in IUFRO when the Union resumed its work at the 7th IUFRO Congress in Stockholm (Sweden 1929). It was he who proposed to supplement each publication with an abstract in three languages and announced the official invitation to hold the next IUFRO Congress in France. At the 8th IUFRO Congress in Nancy (France 1932), he became a member of the International Committees in charge of studying the standardization of forest stand descriptions and of the methods used in forest research established within Section 1 Forest Ecology and Silviculture and the study of podsolized soils. He also participated in the IUFRO work on standardization and terminology: a report on standardization in forest site description was presented during the 9th IUFRO Congress in Budapest (Hungary 1936).

²² Auguste's full name was Auguste Corentin Anne Hubert Marie Oudin,

²³ Commandeur de la Légion d'honneur, Croix de guerre 1914–1918, Croix des services militaires volontaires, Commandeur du Mérite agricole, Officier d'académie, Officier de l'instruction publique. The latter two are the honorary distinctions for University staff members.

After World War Two, at the 10th IUFRO Congress in Zurich (Switzerland 1948), he was elected a member of the IUFRO Permanent Committee from 1949 to 1953 and a member of the Bibliographical Committee of IUFRO, later called the Joint FAO/IUFRO Committee on Bibliography. He also became a reviewer of the dictionary of technical terms in soil science, prepared by Professor Aaltonen (Finland). At the 11th IUFRO Congress in Rome (Italy 1953), he became Leader of Section 31 Forest economics and was re-elected to the IUFRO Permanent Committee (1954–1956). At the 12th IUFRO Congress in Oxford (UK 1956), Mr. Oudin was elected into the team for the revisions of IUFRO Statutes that were adopted during the 13th IUFRO Congress in Vienna (Austria 1961).

Thus, Auguste Oudin was a strong link between two major international scientific associations: soil science and forest science (ISSS and IUFRO). Both associations used this to their advantage in further developing soil sciences in forestry and agriculture.

At the 16th IUFRO Congress in Oslo (Norway 1976), Professor A. Oudin who had been active in IUFRO for over 30 years was elected as an Honorary Member.

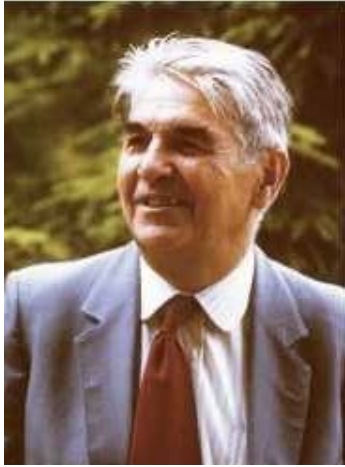
Mr. Auguste Oudin passed away in Paris on 19 December 1979 at the age of 93.

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5. Cussenot M. Personal communications (March 2018) at michcc45@yahoo.fr



PARDÉ, Jean

Jean Pardé received the IUFRO Honorary Membership in 1982.

Jean Pardé was born on 7 January 1919 in Grenoble, French Alps, France into the family of Maurice Edmond (1893–1973²⁴), a school teacher, then Professor of Hydrology at the University of Grenoble, and Jeanne (née Alamelle) Pardé. He had two sisters and two brothers.

In November 1946, he married Solange Guibal. They had six children, Arnaud (born 1947), Sylvie (1949), Thierry (1952), Frédéric (1956), Florence (1960) and Béatrice (1962).

After finishing his secondary education in 1937 and Les Barres technical forestry school in 1939, Jean graduated from the National Agronomic Institute (*Institut National Agronomique – INA*) in Paris in 1944. In 1946, he graduated from the National School of Waters and Forests (ENEF) in Nancy. He began his professional career as a silviculturist in the oak forests of Burgundy.

In 1954, he was appointed as research scientist in the section Silviculture and Dendrometry at the Forestry Research and Experiment Station in Nancy (*Station de Recherches et Expériences Forestières*) and as professor of dendrometry at the Nancy School of Waters and Forests (*École Nationale des Eaux et Forêts – ENEF*). He was Professor of Dendrometry until 1970 at this School as well as at the National School of Rural Engineering of Water and Forests (*L'École nationale du Génie rural, des Eaux et des Forêts – ENGREF*, now AgroParisTech – Nancy Center).

In 1961, he became Director of the Section of Silviculture and Production at the Forest Research and Experiment Station in Nancy, and from 1964 to 1973, Director of the National Centre for Forest Research. In 1964, the Centre was integrated into the National Institute of Agricultural Research (*Institut National de Recherche Agronomique – INRA*), and in 1968, as administrator he moved the Centre to the newly built research campus in Champenoux.

From 1971 to 1984, he served as a leader for the creation of similar research groups in Nancy, Avignon, Bordeaux, and Orléans.

His professional life and major interest led Jean Pardé to publish a textbook on Dendrometry (1961), and the 2nd edition (1988) that was translated into Spanish and Japanese. In 1962, he also produced a growth and yield table for the oak forests of the Loire area, which can be considered the first French model of forest stand growth.

After World War Two, when France, Germany, Italy and the Benelux signed in Paris in 1951 the Treaty establishing the European Coal and Steel Community (ECSC), a good prospective appeared for the re-establishment of cooperation between France and Germany. Jean Pardé was among the pioneers in the forest sector when he began re-establishing a good Franco–German relationship by visiting forest research scientists at the University of Freiburg, and then establishing good working contacts with German universities and forest research stations in Göttingen, Trippstadt, Hamburg and elsewhere.

In 1958, he joined the editorial board of *Revue Forestière Française* (RFF – the French Forest Review), and in 1964 became the Editor-in-Chief of this journal until his retirement in 1984 as Director Emeritus of the Station of Silviculture and Production at *Station de Sylviculture et de Production du Centre National de Recherches Forestières de Champenoux, Nancy* (the INRA Centre in Champenoux–Nancy). He was the Editor (1964–1984) of *Annales des Sciences forestières* published under the aegis of INRA. In 1999 the title was changed to the Annals of Forest Science. During his professional career, Jean Pardé authored and co-authored over 200 publications.

His merits and important role in development of international forest networks and the bilateral Franco–German relationship were widely recognized. He was Doctor Honoris Causa of the Maximilian University of Munich, Germany, and the Laval University, Québec, Canada; he received the Wilhelm Leopold

²⁴ His grandfather was Leon Pardé (1865–1943), Conservator of Waters and Forests (Conservateur des Eaux et Forêts), director of the Forest School in Les Barres (*École Forestière des Barres*) and the author of books about dendrology still well-known especially *Conifers and Hardwoods (Les Conifères and Les Feuillus)*.

Pfeil Prize (the FVS Foundation in Hamburg, Germany), the Heinrich Christian Burckhardt Medal (Georg August University Göttingen, Germany) and the Medal of Merit (the Minister of Rhineland–Palatinate land). He was also a Corresponding Member of the French Academy of Agriculture and of the Italian Academy of Forest Sciences (*Accademia Italiana di Scienze Forestali*) in Florence, and an Honorary Member of the same.

Professor Pardé was active in IUFRO for almost 20 years, starting with the 14th IUFRO Congress in Munich (Germany 1967) when he became Deputy Coordinator and Coordinator of Section 25 Study of Growth and Yield, and Forest Management from 1968 to 1970. At the 15th IUFRO Congress in Gainesville (USA 1971), he was elected Coordinator of Division 6: General Subjects from 1971 to 1976, and then re-elected for the same position at the 16th IUFRO World Congress in Oslo (Norway 1976) and a member of the IUFRO Executive Board until 1981. Then he was the French representative on the International Council until the 18th IUFRO World Congress in Ljubljana (Yugoslavia 1986).

In addition to his IUFRO office work, he also promoted the Union in France and in Francophone Africa by organizing divisional and interdivisional meetings as well as publishing articles on IUFRO activities. In recognition of his exceptional IUFRO career, Professor Pardé was elected as an Honorary Member of IUFRO in 1982.

His hobbies were trains, history, birds, gardening and several others. He transmitted part of his love to his children: Frédéric spent his entire career in trains, Florence is fond of history, and Béatrice loves birds and gardening.

Professor Jean Pardé died at the age of 89 years in Nancy on 9 January 2008.

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LIESE, Walter

Walter Liese received the IUFRO Honorary Membership in 1982.

Walter Liese was born on 31 January 1926 in Berlin and grew up in Eberswalde, where his father, a well known Professor of Forest Botany and Wood Preservation taught at the Forestry School (Forstliche Hochschule). In March 1952, he married Elsa-Katrin Pabst with whom he lived 60 years and raised two sons, Andreas and Stefan.

He finished the Humanistic Gymnasium in Eberswalde and was sent to war service in 1944. After safely returning to a peaceful life, he was a forest worker before enrollment in 1946 into the Albert Ludwig University of Freiburg and the Forest Faculty Hann. Münden of Göttingen University to study Forestry and graduated 1950. His dissertation, dated 1951, contains the first electron micrograph of the unknown microstructure of wood showing the pit structure as a link between wood tracheids.

From 1951, he was Research Assistant at the Forestry Research Institute of North Rhein–Westphalia, worked for a year in the wood preservation industry in Mannheim, and then became in 1953 Research Assistant for Forest Botany at the University of Freiburg. In 1959, he was appointed Lecturer and an Unscheduled Professor at the Institute for Forest Botany, Ludwig-Maximilian University of Munich, acting later as head of this institute.

In 1963, Walter Liese was appointed Full Professor of Wood Biology at the University of Hamburg and Director of the Institute for Wood Biology and Protection at the Federal Research Center for Forestry and Forest Products (BFH) until his retirement in 1991 with emeritus status and kept his desk at the institute. In 1966, Franz Kollmann founded the International Academy of Wood Science (IAWS), and Walter Liese became a Fellow in the first board appointed. The following year Franz Kollmann initiated the journal *Wood Science and Technology*, which is published at the Institute in Munich. Walter Liese belonged to the first Editorial Board and was (together with Josef Bauch) the author of the first essay in this journal.

During his professional career in Hamburg, Professor Liese supervised more than 40 Ph.D. theses and 75 diploma theses. He is the author and co-author of about 500 scientific papers and 10 books on a number of topics from wood anatomy and wood quality to wood preservation and bamboo and rattan. He has also worked as a visiting researcher and as a technical consultant on over 100 projects in 30 countries worldwide.

After retirement in 1991, Professor Liese increased his work on bamboo and rattan growing and utilization. In his research of these “wood of poor man”, he travelled to over 20 countries and published about 150 papers including the more recent co-authored book “*Bamboo: The Plant and Its Uses (2015)* and “*The CODIT Principle. Implications for the Best Practices, (2015)*”. His first experience in studying bamboo or the beginning of his “*Zweitelbens*” (the second life) dated by the end of 1957, when he spent four and a half months as an expert of the Food and Agriculture Organization of the United Nations (FAO) at the Forest Research Institute, Dehra Dun, India. That trip initiated his almost a yearlong travel to Indonesia, Japan, Australia, and the USA. For his contribution to the formation of the International Center for Bamboo and Rattan (INBAR) in Beijing, China, he is mentioned as “Grandfather of INBAR”.

His editorial activity is impressive. For a long time during different years, he was an editor, co-editor and member of editorial boards of several scientific journals: *Holz als Roh- und Werkstoff* (Wood as Resource and Material); *Wood Science and Technology*; *Forstwissenschaftliches Centralblatt* (Forest Science); *Cellulose: Chemistry, Technology*; *Journal of Tropical Forest Science*; *Journal of Bamboo and Rattan*; *World Bamboo and Rattan*.

Many institutions and countries endowed Professor Liese with awards for his national and international achievements in forest research, teaching, administration and development of international cooperation. He received honorary doctorates from the University of Sopron, Hungary (1986), Technical University in Zvolen, Czechoslovakia (1987), Istanbul University, Turkey (1987), Poznań University of Life Sciences, Poland (1991) and University of Ljubljana, Slovenia (1994). He is an Honorary Professor of Nanjing Forestry University, China. He holds an Honorary Membership of scientific academies in India, Italy, France, Poland, and received scientific honours in the People’s Republic of China (PRC), the German Democratic

Republic (DDR, East Germany), Federal Republic of Germany (FRG, West Germany), Finland, Ghana, UK, India, Malaysia, Philippines, Poland, Slovakia, Hungary, Taiwan and USA. He is also an Honorary Member of the American, Chinese, European, Philippine and World Bamboo Organizations.

At the 14th IUFRO Congress in Munich, Germany (1967), Professor Liese was elected a member of the Permanent Committee for 1968–1971, and later as a member of the Organization Committee to revise the IUFRO Statutes that were adopted at the next Congress in Gainesville (1971). At that Congress, he was co-chair of the Working Group on Tropical Woods within Section 41 Forest Products, and was elected a Regional Representative for Western Europe and chaired the Committee for International Relations 1968–1976. At the 16th IUFRO Congress in Oslo, Norway (1976), Professor Liese was elected IUFRO President for 1977–1981, and put a lot effort into organizing the first IUFRO Congress in Asia (Kyoto, Japan, 1981). After high-ranking discussions in Beijing and Taipei, delegates from both China could participate in the meeting after a long time of separation. At that Congress, Immediate Past President Walter Liese became head of the Programme Committee holding the Centennial IUFRO Congress in Eberswalde (1992) where he delivered the keynote address. He later attended further IUFRO Congresses.

Professor Liese has had one of the longest histories of service to IUFRO, organizing and attending numerous IUFRO events. He promoted the international expansion of IUFRO as well as its representation in a number of governing bodies. He organized the first Management Committee meeting in the USSR, Moscow and Sochi (1980), proposed the election of Professor Dušan Mlinšek as first President from a socialist country, and Yugoslavia as the location of the 18th IUFRO World Congress (1986). He has also supported the election of the first representative from Asia and a developing country as IUFRO President – Dr. Salleh Mohd. Nor, Malaysia (1990).

Prof. em. Dr. Drs. h. c. Walter Liese is still active in the forest scientific space. Recently, he participated in the 125th Anniversary of IUFRO Congress in Eberswalde and Freiburg (2017), gifted historical documents to IUFRO as well as greeted the participants in side and other events.

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5. Liese W. Personal communications (December 2017) at Wliese@aol.com



CALLAHAM, Robert (Bob) Zina

Robert Zina Callaham received the IUFRO Honorary Membership in 1982.

Robert Callaham was born on 24 May 1927, in San Francisco, California, USA into the family of Birdie (née Harris) and Zina R. Callaham (1904–1984). In 1949, he married Virginia Johns, and they raised a daughter, Candace Ann (1952), and a son, Peter Robert (1955).

After finishing San Mateo High School (1944), he went to Oregon State College (later Univ.) for one year, served a year in the U.S. Navy, followed by a year at San Mateo Jr. College (now College of San Mateo). As a war-veteran, he enrolled in the School of Forestry at the University of California at Berkeley from which he obtained a B.Sc. degree in Forestry (1949) and a Ph.D. in Botany

and Genetics (1955).

Four weeks after being awarded his degree in forestry, Bob Callaham began his professional career in the USDA's Forest Insect Laboratory located on the ground floor of UC's Forestry Building. His specific assignments all concerned resistance of forest trees to insect attacks by weevils and later by bark beetles. His academic training in genetics led in 1954 to his being reassigned as a forest geneticist. Working and commuting 120 miles, between Berkeley and Placerville's IFG, he developed a broad understanding of diversity in the genus *Pinus* and the genetic compatibility among its nearly 100 species. In the mid-1950s, he specialized on geographic variation in ponderosa pine. Several of his publications describe the biosystematic approaches he used and his results.

In 1958, he was assigned as Research Center Leader at Spokane, Washington (1958–1960). In 1960, he returned to Berkeley as Project Leader for Genetics Research at the California Forest and Range Experiment Station (CFRES) (1960–1962), and as Assistant Director of the Station (1963–1964). During those assignments, he wrote a proposal that resulted in the Institute of Forest Genetics receiving a Distinguished Unit Award from the USDA in 1964.

In October 1964, Dr. Callaham moved to the Washington Office as Branch Chief for Forest Genetics, and was reassigned in 1965 as Staff Assistant to the Deputy Chief for Research. He was promoted to Director of the Division of Forest Insect and Disease Research (from 1968 to 1972), and reassigned as Director of the Division of Forest Environment Research (from 1973 to 1976). Dr. Callaham was reassigned to Berkeley, CA, to serve as Director of the USDA Forest Service Pacific Southwest Forest Research Station (1976–1983). Overlapping his three later roles, he was assigned the added burden of modernizing the Forest Service library systems. Those efforts resulted in his receiving a Superior Service Award from the USDA in 1983.

Dr. Robert Callaham retired from the USDA Forest Service as Director at Berkeley on 13 May 1983. Two weeks later, he was appointed as Program Coordinator (*de facto* Director) of the University of California's Wildland Resources Center. During just seven years in that Center (until 15 July 1990), he produced 26 scientific, technical, and annual reports.

During 16 years, 1982 through 1998, Dr. Callaham undertook 17 international forestry research-related consultancies. They began in 1982 when he was directed by the Chief of the USDA Forest Service to represent the Service at an ASEAN meeting – in Australia and Papua-New Guinea – of heads of forestry in its member countries. Also in 1982, his Chief directed him to spend a week with the Director of the Canadian Forestry Service (CFS) in Ottawa, on strategic planning and improving the management of his organization. Other requests for his consulting services were made by: Canada's International Development Research Centre (IDRC) to Singapore (1984), USAID (via Winrock International) to Bangladesh (1984), ASEAN (Singapore, 1985), Malaysia (1988), Beijing (China, 1990), Bangalore and Dehra Dun, India (1991 and 1993), and Malaysia (1988); Germany's GTZ to Malaysia, (1986, 1987, 1992–1993 and 1995) and Honduras (1998); The Netherland's TROPENBOS (1986–1987); Peoples' Republic of China – Beijing (1990), Republic of China–Taipei, Taiwan (1990, 1992), United Kingdom's Overseas Development Agency (ODA) to Coimbatore, India (1994), as well as the Commonwealth Consultative Group on Technology Management training in Malaysia (1993). He visited and worked in 47 countries on 6 continents.

From 1990 through 2008, Callaham studied, learned, and became expert at the Japanese highly stylized art form of bonsai. He mastered growing dwarfed forest trees in very shallow pots. Through 2015, he

researched and published books on his ancestral roots, available at <lulu.com>. All in all, he has his name attributed to more than 140 scientific, technical, and family histories in articles, reports, and books. He was the editor of all technical papers/reports on silviculture, forest genetics and tree breeding submitted for publication in Proceedings of the World Forestry Congresses from Madrid (1964) to Mexico City (1982).

Dr. Robert Callaham, a long-time member of the Society of American Foresters (SAF), was elected a Fellow in 1979. As a member of SAF, he served in 1974–1979 on the Executive Board of the International Union of Societies of Foresters (IUSF), and was elected an Honorary Member (1982). Dr. Callaham was the first Forest Service employee to be selected to serve as a Congressional Fellow in the U.S. Congress, 1972–1974. He received Distinguished and Superior Service Awards from the USDA (1962 and 1982).

Dr. Robert Z. Callaham dedicated much time to working for FAO/IUFRO in different capacities. He prepared, organized and later chaired FAO/IUFRO's Panel of Experts on Forest Gene Resources (1966–1972). He participated in FAO/IUFRO's First World Consultation on Forest Genetics and Tree Improvement (Stockholm, Sweden 1963). He organized and chaired the second related consultation at Washington, DC, USA, during August 1969. He organized (but did not chair) the third such consultation in Canberra, Australia, 1974. He organized but chose not to chair the FAO/IUFRO Symposium on Internationally Dangerous Forest Diseases and Insects in Dehra Dun, India (1976). In addition, he was Chairman and reporter of FAO's Technical Consultations on an International System for Agricultural Science and Technology, and Forestry (1975, 1976, 1979).

Starting with the 14th Congress in Munich, West Germany (1967), being a botanist and geneticist Dr. Callaham served as Coordinator of Section 22 Forest Plants. Being actively involved as part of the country's team to prepare the 15th Congress in Gainesville, USA (1971) he was also active in his Section. At that Congress, Dr. Callaham became Coordinator of Division 2: Forest Plants and Forest Protection to which he served two terms until the Congress in Kyoto, Japan (1981). He also was a member of the IUFRO Executive Board (1972–1981) and participated in 14 annual meetings of IUFRO's EB in member countries. Dr. Callaham also consulted on design of IUFRO's INCOFORE, an international system for managing networks of forestry research projects (Vienna, Austria, 1988).

In 1982, Dr. Robert Z. Callaham was awarded IUFRO Honorary Membership.

After receiving this appreciation of his work, Dr. Callaham continued to serve IUFRO. He actively participated amongst other things in the preparation of the world's first Trilingual Forestry Vocabulary (English, French Spanish), later merged into IUFRO's SilvaTerm database (1986), the IUFRO-designed International Council for Forestry Research (INCOFORE) System for managing networks of forestry research projects (1988), and the IUFRO/World Bank training course on management of forestry research for Africa (Nairobi, Kenya 1989), acting as its director.

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Personal sources:

Callaham R.Z. Personal communications (December 2017 – February 2018) at rzcallaham@comcast.net



MELEKHOV, Ivan Stepanovich

Ivan Stepanovich Melekhov received the IUFRO Honorary Membership in 1986.

Ivan S. Melekhov was born on 15 September 1905 in the village of Zharovikha (now within the boundaries of Arkhangelsk city). His father, Stepan Andreyevich Melekhov (1877–1967), worked from childhood in the A. Surkov & E. Shergold sawmill, and his mother Yekaterina Maksimovna (née Khviyuzova, 1877–1960) was the daughter of a local peasant family. Stepan married her, and in 1906, brought them to a newly built (by himself) house not far from his spouse's family house. In 1938, Ivan Stepanovich married Tamara Anatolievna Lange (1916–1988), after marriage – Melekhova. There were three sons: Vladimir (1939), Alexander (1941) and Evgeniy (1946) in the

family.

Until the age of 6 or 7, his grandmother, who was his first teacher, cared for Ivan. At the age of 9, he enrolled in a three-year elementary school in Arkhangelsk. Due to the educational reforms in 1918, he only finished school in 1924. He first enrolled in Arkhangelsk Polytechnic School in the mechanics program, but in August 1925, he entered the Leningrad Forest Institute (since 1929, the Leningrad Forest and Technical Academy, LLTA, and now the St. Petersburg State Forest Technical University). From 1930, after graduating from the Academy as a Forestry Engineer, he conducted scientific research in the forests of the European North. In his early scientific publications, he touched upon the natural regeneration of spruce, the nature of forest fires, the anatomical structure and the physical and mechanical properties of softwood in the North.

In 1930, he was sent to Arkhangelsk Forest Technical Institute (ALTI), where he followed the path from Assistant Professor (1930) to Chairman of the Department of General Forestry (beginning in 1934) and Forestry (1944–1958). In 1944, in Sverdlovsk (now – Ekaterinburg) Melekhov received a doctoral of science degree in agricultural sciences, and earned the title of Professor. In 1956, he was elected as a Member of the All-Union Academy of Agricultural Sciences, named after V. I. Lenin (VASKhNIL).

Along with teaching, between 1936 and 1958, he conducted research organized by the Academy of Sciences of the Union of Soviet Socialist Republics (USSR). He was a head of scientific expeditions of the forest group of the Northern Bases of the USSR Academy of Sciences; a director of the Arkhangelsk Station; and a director of the Northern Branch of the Forest Institute of the USSR Academy of Sciences. In 1958–1962, he organized and became the first Director of the Arkhangelsk Institute of Forest and Forest Chemistry of the USSR Academy of Sciences. In 1960, he established the northernmost arboretum in the USSR. In the ALTI, he served until 1962 apart from a small break when he was Head of the Department of Forestry at the LLTA (1951–1952).

In 1962, Professor Melekhov moved to Moscow after being appointed Deputy Chairman of the State Committee for Forestry, Pulp and Paper, Woodworking Industry and Forestry under the State Planning Committee of the USSR. Simultaneously, in 1962–1994, he was a Head of Department of Forest Science and Silviculture at Moscow Forest and Technical Institute (MFTI – now Moscow State Forest University) until his last days. From 1965 to 1971 he also served as the Academician Secretary of the Forestry and Agroforestry Division of the VASKhNIL.

Academician I.S. Melekhov was one of the initiators of and a member of the first editorial board of *Lesnoy Zhurnal* (the Forest Journal, from 1958); in 1980–1993, he was its editor, and then deputy editor-in-chief. He was also a member of the editorial boards of the journals *Lesnoye Khoziaystvo* (Forestry) and *Lesovedenie* (Forest Science). He was an advisor for more than 50 Ph.D. holders. The doctrine he developed on the dynamic forest and clear-cut typology makes it possible to learn about the forest during its development, deeply understanding its past and present, enabling one to solve the practical tasks of forestry and to foresee the future. He was the author of almost 350 scientific publications, including fundamental university textbooks on forest science, silviculture, and forest regeneration on clear cuts, forest pyrology, forest management history, and other issues of forestry. Many of them received wide recognition in the USSR and abroad. He also published more than a dozen papers about IUFRO including articles dedicated to the 80th, 90th and 100th anniversaries of the Union.

For his outstanding achievements in forest research, teaching, administration and public work, Professor Melekhov was awarded the highest USSR orders, including the Order of Lenin, the Order of the October Revolution, and two Orders of the Red Banner of Labour, as well as many medals. His work was highly appreciated by forest scientists and earned him the title Honoured Scientist of the Russian Soviet Federative Socialist Republic (RSFSR, 1967) and the USSR's highest professional award – the Gold Medal of Georgy F. Morozov (1983). He received Doctor *honoris causa* of the Mendel University of Agriculture and Forestry in Brno, Czechoslovakia (1966), a foreign member of the Royal Swedish Academy of Agriculture and Forestry (1968) and the Hungarian Academy of Sciences (1979), Honorary Member of the Finnish Society of Forest Science (1969, member – 1962).

Professor Melekhov played an active role in international forest congresses, symposia, conferences, and spoke at the 5th (1960, Seattle, USA) and the 6th World Forestry Congresses (1966, Madrid, Spain). He was Vice-President and Chairman of the first plenary session of the 6th WFC. He participated in the XII International Botanical Congress (1975, Leningrad). He was Chairman of the Committee on Forestry at the 14th Pacific Scientific Congress (1979, Khabarovsk).

According to the reminiscences of Professor Melekhov, Professor Nikolay Kobranov's lecture about his trip to participate in the 7th Congress of IUFRO in Stockholm (1929) was the first time that Professor Melekhov heard about IUFRO. Professor Melekhov actively participated in IUFRO for almost 30 years. He spoke at the 13th (Austria 1961), 14th (Germany 1967) and 15th (USA 1971) IUFRO Congresses. In 1967, at the 14th IUFRO Congress, as Regional Representative from Central Eastern Europe, he was elected a member of the IUFRO Permanent Committee, and at the 15th Congress – a member of the Executive Board and one of the six members of the IUFRO Awards Nomination Committee for the Scientific Achievement Award (SAA).

In 1986, at the 18th IUFRO World Congress in Ljubljana, Yugoslavia, Professor I. S. Melekhov was awarded IUFRO Honorary Membership. It was recognized that he had made substantial contributions to IUFRO, supporting the relationship between IUFRO and socialist countries, and promoting IUFRO among forestry scientists in these globally important forestry countries.

Professor Ivan S. Melekhov passed away on 6 December 1994 at the age of 89 years in Moscow and was buried at Vostryakovskoe cemetery.

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5. Melekhov V. I. Personal communications (January 2018) at forest@narfu.ru



HILLIS, William Edwin (Ted)

William Edwin Hillis received the IUFRO Honorary Membership in 1986.

Ted Hillis was born on 9 February 1921 in Geelong, 75 kilometers southwest of the state capital, Melbourne, Victoria, Australia. He was the youngest son of William Herbert and Emily Hillis and brother to Herbert, Raymond, Keith and Emily. In late 1952, he married Marjorie Moore (1924–2005), and they had three children: Rosemary, David and Margaret.

After finishing Geelong High School in 1937, he spent two years studying Industrial Chemistry at the Gordon Institute of Technology in his hometown and gained a Diploma in 1939. During World War Two, he worked as a control chemist in the Coal Gas Industry.

In 1942, he began his professional career as a public servant and wood researcher. He was appointed as a Technical Officer in the Division of Industrial Chemistry at the Council for Scientific and Industrial Research (CSIR)²⁵ (the federal government agency for scientific research in Australia) and dedicated his entire life to this organization until his official retirement in 1986. He then continued as an Honorary Research Fellow until complete retirement in 2002.

From 1945 to 1951, he studied industrial chemistry and biochemistry as a part-time student at the University of Melbourne where he obtained his Bachelor of Science degree in 1947 followed by a Master of Science in 1951, as well as gaining teaching experience from being a Resident Tutor at Queen's College. In 1947, he was transferred to the CSIR's Division of Forest Products.

In 1966, Ted Hillis obtained a Doctor of Science degree from the University of Melbourne. The core of his thesis was his research work on polyphenols, which resulted in five substantial papers entitled "Polyphenols in leaves of *Eucalyptus* species: a chemotaxonomic survey" published in *Phytochemistry* [journal]. In 1972, he was promoted to Chief Research Scientist, the highest research position in CSIRO. In 1973, he became a founding member and the first Chair (1973–1977) of the Australian Institute of Wood Science, remaining a member until his last days.

Along with his research, from 1974 to 1986, Dr. Hillis was affiliated with different universities: as a Visiting Fellow in the Department of Forestry at the Australian National University (ANU) in Canberra, where he lectured in wood science and supervised post-graduate research, and as Cecil Green Visiting Professor at the University of British Columbia (UBC), Vancouver, Canada in 1984. He was part time Lecturer at the University of Melbourne in 1972–1974, and at the Australian Pulp and Paper Institute (APPI), Monash University in 1990–1999. He established a Wood Science course at the University of Lae, Morobe Province, Papua New Guinea, where he taught in 1975–1976.

Dr. Hillis was a member of the editorial boards of several professional journals. In 1956, he was among a group of distinguished scientists who collaborated at Cambridge University resulting in important scientific papers published in *Nature* and through this group he became a pioneer in the establishment of *Phytochemistry*. Later on, he was a sponsored lecturer of the Phytochemical Society of Japan (1975) and The Phytochemical Society of North America (1976). For almost a quarter of century, from 1977 until 1999, he was also an Editorial Board Member of the journal *Wood Science and Technology*.

After retirement in 1986, he finally had time to finish the textbook "*Heartwood and Tree Exudates*", which was printed in 1987. His other famous book was "*Eucalypts for Wood Production*" published in co-authorship in 1978, reissued in 1984 and 1988, and then translated and printed in China in 1990. The first book was mostly about wood chemistry, with the second one covering the biology and use in plantations of *Eucalyptus* species in Australia. Both books were pioneering, containing much practical implementation of research findings. Another extremely important book initiated and edited by Ted Hillis was entitled "*Wood extractives and their significance to the pulp and paper industries*" (1962). This became a classic textbook for both researchers and students all over the world. In total, he published over 200 scientific papers, review articles and books.

²⁵ From 1949 – Commonwealth Scientific and Industrial Research Organisation (CSIRO).

Dr. Ted Hillis was a highly respected scientist in the field of phytochemistry, heartwood formation in different tree species and related fields. His achievements were recognized both nationally and internationally. At the national level, he was acknowledged as a Fellow by the Australian Academy of Technological Sciences and Engineering (ATSE) (1980), and was a recipient of the Stanley A. Clarke Memorial Medal by the Institute of Wood Science (1986). In 2003, he was awarded twice as he received the Centenary Medal from the Australian Government and became a Member of the Order of Australia (AM), which is one of the most prestigious awards given in recognition of the achievements by Australian citizens.

Internationally, after 1981, he was elected an Honorary Member by the International Association of Wood Anatomists (IAWA) and an Honorary Member of the Chinese Society of Chemistry and Chemical Engineering of Forest Products. He was elected as a Fellow (1970) and President (1978–1982) of the International Academy of Wood Science (IAWS) and Academy Lecturer, giving the opening annual lecture in 1985. In 2006, at the IAWS meeting in Melbourne he gave the Academy Lecture entitled “Wood Science in the Future”.

For many years, Dr. Hillis was a consultant to the governments and industrial companies of many countries. He was an active initiator of international cooperation between Australia and other countries such as the United Kingdom, Canada, Germany, Japan, China and others. He increased his capacity in this direction especially after joining the International Union of Forest Research Organizations (IUFRO). At the 16th IUFRO World Congress in Oslo, Norway (1976), he was elected Coordinator of Division 5: Forest Products and a member of the Executive Board for 1977–1981, and at the next Congress in Kyoto, Japan, he was re-elected for 1982–1986.

At the 18th IUFRO World Congress in Ljubljana, Yugoslavia (1986), the IUFRO International Council elected Dr. W.E. Hillis, former Chief Research Scientist, CSIRO, Australia, as a IUFRO Honorary Member for his work in IUFRO. The decision was based on the vision of IUFRO as one of the few international organizations working in the modern world for a real improvement in the living conditions of all humankind and its future generations. He attended his last IUFRO World Congress in Brisbane in August 2005.

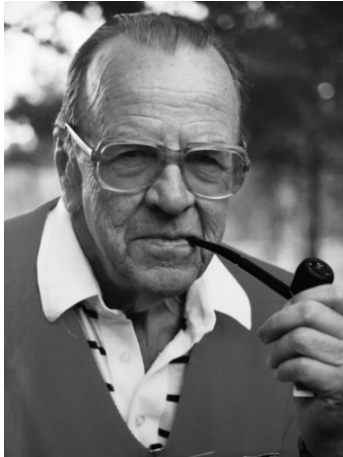
William Edwin (Ted) Hillis passed away from a heart attack on 3 February 2008 in Melbourne, less than a week before his 87th birthday.

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SUNDBERG, Ulf Hjalmar

Ulf Hjalmar Sundberg received the IUFRO Honorary Membership in 1989.

Ulf Sundberg was born on 11 September 1919 in Hedemora in central Sweden (about 175 km north-west of Stockholm), into the family of District Forest Manager Carl Gustaf (1884–1954) and Dagmar Matilda (née Esseen) Sundberg. Ulf grew up in Överum²⁶ in southern Sweden as one of six brothers and one sister. From 1952 to 1974, he was married to Margit Ingegärd Karlsson (1918–2007). They had a daughter, Karin Sundberg-Allberg (1955). In 1974, he married Britt Ingegärd Tjernell.

After graduation from Linköpings Public High School in 1938 and a compulsory preparatory course in charcoaling in Skinnskatteberg 1939, he was admitted to the Royal College of Forestry (*Skogshögskolan*) in Stockholm where he graduated with a Master's degree in 1944. His first employer was the forestry company Korsnäs AB, in the central part of Sweden, where he initially worked as an assistant and later (1945–1947) as a District Forest Manager. In early 1947, Ulf was appointed Trial Leader at SDA²⁷, one of three development organizations of the Swedish Forestry Sector, and he later became Head of their Department of Communication, moving on to become Head of the Department of Transportation. In 1950, Ulf made a long study tour to the USA and Canada, where forest operations technology, especially mechanization, had become more advanced than in the Scandinavian countries. That trip was of great importance not only for advancing of his knowledge in the professional sphere, but also for establishing an extensive international network of contacts helpful in his further career.

In 1952, Ulf Sundberg accepted a Professor's position at the Department of Forest Technology (with the initial focus on forest labour issues that later broadened to operational efficiency) of the Swedish Forest Research Institute and the Royal College of Forestry. In the early 1970s, the Department was relocated to the Research and Training Centre in Garpenberg. Ulf then also became the Head of the Centre until his retirement in 1984. As a consequence of the merger between the Colleges of Forestry, Agriculture and Veterinary Sciences, respectively, in 1977 he became the Professor and Head of the Department of Operational Efficiency within the Faculty of Forestry at the Swedish University of Agricultural Sciences (Sveriges lantbruksuniversitet in Umeå, Uppsala and Garpenberg).

Professor Sundberg began working in cooperation with the Food and Agriculture Organization of the United Nations (FAO) at the beginning of 1950s, working on a number of issues including studies of Power Saws in Forestry Operations (1953, 1955) and The Mechanical Barking of Timber (1957). He then became the Leader of a Study Group on a multilingual glossary of forest work science (1959–1970) and Vice-Chairmen of the Joint FAO/ECE/ILO Committee on Forest Operations (1966–1972). In 1971, Professor Sundberg moved to Rome where he served until 1974 as Director of the Forest Logging and Transport Branch, Forestry Department of the FAO.

He made significant contributions not only in mechanization of forest operations, but also in ergonomics and harmonization of modern technologies with forest use at national and international levels. Many of his ideas and research results became well known in the field of forest science and practice, becoming a part of many universities' educational processes and curricula. During his career, he advised government agencies and various national and international organizations in about a dozen countries. He was also a guest Professor at Yale University, USA (1965). During 1948–1995, Professor Sundberg authored and co-authored over 200 publications including about 30 monographs and reports, and ca 80 contributions to national and international journals and conference proceedings. In addition, he published seven FAO reports (1953–1987) and some educational textbooks and compendia. His "*Forest Engineering Economics*" (1979) and in cooperation with C. R. Silversides from Canada – "*Operational Efficiency in Forestry*" (Vol. 1. Analysis, Springer, 1988, 221 p.; Vol. 2. Practice, Springer, 1989, 169 p.) were standard textbooks for a whole

²⁶ Since 1920, Carl Sundberg played a major role as CEO in the renovation and modernization of Överums Bruk AB – Swedish engineering company established in 1655 and since 1850s produced agricultural plows.

²⁷ SDA – Föreningen Skogsarbetens och Kungliga domänstyrelsens arbetsstudieavdelning = The Work Study Department of the North Sweden Forest Employers' Association and the Swedish Forest Service.

generation of foresters at the end of the 20th and beginning of the 21st centuries. His works have been translated into English, French and Russian. His papers were also printed in German in the general forestry and hunting newspaper (*Allgemeine Forst- und Jagdzeitung*).

After his retirement from the University in 1984, Professor Ulf Sundberg was active until his last days. In 1991, he resumed his work for FAO as a consultant in forest projects in Africa (Madagascar, Kenya, Uganda), Asia (Bangladesh, Malaysia, Thailand, Indonesia, Philippines), and the Americas (Fiji, Brazil, Western Samoa, Suriname and Jamaica).

Professor Ulf Sundberg received many awards both nationally and internationally. He received honorary doctorates from several different universities, including the Ludwig-Maximilian University of Munich (Germany 1987), was a member of the Royal Swedish Academy of Agriculture and Forestry, the Royal Swedish Academy of Engineering, and the Royal Norwegian Academy of Sciences. He was Knight and Commander of the Royal Swedish North Star Order and was awarded with the Grand Cross of Merit of the Order of Merit of the Federal Republic of Germany (*Großes Verdienstkreuz des Verdienstordens der Bundesrepublik Deutschland*) in 1974. He was Honorary Member of the University Student Union, and received the International Achievement Award of the Council on Forest Engineering (1999, posthumous).

Professor Sundberg was involved in the IUFRO activities from 1952 to 1986. At the 11th IUFRO Congress in Rome (Italy 1953), he was elected Leader of IUFRO Section 32 Operational efficiency, and at the Congress in Oxford (UK 1956), he was re-elected for 1957–1961. By the 14th IUFRO Congress in Munich (Germany 1967), the WG on Terminology of Section 32, under the guidance of Professor Sundberg, had prepared the Glossary of Terms for Work Study in Forestry. At the 15th IUFRO World Congress in Gainesville (USA 1976), he was elected IUFRO Board Member as the President's Nominee for 1977–1981, and then re-elected to this position at the Congress in Ljubljana (Yugoslavia 1981) for 1982–1986. For his long-term service and inputs to IUFRO, Professor Sundberg was granted IUFRO Honorary Membership in 1989. He passed away on 14 October 1997 in Grytnäs, not far from the place where he was born.

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MLINŠEK, Dušan

Dušan Mlinšek received the IUFRO Honorary Membership in 1989.

Dušan Mlinšek was born on 30 September 1925 in Velenje, 81 km northeast of Ljubljana, Slovenia (Yugoslavia) into the teacher's family of Franjo and Franja (née Forštner) Mlinšek. He has a brother, Borut, and two sisters: Breda and Alenka. In 1952, Dušan married Jožica Mlinšek (née Verdelj) and they have three sons, Gorazd, Matjaž and Jurij.

In 1940 after finishing school in his hometown, he entered the real gymnasium in Celje, graduating from the gymnasium after the turmoil of World War Two. The same year, in 1945, he enrolled in the Forestry Department at the Faculty of Agriculture and Forestry in Zagreb University and in 1950 graduated as a Dipl. Engineer in Forestry. He began his professional career as an intern in forest management and planning at the Ministry of Forestry of the People's Republic of Slovenia, and in 1951–1960, he worked in different managerial positions in forest management and forestry at the State forest enterprises in Murska Sobota, Novo Mesto and Slovenj Gradec. After working on his Ph.D. during 1953–1958, he graduated from the ETH Zurich (Eidgenössische Technische Hochschule Zürich / Swiss Federal Institute of Technology Zurich) after presenting 84-page thesis "Studies on the condition and maintenance of the peasant forests in Pohorsko Podravje".

His professional career as a teacher and researcher began in 1960 when he was elected as an extraordinary Assistant Professor, 1966 – Associate Professor, and 1971 – full-time Professor of Forestry and Landscape Ecology at the Department of Forestry and Renewable Forest Resources of the Biotechnical Faculty, University of Ljubljana, where he worked until his retirement in 1996.

As a teacher, Professor Mlinšek introduced new pedagogical methods in training and consulting students. He was the founder of the International Section of the Professor of Forestry (1985). As a researcher, he made a visible and diverse input into both nature conservation and sustainable forest management in planted forests and virgin forests. He has led a team of specialists in designing and establishing a network of forest protected areas (reserves) across Slovenia, introduced a notion "holistic forestry" in support of the "Close-to-Nature" approach in forestry, including a development of the nature-based forest tending system, and was a founding member of the *Pro Silva* association in Europe (Ljubljana, 1989).

Apart from his research and educational activities, Professor Mlinšek also carried out many other duties: as Head of the Forestry Department (1966–1968), Deputy Dean (1971–1973, 1975–1977) and Dean (1973–1975) of the Biotechnical Faculty and a member of several other bodies at the University of Ljubljana. During 1971–1975, he served as a Head of the Biotechnical Section at the Research Society of Slovenia. For many years, he was a member of several editorial boards, including the journal "Forestry Courier" (*Gozdarski vestnik*), the Research reports "Forestry and Wood Science and Technology" (*Zbornik gozdarstva in lesarstva*), and many books including, the Encyclopedia of Slovenia (*Enciklopedija Slovenije*), in which he was editor of the section on forestry.

Professor Dušan Mlinšek is an author and co-author of more than 160 publication in Slovenian and over 120 publications in foreign languages.

For his dedication to the forest sector and the development of forest education, as well as his administrative work and public service, Professor Dušan Mlinšek has been awarded a number of formal recognitions nationally and internationally. He received the *Boris Kidrič Fund Award* for his significant contribution to the study of Scots pines in Eastern Slovenia (1960), the Order for the Work Achievements with a Golden Crown (1980) and the Slovenian Jesenko Award (1989), was appointed as an Ambassador of Science of Republic of Slovenia (1991), was made a Merit Professor of University of Ljubljana (1992), and was chosen as an Honorary Citizen of the Municipality of Velenje (2007).

He was decorated with the Heinrich Cotta Medal by Tharandt University, German Democratic Republic (1986), was elected the UN Peace Envoy (together with IUFRO, 1986), became a Honorary Doctor of the University of Oslo (1987), was awarded the Karl Gayer Medal by the Bavarian Nature Conservation Union, Germany (1990), and became a Corresponding Member of the Academy of Forestry Sciences in Florence, Italy.

Professor Mlinšek has actively participated in the International Union of Forest Research Organizations (IUFRO) since 1961. He began his service for IUFRO at the 13th IUFRO Congress in Vienna, Austria, as a member of Working Group 21 dealing with forest tending measures within Section 23 on silviculture. In 1967, at the 14th IUFRO Congress in Munich, Germany he made a few presentations at Section 23 and became a leader of the Working Group on treatment of young stands. After the reorganization of the Union in 1971, at the Congress in Gainesville, he was elected Coordinator of Division 1: Forest Environment and Silviculture and became a Board member, and at the 16th IUFRO World Congress in Oslo, Norway, he was re-elected to these positions.

At the 17th IUFRO World Congress in Kyoto, Japan (1981), Professor Dušan Mlinšek was elected President of IUFRO for 1982–1986. He became the first and only President from a socialist country. He put much effort into organization and successful holding of the 18th IUFRO World Congress in Ljubljana in 1986. It is noteworthy that during his Presidency, the IUFRO Special Programme for Developing Countries (SPDC) was established, and much attention of IUFRO was allocated to the boreal forests. For his long-term service to IUFRO and his achievements in the development of forest research, Professor Dušan Mlinšek was recognized as a IUFRO Honorary Member in 1989, and was given this award in 1990 at the 19th IUFRO World Congress in Montreal, Canada. He then participated in several further IUFRO Congresses.

Professor Dušan Mlinšek passed away on 15 December 2020 at home in Ljubljana, Slovenia aged 95 years.

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PLOCHMANN, Richard

Richard Plochmann received the IUFRO Honorary Membership in 1990.

Richard Plochmann was born on 7 June 1924 in Nürnberg, Germany, into the family of Karl Plochmann (1884–1958), member of the board of directors of MAN²⁸, and his wife Lola Freiin von Pechmann (1898–1966). He had two sisters – Renate and Lilly. In 1959, he married Waltraud Diez. They had four children – Ulrike, Rudolf, Annette, and Regine.

After finishing the Melanchthon-Gymnasium in his hometown in 1941, he was called up for military service. Upon his return, and from 1946 to 1948, he studied forest science and then received a Diploma in Forest Sciences (*Forstwissenschaft*) from the Ludwig-Maximilian University of Munich.

In 1951, he began his professional career (a 3-year trainee period), and in 1952 he passed the Great Forest State Examination for the higher forest service as best of the year. He was assigned to work at the Bavarian State Forestry Administration (*Bayerische Staatsforstverwaltung*). However, he took an unusual decision to spend a year in a logging camp in Western Canada as a worker. That experience and the materials that he collected enabled him to study the nature and natural dynamics of the virgin forests that still exist there. He then habilitated after five years as an Assistant Professor at the Institute of Silviculture at the Ludwig-Maximilian University of Munich from 1957. During this period, he earned his Ph.D. from the Ludwig-Maximilian University.

Richard Plochmann dedicated his working life to the Ludwig-Maximilian University of Munich. In 1960, he was appointed *Privatdozent* and, in 1964, Associate Professor. In 1968, he was promoted to Full Professor and the Chair of Forest Policy and Forest History at the LMU Munich. In 1971, he became the first Dean of the newly established Faculty of Forest Sciences, and from 1972 to 1975 he was Vice-Chancellor of the University. In 1972/73 he was Chairman of the Forestry Faculty Day. He resumed his work as the Dean of Forestry Faculty in 1988 and became the Director of the Institute of Forest Policy and Forest History at the Ludwig-Maximilian University of Munich (*Institut für Forstpolitik der Universität München*).

Professor Plochmann was active in the extension service in Bavaria. He actively participated in various events in the State. From 1961, he was in charge as Deputy District Chief of the Bavarian Forest Service in Reit im Winkl and from 1964 until 1968 as District Chief in Murnau, Upper Bavaria. These roles represent his lifelong endeavor to remain connected with practical work in the forest, even as a scientist.

Professor Plochmann participated in the reorganization of the Bavarian State Forestry Administration (1971), worked on the amendment to the Bavaria Forest Act (1974) and on the new version of the Bavarian Hunting Law (1978) after the adoption of the German Federal Hunting Law of 1976. Later, in 1988, together with TV author and environmentalist Horst Stern, he took leadership in establishing the Ecological Hunting Association (*Ökologischer Jagdverein Bayern e. V. – ÖJV, ÖJV-Bayern*), described its goals and became its first Chairman. That happened after the long, serious and thorough debates that occurred after hunters lost faith in the reform capacity of the Hunting Protection Association (*Deutscher Jagdschutzverband*).

He was also active in the German Forestry Association (*Deutscher Forstverein*), was a member of the Advisory Council of the Federation of Nature Conservation in Bavaria (*Beiratsmitglied beim Bund Naturschutz in Bayern*) and from 1986 its spokesman. He represented the Bavarian action group “Fight against the dying of the forest” (*Bayern Aktionsgemeinschaft “Kampf gegen das Waldsterben”*), and was an initiator and a participant of many events of the Evangelical Academy Tutzing (*Evangelische Akademie Tutzing*), which organizes conferences, seminars and scientific colloquia.

Professor Plochmann spent over 35 years of his teaching, research and administration career within the Ludwig-Maximilians-University Munich, and in 1989, he retired as Professor Emeritus of Forestry Policy and Forestry History at the Faculty of Forestry.

Internationally, Professor Plochmann was active in IUFRO following the 16th IUFRO Congress in Oslo (Norway 1976) when he became Coordinator of Division 4: Planning, Economics, Growth and Yield, Management and Policy; he was re-elected to the same position as well as to the Executive Board at the 17th

²⁸ *Maschinenfabrik Augsburg-Nürnberg AG*

IUFRO World Congress in Kyoto (Japan 1981) for 1982–1986. In recognition of the high level of professionalism of Professor Plochmann and his involvement in the Union's development, he was awarded IUFRO Honorary Membership at the 19th IUFRO World Congress in Montreal (Canada 1990).

He loved to spend his spare time by hunting and skiing.

Professor Plochmann died unexpectedly on 26 April 1991 in his home in Assenhausen (Berg) as a result of brain surgery in his 67th year. He was buried in Aufkirchen (Berg) in the Upper Bavarian district of Starnberg near Lake Starnberg.

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BOL, Marten M.G.R.

Marten M.G.R. Bol²⁹ received the IUFRO Honorary Membership in 1992.

Marten Bol was born on 18 July 1925 in Anloo, a small village 8–10 km from Assen, the capital of the province of Drenthe, the northeastern Netherlands. His parents were primary school teachers: Lourens Jan Bol (1897–?) and Roelfina Harmina Eertman (1896–?). He had a brother, Jan (1923). In 1956, he married Theresia Antonia Margu rite Bernards (1926). They raised four children, Roely (1958), Anton (1960–1964), Rob (1965) and Juli tte (1969) Bol.

In 1943, after finishing Hogere Burger School (HBS) in Groningen, he later moved to Sweden where he practised as a sawmill worker and rafter. He met his future wife there. In 1956, he graduated with a M.Sc. degree in

Forestry Engineering (M.Sc. *ingenieur*) with specialization in Forest Techniques and Forest Products from the Agricultural College in Wageningen (*Landbouwhogeschool Wageningen*, now Wageningen University & Research). After graduation, he began his professional career at the Division of Forest Exploitation of the same University and researched the Dutch forest with his former teacher and colleague Prof. Dr. Ir. J.F. Kools.

In 1960, he was appointed as a Section leader for Forest Work and Technique at the Forest Research Station “De Dorschkamp” of the National Council for Applied Scientific Research in the Netherlands, at Wageningen, and in 1965 was promoted there as a senior research officer. Then, in 1971, he was invited and on 13 September 1972, Prof. Ir. M.M.G.R. Bol accepted the post of Extraordinary Professor in Forestry Technology after delivering a lecture entitled “Viewpoints from forestry technology” at the Agricultural University in Wageningen where he worked until his retirement in 1987.

His service at the “De Dorschkamp” and the University dramatically broadened his interest in different directions and disciplines and resulted in him bringing forward various proposals and practical advice for the management of Dutch forests. Trained as a forest engineer, he was a broadly oriented researcher, a stimulating forestry teacher and one of the leaders of the forestry sector in the Netherlands. Over time, he paid more attention to nature and forest landscape conservation, outlining the significance of forests both nationally and internationally.

For almost 30 years, Marten Bol led an active professional and public life, being a member of many professional societies and associations in the Netherlands, including the Netherlands Institute of Agricultural Engineers and the Netherlands Society of Efficiency. In 1959–1969, he was a member of the Editorial board of the Dutch Forestry Journal (*Nederlands Bosbouw Tijdschrift*), the Board of Trustees of the School for Professional Training in Forestry, and of the Board of the Global Forest. He was also Chairman of the Council for Work Science in Agriculture (1967–1973), Chairman of the Foundation for Training of Labourers in Forestry (1972–1982) and Chairman of the Foundation for the Netherlands Forestry Museum (1983–1988). Professor Bol was a member of the Royal Dutch Forestry Society (*Koninklijke Nederlandse Bosbouw Vereniging* – KNBV) and served as its Vice Chairman (1971–1976) and Chairman (1983–1988), and in 1992, he was appointed as an Honorary Member.

Internationally, he was a member of the Woodlands Section of the Canadian Pulp and Paper Association and a member of Germany’s Board of Trustees for Forestry and Forestry Products e.V. (*Kuratorium f r Waldarbeit und Forsttechnik* e.V. – KWF). He was also a member of the FAO/ECE/ILO Joint Committee on Forest Working Techniques and Training of Forest Workers, in which he was a rapporteur (1970–1972).

Marten Bol was an active officer in the International Union of Forestry Research Organizations (IUFRO). At the 15th IUFRO Congress in Gainesville (USA 1971), he organized and became Leader of IUFRO Subject Group S3.02 Operational methods in the establishment and treatment of stands for 1972–1976. During his term, Marten Bol paid much attention also to work-studies on silvicultural operations. In October 1974, he organized in Wageningen the Symposium on Stand Establishment as the Joint Meeting of IUFRO Divisions 1 and 3, and the Food and Agriculture Organization of the United Nations (FAO).

²⁹ Marten’s full name was Marten Margritus Garbrand Regnerus Bol.

At the 16th IUFRO World Congress in Oslo (Norway 1976), Marten Bol was elected as Deputy Coordinator of Division 3: Forest Operations and Techniques, and served in this position until 1978, when he became Coordinator of Division 3. He was active in organizing the 17th IUFRO World Congress in Kyoto (Japan 1981) where he was re-elected to his position from 1982 until 1986, and the 18th IUFRO World Congress in Ljubljana (Yugoslavia 1986). Under his leadership, the Division 3 activities were strengthened and its international cooperation enlarged. Major divisional meetings and symposia were organized in the Federal Republic of Germany, with an excursion to Austria, Sweden, Finland, and the first IUFRO meeting in the Soviet Union (1979). He arranged a joint meeting of IUFRO Divisions 1, 2, 3, 4 and INRA in France, a meeting in the USA and Canada (1984) jointly with the Council of Forest Engineering, and meetings in Tanzania, Brazil and Pakistan (in cooperation with Division 4, IUFRO Special Programme for Developing Countries, Food and Agriculture Organization of the United Nations, the International Labour Organization and national authorities). During his term as the Division 3 Coordinator, he actively worked on the IUFRO Executive Board. In recognition of his longstanding service and achievements in the promotion and development of IUFRO, at the 19th IUFRO World Congress in Montreal (Canada 1990), Prof. Bol was awarded IUFRO Honorary Membership.

After retirement from all his positions, Marten Bol turned his interests and activities to literature and arts. He began collecting paintings, organized lectures and exhibitions and events wrote books about the Painting School (*Schilderschool*) in Oosterbeek, the so-called the “Nederlands Barbizon”.

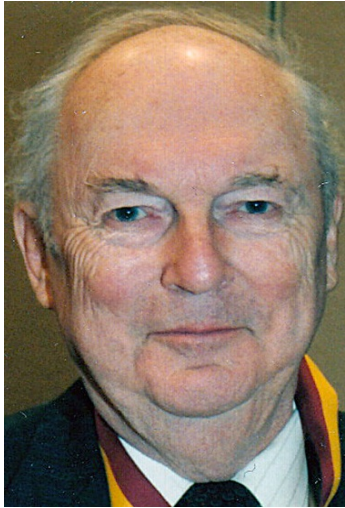
Professor emeritus Marten Bol died on 16 November 2014 in Arnhem, The Netherlands, aged 89 years.

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BUCKMAN, Robert (Bob) Erwin

Robert Erwin Buckman received the IUFRO Honorary Membership in 1992.

Robert Buckman was born on 28 June 1927 in Superior, Wisconsin, and grew up in Spooner, Wisconsin. He was the first child of railroad conductor Herman (1890–1957) and schoolteacher Leola (née Larson) (1899–1990) Buckman. His brother, Donald, was born in 1928.

After finishing Spooner High School in 1944, he served in the US Army from 1944–1947 and 1950–1952. In 1950, Robert married Marie L. Eidenschink (1925–2011), and their marriage lasted over 60 years until her death in 2011. They had two daughters, Mary and Patricia, and two sons, Robert and John.

He entered the Forestry programme at the University of Minnesota where he got Bachelor degree in 1950, Master of Forestry degree in 1953, and in 1959, he earned a PhD in Forestry (thesis on growth and yield of red pine) from the University of Michigan. In 1968–1969, he spent a year as a Charles H. Bullard Fellow at Harvard University and received a second Master's Degree in Public Administration. At Harvard, his major area of interest concerned the ideas of V.L. Harper and G.M. Jemison and the development and implementation of forest research policy.

He began his forestry career in Missoula, Montana in 1953. In 1955–1965, he was a Research Forester working in the northern conifer and aspen forests on prescribed burning in pine forests. This work was conducted at the Lake States Forest Experiment Station of the USDA Forest Service in Grand Rapids, Minnesota, and he rapidly developed professionally, becoming the project team leader.

His talent for administration and strong leadership was noticed: in 1965, he moved to the USDA Forest Service Washington Office in the Division of Timber Management Research, and in 1970–1971, he served as staff assistant to the Deputy Chief for Research. In 1971, he left the capital city for Portland, Oregon to be Director of the Pacific Northwest Forest and Range Experiment Station. During his term there, he chaired the Pacific Northwest Research Natural Area Committee – a group of federal, state, and private agencies that developed standards for natural areas and recommendations on establishing new ones throughout Oregon, Washington, and Alaska. He also encouraged the development of an interdisciplinary program.

In 1975, Dr. Buckman returned to Washington DC as Associate Deputy, and in a year, he became the Deputy Chief for Research of the USDA Forest Service. He was a major contributor to the Forest and Rangeland Renewable Resources Research Act of 1978. His responsibility was to direct forest research and international programs, which gave him insights into the forestry and forest research activities and problems of many countries.

After retirement in 1986, he returned to the Pacific Northwest and shortly after accepted an invitation from Oregon State University in Corvallis where he taught international forestry and forest policy and advised several graduate students on the preparation of their theses, retiring in 1995. In recognition of his achievements, Professor Buckman was honoured with a number of awards including election as a Fellow of the Society of American Foresters (SAF), as a Fellow of the American Association for the Advancement of Science (AAAS), and with the Outstanding Achievement Award of the University of Minnesota (2002).

Robert Buckman dedicated almost 20 years to working for IUFRO. At the 16th IUFRO Congress in Oslo, Norway, in 1976, he was elected to the IUFRO Executive Board. At the 17th IUFRO Congress in Kyoto, Japan, in 1981, he was elected as IUFRO Vice-President. As an IUFRO Board Member, Robert Buckman chaired the Honours and Awards Committee and worked with Past President Walter Liese to improve the financial affairs of the Union. He also served on the Marcus Wallenberg Prize Selection Committee (Stockholm, Sweden) for forestry.

At the 18th IUFRO World Congress in Ljubljana, Yugoslavia, in 1986, he was elected President of IUFRO for the period 1987–1990. During this time, he continued to improve IUFRO's administrative procedures, such as ensuring the adoption of Spanish as the fourth official language of the Union. He worked hard to promote recognition of the importance of forestry research in developing countries and at the international governmental level, but he strongly emphasized the non-political and non-governmental nature of the Union.

He is fondly remembered for many important contributions made to IUFRO, and particularly for extending the reach and effectiveness of the Union worldwide, giving particular emphasis to the development of research programs in developing countries. In recognition of his exemplary work for IUFRO and the world of forestry research, Dr. Buckman was awarded Honorary Membership of the Union at the Centenary Anniversary Congress in Eberswalde/Berlin, Germany, in 1992. As Past-President, he served on the IUFRO Executive Board until the 20th IUFRO World Congress in Tampere, Finland, in 1995.

Bob was an avid hunter and fisher throughout his life. His love of things outdoors started as a youth and continued through his retirement. While in Oregon, he planted, propagated and maintained a beautiful yard full of native rhododendrons. The blaze of colors each spring was a source of pride and joy.

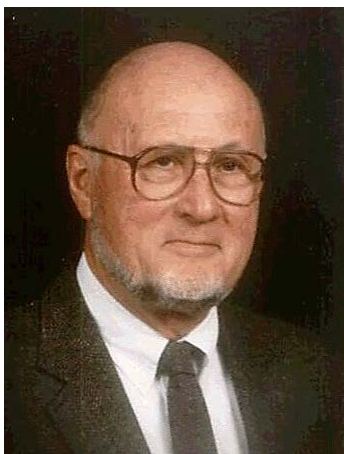
Professor Robert E. Buckman passed away peacefully on 2 April 2016 at his home at Stoneybrook Lodge in Corvallis, Oregon, USA.

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YOUNGS, Robert (Bob) Leland

Robert Leland Youngs received the IUFRO Honorary Membership in 1992.

Robert Youngs was born on 10 February 1924 in Pittsfield, Massachusetts, USA.

He received his Bachelor degree from New York State College of Forestry (Syracuse, NY) in 1949, a Wood Technology degree from the University of Michigan (Ann Arbor, MI) in 1950, and a Ph.D. from Yale University (New Heaven, CT) in 1957.

In 1949, he married Esther Stevenson. They had one son and four daughters.

Robert Youngs began his career in 1951 as a research forest products technologist at the Forest Products Laboratory (FPL) of the US Forest Service in Madison, Wisconsin. His research was focused on the physical and mechanical properties of wood. In 1964, he was appointed Chief of the Division of Solid Wood Products there. In 1966, he moved to Washington, D.C. to the staff of the Deputy Chief for Forest Service Research. In 1970, he was appointed Director of the Southern Forest Experiment Station in New Orleans, Louisiana, and in 1972, he returned to Washington D.C., as Associate Deputy Chief for Forest Service Research. He returned to FPL as Director and served until retirement from the Forest Service in 1985.

After retirement from the Forest Service, Dr. Youngs moved to Blacksburg, Virginia, to serve as Professor of Forestry and Forest Products at Virginia Polytechnic Institute and State University. He initiated studies in world forestry and agroforestry and continued his work in international forestry as a member of several professional societies and as a participant in numerous international meetings, in addition to many international assignments.

Dr. Youngs is a member the International Academy of Wood Science (IAWS), the International Society of Tropical Foresters (ISTF), the Society of American Foresters (SAF), the Forest Products Research Society (FPRS), and a founding member and fellow of the Society of Wood Science and Technology (SWST). He held many offices in IUFRO, especially as Coordinator of the Forest Products Division, served assignments in the Food and Agriculture Organization of the United Nations (FAO), and with USAID. He participated in several World Forestry Congresses, carrying out various responsibilities and elaborating projects in the sphere of his professional interests including a worldwide forestry program assessment. He also served as a board member for many of these organizations.

Professor Youngs served as Editor of the scientific journal *“Wood and Fiber Science”* from 1995 to 2001. He is the author and co-author of more than 50 scientific publications on wood science and its history.

During his term with the USDA Forest Service and his Professorship, Dr. Youngs always tried to bring together researchers, forest managers, and wood-using industry practitioners and business for the effective management and use of forest resources nationally and worldwide. He is well known in national and international organizations as a researcher and a research administrator, and he is recognized as a leader in evolving and encouraging advanced timber utilization practices.

As a widely known scientist in the field of physics and mechanics of wood, woodworking, drying, marketing, forestry, and as a master of woodworking, he has received many honours. He is an Academician of the IAWS and was awarded the U.S. Department of Agriculture Distinguished Service Award. He was awarded an Honorary Doctorate by the Moscow State Forest University, Russia, and the University of Poincare, Nancy, France. Dr. Youngs actively participated in the organizing the 15th IUFRO Congress in Gainesville, FL, USA in 1971 and with a few others was recognized in the congress Resolution V. He also made a presentation at the plenary sessions of the Division 5: Forest Products and another, in co-authorship with B. A. Bendtsen, during the 17th IUFRO World Congress in Japan. At that same Congress he was elected of Division 5 Coordinator and then re-elected for the same position at the 18th IUFRO World Congress in Yugoslavia (1986). Thus, he acted as IUFRO Division 5 Coordinator during 1982–1990.

In 1992, Professor Robert L. Youngs was awarded IUFRO Honorary Membership during the Centennial Congress in Berlin and Division 5 meeting in Nancy.

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MORANDINI, Riccardo

Riccardo Morandini received the IUFRO Honorary Membership in 1992.

Riccardo Morandini was born on 21 December 1925 in Borgo Valsugana, Trentino, Italy, into the family of judge Simone Morandini (1890–1984) and teacher Maria (née Zieger) (1888–1971). There were three children in the family, with Riccardo being the youngest brother. In 1960, Riccardo married Bona Edlmann (1924), and they had three children, Simone (1961), Martino (1962) and Maddalena (1965).

After finishing high school in Florence, Riccardo Morandini entered the Faculty of Agricultural and Forestry Sciences at the University of Florence, where in 1947 he earned his Diploma in Agriculture/Forestry. In the same year, he began his professional career as a Researcher at the Silviculture Experiment Station, Florence, a position that he held until 1969.

From the outset, he was keen to investigate the Mediterranean and mountain ecosystems of Italy and its neighboring countries. These efforts brought him to the international arena for various trees and forest ecosystems and gene resources research. During his entire life, he promoted complex forest research in the Apennine and the Mediterranean regions. From 1956, he was associated with the Scientific Committee of *Silva Mediterranea* of the Food and Agriculture Organization of the United Nations (FAO). He chaired the Association, and was a coordinator of its experimental network. Later, he was the Committee's scientific adviser.

In 1969, Dr. Morandini was appointed Acting Director, and from 1973 to 1995, he held the position of Director at the Silviculture Experiments Institute (*Istituto Sperimentale per la Selvicoltura*) in Arezzo. During his directorship, he reviewed methods of experimentation in relation to forest science, identified new goals, made structural adjustments to the institutional structure and adopted a new research program. He established the groundwork for the further transformation of the Institute into the Research Centre for Forestry and Wood, Arezzo.

In 1958, Riccardo Morandini received his license to teach ecology and silviculture at the university level (*Libera docenza*), and became a Professor in the University of Florence (*Universita di Firenze – UniFI*). He delivered lectures on silviculture and forest genetics. When retired from this position, he concentrated his activities on IUFRO and on Mediterranean issues, such as the International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM).

During his career, Professor Morandini authored and co-authored over 110 publications on forest ecology, forest genetics, silviculture, conservation of natural resources and the environment, and on forestry research policy.

International activities made Professor Morandini an important and well-known person outside Italy. He was active in the Food and Agriculture Organization of the United Nations (FAO), the European Economic Community, the United Nations Educational, Scientific and Cultural Organization, and the Organization for Security and Co-operation in Europe, and was involved in technical assistance missions in developing countries. Riccardo Morandini was a member of many editorial boards in Italy and abroad. He held many high offices in national and international scientific associations and, for example, he was a member of the High Council for Agriculture and Forestry of Italy. He was the Vice Chairman (1968–1972), then Chairman (1972–1993), the member representing IUFRO (1993–2000) and finally, a Resource Person (2001–2003) of the FAO Panel of Experts for Forest Genetic Resources. At the beginning, he was also a Coordinator for Exploration and Seed-collecting Expeditions in the Mediterranean Region for this Panel. Strongly dedicated to research and development in the Mediterranean area, Professor Morandini from 1974 to 1990 was a member of the Scientific Committee and a Chairman of the Forests Group at the International Center for Advanced Mediterranean Agronomic Studies (CIHEAM). In this region, he was actively involved in the UNESCO MAB Programme, OECD, and an EU COST Committee. From 1980, he was also a member and Vice-President of the International Society of Tropical Foresters (ISTF).

In recognition of his international efforts and achievements, Professor Morandini was awarded an honorary degree in Forestry and Forestry genetics from the University of Natural Resources and Life Sciences

(*Universität für Bodenkultur Wien – BOKU*), Vienna (1979). He was elected a member of the Italian Academy of Forestry Sciences (*Accademia Italiana di Scienze Forestali*) in Florence and was a Vice President as well as a member of the French Academy of Agriculture (*Academie d'Agriculture de France*) (2011).

Professor Richardo Morandini began his longstanding relationship with IUFRO in 1952 when he was actively involved in the organization of the 11th IUFRO Congress in Rome, including leading a post-Congress tour to Sicily and establishing the Working Party on provenance trials. He was associated with IUFRO as a Technical Advisor during the Presidency of Aldo Pavari, stimulated and actively supported IUFRO activities in the Mediterranean region and established an IUFRO Working Party on Mediterranean conifer species. Starting from the 17th IUFRO World Congress in Japan (1981), he was elected twice as a member of the IUFRO Board (1982–1990) and as a member of IUFRO Enlarged Board (1990–1993) and was appointed IUFRO liaison person with the Food and Agriculture Organization of the United Nations (FAO) and the UN Economic Commission for Europe (UN ECE). He was an editor of the IUFRO's history in its first century, being the "institutional memory of IUFRO" in those days. From 1993 to 2000, he represented Italy on IUFRO's International Council.

In recognition of his almost half-a-century of service to IUFRO and the promotion of forest research in the Mediterranean Region, Professor Riccardo Morandini was awarded with IUFRO Honorary Membership at the Centennial IUFRO Congress in Eberswalde (Germany 1992).

Professor Riccardo Morandini passed away in Florence on 10 February 2011.

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5. Morandini S. Personal communications (March 2018) at morandinis@yahoo.it



HERMANN, Richard (Dick) Karl

Richard Karl Hermann received the IUFRO Honorary Membership in 1992.

Richard Hermann was born on 16 February 1924 in Munich, Germany, into the family of mining engineer Kurt (1887–1954), and Laura (née Fischer) (1889–1967) Hermann. He had a younger sister Gudrun (later German). In 1948, he married Freya F. Roeger (1925–2012)³⁰. They had a son, Christopher (1953).

In 1941, after finishing high school (*Abitur*) in Cottbus, he was drafted into military service. After World War Two, he returned to Munich. Before he could begin his studies, he was required, as a pre-condition of enrollment, to complete 1,000 hours clearing rubble in the ruined city. He received a Diploma in Forest Sciences (*Forstwissenschaft*) with distinction from Ludwig

Maximilian University of Munich (*Ludwig-Maximilians-Universität München*) in 1951.

From 1951 to 1953, he worked for the Bavarian State Forestry Administration (*Bayerische Staatsforstverwaltung*) and passed the Great Forest State Examination (*Große Forstliche Staatsprüfung*). In 1953, Dick and Freya moved to the United States, where Dick began working for Davey Tree Company in New Jersey. In 1954, he was awarded a full tuition scholarship to Yale University, and in 1956, he earned a Master's in Forest Soils Science. In 1960, he earned a Ph.D. in Forest Ecology from the Department of Botany at Oregon State College (OSU). As a Ph.D. student, he started working in Botany in 1958, but in 1959, he moved to the OSU College of Forestry. He continued his career there in forestry research and education, where, as a tenured Professor, he taught courses in silviculture from 1979 until his official retirement in 1989 as Professor Emeritus of Forest Resources. Twice, in 1982 and 1989, he was a Visiting Professor in Forestry at the University of Göttingen (*Georg-August-Universität Göttingen*), Germany.

At the College of Forestry, he conducted research in several fields, including stress testing of forest tree seeds and seedling testing before large-scale planting, as well as strategies, programs and methods for seedling quality. His primary research interests were forest regeneration (nationally and globally), the physiology of trees, and developing quality planting stock, particularly Douglas fir. His knowledge and the results of his scientific work on Douglas fir earned him worldwide recognition.

Throughout his years at OSU, Professor Hermann was a leader in international forestry. In 1971, he participated as a researcher in an international exchange program between the U.S. National Academy of Sciences (NAS) and the Polish Academy of Science (PAN). In 1978, he was a fellow researcher of the French National Institute of Agricultural Research Institute (INRA – *National de la Recherche Agronomique*) at the Forest Tree Improvement Station, Orleans Centre (*Station d'amélioration des arbres forestiers, Centre d'Orléans*).

Professor Hermann was a member of the Society of American Foresters (SAF), the Ecological Society of America, the Northwest Scientific Association, and the Sigma Xi Scientific Research Society. In 1979, he was awarded an Honorary Doctorate in Silviculture from the University of Göttingen. In 1982, he was named as a Corresponding Member of the Italian Academy of Forest Sciences (*L'Accademia Italiana di Scienze Forestali*), and in 1991, he received the prestigious national SAF Fellow Award.

Professor Hermann dedicated much time to the activities of the International Union of Forest Research Organizations (IUFRO). In 1965–1980, he served as the leader of several working parties at the Division 1. He was co-organizer and an active supporter of the establishment of the IUFRO working group *Ecology and silviculture of silver fir* when the first symptoms of European silver fir (*Abies alba*) disease and decline appeared in Central European countries (1969). At the 17th IUFRO World Congress in Kyoto, Japan (1981), he was elected Coordinator of Division 1 and a member of the IUFRO Executive Board for 1982–1986. He actively participated in the preparation of the 18th IUFRO World Congress in Ljubljana, Yugoslavia (1986) and put much effort toward the success of the Divisional sessions. His fluent German, English, French, and Italian made his service in IUFRO both valuable and productive.

³⁰ She had her own scientific career as Professor of Pharmacy at Oregon State University (OSU).

In 1992, in recognition of his longstanding participation and significant input into the Union's development and achievements, Professor Richard K. Hermann was elected as an IUFRO Honorary Member. After receiving the award, Professor Hermann remained active in IUFRO and participated in many IUFRO meetings around the world. For example, in 2005, he participated in the meeting in Romania on the silviculture and gene preservation of the threatened silver fir. For his research on silver fir, he also travelled to Bulgaria, Macedonia, Spain, and Germany.

He did not actually "retire" from his activities until his last days. He continued his work on Douglas fir issues such as growth and stocking, silviculture and plantations both domestically and internationally, including acting as a consultant to the German Forest Service and French Forest Service. He culminated his scientific career in 2014 with the publication of a comprehensive monograph on Douglas fir. In this seminal work, he synthesized 100 years of Douglas fir research literature, including 200 of his own scientific articles.

He loved to spend his spare time with his wife, traveling, hiking or listening to music. Professor Emeritus Richard K. Hermann passed away quietly at his home in Portland, Oregon on 14 October 2016 at the age of 92.

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FUGALLI, Oscar

Oscar Fugalli received the IUFRO Honorary Membership in 1995.

Oscar Fugalli was born on 11 March 1922 in Senigallia, a small port town on *the* Adriatic coast of Italy, into the family of merchant Giosafatte and Fanny Fugalli. Oscar had a brother, Raul, and a sister, Juanita. In 1944, he married Licia Brega (1921–2010) from Ancona, and they raised three children: Francesca, Giulia and Gualberto (Toto) Fugalli.

Oscar finished high school in Rimini, where he received a good education. His fluency in English brought him in 1944 to the US Army as an interpreter. In 1945, Oscar graduated from the Forestry Faculty of one of the oldest universities in Europe – the University of Florence, Italy. His fluent English allowed him to continue his education in the United States where in 1948 he obtained an MSc degree at the Forestry College of the New York State University (SUNY), Syracuse. Upon return to Italy, he began his professional forestry career at *Corpo Forestale dello Stato* (State Forestry Corps³¹), but in 1951, having been assigned to the special section on forest policy at the Food and Agriculture Organization of the United Nations (FAO) where he served until his retirement in 1982. In his sixties, Oscar Fugalli became Chief of the Forest Management Branch at the Forest Resources Division of the FAO Forestry Department.

Rebuilding the world after the devastation of World War Two was challenging. Much reforestation was needed as well as reconstruction of forestry administration and timber industry. This challenge required intensive forest management based on improved planting material, such as seeds from the best forest trees. To utilize this approach, in 1968 the FAO created the Panel of Experts on Forest Gene Resources. However, hard work almost killed him: he had a massive heart attack during his trip to Budapest in 1968. Fugalli was one of key initiators of this. Until his retirement in 1982, he was also an advisor on forestry economics at the Permanent Interstate Committee for Drought Control in the Sahel (CILSS) as well as Secretary of the Committee of *Sylva Mediterranea*.

Over 30 years, he was involved in organization of six World Forestry Congresses, from the third congress in Helsinki (Finland 1949) to the eighth one in Jakarta (Indonesia 1978), where he was appointed Associate Secretary General. His big success was the last Congress that he organized and coordinated, and which led among other things to the opening of the FAO to forestry and social problems in developing countries.

After retirement, he continued his work for FAO as a volunteer in the Forestry Library, where he was also on the Forestry Library Users Committee. He also worked with the Forest Resources Development Service (FORM) as well as with the FAO International Poplar Commission (IPC), having been one of its key initiators and having been its Secretary for 20 years. Having CILSS and FAO IPS experience, Oscar was an active and interested supporter of the Tropical Forestry Action Plan (TFAP), which was developed by the FAO Committee on Forest Development in the Tropics, supported by the World Bank and many developed countries via their International Development Agencies (IDA), long before its adoption by the Food and Agriculture Organization of the United Nations (FAO) in 1985.

During his service at FAO, he put much effort into enhancing cooperation between FAO and IUFRO, especially on tree improvement, breeding and gene resources. He was actively involved in organizing and holding the FAO/IUFRO First (Stockholm, Sweden 1963), Second (Washington, DC, USA 1969) and Third (Canberra, Australia 1977) World Consultations on Forest Genetics and Tree Breeding. Another big success was the FAO/IUFRO Symposium on Internationally Dangerous Forest Diseases and Insects (Oxford, UK 1964) and the World Symposium on Man-Made Forests and their Industrial Importance (Canberra, Australia 1967). In recognition of his achievements and dedication to forestry, the Italian Academy of Forest Sciences awarded him Honorary Membership in 1964. He was also a long-standing member of the Commonwealth Forestry Association.

³¹ The Italian Forestry Service; under the jurisdiction of the Italian Ministry of Agriculture, Food and Forestry.

After retirement, in 1983, Oscar Fugalli created the IUFRO Special Programme for Developing Countries (IUFRO–SPDC) at the IUFRO Secretariat, was appointed as its first Coordinator, and carried out this responsibility until 1991. After 1991, he continued to work for IUFRO and SPDC Programme on a voluntary basis, both at IUFRO and at the FAO headquarters in Vienna and Rome. Having few financial resources, but leveraging his vast international recognition and respect in many countries, he was able to organize a series of regional research planning workshops in Sri Lanka for Asia (1984), in Kenya for Sahelian and North Sudanian region of Africa (1986), in Peru for Latin America (1987), and in Malawi for Eastern and Southern Africa (1988). He also built a strategy for the further development of the SPDC, as well as establishing high standards for the organization of research planning workshops. He then found means to establish the IUFRO Special Programme for Africa.

IUFRO granted Oscar Fugalli two of its awards – the IUFRO Distinguished Service Award (1992) and IUFRO Honorary Membership (1995) in recognition of his exceptional activities, contributions and professional service rendered to the Union.

Oscar Fugalli was active in the service of FAO until almost his last days totaling 55 years. Outside work, he was very engaged with basketball and tennis. He was a professional basketball player for almost twenty years, and played in Ancona basketball team for 12 years in Serie B. He spent his last basketball years playing with a Roma Team in Serie A and Serie B, being limited to semiprofessional status as he was already working for FAO. He was a passionate tennis player and an equally passionate tennis coach for his children.

Oscar Fugalli passed away at home in Rome on 15 October 2005 at the age of 83.

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CAYFORD, James (Jim) Harry

James Harry Cayford received the IUFRO Honorary Membership in 1995.

James Cayford was born on 14 November 1929 in Montreal, Canada into the family of Stanley Barrett and Grace Alice (née Gummer) Cayford. He had a brother, Ralph, and a sister Merelie (Griffith). In 1954, he married Marjorie Burla Redstone with whom he lived for 57 years and raised two daughters, Carol and Diane, and a son, Alan.

After finishing school, Jim attended McGill University, Montreal, Quebec and the Faculty of Forestry, University of New Brunswick (UNB), Fredericton, from which he obtained B.Sc. in Forestry (1952). In 1956, he received Master's degree in Forestry from Yale University.

Jim Cayford began his professional career with the Industrial Forestry Service (IFS) Ltd., Prince George, British Columbia, joining them when the company was established in 1952. In 1953, he began his 35-year career with the federal government's Canadian Forestry Service (CFS) Manitoba District Office, and then served 12 years in Winnipeg, Manitoba, with a short one-year break in 1955 to complete his MSc at Yale. In 1965, he was promoted to Assistant Coordinator and soon Program Coordinator in Silviculture at CFS Headquarters in Ottawa, and in 1972 – Program Development Officer on Forest Production.

In the fall of 1974, he was appointed as Director of the Great Lakes Forest Research Centre in Sault Ste. Marie, Ontario, the position he held until 1987 with a break in 1980–1982 when he was Director General of Research and Technical Services. His final position at the Great Lakes Forest Research Centre was Director General, from 1985 to 1987. His major responsibilities included the development of the Ontario regional forest research program and the implementation of the federal government's programs to the forest sector. To raise his personal capacity, Jim obtained a license as a Registered Professional Forester (R.P.F.) in the Ontario Professional Foresters Association (OPFA).

During his Directorship, Jim Cayford was also Co-chair of the Canada-Ontario Joint Forest Research Committee; Chairman of the Canada-USSR Working Group on Forestry (1976–1987), contributor to the programs of two World Forestry Congresses and head of the Canadian Delegation at the 8th WFC in Indonesia (1978). For many years, he was also active in the Food and Agriculture Organization of the United Nations (FAO), serving on the Canadian Delegation in Rome, in several capacities on the FAO's North American Forestry Commission (NAFC) as well as contributing to a variety of FAO symposia.

He was also President (1982–1983) of the Canadian Institute of Forestry (CIF). The Institute was not a new for Mr. Jim Cayford as he began with the Manitoba Section of CIF where from 1957 to 1965, he was consecutively Councillor, Chairman of the Program and Publicity Committees, Secretary-Treasurer and, finally, Director. He kept up contact with the CIF when he moved to Ottawa and was elected as 2nd Vice-President (1980–1981), then 1st Vice-President (1981–1982), President (1982–1983) and Past-President of the CIF (1983–1984). In 1987, after retirement from his position at the Canadian Federal Forestry Service, Dr. Jim Cayford moved to Ottawa because he accepted a 3-year appointment (1987–1990) as the CIF's Executive Director. During this period, he revitalized the organization after a number of troubled years.

Throughout next 15 years, Mr. Jim Cayford worked as a part-time consultant on forestry issues and on contracts with several of organizations, including the Canadian International Development Agency (CIDA) as Forestry Advisor, Forestry and Conservation Sector, and as Executive Director of the Canadian Forestry Accreditation Board (CFAB). He was also the associate editor for the *Northern Journal of Applied Silviculture* (1984–1987), and the editor of *The Forestry Chronicle*, published by the CIF. At the same time, he served as Executive Director of the International Union of Societies of Foresters (IUSF) as well as several other national and provincial professional organizations.

Mr. Cayford devoted much voluntary time to serving a number of institutions, including as a member of the Board of the Eastern Ontario Model Forest (EOMF) and Chair of its Forest Science Committee, as a member and officer of the Canadian Forestry Association and the Ontario Forestry Association. After finally moving to Guelph, he served as a member of the Wellington County Stewardship Council.

Mr. Cayford received a number of national awards, including the Queen Elizabeth II Golden Jubilee Medal (2002). He was granted the status of a CIF Fellow, recognized with the CIF's special award for distinguished services (1986), and received the Eastern Ontario Model Forest's (EOMF) Ross Silversides Forestry Award. As a tribute to one of Canada's leading forestry professionals of the second half of the twentieth century, the new EOMF Memorial Trail named after Jim Cayford was established by the EOMF, supported by Limerick Forest and the James H. Cayford Memorial Fund. In recognition of his achievements in international forestry, Jim Cayford became a recipient of the CIF International Forestry Achievement Award (1990) and the American Forestry Association's Bernhard Eduard Fernow Award (1992).

He was active in IUFRO from the early 1970s. At the IUFRO World Congress in Japan (1981), he was appointed to the IUFRO Executive Board (EB) as Regional Representative for North America and later, as Chair of the Scientific Achievement Award (SAA) Committee. In 1986, at the 18th IUFRO World Congress in Ljubljana, he became one of three President's nominees and remained an EB member for the period 1987–1990. Jim Cayford actively participated in the preparation of the 19th IUFRO World Congress in Montreal (1990), during which he was elected Vice-President for Administration. He participated in the IUFRO Centennial Congress in Eberswalde (1992) and the follow up Congress in Tampere (1995) where he received the award of IUFRO Honorary Membership. After he left all IUFRO positions, he remained involved in IUFRO acting as one of the team reviewing the Union's activities and developing recommendations for its advancement.

He travelled extensively, visiting almost 100 countries on five continents during his work as a Canadian Federal Government employee, IUFRO senior official and working on contracts after retirement. During his professional career, he authored and co-authored over 200 scientific papers as well as numerous notes and remarks.

James Harry Cayford has passed away on 17 November 2011 in Guelph, Ontario, Canada, after collapsing suddenly at a community concert.

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KRIEBEL, Howard Burt

Howard Burt Kriebel received the IUFRO Honorary Membership in 1998.

Howard Kriebel was born on 31 July 1921 in Rose Valley, a small, historic borough in Delaware county, Pennsylvania, USA, to William Faul Kriebel, who was also born in Pennsylvania, and Mabel Burt Kriebel. Howard had an elder brother, William B. Kriebel (1918), and younger one, John A. Kriebel (1924). In 1949, he married Dorothea (Dottie) (née Reeder), and they had two children.

After finishing Westtown Friends School in 1939, he entered Haverford College, Pennsylvania, and in 1946, he gained a Bachelor degree in Biology. In 1948, he received a Master's degree in Forestry from Yale University and began his working career as a forester for the recently founded Sable Mountain Corporation in Vermont and Kentucky Conservation Department (1948–1949). He was also an Instructor in Ecology and Silviculture at the University of New Hampshire, Durham (1949–1952).

In 1952, Howard was enrolled at Yale University's School of Forestry, and in February 1956 he got a Ph.D. in Forestry with specialization in genetics after presenting his 194-page thesis *Patterns of genetic variation in sugar maple*. Later, in 1963, he spent 6 months as a visiting scientist in Genetics at the Royal College of Forestry, Stockholm, Sweden.

He worked his entire life in Ohio. In 1953, he began working as an Instructor in Genetics, then as Assistant Professor (1955–1958), Associate Professor (1958–1962) and, from 1962, Professor of Genetics at the Department of Forestry at the Ohio Agricultural Experiment Station (OAES), which later became the Ohio Agricultural Research and Development Center (OARDC) in Wooster, Ohio. From 1958, he also worked at the Ohio State University until his retirement in 1988. In 1966–1968, he served as Acting Chairman of the Department of Forestry of OARDC.

His primary responsibility, though, was research. Starting in 1953, his research pioneered the genetic improvement of forest trees for planting in Ohio, and one of his publications was a condensed form of his Ph.D. thesis. He also began his international activities, and established links with foreign geneticists, especially from Germany.

During his career, he made numerous presentations and published over 100 scientific papers alone and as a co-author. He pioneered research on the application of molecular genetics of trees. In 1982, he published recommendations on genetic selection based on the results of almost a quarter-century of research on genetic variation and tree improvement for many species, both native and exotic, coniferous and hardwood species.

Dr. Kriebel was a member of numerous societies, committees, panels and boards. Nationally, he was a member of the Society of American Foresters (from 1958), Central State Forest Tree Improvement Committee (1958–1962), Zoning Board of Appeals at Wooster, Ohio (1961), and the American Society of Plant Pathologists. In addition, he was a member of and President (1967) of the Wooster, Ohio Sigma Xi Club, and Honor man of Phi Beta Kappa at Haverford College (member since 1958), American Man of Science (from 1955), and Fellow of the American Association for Advances in Science (1965), as well as many others.

Internationally, he was panelist at the World Consultation on Forest Genetics (Stockholm, Sweden 1963) and at the 11th International Congress of Genetics (The Hague, Netherlands 1963), a member of the Yugoslav/American Fulbright–Hayes Commission and a Fulbright Senior Lecturer at the University of Zagreb, Yugoslavia (1971–1972). Later, he was elected as an honorary member of the Association of Genetic Societies, Yugoslavia. He visited many countries including Bulgaria, India, Japan, Romania, Sweden and others, building international cooperation in various research fields.

In 1997, Dr. Kriebel retired from all his positions and moved with his wife to Medford, New Jersey.

Dr. Howard Kriebel starting participating in IUFRO in 1963, joining the IUFRO Working Group on provenance testing, then on Quantitative Genetics, and serving for many years in several other positions within the Union. He made presentations at many IUFRO Congresses. In 1987–1995 he was elected to the IUFRO Executive Board, and in 1990, at the 19th IUFRO World Congress in Montreal, Canada, he was elected Coordinator of Division 2: Forest Plants and Forest Protection, later re-named Physiology, Genetics and

Protection, and then Physiology and Genetics. He published a paper with a brief history of Division 2 at the IUFRO Centennial Congress in Eberswalde, Germany (1992).

Professor Howard B. Kriebel received IUFRO Honorary Membership in 1998 at the Division 2 Meeting in Beijing, China.

At the 21st IUFRO World Congress in Malaysia (2000), Howard Kriebel was selected to be Division 2 web moderator and Deputy Coordinator of 2.02.15 Breeding and genetic resources of five-needle pines. In those capacities, he informed IUFRO on 10 June 2004 that his co-edited new publication, "*Breeding and Genetic Resources of Five-Needle Pines*", had recently been released.

The next day, on 11 June 2004, a tragedy occurred: Professor Howard B. Kriebel was killed in an automobile accident. He lived in Medford Leas and was buried in the Upper Springfield Cemetery, Burlington Co., New Jersey.

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SALLEH Bin Mohd. Nor

Salleh Bin Mohd. Nor received the IUFRO Honorary Membership in 1999.

Salleh Mohd. Nor was born on 20 October 1940, in the small village of Ulu Inas in Negeri Sembilan State of Malaysia. His father, Mohd. Nor Bin Rajab, was a rubber tapper and driver, while his mother, Nyonya binte Buruk, was a housewife. He has two sisters, Zaharah and Ramlah.

In 1957, after finishing at the Tuanku Muhammad Secondary School, he gained admission to the Federation Military College (later the Royal Military College) at Port Dickson, where he completed his higher education with honours. In 1961–1962, he studied forestry in Adelaide, South Australia, and later at the Australian Forestry School (AFS), Canberra, from which he graduated with a B.Sc. in Forestry and gained a Diploma of Forestry.

Salleh moved in Europe where, in 1969, he obtained a Diploma in Photointerpretation from the International Institute for Aerial Survey and Earth Sciences (ITC) in Delft, the Netherlands.

He was then awarded a scholarship to study at Michigan State University, East Lansing, where he graduated with an M.Sc. and Ph.D. in four years in 1977. During that period, Salleh worked as a Teaching Assistant and as a Research Assistant at the MSU Remote Sensing Centre and undertook a short consultancy in the Dominican Republic.

On his return to Malaysia, he started his professional career, undertaking forest resources inventory. In 1977, he was appointed as the Director of the Forest Research Institute (FRI) Kepong, a unit of the Forestry Department Peninsular Malaysia. Eight years later, the Parliament adopted an Act to transforming the institute into the Forest Research Institute Malaysia (FRIM), and Dr. Salleh was appointed its first Director General until his mandatory retirement in 1995. Salleh's leadership at FRIM saw the institute grow to become the top tropical forest research institute in the world.

In 1965, Salleh was elected President of the Malaysian Nature Society (MNS), the oldest and largest environmental NGO in the country. For more than 30 years, while he was President of the Society, Salleh advocated the formation of the Endau Rompin National Park tropical rainforest in the southernmost extension of the Tenasserim Hills, and the Belum State Park. Salleh managed to save the Sungei Buloh Forest Reserve, the oldest forest reserve in the country. He also established a number of Nature Education Centres to promote nature education amongst the public. Dr. Salleh is also active in a number of other NGOs, such as the Friends of Kota Damansara, the Malaysian Turtle Protection Society, the Friends of Bukit Kiara, the Malaysian Scientific Association, the Michigan State University Alumni, the Adelaide University Alumni Association and the Aberdeen University Alumni Association in Malaysia. Salleh was also President of the Old Putra Association, the Royal Military College, and a member of the Malaysian Human Rights Commission.

Salleh was a member of the inaugural Malaysian Human Rights Commission (SUHAKAM), Chairman of the Board of Trustees of University Malaysia Terengganu, Inaugural Chairman of Malaysian Bio-Industry Organization, and Inaugural Fellow, past Vice President, former Secretary-General and Council member of the Academy of Sciences Malaysia (ASM). He is now a Senior Fellow of ASM. Salleh is currently the Pro-Chancellor of University Technology Malaysia. Salleh was a member of the Yayasan DiRaja Sultan Mizan (Sultan Mizan Royal Foundation) with the then Yang Di-Pertuan Agong as its Chairman. Salleh was elected as its Deputy Chairman. He was appointed the Chief Executive Officer of the World Endurance Championship 2008 that organised the International Equestrian Championship, the first time that this prestigious event was ever held in Asia. Salleh is currently a member of the Sultan Mizan Antarctica Research Foundation where he heads the Task Force on Antarctica that promotes research by Malaysian scientists in Antarctica. He has visited there four times, as well as the Arctic once. Salleh was a Board member of the International Network on Bamboo and Rattan (INBAR), Beijing, China, the Inaugural Chairman of a regional network on mangroves formed by UNESCO (NATMANCOM), and Chairman of Forest Research Association in Asia and the Pacific (FORSPA).

For his services to the country and internationally, Dr. Salleh has been given numerous awards including the Inaugural Langkawi Award, the Third World Network of Scientific Organizations (TWNSO) prize on the public understanding of science, the Ordre du Merite Agricole from The Ministry of Agriculture and

Forestry France, Old Putra of the Year from the graduate association of the Royal Military College, the National Science Award, and Honorary Doctorates of Science by Universiti Kebangsaan Malaysia, the University of Aberdeen and University Malaysia Terengganu. Salleh was awarded the Asian Achievement Award for environmental protection, the prestigious Tun Razak Award, the Libur Environment Award, the Inaugural Malaysian Forestry Research and Development Board (MFRDB) Award and was one of 50 “Tokoh Malaysia” (Malaysian Heroes) on the occasion of the 50th Anniversary of “Merdeka”. He was nominated as “Fellow” of the Malaysian Scientific Association and Senior Fellowship by the Academy of Sciences Malaysia, which carries the title of “Academician”. Salleh was awarded the Inaugural “Tapir Award” for life-long service to conservation by the Malaysian Nature Society in conjunction with MNS’ 75th anniversary. In 2016, Salleh was awarded The Brand Laureate Most Eminent Brand Icon Leadership Award and the prestigious Merdeka Award in the Environment Category.

In 1981, at the 17th IUFRO World Congress in Japan, Dr. Salleh was elected to the IUFRO Executive Board as Regional Member from the Asia Pacific, and at the 18th Congress in Yugoslavia (1986), he was elected Vice President of the Union for 1987–1990. At the 19th IUFRO World Congress in Montreal, Canada (1990), he was elected President of IUFRO for 1991–1995, becoming the first President to be elected from outside Europe and America in the 100-year history of IUFRO. He was a member of the IUFRO Board for a total of 20 years, including his last position as Immediate Past President, which lasted until the 21th IUFRO World Congress in Malaysia (2000). He actively participated in the preparation of this Congress. During his Presidency, IUFRO formed the Special Programme for Developing Countries (SPDC) and in 1992, held the Centennial IUFRO Congress at IUFRO’s birthplace in Eberswalde, Germany. In 1999, Dr. Salleh Bin Mohd. Nor was awarded IUFRO Honorary Membership for his long-term activities with IUFRO.

Dr. Salleh currently manages a contract R&D Company on plant biotechnology, a forestry consultancy business in forest inventory and sustainable management of forests, and consultancies in forest inventory and valuation of forest areas, both locally and overseas.

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SCHMITHÜSEN, Franz

Franz Schmithüsen received the IUFRO Honorary Membership in 2000.

Franz Schmithüsen was born on 3 January 1940 in Oberkassel, district of Bonn, Germany into the family of geographer Prof. Dr. Josef Schmithüsen (1909–1984), who is considered one of the founders of modern biogeography, and his wife Franziska (née Schmidt) (1915–1962). He was the oldest of eight children – Fritz, Christiane, Carola, Cordula, Florian, Clarissa and Martin. In 1969, Franz married Françoise Morange and in 1971 their son, Bernhard, was born.

From 1946 to 1950, Franz attended elementary schools in Pforzheim and Karlsruhe. He then moved to the Kantgymnasium in Karlsruhe where he passed the matriculation examination in 1959.

From 1959 to 1964, he studied forestry and economics at the world's leading universities, including the Albert-Ludwig University of Freiburg, where he passed preliminary forestry examination (1961), at the University of British Columbia in Vancouver, Canada, and the Swiss Federal Institute of Technology (ETH) in Zurich. He continued his education as a doctoral student at the ETH Zurich from 1964 to 1969, and in 1969 received his Doctor of Technical Science degree. In 1975, Franz completed his Habilitation with Professor Gerhard Speidel at the Albert-Ludwig University of Freiburg in the fields of forest economics and politics, and where in 1984 he was appointed as an Associate Professor. From 1959, Franz was a member of the Catholic German student fraternity Hercynia in Freiburg and later of the Academic Association Turicia Zurich in the Swiss Student Union.

At the same time (1967), he began his professional career in Baden-Württemberg as a trainee in the forest civil service, then as a forest assessor (1969), forest councillor (1971), and senior forest councillor (1972). During this period he passed the Great Forest State Examination (*Große Forstliche Staatsprüfung*) for the higher forest service in Baden-Württemberg. In 1978 he became head of the Forestry Office in Geislingen an der Steige, and in 1981, he was appointed as forest director and personnel officer of the Forest Directorate in Stuttgart.

In 1984, Franz accepted an offer to be Full Professor of Forest Policy and Forest Economics at ETH Zurich. Here, he made great contributions to the development of the ETH by promoting integrative structures between the natural and social sciences as Head of the Institute of Forest and Wood Research, of the Department of Forest and Wood Research, as deputy head of the Department of Forest Sciences (this Department no longer exists at ETHZ) and as co-founder of the Institute for Human-Environment Systems (HES). In 2005, he retired as Professor Emeritus from the ETH Zurich, after 21 years of service.

From 1970 onwards, he frequently worked for the Food and Agriculture Association of the United Nations (FAO) in Rome, including a period from 1975 to 1977 when he worked there with the support of the State Forestry Administration (*Landesforstverwaltung*) Baden-Württemberg as a forestry policy expert with a focus on African countries. Subsequently he participated in missions for the FAO, World Bank and other development organizations that brought him to the great forests of South America, Africa, Asia, and, after the fall of the Berlin Wall, Eastern Europe.

While his focus was always on political and economic issues, he also paid much attention to the development of international networking in the sphere of his professional interests including various meetings, seminars and conferences to formulate principles and designs for the forest policies of various countries. He was a member of the European Forest Institute (EFI) Board and many other organizations' and editorial boards. His scientific achievements were recognized by honorary doctorates from Aristotle Thessaloniki University (Greece) and Charles University in Prague (Czech Republic) and he was invited by the Pinchot Institute in Washington D.C. to give the Pinchot Distinguished Lecture in 2003. Being involved in numerous organizations and committees, as well as an international network on global forestry and forest policy, he played a vital role in IUFRO. In 1991–1995, he was the IUFRO Treasurer and a member of Executive Board. For a long time he was a Leader of the IUFRO Research Group 6.13.00. For his longstanding service and contributions to the further development of IUFRO, Professor Franz Schmithüsen was granted IUFRO

Honorary Membership at the Opening Ceremony at the 21st IUFRO World Congress in Kuala-Lumpur (Malaysia 2000). Meanwhile, he continued his work in Division 6.

Even though he was fully absorbed in his career, Franz always found some time to create moments of personal exchange with his colleagues. His interest was in the human nature; he loved literature and shared with his wife Françoise a passion for the opera of Verdi and Puccini. He passed away at the age of 75 on 14 April 2015 in Baden, Switzerland, and was buried in Bort-les-Orgues, France.

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WHITMORE III, Jacob L. (Les)

Jacob L. Whitmore III received the IUFRO Honorary Membership in 2005.

Les Whitmore was born on 21 January 1939 in Pontiac, Michigan, USA. He is married to Menandra Mosquera, former Director of the Pentagon Library. They have two daughters, born in 1968 and 1970.

After finishing Wachusett Regional High School in Holden, Massachusetts in 1956, he entered the University of Michigan from which obtained his Bachelor's and Master's degrees in Silviculture/Forest Management.

Les began his professional career in 1961 and until 1969 worked with the USDA Forest Service (National Forests) in Pennsylvania, Arizona and New Hampshire. For two years, he directed a reforestation program in San Francisco Tepeyac, Mexico for the American Friends Service Committee (Quakers) that had a community service project there. His international activities continued when he worked for the U.S. Cultural Institute in Lima, Peru and the Organization for Tropical Studies in Costa Rica (established in 1963). At that time, he combined his administrative and research activities with teaching at the College of Forest Resources, University of Washington, Seattle, USA.

In 1969, Les joined the Institute of Tropical Forestry in Puerto Rico as a Research Forester. He held this position until 1980 with a short break when he did research and taught at the Tropical Agricultural Research and Higher Education Center (CATIE) in Turrialba, Costa Rica (1974–1976). During 1969–1980, his research involved tropical forest plantations and life zone ecology.

Les Whitmore moved to Washington, DC in 1980 and filled a variety of USDA Forest Service assignments such as Manager of the Man & the Biosphere (MAB) Research Consortium and the USDA Forest Service liaison to the Peace Corps. Internationally, he was the Asia Coordinator of the Forestry Support Program and Coordinator of Forestry Interaction between the Food and Agriculture Organization of the United Nations (FAO) and the U.S. Government and between the U.S. and Mexican Forest Services. He also cooperated with the USAID and with the World Bank (WB), as they supported many of these activities and needed a consultancy from the Forest Service for the forest-related projects. From 1987 to 2000, he was Principal Research Silviculturist, Vegetation Management Research Staff. He also served a 1-year secondment to the World Wildlife Fund–U.S. (WWF–US). His 40-year professional career led him to about 60 countries.

Les is the author of the National Reforestation Plan for the Dominican Republic and the National Forest Research Plan for Paraguay. He was the U.S. Delegate to the Latin American Forestry Commission (1980), the Committee of Forest Development in the Tropics (1983), the FAO Expert Panel on Mixed Forest Tree Plantations in the Tropics and Subtropics (1991), the International Advisory Panel of the WB Afforestation Project in China (1992–1998), as well as being a member of Board of Directors of the Tropical Forest Foundation in 1995–1996 and 2001–2002.

During 1985–2005, he combined his research, teaching and administration work with serving on a number of editorial boards at professional forestry journals. He was member of Editorial Board of the *Journal of Forestry* (1985–1987) and the *Journal of Sustainable Forestry* (1991–1996), and a member of the Editorial Advisory Boards of *Forestry Abstracts* (1991–2000) and *Journal of Tropical Forest Science* (1995–2005). In 40 years, he authored and coauthored about 90 publications.

Les Whitmore joined the Society of American Foresters (SAF) in 1960 and was elected as a SAF Fellow in 1987. In 2000, he was awarded the Chief's International Forestry Award by USDA Forest Service.

In 1978, Les Whitmore founded the IUFRO Working Party 1.07.09 *Silviculture in Latin America*, with about 500 members in 60 nations. In 1979, he analyzed forestry activity by donor agencies in a dozen Asian & Latin American nations. At the 18th IUFRO World Congress in Ljubljana (Yugoslavia), Les was elected Deputy Coordinator of Division I for the period 1987–1990, and at the 19th Congress in Montreal, Canada (1990) and the 20th IUFRO World Congress in Tampere, Finland (1995) Coordinator for Division I (1991–2000). At the beginning of 1997, he left that position as he was elected to the position Vice President (Administration) for 1997–2000 after Dr. Jerry SESCO received a new position at the USDA Forest Service and left IUFRO. He was a member of IUFRO Executive Board from 1991 to 2000. He published a manual on Planning a Conference (2nd edition) as well as a few papers dedicated to the results of the IUFRO congresses.

For his long-term active service to IUFRO, Jacob L. Whitmore received Honorary Membership of IUFRO in 2005.

Since retiring from the USDA Forest Service at the end of 2000, Les has served with the International Society of Tropical Foresters (ISTF) as a volunteer (2001), and in 2002, he was elected President of ISTF and held the post until 2012. During 1996–2002, he was a Board Member with Job Discovery, Inc., Virginia, and Chairman of its Board in 2001–2002.

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SCHMUTZENHOFER, Heinrich

Heinrich Schmutzenhofer received the IUFRO Honorary Membership in 2005.

Heinz Schmutzenhofer was born on 16 May 1939 in Vienna, Austria into the family of secondary school teacher Josef and Josefina (née Stepanek) Schmutzenhofer. He has a sister, Elisabeth. In 1961, he married Edith Tschebann and they have two children, Karin (1962) and Klaus (1965).

In 1958, after finishing the Realgymnasium in Vienna and passing his matriculation examination, locally called “Matura”, he entered the Hochschule für Bodenkultur (BOKU), Department for Forestry, now University of Natural Resources and Life Sciences, in Vienna, from which he graduated in 1964 as Dipl. Ing. in Forestry. He continued there until 1966, conducting post-graduate studies in Forest Entomology and Forest Protection.

Heinz began his professional career at BOKU, working in the Institute of Forest Entomology and Forest Protection as an Associate Assistant (1963–1964) and then as an Assistant (Lecturer) (1964–1966). In 1966, he moved to the Institute for Forest Protection at the Federal Forestry Research Center (BFW) in Vienna where he worked as Head of Department of Testing Agrochemicals (1968–1973), and from 1979 until his retirement in 2003. He also held the position of Head of Department Forest Entomology (1987–1995), being in charge for forest entomology, pest risk assessments, development of pest control systems for major and common pests, advisory tasks for forest practice, training courses and seminars, publications and lectures, in Austria and abroad. His work in BFW was interrupted several times by his involvement in activities and secondments in other countries and organizations.

In 1974–1975, Heinrich Schmutzenhofer participated in the Project ELS/73/004 El Salvador of the Food and Agriculture Organization of the United Nations (FAO) as a full time Associate Expert for Forest Entomology, working on the development of pest control programs for forest plantations. He then continued his work in South America for another FAO Project COL/74/005 Colombia from 1976 to 1978, working as an Expert for Forest Protection. Many of the projects that he worked on were supported by the United Nations Development Programme (UNDP). He was involved in the establishment of a center for forest protection laboratories at Medellín, Piedras Blancas, in Colombia. He was also in charge of the development of pest management system for major pests. His advisory activities also included short missions for pest problem analysis in Ecuador.

In 1979, he resumed his work at the Federal Forest Research Centre, Vienna, but he was seconded to the International Union of Forest Research Organizations at its Headquarters in Vienna as the Secretary from July 1987 until 1995, working on a part-time basis, and then from 1995 until December 2004 working full-time as the Executive Secretary of IUFRO.

Being fluent in German, English, and Spanish, Dipl.-Ing. Heinrich Schmutzenhofer was an extremely valuable expert for many international projects for which he provided short-term professional consultancies on 1 to 3 months basis. In this capacity, he participated in FAO projects in Argentina (1979), Bhutan (1985–1988), Vietnam (1991–1992), China (1994); the World Bank project in Bhutan (1988, 1990), and the Austrian Bilateral Aid Programme in Mexico (1982, 1983) and in Bhutan (1988–1992). These projects employed his expertise in the assessment of biotic and abiotic damage to forests and plantations, forest operations planning, the development of bark beetle control programmes, and the establishment of integrated forest management and integrated pest management systems. He had capability in poplar entomology, afforestation, and forestry research, planning and development, as well as being able to deliver lectures in forest protection for teachers.

It was in Bhutan, the land of the thunder dragon, that Heinz Schmutzenhofer discovered several new noxious beetles to forestry. Among these was a new species of bark beetle, *Ips schmutzenhoferi* (Holzschuh) – the “Eastern Himalaya spruce bark beetle”. Having a beetle named after him was no surprise, as Heinz was and is a respected global expert in the field of entomology, and “Schmutzi”, as his generation calls him, is particularly well-known for his expertise in bark beetles in many parts of the world. In addition, these activities, from 1968 to 1988, he was appointed in Austria as a plant quarantine officer and supervisor for phytosanitary plant control. In 1995, he was also the Austrian representative for forest entomology in the

European Plant Protection Organization (EPPO), and he participated in a number of EPPO activities, Congresses and Conferences from 1967 onwards.

In 2008, the Hochschule für Bodenkultur (BOKU) awarded Heinz Schmutzenhofer with the “Pro Scientia medal” for his scientific achievements, and in 2003, the Government awarded him with the “Great Honorary Sign for Merits to the Republic of Austria” for his service to the country.

Heinrich participated in all 9 IUFRO Congresses between 1976 and 2014, and the 100th and 125th Anniversaries of IUFRO, as well as many of the Union’s workshops, seminars, and conferences, including IUFRO Executive Board meetings. He was Chairman of IUFRO Working Party S2.07-07, Pine Insects in the Tropics (1976–1982), and S2.07.07 Protection of Forests in the Tropics (1982–1988). He stepped down from his position as Executive Secretary of IUFRO at the end of 2003, but continued working for IUFRO during 2004 as the IUFRO Representative for Latin America, based in Chile at FAO’s Regional Office and the Instituto Forestal (INFOR) in Santiago. From 2005 until 2014, he was Deputy Coordinator of IUFRO WP 6.03.04, Latin American and Caribbean Information Systems Network (RIFALC). He was the driving force in the organization of two IUFRO Regional Congresses in Latin America (Valdivia 1998, La Serena 2006, both in Chile).

Heinz Schmutzenhofer’s work has taken him to over 50 countries on all five continents.

In recognition of his longstanding service and significant contributions into the development of the Union, at the 22nd IUFRO World Congress in Brisbane (Australia 2005), *Hofrat*, Dipl.-Ing. Heinrich Schmutzenhofer was elected as an Honorary Member of IUFRO. He continues his active participation in IUFRO events as well as dedicating some spare time to his hobby – fishing.

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BURLEY, Jeffery

Jeffery Burley received the IUFRO Honorary Membership in 2005.

Jeff Burley was born on 16 October 1936, in Portsmouth, southern England. In 1961, he married Jean Shirley Palmer; they have two sons, Jeremy Andrew (1963) and Timothy John (1966).

After finishing secondary school in Portsmouth in 1954, Jeff served as a regular British Army officer in the Royal Signals for three years. In 1957, he entered Oxford University and in 1961 obtained a Bachelor's degree in Forestry with honours. He moved to the United States of America where he obtained a Master's degree in Forestry (1962) and a Doctorate in Forest Genetics (1965) from Yale University.

His professional career began in Zambia in 1965, where he was a UNESCO expert in forest genetics and Head of the Tree Improvement Research Centre, Agricultural Research Council of Central Africa. He served there for four years, acting as advisor to government research programmes on tree breeding in Malawi, Zambia and Zimbabwe.

In 1969, he was appointed as a Research Officer at the Commonwealth Forestry Institute at the University of Oxford. He was also responsible for assisting the development of the underlying quantitative theory and practical aspects of tree breeding programmes for the British Commonwealth and developing countries. In 1976, he was appointed as University Lecturer in Forestry in the University's Department of Forestry. In 1982, he became the last Head of Department and first Director of the Oxford Forestry Institute (OFI). He was promoted to an Ad Hominem Professorship and, when the OFI was in 1993 transferred into the Plant Sciences Department of the University, he was elected to a Professorial Fellowship in Green College. He also acted as Development Fellow and Vice-Warden of Green College.

Professor Burley was involved in the design and analysis of collaborative research into the genetic variation in the growth and properties of tropical plantation species in many countries and the development of breeding strategies. He coordinated the development of X-ray densitometry for wood quality assessment and the pulp and paper making properties of tropical pines. He also participated in the development and management of an open database (PROSPECT – Programmed Retrieval of Species by the Property and End-use Classification of their Timbers). He has published 170 papers as single author, over 180 jointly authored papers, 60 reviews and 70 agency reports.

At a national level, he became Chairman of the British and Irish Hardwoods Improvement Programme, the Commonwealth Forestry Association, and other organizations. In recognition of his service to the nation, he was awarded the honour Commander of the Order of the British Empire.

Internationally, he was involved in consultancies for over 40 companies, donor agencies, and cooperation projects, covering 35 countries. Major areas for his consultancies were in tropical countries, dealing with the planning and management of forest research, forest education and information management. He was the foreign member of the Technical Committee for the Model Forests Programme initiated by the Canadian Government in 1990 that expanded to the international level, and an adviser when the USDA Forest Service developed its international forestry strategy.

He has received numerous recognitions nationally and internationally: Honorary Fellow of the Society of American Foresters, Corresponding Member of the Italian Academy of Forest Sciences, International Fellow of the Royal Swedish Academy of Agriculture and Forestry, Honorary Research Professor of the Chinese Academy of Forestry, Honorary Fellow of the Institute of Chartered Foresters in the United Kingdom, Distinguished Alumnus of the School of Forestry and Environmental Sciences at Yale University and he has received an Honorary Doctorate from CATIE, Costa Rica.

After retirement from the University in October 2002, Professor Burley remained until 2004 at Green Templeton College where for two years he was Emeritus Fellow in the Public Understanding of Forest Science, established by the Leverhulme Trust. For twelve years, he was a member and chairman of the Selection Committee for the Marcus Wallenberg Prize, followed by eleven years as a member of the Board of the Marcus Wallenberg Foundation.

Throughout his professional career, Professor Jeff Burley was active in IUFRO. At the 15th IUFRO Congress in USA (1971), together with Dr. Garth Nikles, Queensland, Australia, he established the first specifically tropical Working Group in the Union. He was also active in the work, meetings and leadership of IUFRO Working Party S2.01.08 Tropical Species Provenances and Subject Group S2.03.00 Breeding. At the Congress in Yugoslavia (1986), he was elected Coordinator of Division 2: Forest Plants and Forest Protection and a member of the Executive Board for 1987–1990. At the next Congress in Montreal (1990), he made a keynote presentation at the Plenary Session entitled “Achieving Excellence in Forestry Research”. He was then elected Vice President (Programme). In 1995, at the 20th IUFRO World Congress in Tampere, Finland, Professor Burley was elected President for 1996–2000. In his inaugural address as President-elect, he stressed six major points of attention during his Presidency: (i) challenges and opportunities for IUFRO; (ii) linkages within IUFRO; (iii) structure of the Union; (iv) linkages to other institutions and disciplines; (v) IUFRO in developing countries, and (vi) administration. In addition, he developed the concept of Task Forces (TF), including one on Sustainable Forest Management.

During his Presidency, Professor Burley introduced a new form of communication, the President’s Panel Discussion at Congresses. Largely under the guidance of Professor Howard Kriebel, USA, and Dr. Les Whitmore, USA, he undertook the reorganization of Divisions 1 and 2, creating Divisions 7: Forest Health and 8: Forest Environment. He introduced the Certificate of Appreciation, IUFRO’s fourth award. In addition, his Presidency saw the first IUFRO Regional Congress in Latin America, which took place in Chile. He also established formal cooperation between the Union and the Commonwealth Agricultural Bureaux International (CABI), setting the scene for the Global Forest Information System led by IUFRO.

In 2005, at the 22nd IUFRO World Congress in Brisbane, Australia, Professor Jeffery Burley retired formally and was awarded IUFRO Honorary Membership. However, he continues to be active in many organizations, including IUFRO. At the Congress in Salt Lake City, USA, in 2014 he organized a “President’s Session” in which a number of Past Presidents and international figures presented their views of the challenges facing forestry and forest research.

Jeffery died peacefully at home on 27th December 2021 aged 85 years.

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SEPPÄLÄ, Risto Juhani

Risto Juhani Seppälä received the IUFRO Honorary Membership in 2010.

Risto Seppälä was born on 20 September 1943 in Kouvola, Finland into the family of Armas and Tyyne (née Valjakka) Seppälä.

After finishing high school in his hometown in 1962 and then performing military service, he entered and graduated from the University of Helsinki as a Bachelor of Political Science in 1967, Licentiate of Political Science in 1969, and obtained a PhD degree in Political Science in 1971. Soon afterward, in 1971–1972, he gained international experience within the post-doctoral program at the University of California (Berkeley, CA, USA). In 1968, he married Licentiate of Philosophy Riitta Markkanen and they had two sons, Mikko (1971) and Ilkka (1975).

Risto Seppälä began his career as a mathematician at the Finnish Forest Research Institute (*Metla*), working there from 1966 to 1972. In 1973, as a senior researcher, he moved for a while to the Academy of Finland, where he worked until 1975. He was later offered a three-year (1986–1989) research professorship at the Academy to explore the future of the Finnish forestry sector, but he resigned a month after starting so that he could dedicate himself to more practical research, teaching and administration. Since 1974, he has been an Adjunct Professor of the University of Helsinki.

In 1976, until his retirement in 2011, he worked at *Metla* as a professor, being twice appointed as Research Director (1987–1988 and 1991–1994) and, after that, serving as a member of the Scientific Advisory Board from 1994 to 2000. In 1976, he was elected as the Head of the Department of Mathematics, becoming the youngest professor of forestry in Finland. In 1986, he became an Academy Professor of the Academy of Finland. In the early years of his career, his work dealt with statistical methods. From the mid-1970s, his research interests have focused on the long-term strategic problems of the forest sector as well as modelling and systems analysis in general. He is one of the pioneers of future studies of the forest sector.

When in 1991 the Ministry of Agriculture and Forestry of Finland supported the idea of establishing the European Forest Institute (EFI) and launched a preparatory project, Professor Seppälä was nominated to lead the project. He spent two years promoting the idea of the institute, taking care of the initial work and gathering strong support across Europe and elsewhere. This led to the Institute being established in 1993, and he served on the first Advisory Board (1994–2000) of EFI.

Professor Seppälä's broad field of expertise gave him many opportunities to advise private companies, governmental projects and international organizations. He was a consultant at Jaakko Pöyry Ltd. (1979 *Jaakko Pöyry Oy*), a chair of the "Forest Industry–2000" (1983–1985 *Metsä–2000 – metsäteollisuusryhmässä*), a scientific advisor to the *Finnish IT Centre for Science Ltd.* (2007–2008 *CSC – Tieteen tietotekniikan keskuksen*) and the project leader for the Forestry Foundation (2013–2014 *Metsämiesten Säätiö*).

Professor Seppälä has been a Visiting Professor in the USA at Dartmouth College (Hanover, NH, 1979–1980), at the University of Washington (Seattle, WA, 1989) and at the University of California (Berkeley, CA, 1990) as well as at the University of Bradford (United Kingdom, 1980) and at IIASA – the International Institute for Applied Systems Analysis (Laxenburg, Austria, 1980–1982). As the founder and leader of the first Forest Sector Project at IIASA (1980), he contributed to the launch of cooperation between forest scientists in the USSR and western countries in the early 1980s. In 1982, he was offered a position on the Finnish Committee of IIASA, where he worked for 15 years, heading this Committee for 7 years. From 1990 to 1998, he was also a member of IIASA's Governing Council, and for several years, he was chairman of the Finance Committee. As a member of the IIASA Board, he actively promoted the participation of the Russian researchers in international co-operation.

Professor Seppälä has many memberships and presidencies of national and foreign organizations, societies, councils, and editorial boards. In 2001, he was elected as a Member of the Finnish Academy of Sciences. A number of domestic and international institutions have recognized his contributions to forest research development and teaching. The Finnish Forestry Association honoured him with the Forestry Annual Prize (1996), the Finnish Forestry Society with the Cajander Medal (2009) and the Finnish Forestry Foundation with the Silver Assignment (2010). In 2002, the University of Helsinki nominated him as Honorary Professor

of Agriculture and Forestry, and the Moscow State Forest University (Russia) awarded him with an Honorary Doctorate in Forest Sciences. He also received an Honorary Professorship from the Chinese Academy of Forestry (2004). The President of Finland has decorated him with the Commander of the Order of the Lion of Finland and Knight, First Class, of the Order of the White Rose of Finland.

Professor Risto Seppälä was very active in the International Union of Forest Research Organizations. In 1981 at the IUFRO Congress in Japan, he was appointed as coordinator of Project Group P4.10.00 Analysis of World Trade in Forest Products. Later, he became the Chairman of the 20th IUFRO World Congress Organizing Committee. The Congress took place in Tampere, Finland, in 1995, when he was elected Vice President for Programmes. During his time (1996–2000) in this position, he supervised the activities of IUFRO's SPDC, the Divisions and the Task Forces.

In 2000, Professor Seppälä was elected 24th IUFRO President and carried out this responsibility in 2001–2005. Under his Presidency, many changes occurred in IUFRO: revision of the IUFRO Statutes (a new Vision, Mission and Strategic Action Plan), participation in the newly established Collaborative Partnership on Forests (CPF) (2001), launch of the new Programme – the Global Forest Information Service (GFIS), and a new Project: World Forest, Society and Environment (WFSE), development of a new IUFRO logo (2002), a new design for IUFRO News and establishment of new publications (E-Notes, IUFRO Scientific Summary), the introduction of a new form of communication during the Congress, namely the President's Discussion (2005), and the publication of attractive annual reports. Since 2007, IUFRO has coordinated five Global Forest Expert Panels, producing influential reports, including "Adaptation of Forests and People to Climate Change" (2009). In 2010, in recognition of his accomplishments in international forestry organizations and research activities promoting the international research in the forest sector, Professor Emeritus of the Finnish Forest Research Institute (*Metla*) Risto Seppälä was awarded with IUFRO Honorary Membership.

Risto Seppälä's hobbies are violin playing, ballroom dancing and skiing.

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TEISSIER DU CROS, Eric Barthélémy

Eric Barthélémy Teissier du Cros received the IUFRO Honorary Membership in 2010.

Eric Barthélémy Teissier du Cros was born on 2 June 1944 in Beaufort, French Alps. His parents were Jacques (1913–1970), a mechanical engineer, and Karin (née Röhss) (1915–1974), who was born in Sweden. Eric is number three in a family of four. In 1968 he married Dominique (née Guibal). She is Jean Pardé's sister in law. Dominique and Eric have four children, Bruno (1970), Claire (1972), Rémi (1976) and Nils (1979), and eight grandchildren.

He went through his primary and secondary education in the public system in Paris. In 1967, after his graduation in the National Institute of Agronomy (*Institut National Agronomique*), Paris, and his specialization in forest genetics, he was appointed at the National Agriculture Research Institute (INRA = *Institut National de Recherche Agronomique*) in Nancy. Meanwhile he continued his education and obtained his PhD in 1969 in the Clermont Ferrand University.

He began his professional career as a research scientist on poplar selection and breeding in the Forest Research Department of INRA. In 1974, he was asked take care of the French programme on beech diversity and the genetic mechanisms to be considered in beech stand management and regeneration. In 1975, he moved to the Orléans research station of INRA. In 1981 he expanded his work to include the selection and breeding of trees for short rotation forestry. From 1985 to 1990, he was elected as president of the Orléans research station, covering several aspects of forest research (silviculture, insects, physiology and genetic improvement) as well as soil science and cattle breeding. In 1990, after having moved to Avignon, he was appointed INRA Coordinator for genetics and breeding of forest trees, taking charge of research activities in Nancy, Orléans, Bordeaux and Avignon. In 1994–1995, he worked as the EU expert for genetics projects in the European AIR and FAIR programmes³². He developed and took over the Mediterranean programme on cypress. From 1999 to 2005, he chaired the French Commission for the Conservation of Forest Genetic Resources.

Eric Teissier du Cros played a role in IUFRO starting with his first IUFRO meeting on forest genetics (Stockholm, Sweden 1974). In 1981, he organized in Belgium the first scientific meeting of the Working Party on poplar genetics and breeding (S2.02.10, later S2.03.07 Breeding Poplar) and was elected as Coordinator of this WP. In 1984, he was co-organizer of an IUFRO/FAO meeting on poplar breeding, improvement and culture during the 17th Session of the International Poplar Commission in Ottawa, Canada³³. At the 18th IUFRO World Congress in Ljubljana (Yugoslavia 1986), he became a regional member for West Europe on the Executive Board for 1987–1990. At the 19th IUFRO World Congress in Montreal (Canada 1990) and the 20th IUFRO World Congress in Tampere (Finland 1995), he was elected Coordinator of Division 2: Physiology and Genetics and a member of Executive Board.

At the 20th IUFRO World Congress in Kuala Lumpur, Malaysia (2000), Dr. Eric Teissier du Cros was elected IUFRO Vice President for Science, a position that he held until his retirement in 2005. During 1990–2005, he was also involved into the coordination of the scientific part of IUFRO World Congresses. He was the Chair of the Congress Scientific Committee of the Kuala Lumpur Congress in 2000, and in this position, did an excellent job ensuring the high quality of the Congress' scientific programme.

In 2005, he received IUFRO's Distinguished Service Award at the 21st IUFRO World Congress in Brisbane, Australia. At the 22nd IUFRO World Congress in Seoul, Republic of Korea (2010) he was awarded IUFRO Honorary Membership for his great enthusiasm and the energy with which he carried out his longstanding service for the Union.

³² FAIR – findable, accessible, interoperable and reusable (research) data.

³³ Proceedings of the Joint Meeting of the Working Parties S2.02.10 Poplar Provenances and S2.03.07 Breeding Poplar with the IPC Ad hoc Committee Poplar Breeding during the XVII Session of the International Poplar Commission, Ottawa, Canada, October 1–4, 1984 [1984] = International Union of Forestry Research Organizations, Vienna (Austria); FAO, Rome (Italy). International Poplar Commission. Ad Hoc Committee on Poplar Breeding [Corporate Author]

After retiring from many of his positions, Eric Teissier du Cros continued working as Division 2 Web moderator for a few years. For a couple of years after his retirement, he worked as consultant for Italian forest programmes. In 2018, he was asked to be a member of the committee preparing the French application for the 2024 IUFRO Congress.

Throughout his life, he practised mountaineering, skiing and climbing, as well as rock and cliff climbing. He has now switched to snowshoeing in winter and hiking in summer. When he retired in Erquy (3800 inhabitants) in 2005, a small fishing harbour in north Brittany, he started sea kayaking. He chaired the local nautical center from 2007 to 2017. He is now involved in the organization of local shows including theatre, music and comedy.

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LEE, Don Koo

Don Koo Lee received the IUFRO Honorary Membership in 2014.

Don Koo Lee was born on 3 September 1946 in Cheongju, Chungcheongbuk-do, Korea into the family of a farmer, Sun Kyu Lee, and his wife Chun Bong Choi. He has an elder brother, Chung Koo Lee, who later became Prof. Emeritus of Chungbuk National University, and two elder sisters, Jeong Soon and Jeong Ye.

After finishing secondary school in his native town, in 1965 he entered Seoul National University (SNU), Republic of Korea, where he obtained his B.Sc. in Forestry (1969) and M.Sc. in Forest Genetics (1971) from the College of Agriculture and Life Sciences (CALs). Then he moved to the U.S.A., where he graduated from the Iowa State University (ISU), Ames, Iowa with an M.Sc. in Forest Biometry (1975) and Ph.D. in Silviculture (1978). In Ames, he married Young Sook Kim and they had a daughter, Mina, who is now a studying for a Ph.D. at Stanford University.

Don Koo Lee began his teaching career as a Teaching Assistant in the Forestry Department, CALs SNU (1971–1973) and continued as a Research Assistant in the Department of Forestry, Iowa State University (1975–1978) working at the same time on his Ph.D. thesis. Following the Government of Korea's brain pool programmes, in 1979 he returned to Korea and soon accepted an invitation to work as the Principal Researcher at the Institute of Forest Genetics in Suwon, a part of the Korea Forest Service.

In 1981, Dr. Lee was appointed as a Professor in the Department of Forest Sciences, CALs SNU, where he working for more than 31 years (until 2012). Along with his duties as a teacher and researcher, Professor Lee carried out much work as Director of the National Instrumentation Centre for Environmental Management (NICEM) at CALs, SNU (1994–1996), Deputy Dean (1993–1995), and in 1999–2001 – Dean of CALs, and other positions. The crowning point of his fruitful administrative and pedagogical activity at that time was the construction of a new building for the College, which was equipped with modern technology. Professor Lee's major research interests are in the field of restoration of degraded forest ecosystems in Northeast and Southeast Asia, eco-friendly management of forest ecosystems, development of silvicultural strategies for natural forests, growth and nitrogen fixation by *Frankia* in non-legumes, and biomass production and nutrient cycling of forest ecosystems, as well as forestry education. Over the last 20 years, he has published and been co-author of over 200 articles as well as 30 books in these and related areas.

He has been recognized at a national level, being elected President of the Korean Forest Society (2004–2006), Chair of the Board of Directors of the Forest for Life National Movement in Korea (2015), and Chair of the Board of Directors of the National Centre for AgroMeteorology (2016). His highest administrative position in the Republic of Korea was as Minister of the Korea Forest Service from February 2011 to March 2013. He proposed to the Government of Korea the Asian Forest Cooperation Organization (AFoCO) as an intergovernmental organization in 2008, and it formally launched in August 2012, promoting cooperation amongst ASEAN Member States and other nations in Asia. Internationally, he was elected as a Member of the Board of Trustees of the Center for International Forestry Research (CIFOR), Bogor, Indonesia (1999–2004) and for a long time he headed the international "ASEAN–Korea Environmental Cooperation Project", funded by the Korea Ministry of Foreign Affairs and Trade (2000–2010). This helped forest and environmental education and research in developing countries of the region. He was also President of the Conference of the Parties (COP 10) of the United Nations Convention to Combat Desertification (UNCCD) (2011–2013) and a member of a number of national and international editorial and advisory boards for professional journals and organizations.

Professor Don Koo Lee was been widely recognized for his teaching, research and public affairs, both domestically and internationally. In 1994, he was elected as Regular Member and in 2016 as Fellow of the Korean Academy of Science and Technology. He was elected Foreign Member (2003) and then Fellow (2016) of the Royal Swedish Academy of Agriculture and Forestry (KSLA), Sweden, received an Honorary Doctorate from Moscow State Forest University, Russia (2007), and an Honorary Professorship from Beijing Forestry University, China (2007), and status as Advisor to the Chinese Academy of Forestry (2010). He is Professor Emeritus of SNU (2012) and Endowed Chair Professor of Park Chung Hee School of Policy and Saemaul (PSPS)

at Yeungnam University (2013). In 2015, he received The George Washington Carver Distinguished Service Award from Iowa State University, and in 2017, he was given an Honorary Doctorate by Kasetsart University, Bangkok, Thailand. He was also awarded the Scientific Award by the Korean Forest Society (1980), the First Gasan's Scientific Achievement Award by Soho Culture Foundations (2002), the 14th Evergreen Grand Award (Sangnok Daesang) by CALS SNU (2006), the Yellow Stripes Order of Service Merit by the Korea Government (2013), and the 3^d Climate Change Grand Leaders Award by the Climate Change Centre, Seoul, Korea (2013).

Professor Lee has participated in IUFRO activities for many years. He participated for the first time at the 17th IUFRO Congress held in Kyoto, Japan (1981), where he presented a paper. Later, at the 20th Congress in Finland (1995) he was elected as President's Appointee for 1996–2000. Then, at the 21st Congress in Malaysia (2000) he was appointed as IUFRO Vice-President Policy for 2001–2005, and at the 22nd Congress in Australia (2005) he was elected as President of the Union for 2006–2010. President Lee declared that supporting young people was one of his top priorities, and he enthusiastically involved students and young researchers in IUFRO events and research activities. Under his Presidency, the Union played significant roles in the United Nations Framework Convention on Climate Change and the United Nations Convention on Biological Diversity, and he undertook a major project "Keep Asia Green" that resulted in a number of IUFRO publications that were distributed worldwide.

Professor Lee was actively involved in drafting the first IUFRO Strategy for 2006–2010, which he was able to carry out, and then he prepared a new strategy for 2010–2014 that took into account the rapidly changing situation. This marked IUFRO as positioning itself "as a truly global network of forest-related science knowledge and cooperation". He was also involved in the establishment of the Global Forest Expert Panels (GFEP), launched at the initiative of the Collaborative Partnership on Forests and in the preparation of the first IUFRO European Congress 2007, held in conjunction with the European Forest Institute (EFI).

At the 24th IUFRO World Congress in Salt Lake City, Utah, USA (2014), Professor Don Koo Lee, Immediate Past President was awarded Honorary Membership of IUFRO for his outstanding and valuable service to the Union.

Professor Lee is still teaching and doing research.

His hobbies include a collection of small cups representing cities, schools and nations that he has visited, and walking small hills and low mountains.

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Personal sources:

Lee D. K. Personal communications (December 2017) at leedk@snu.ac.kr



LEE, Su See

Su See Lee received the IUFRO Honorary Membership in 2016.

Su See Lee was born on 9 January 1955 in Kuala Lumpur, Malaysia. Her father, Lee Koon Foong, a technician at the Institute of Medical Research, Kuala Lumpur passed away when she and her brother Lee Yu Kit were four and two years old, respectively. They were brought up by their mother, Foo Kwee Guat, who worked as a Secretary for Socfin Plantations, a private plantation company.

Su See attended Bukit Bintang Girls' Secondary School up to O levels and completed A levels at the Victoria Institution, Kuala Lumpur. She then entered the University of Malaya (UM) in Kuala Lumpur, and in 1979, she obtained her B.Sc. (Hons.) in Botany. In 1981, she graduated with an M.Sc. from Universiti Pertanian Malaysia (now called University Putra Malaysia) at Serdang, Selangor, where she also worked during 1979–1981 as a tutor and until 1990 as a lecturer.

In 1990, Su See Lee began her research career as a senior research officer and a Head of Mycology and Pathology Laboratory at the Forest Research Institute of Malaysia (FRIM).

She dedicated her entire professional career to FRIM, its development and achievements.

In 1992, she presented her Ph.D. thesis entitled "Some Aspects of the Biology of Mycorrhizas of the Dipterocarpaceae" and received a Ph.D. in Plant Sciences from the University of Aberdeen, United Kingdom. Dr. Lee continued working in FRIM where she advanced to the ranks of principal research officer (in 2007) and Deputy Division Director and Head, Forest Health and Conservation Programme, Biodiversity Division in 2009. She has taught and supervised students at the M.Sc. and Ph.D. levels as well as consulted with forest plantation companies in Indonesia and Malaysia on pests and diseases.

In 2015, Dr. Lee retired from FRIM and became a freelance consultant on forest and tree health. Besides her responsibility at FRIM, Dr. Lee was a scientific advisor and referee for the International Foundation for Science (IFS) Sweden, from 1993 until retirement. She also carried out much public work as an editor, co-editor and member of editorial boards as well as acting as a reviewer for professional journals in Malaysia, Indonesia, Canada, South Africa, Southeast Asia countries, and the international *Australasian Plant Pathology* journal. In 2011–2013, she was an adjunct professor at the Faculty of Science and Technology, University Malaysia Terengganu (UMT), and in 2012–2014, a member of the Scientific Advisory Committee of the Korea Forest Research Institute (KFRI).

Her various achievements have been recognized locally, nationally and internationally. She received more than a dozen FRIM Publication Awards in various categories in 1994–2012, the FRIM Best Scientist Award, and two of the FRIM Director General awards, as Leader in Scientific Writing (*Tokoh Penulisan Saintifik*) and as Pearl of International Forestry Science (*Mutiara Sains Perhutanan Antarabangsa*) in 2010. She was given the Ahli Mangku Negara (A.M.N.) Award in 2007 for her services to the nation. In 2009, she was conferred Honorary Membership of the Malaysian Nature Society.

In August 2000, her research achievements and contributions to forest pathology and dipterocarp mycorrhizal research were recognized by the International Union of Forestry Research Organizations through the Scientific Achievement Award (IUFRO SAA). In 2002, Dr. Lee received a 2-month grant from the Malaysian Fulbright Professional Exchange Program to visit Oregon State University in Corvallis, USA to conduct research on "Detection and Control of Phytophthora and Phellinus Diseases".

Dr. Su See Lee has an impressive record of services with IUFRO, starting in 1995 with her election as deputy coordinator of two working parties, and in 2001–2005 as Co-ordinator of RG 7.02.07 Diseases of Tropical Forest Trees, and Deputy Co-coordinator of RG 5.11.03 Edible Forest Products.

She then served in several different IUFRO positions: General Board Member (2005–2010), Management Committee member (2005–2014), and IUFRO Honours and Awards Committee (Chair, 2006–2010, Member, 2011–2014). In 2010, Dr. Su See Lee was elected IUFRO Vice President for Task Forces, Special Programmes, Projects and IUFRO-led Initiatives (2010–2014), becoming the first female to achieve such a high administrative position in the history of the Union.

In recognition of her long-term service to IUFRO, in 2016 Dr. Su See Lee was awarded IUFRO Honorary Membership.

Dr. Su See Lee is still actively working as a consultant, steering committee member, or special input provider for many projects nationally and internationally. She is often invited to give public talks, deliver lectures or to conduct training at workshops in Malaysia, Indonesia, Singapore, and other countries in the region. She also serves as a reviewer for different projects and for peer-reviewed professional journals.

Su See enjoys reading, bird watching and making handicraft items that help her to relax and to learn something new. She recently started learning Mandarin.

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2. Lee S.S. Personal communications (December 2017) at leesusee08@gmail.com



KOCH, Niels Elers

Niels Elers Koch received the IUFRO Honorary Membership in 2019.

Niels Elers Koch was born on 31 March 1951 in Aarhus, Denmark, into the family of Inge Elers Koch (née Pedersen) and H.C. Elers Koch. He has one brother (Hans E.K.) and one sister (Kirsten E.K.). In 1998 he married Anne Birgitte Elers Koch (née Heiberg-lürgensen), and they raised a son, Mads Christian Elers Koch (2003).

After finishing High School at *Aarhus Katedralskole* in 1969, he studied Forestry at *Den Kongelige Veterinær- og Landbohøjskole* (KVL, the Royal Veterinary and Agricultural University of Denmark, RVAU) and earned his M.Sc. in Forestry (1975) and D.Sc. (1985) in Forest Policy. He began his research and education career as a Project Leader (Forest Recreation Research) at The Danish Forest Experiment Station (1975–1987)³⁴, and in his alma mater as Adjunct Professor in Landscape Management (1976–1990) and was appointed Honorary Professor (1992). He served at the University of Copenhagen as interim Dean of the Faculty of Life Sciences (2011–12) and Head of the Department of Geosciences and Natural Resource Management (2013–2014). He was a Visiting Professor at Utah State University and Oregon State University (1990) and also a Faculty Affiliate in the College of Forestry and Conservation at the University of Montana (2009–2011).

Dr. Koch has served as an Assistant of Forest Superintendent (1981–1987) and Forest Superintendent (1987–1991) at the Danish Forest and Nature Agency of the Ministry of the Environment of Denmark responsible for silviculture and forest law. He was the driving force behind the establishment of the Danish Forest and Landscape Research Institute (DFLRI) merged of 7 other public and private forest and landscape research institutions, and served as its first Director, starting in 1991. After the establishment of a new institution in 2004, he was appointed as the first Director General of the *Center for Skov & Landskab* (the Danish Centre for Forest, Landscape and Planning at the University of Copenhagen). From 1993–2012, he has served as Editor-in-Chief of *Forest & Landscape Research*. In September 2014, he was appointed CEO and Editor-in-Chief of the *Trap Danmark A/S* and from June 2019 also as Editor-in-Chief for the Danish Encyclopedia.

Dr. Koch's research has focused on Forest Policy, including the application of recreation and landscape research to policy and management in an era of globalisation and realising the environmental benefits of forests. He has made a significant contribution to research on forest recreation in Denmark, Europe and globally. In 1978–1988, he published in four parts the results of his fundamental research on forest recreation in Denmark – *Skovenes friluftsfunktion i Danmark* – totaling almost 1000 pages! He is the author and co-author of more than 200 research papers, book chapters and a several books, and the editor of numerous reports and the proceedings of various national and international meetings and symposia.

Professor Koch has been a leader in forest, environment and recreation research in Denmark and other northern European countries. He has served as a member of numerous national and international governing bodies. Internationally, he was Chairman of the Scandinavian group of Multiple-Use Forestry (1986–1988) and a member of Board of The Nordic Forest Research Co-operation Committee, SNS (1991–2014), COST Technical Committee: "Forest and Forestry Products" (1994–2019), Scientific Advisory Board for European Forest Institute (1993–1997), Chairman of the Evaluation Committee (1995–1996) and member of Board of the Swiss Federal Institute for Forest, Snow and Landscape Research (1997–2000), member of the Evaluation Committee for *Forstwissenschaftliche Fakultät*, University of Freiburg, Germany (1998–1999), Chairman of the panel for review of the CGIAR-centre CIFOR (2005–2006).

At the national level he has served as a member of Danish Forestry Council (1991, Chair in 2004–2014), Chairman of the strategic planning group for forest and landscape research in Denmark (1993–1994), Board of the Danish Research Councils (1997–2003), Chairman for the directors of the National Research Institutes (2002–2003), and member of Council for Development Policy advising the Ministers within the area of development cooperation (2012–2014) to name a few. Prof. Dr. Koch was elected as a Member of the Danish Academy of Technical Sciences (1993), the Academy of the Royal Danish Agricultural Society (1995) and the

³⁴ Prof. Dr. Niels Elers Koch became in 1991 the fourth Director of this Station since its establishment in 1901!

Royal Swedish Academy of Agriculture and Forestry (1995). He is *the recipient of* an Honorary Doctorate in forest science at the Swedish University of Agricultural Sciences (2008), Honorary Doctorate of Moscow State Forest University (Russia, 2010), Honorary Professorship from the CAF (China, 2012), Honorary member of the Society of American Foresters (2012).

For his input to the development of national and international forest research and education, Dr. Koch was also recognized with many other honours and awards including *Regia Academia Scientiarum Danica* (the Research Prize for 1979 by the Royal Danish Academy of Sciences and Letters), Scientific Achievement Award (1986) by the International Union of Forestry Research Organizations (IUFRO), and knighted "*Ridder af Dannebrog*" (1989) and Knight 1st Class (2007) by Denmark.

Dr. Niels Elers Koch has a long-standing and impressive record of service for IUFRO. Starting from his first IUFRO World Congress in Oslo in 1976, he has served IUFRO in different capacities. He was a member and chair of various Working Parties and Working Groups (1976–1990), Deputy Coordinator and Coordinator of IUFRO Division VI Social, Economic, Information and Policy Sciences (1991–2005), Coordinator of the former Task Force: Communicating Forest Science (1996–2000), member of the Finance Committee, Vice President for Research (2006–2010), President (2011–2014), and Immediate Past President (2014–2019) of the Union. He was also an Alternate Representative of Denmark's member organizations on IUFRO's International Council, voting member of the IUFRO Executive Board and Management Committee (1995–2019), served as a member of and secretary for IUFRO Review Panel (1999) as well as carried out many other responsibilities. He organized and supported many national and international initiatives, seminars, conferences and congresses worldwide as well as maintained their proceedings publication.

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2. Koch N.E. Personal communications (October 2019) at nek@trap.dk

CONCLUSIONS

Looking individually at the Honorary Members of IUFRO, one can find many common features. Many of them fall into a few if not all of the following categories: good researcher, administrator, teacher, and a public figure recognized nationally and internationally.

Since 1953, 41 people have been recognized; only one of these has been female.

IUFRO Honorary Members represent 20 different countries, including Australia (1 person), Austria (1), Canada (2), Denmark (1), Finland (3), France (4), Germany (4), Hungary (1), Italy (3), Malaysia (2), the Netherlands (2), Norway (1), Poland (1), Republic of Korea (1), Sweden (1), Switzerland (1), United Kingdom (1), the USA (8), the USSR (1), and Yugoslavia (1).

From 1953 to 2019, almost every President of IUFRO has received an Honorary Membership, with the exception of Professor Aldo Pavari from Italy, who was President of IUFRO in 1954–1956. He was not even nominated for this highest IUFRO award as he suddenly passed away (in 1960), shortly before the Congress in Vienna in 1961. He should however be recognized as a person who would have been deserving of Honorary Membership of IUFRO had he lived long enough.

Among those awarded, 13 Presidents held all the ranks from lower research unit via IUFRO Division (earlier – Section) coordination and Vice-President to President. Eight Honorary Members reached Vice-President as their highest rank in IUFRO; two individuals received this award while being Chairs of IUFRO Sections, and two persons as longstanding IUFRO Permanent Committee members who provided valuable service to IUFRO and its expansion at national and international levels.

IUFRO also recognized 10 people for their research capability, coordination of research at the Division (Section) level and for activities such as organizing the international IUFRO and IUFRO/FAO events, panels and joint teams and groups.

Amongst IUFRO's Honorary Members there are also individuals who have held posts such as IUFRO Secretary, IUFRO SPDC Coordinator, IUFRO Treasurer, United Nations and IUFRO/FAO Joint Committees on various issues, IUFRO Congress Organizing Committee Chair and others.

A few Honorary Members have been recognized at a national level by the placing of memorial plaques at their places of birth or by naming streets or crossroads after them. Several IUFRO Honorary Members have been appointed as high-level forest administrators of national (Forest Minister) and regional governments.

It is worth mentioning that four Honorary Members also received other IUFRO awards. Niels Elers Koch received the IUFRO SAA in 1986 (HM–2019), Oscar Fugalli (Italy) received the IUFRO DSA in 1992 (HM–1995), Risto Seppälä (Finland) received the IUFRO DSA in 1995 (HM–2010), Eric Teissier du Cros (France) received the IUFRO DSA in 2005 (HM–2010), and Su See Lee (Malaysia) received the IUFRO SAA in 2000 (HM–2016). In fairness, it should be noted that the DSA and SAA awards are relatively recent, having been introduced in 1981 and 1971, respectively, whereas Honorary Membership was introduced in 1953.

Part Two

The Scientific Achievement Award of the International Union of Forest Research Organizations: 1971–2020

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INTRODUCTION

The idea for a series of books about prominent scientists and active officeholders collaborating within IUFRO was announced at the 125th IUFRO Anniversary Congress in Eberswalde – Freiburg in September 2017.

Over the years, the International Union of Forest Research Organizations (IUFRO) has developed an honours and awards system for those who advance forest-related sciences, who promote international cooperation of forest-related research and who have delivered an outstanding long-term service to the Union. At each IUFRO Congress, these awards are presented in a number of categories. One of them is IUFRO's Scientific Achievement Award (SAA) – the second type of award established by IUFRO, and presented for the first time in 1971.

During the Closing Ceremony of the IUFRO Congress 1971 held in Gainesville, USA, President George Jamison stated, “the Permanent Committee decided to call attention to the contributions that young scientists³⁵ are making to international forestry research. It has developed an IUFRO Scientific Achievement Award program. Many of you already know about this award. All members have received a copy of the charter, which was prepared two years ago. Awards are made to outstanding scientists, 45 years of age or younger, who have distinguished themselves in any specific aspect of forestry or forest products research. Individuals selected for this honor receive a gold medal, scroll, and cash honorarium. IUFRO is indebted to Dr. D. A. N. Cromer (Australia), member of the Permanent Committee, for his outstanding work in developing the designs for the medal and scroll and for getting these items produced.” (IUFRO 1971, p. 271). According to the Award description, it was established “to recognize distinguished individual scientific achievements within the fields of research covered by IUFRO” (IUFRO Honours and Awards 2010, p. 20).

This book is an assembly of biographical sketches prepared especially for this edition. Each bio-sketch is a one-page compilation of the materials available from open sources, mostly, online. It includes citations from the decision about the person and the scientific achievements of the nominee that are presented in the IUFRO Congress report, IUFRO News or other source followed by some brief information about the individual (date and place of birth, education, career development, professional activities and recognitions). Each article also includes a short list of a few selected publications (*Selected research sources*), and the references that underlie this narration (*Personal sources*). The *research sources* display a few samples of the person's works, including articles, chapters, books, etc., as well as edited proceedings, co-authored books and the like. The information for this section was selected from Google Scholar Citations, ResearcherID, ResearchGate, ORCID, The Academic Family Tree and other online resources, as well as the University's and other affiliations of the person, and refers to the most cited papers. The *personal sources* section includes a few major links to the biography of the person. References about nomination and delivery of the SAA at the IUFRO Congress are presented in the Bibliography.

The information for each individual was collected from open sources and translated into English from Finnish, French, German, Japanese, Norwegian, Polish, Russian, Slovak, Spanish and Ukrainian languages. All photographs for this publication were taken from Internet and the articles about the recipient of the SAA.

The book contains bio-sketches of all recipients of the IUFRO SAA, with the exception of T. Kent Kirk (USA), who declined to be included.

³⁵ At that time, the maximum age of the award nominee was set as 45 years old but, in 2000, with introduction of the IUFRO Outstanding Doctoral Research Award (IUFRO ODRA), it was changed to unlimited.

ACKNOWLEDGEMENTS

With such a vast and diverse scope of destinies scattered over time and space, I initially thought that I had set myself an impossible task. Nonetheless, it was completed through the great assistance of many people and institutions to whom I would like to express my gratitude.

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I am thankful to Dipl.-Ing. Heinrich Schmutzenhofer and Prof. Hubert Hasenauer (Austria), Dr. Gary Bacon and Dr. Roger Underwood (Australia), Dr. Lorne Riley (Canada), Prof. Risto Seppälä (Finland), Prof. Walter Liese (Germany), Dr. Eric Teissier du Cross and Prof. Antonio Pizzi (France), Dr. Sumire Kawamoto (Japan), Praveena B. (Malaysia), Prof. Don Koo Lee (Republic of Korea), Elena Katkova (Russia), Prof. Jeff Burley (United Kingdom), Dr. Taras Yamelynets (Ukraine), Dr. John A. Parrotta, Prof. Andrew Liebhold, and Jodi N. Axelson (USA) for their vital help and cooperation in making links and communicating with various people, colleagues, and organizations to find information needed. Special thanks to Erkki Oksanen (Finland) for providing valuable photographs.

I extend my sincere thanks to all SAA winners for their frank and friendly support and participation in checking their bio-sketches, and to those who provided cross-links and cross-communication with their colleagues and directing me to the right individuals when I was unable to find the right contact or information. It is especially true when some contact information became irrelevant for specific reasons (person's retirement, moving to other location, etc.).

My deep gratitude should also go to my colleagues in the editorial board – Walter Liese, Don Koo Lee and Heinrich Schmutzenhofer, for their first reading of the drafts and permanent support during my work on this book. Heinz Schmutzenhofer has often visited IUFRO Secretariat and helped greatly in finding photos and files about SAA holders as well as complimentary information.

I am thankful to IUFRO President Michael Wingfield and Vice President John Parrotta for their support, and the IUFRO Secretariat, particularly Alexander Buck for his considerations and thoughtful navigating over the EU Regulation on the protection of personal data (GDPR), and to Gerda Wolfrum and Renate Prüller for providing information from the IUFRO archives.

I express special appreciation to Professor John Innes who undertook the burden of editing the book.

It is rather difficult to name all individuals who helped me in this endeavour, and if I missed any name, I would like to apologize in advance.

The author

THE SCIENTIFIC ACHIEVEMENT AWARD

“At each World Congress, IUFRO recognizes outstanding achievements of up to ten scientists. Awards will be made for research results published in scientific journals, proceedings of scientific meetings or books, or appropriate patents or other relevant evidence that clearly demonstrates the importance of the scientific or technical achievement to the advancement of regional or world forestry or forest research.

Other criteria of judgement are dissemination of results, implementation of knowledge, methods or techniques in practical forestry and skilled research management.

The President invites nominations about two years in advance of the next World Congress. Nominations may be made by a member of the nominee’s parent organization, by Coordinators of Divisions, Research Groups, Working Parties and Task Forces, and by other officeholders and knowledgeable persons associated with the Union (but no self-nominations). Nominees must either belong to IUFRO Member Organizations or be Individual Members of IUFRO.

Nominations and supporting documents should be sent to the Executive Director of IUFRO with a copy to the Chair of the IUFRO Honours and Awards Committee.

Nominations are evaluated by the Honours and Awards Committee and approved by the Board of IUFRO.

The award consists of a medallion, a certificate, the most economical cost of (air) travel/subsidized travel to attend the World Congress, and waiver of World Congress registration fees.

The awards will be presented at the opening or closing ceremony of the ensuing World Congress. The names of the recipients will be published in IUFRO News, the Annual Report and the World Congress Report.”

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THE SAA WINNERS:

1971 (GAINESVILLE, FLORIDA, USA)

An Awards Nomination Committee headed by Professor Leonard Leyton (Great Britain) and which consisted of Professors and Doctors R. Villasenor (Mexico), I.S. Melekhov (USSR), R. Karschon (Israel), F. Mergen (USA), and D.A.N. Cromer (Australia) screened 26 nominations received from seven countries. The IUFRO Permanent Committee then selected five outstanding scientists for the first Scientific Achievement Awards (SAA).

The SAAs were granted on 20 March 1971 during the Closing Ceremony of the XV IUFRO Congress. President George Jemison, on behalf of IUFRO, announced the names and delivered the award to the five winners (IUFRO 1971, p.271):

Edwin DONAUBAUER	Austria
Donald M. FUQUAY	USA
Gene NAMKOONG	USA
Francis D. PODGER	Australia
Dušan ZACHAR³⁶	Czechoslovakia

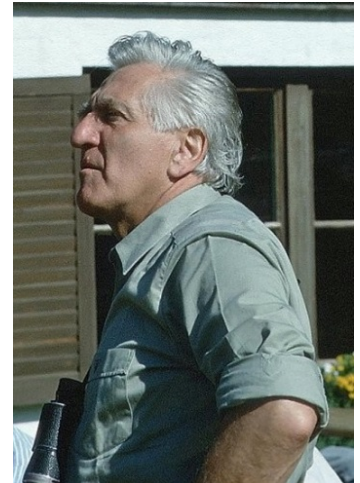


*The Fifteenth Congress of the International Union
of Forestry Research Organizations, Gainesville, Florida.*

³⁶ Dr. Dušan Zachar was unable to attend the Congress.

DONAUBAUER, Edwin

Edwin Donaubaauer received the IUFRO Scientific Achievement Award in 1971 for studies of diseases of the larvae of the spruce sawfly, fungal diseases of pines, and damage by air pollutants. Currently he is studying the causes of epidemics and racial variations of Scleroderis and the nature of resistance of poplar hybrids to fungal diseases. His interests have been broad, ... he has had a brilliant research career (IUFRO 1971, p. 272).



Edwin Donaubaauer was born on 11 August 1932 in Salzburg, Austria. He obtained his Diploma degree in Forestry in 1955 and his Doctoral degree in 1959 from the former *Hochschule für Bodenkultur* (now University of Natural Resources and Life Sciences, Vienna – BOKU). In 1956, Dr. Donaubaauer began his career at the Federal Forest Research Centre, Vienna (FBVA, now BFW), where he was the head of the Institute of Forest Protection from 1964 to 1995. For 40 years, he was one of the pillars of this major forest research institution in Austria, from the beginning as a young scientist until his retirement in 1995 as institute's head and Deputy Director.

In 1971, Dr. Donaubaauer started teaching at BOKU University, habilitated in 1974 and was appointed as Associate Professor in 1985. Professor Donaubaauer contributed greatly to the establishment and strengthening of forest pathology as an independent research area at BOKU. He was a passionate, enthusiastic and charismatic university lecturer, positively remembered by generations of forestry students. He lectured for 40 years, until 2011, when he became the very first recipient of the BOKU Lifetime Teaching Award.

Professor Donaubaauer was a well-known forest scientist with a broad expertise in all areas of forest protection (phytopathology, entomology, air pollution and wildlife ecology). He intensified the national and international research network of FBVA through numerous publications, projects and cooperation, including work in international organizations, such as FAO. Starting in 1961, Dr. Donaubaauer was active in IUFRO for over 40 years in various capacities. He was a leader of the Congress excursion (1961), chaired the Congress meeting of the WG on Fume Damage and presented a paper at Section 24 Forest Protection (1971), organized IUFRO WP S2.06-02 Canker Diseases-Scleroderis, was Coordinator of Division 2 (1981-1986), and made a presentation at the International Symposium dedicated to the 110th Anniversary of IUFRO (2002) – to mention just a few. Most significantly, he co-founded the world's most important scientific journal in the field of forest pathology, the *European Journal of Forest Pathology* (now *Forest Pathology*).

Professor Edwin Donaubaauer passed away in Vienna on 18 March 2012.

Selected research sources:

1. Decline and Dieback of Trees and Forests: A Global Overview. *FAO Forestry Paper* 120. 90 p. (with W. M. Ciesla). 1994.
2. Die Bedeutung von Krankheitserregern beim gegenwärtigen Eichensterben in Europa – eine Literaturübersicht. *Forest Pathology* 28(2): 91–98. [The importance of pathogens in the current oak decline in Europe – a literature review]. 1998.

Personal sources:

1. Feichtner Ch. Univ.-Prof. HR Dr. Edwin Donaubaauer. *Holzkurier*, 22.03.2012. https://www.holzkurier.com/rundholz/2012/03/edwin_donaubaauer.html Retrieved 10.12.2018
2. Halmschlager E., Kirisits T., Cech T. L. and C. Tomiczek. Edwin Donaubaauer, 1932–2012. Obituary. *Forest Pathology* 42(5): 441-442. 2012.
3. Kirisits T. Personal communications (January 2019) at thomas.kirisits@boku.ac.at



FUQUAY, Donald (Don) Morgan

Donald Morgan Fuquay received the IUFRO Scientific Achievement Award in 1971 for his pioneering research on lightning storm modification through basic studies of cloud physics and related phenomena. His research has not only added to our understanding of atmospheric processes, but it has led directly to exciting practical opportunities to reduce lightning, which causes thousands of forest fires every year (IUFRO 1971, p.272).

Don Fuquay was born on 17 January 1926 in Montesano, WA, USA. During World War II, he volunteered for the Navy at age 16, and spent four years serving in the U.S. Submarine Service. Donald M. Fuquay received medals for the American Area Campaign, the Asiatic Pacific Campaign, and a Purple Heart, and he was honourably discharged from the U.S. Navy in January 1947. He then served during the Korean War, and was finally discharged with honour in January 1952. Using a program provided by the Navy, Donald earned his B.Sc. (1951) degree, and in 1954 – his M.Sc. degree in meteorology and climatology at the University of Washington in Seattle.

In 1975, he earned his Ph.D. in Watershed Management at Colorado State University in Fort Collins, CO. As a meteorologist, from 1956 onwards, he undertook research on forest and mountain meteorology for the University of Washington and the Munitalp Foundation of New York. He designed and supervised the construction of a storm tracking radar device that was used to observe lightning storms in Arizona. Later, he was a radar consultant on the Presidential Advisory Committee on Weather Control and served on several other similar bodies. From 1958, he worked for the USFS Fire Laboratory of Missoula, MT. In the 1960s, being a Director of Skyfire Project, he was one of the first scientists working on cloud seeding by dropping silver iodide to make rainfall. Later, he was appointed as the Chief Research Meteorologist for the Northern Forest Fire Laboratory of the Intermountain Forest and Range Experiment Station (now Missoula Fire Sciences Laboratory, Rocky Mountain Research Station), from which he retired in 1983.

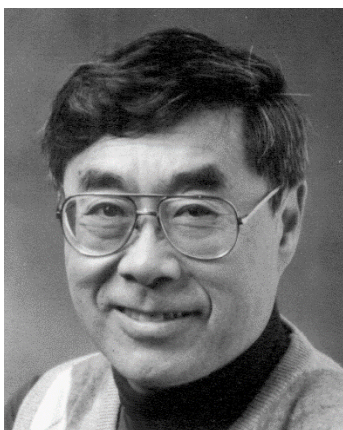
After retirement, he was very active with the Missoula Chapter of the Red Cross and at the Bay Area during the 1989 San Francisco earthquake. Dr. Fuquay's research has been highly recognized: he received the highest SAF scientific award – the Barrington Moore Memorial Award for Outstanding Achievement in Forestry Research (1967), and has also received the USDA Certificate of Merit (1976). Dr. Donald M. "Don" Fuquay passed away at home on 23 August 2006. His wishes were to have a joint scattering of ashes with his wife Dorothy (deceased 1998), over the ocean.

Selected research sources:

1. Weather modification and forest fires. In: Ground level climatology, *Am. Ass. Adv. Sci.*, p. 309–325. 1967.
2. Project skyfire lightning research (Grant No. GP-2617). USDA FS, Intermt. For. Range Exp. Stn. Final Rep. to Natl. Sci. Found., 67 p. (with R. G. Baughman). 1969.
3. Remote sensing of lightning in forest fire research. *Sixth Int. Symp. Remote Sensing Environ. Proc.*, Willow Run Lab., Ann Arbor, Mich., p. 1193–1203 (with R. G. Hawe). 1969.
4. Lightning discharges that caused forest fires. *J. Geophys. Res.*, 77(12): 2156–2158 (with A. R. Taylor, R. G. Hawe, and C. W. Schmid, Jr.). 1972.

Personal sources:

1. Donald Morgan Fuquay (26.01.1926 – 23.08.2006). *The Missoulian*, September 2, 2006. https://missoulian.com/news/local/obituaries/07sat/donald-m-fuquay/article_b4585319-7f7e-5d0a-ad58-d4d2276d30b7.html Retrieved 11.12.2018.
2. Jamie Kelly. Lightning chaser Don Fuquay also slowed down for family - Western Montana Lives. *The Missoulian*, October 16, 2006. https://missoulian.com/hometowns/lightning-chaser-don-fuquay-also-slowed-down-for-family-/article_e0dcba53-8501-572d-b287-0383c8102c63.html Retrieved 11.12.2018.



NAMKOONG, Gene

Gene Namkoong received the IUFRO Scientific Achievement Award in 1971 for his leadership in population genetics and pioneering research on the application of quantitative genetics to forestry, estimating genetic variance, developing genetic gain formulas for seed orchard systems, and developing optimal designs for characterizing advanced generation populations. His work has emphasized the fundamentals of the evaluation of tree species, variations in selection pressures, migration rates, and other factors that will lead to appropriate breeding systems for forest tree species (IUFRO 1971, p.272).

Gene Namkoong was born on 25 January 1934 in New York City, USA, of Korean ancestry. He received his B.Sc. (1956) and M.Sc. (1958) in Forestry from the State University of New York at Syracuse, and his Ph.D. in Forestry and Quantitative Genetics from North Carolina State University (1963). From 1958 to 1993, he worked for the USFS based at North Carolina State University, where he also held professorships in the Departments of Genetics, Biomathematics and Forestry. In the mid-1970s he was also appointed as a USFS Pioneer Research Scientist, one of only seven positions. In 1993, he retired from the USFS and moved to the University of British Columbia where accepted the position of the Department Head, Forest Sciences, until his retirement in July 1999.

He published in many areas of genetics, including theoretical and empirical population and quantitative genetics, breeding theory and strategies, gene conservation, extension, and disease resistance as well as in the area of ethics. In 1994, he was awarded the Marcus Wallenberg Prize for his “path-breaking contributions to quantitative population genetics, tree breeding, and management of genetic resources, which form a solid scientific basis for the maintenance of biological diversity in forests all over the world”. He received an honorary doctoral degree from the Swedish University Agricultural Sciences (SLU), membership in the Royal Swedish Academy of Agriculture and Forestry (KSLA), membership in the Korean Academy of Science and Technology (KAST), and the Order of Honor/Camellia (Republic of Korea). He served for many years on the FAO Panel of Experts on Forest Gene Resource, as well as on the Board of Trustees of International Plant Genetic Resources Institute in Rome, Italy. He was a fellow of the AAAS and received the USDA FS SSA in 1991. He served as a consultant and scientific advisor for projects in Denmark and Brazil, at CIFOR, IBPGR (Republic of Korea), and many other places.

In 1999, Professor Gene Namkoong and his wife Carol moved back from Canada to North Carolina. They lived in Leicester, Buncombe County, NC, where he died on 3 March 2002. In 2008, his over 250-page book *The Misunderstood Forest* was published posthumously in Canada as well as in Korean in 2014.

Selected research sources:

1. Inbreeding Effects on Estimation of Genetic Additive Variance. *Forest Science* 12(1), 1: 8–13. 1966.
2. Introduction to Quantitative Genetics in Forestry. *USDA FS Technical Bulletin* No. 1588. Washington, D.C. 342 p. 1979.
3. Philosophy of Breeding Strategy for Tropical Forest Trees. *Tropical Forestry Papers* No. 16, Oxford Univ., England, 67 p. (with R. D. Barnes and J. Burley). 1980.
4. *Tree Breeding: Principles and Strategies*. Monographs on Theoretical and Applied Genetics 11. Springer-Verlag New York, viii, 180 p. (with H. C. Kang and J. S. Brouard). 1988.

Personal sources:

1. Palmberg-Lerche Ch. Obituary: Gene Namkoong (1934-2002). *Unasylva*, No. 30. Forest Genetic Resources. FAO, Rome, 2002. <http://www.fao.org/docrep/005/y4341e/Y4341E02.htm> Retrieved 13.12.2018.
2. Professor Gene Namkoong. *Forest Genetics*, 9(2): 167-168. By Alvin Yanchuk A. and Sally Aitken (p. 167); Jeff Burley; Gosta Eriksson with family (p. 168). 2002.
3. Yanchuk A. Personal communications (January 2019) at Alvin.Yanchuk@gov.bc.ca



PODGER, (Frank) Francis Denis

*Francis Denis Podger received the IUFRO Scientific Achievement Award in 1971 for his significant contribution to the improved culture of certain eucalypts through his studies of *Phytophthora cinnamomi*, a causal agent of great importance in the mass-dying of these species and the development of major adjustments in forest management practices to check the impact of the disease (IUFRO 1971, p. 272).*

Frank Podger was born on 10 August 1933 at Bunbury, Western Australia, Australia. He began his professional academic career in 1952 at the University of Western Australia (UWA). After a sojourn of two years at the Australian Forestry School at Canberra where he received the Diploma of Forestry in 1955, he returned to UWA for his B.Sc. in Forestry in 1956.

In 1959, Francis Podger joined the Forest Research Institute, Forestry and Timber Bureau (then part of the Australian Department of Agriculture, which later became the Division of Forest Research, CSIRO), as a research officer and from then until 1967, he was Officer-in-Charge of the Dwellingup Research Station, later moved to Kelmscott, WA. He was also one of the heroes of the great Dwellingup Fire in January 1961. In 1964, Francis Podger was involved in the research that identified that the root-rot fungus, oomycete *Phytophthora cinnamomi*, caused jarrah dieback in Western Australian forests.

In 1968, he earned an M.S. in Forestry from the University of Melbourne for his dissertation on *Phytophthora*. In the 1970s he worked with CSIRO in Tasmania. He completed his Ph.D. at the University of Auckland in New Zealand in 1971, and undertook his post-graduate research there, specializing in forest pathology. In 1996, he was chair of the Western Australian Dieback Review Panel, reporting on dieback in Western Australia. In addition to being a pathologist, Dr. Podger was a fire-effects ecologist and an excellent botanist, and was responsible for identifying and naming two new eucalypt species in Western Australia.

Dr. Francis Denis Podger passed away in Marangaroo, on 29 June 2009, not long before age 76.

Selected research sources:

1. Association of *Phytophthora cinnamomi* with a disease of *Eucalyptus marginata* forests in Western Australia. *Plant Disease Reporter* 49: 943–947 (with R. F. Doepel and G. A. Zentmyer). 1965.
2. Aetiology of jarrah dieback: a disease of dry sclerophyll *Eucalyptus marginata* Sm. forests in Western Australia. M.Sc. Thesis, University of Melbourne, vii, 292 p. 1968.
3. *Phytophthora cinnamomi*, a cause of lethal disease in indigenous plant communities in Western Australia. *Phytopathology* 62: 972–981. 1972.
4. The eucalypt crown diebacks – a growing problem for forest managers. *Australian Forestry* 37: 173–187 (with T. Bird and G. A. Kile). 1974.
5. An unexpected decline in some forests of *Eucalyptus obliqua* and *E. regnans* in southern Tasmania. *Australian Forest Research* 10: 53–70 (with G. A. Kile, T. Bird, C. R. A. Turnbull and D. E. McLeod). 1980.
6. *Diseases and Pathogens of Eucalypts*. CSIRO Publishing, Collingwood, Vic., 576 p. (with P. J. Keane, G. A. Kile and B. N. Brown). 2000.

Personal sources:

1. URL: https://de.wikipedia.org/wiki/Francis_Denis_Podger Retrieved 8.12.2018.
2. Hall N. Botanists of the eucalypts. CSIRO, Melbourne, v, 160 p. 1978.
3. Walker R., Fagg P. Podger, Francis Denis (1933 – 1999?). Encyclopedia of Australian Science. <http://www.eoas.info/biogs/P003864b.htm> 2001 Retrieved 8.12.2018.
4. Underwood R. Personal communications (January 2019) at yorkgum@westnet.com.au



ZACHAR, Dušan

Dušan Zachar received the IUFRO Scientific Achievement Award in 1971 for his research on soil erosion, effects on soil quality, methods to overcome erosion damage and significant contribution to the development of new methods for afforesting extreme sites, investigation of physiological and ecological characteristics, especially drought and heat resistance, of various tree species (IUFRO 1971, p. 271).

Dušan Zachar was born on 6 May 1926 at Brezno, Banskobystrický kraj, Czechoslovakia. After finishing the Upper Secondary School of Forestry in Banská Štiavnica (1946), he continued his studies at the Faculty of Forestry of the Czech Technical University (CTU) in Prague (1950), where he later earned his Ph.D. in amelioration (1954) with a focus on afforestation. He also taught amelioration there until 1955. In 1955, the Slovak Academy of Sciences (SAS) was commissioned to set up a Department of Amelioration and Ecology as part of a later Forestry Center of SAS in Zvolen. Dr. Zachar was appointed there as Researcher in Soil Erosion (1955-1959). He was habilitated as an Associate Professor (1960) and became full Professor (1974) of the Faculty of Forestry at the College of Forestry and Wood Technology in Zvolen (VŠLD – *Vysoká škola lesnícka a drevárska*; now Faculty of Forestry, Technical University in Zvolen – TUZVO), where he lectured externally on forest amelioration through the mid-1970s. In 1969, Dr. Zachar obtained a D. Sci. degree from the Agricultural University in Brno (VŠZ – *Vysoká škola zemědělská*, Brno). In 1974 he became a corresponding member of the Slovak and the Czechoslovak Academies of Sciences.

Dr. Zachar served as Director of the Slovak Forest Research Institute in Banská Štiavnica (which moved in 1964 to Zvolen) from 1960 to 1977, and continued working at this Institute until 1991. He dealt mainly with ecology of afforestation, forest melioration, soil erosion and its counter-protection, creation and protection of the landscape. Under his leadership, the Forest Research Institute at Zvolen, Czechoslovakia, greatly expanded its programs and contributed significantly to progress in forest research in Czechoslovakia and internationally. He served on the editorial boards of several Czechoslovakian forestry journals. He was responsible for the establishment of a scientific journal *Acta Instituti Forestalis Zvolensiensis* that publishes original research findings in English, German, or French and several other journals (e.g. *Lesnícky časopis*, *Folia venatoria*, *Vedecké práce VÚLH vo Zvolene*).

Dr. Zachar received numerous awards: from the CTU in Prague (1955), the SAS (1958), a postdoctoral Humboldt Fellowship at the University of Munich (1966), the Gold Medal of the Central Forestry Research Institute in Budapest (1973), the Klement Gottwald State Prize (1975), the National Award (1984), and the Pfeil Award for Merit (1986). He also received the *J. Dekret-Matejovie* medal, the G.J. Mendel Silver and Gold medals, the SAS gold plaque for Merit in Biological Sciences, the Gold Plaque for Merit for Science and Research Development of the Czechoslovak Academy of Sciences, and other honours. After overcoming osteoporosis, he devoted the rest of his life to human nutrition. In March 2007, he founded the Academia Vitae, dedicated to human nutrition. Professor Zachar passed away on 13 November 2014 at the age of 88 years.

Selected research sources:

1. *Erózia pôdy* [Soil erosion]. 1960. 2nd ed., Slovak Academy of Sciences, Bratislava, 528 pp. 1970.
2. *Soil Erosion*. [transl. ed., M. Cowan]. Elsevier (Amsterdam); VEDA (Bratislava), 548 pp. 1982.
3. *Forest Amelioration*. Elsevier Science Pub. Co., viii, 623 p. (with O. Riedl). 1984.
4. *Výživa človeka*. [Humane Nutrition]. Zvolen: Technická univerzita, 265 pp. 2006.

Personal sources:

1. Midriak R. (2016) Chronicle. K nedožitým deväťdesiatinám prof. Ing. Dušana Zachara, DrSc. *Lesnícky časopis – For. J.* 2016, 62: 136–137. [Towards ninety years of Prof. Ing. Dušan Zachar, DrSc.].
2. Paule L. Personal communications (February 2019) at paule@tuzvo.sk

1976 (OSLO, NORWAY)

The Executive Board appointed the following scientists members of the Award Committee: Professors Leonard Leyton, Oxford University (Chairman), UK, Ivan S. Melekhov, the USSR Academy of Sciences, USSR, Kalle Putkisto, University of Helsinki, Finland, and Ion Milescu, Forest Research Institute, Romania (IUFRO 1976, p.29). Professor Ivar Samset greeted the winners and stressed that 42 scientists had been nominated for the Award. During the Opening Ceremony of the XVI IUFRO Congress, on 20 June 1976, the following five young scientists received the IUFRO SAA:

Pentti T. HAKKILA	Finland
Alexander S. ISAEV	USSR
Alphonse V.J.G. NANSON	Belgium
James A. PETTY	United Kingdom
David E. REICHLE	USA

They entered the rostra under the leadership of the Chairman of the Award Committee Professor Leonard Leyton from Oxford. When the winners entered the rostra, three horns were playing *The Song of the Forests*, written and composed by Professor Erling Eide, leader of Norwegian forestry research from 1921 to 1956, and arranged for three horns for the occasion of the XVI IUFRO World Congress (Teplyakov, Shalaev 2017).



From left to right D. E. Reichle, J. A. Petty, A. V. J. G. Nanson, A. S. Isaev, P. T. Hakkila, and L. Layton (Photo: A. S. Isaev).

After this ceremony, the IUFRO President gave the floor to “His Royal Highness, Crown Prince Harald, who attended the Opening Session. Crown Prince Harald handed over the Award to each of the Award winners, assisted by Prof. Leonard Leyton. The Award consisted of a gold medal and scroll together with a cash prize of 3,000 Norwegian Kroner. Afterwards the President handed over a painting to His Royal Highness in memory of the XVI IUFRO World Congress” (IUFRO 1976, p.29).



HAKKILA, Pentti Tapani

Pentti Tapani Hakkila received the IUFRO Scientific Achievement Award in 1976 for his investigations on the basic density of Finnish pine, spruce and birch wood as well as investigations on the weight and composition of branches as a raw material source, and new methods that may show ways of taking care of the stump and root material. His work with the whole tree concept in Finland has shown the possibilities of a better use of the raw material from the forests including a practical solution for small-sized wood problems. The valuable fibres in the tree stumps and roots may be a good addition to the available resources of wood products (IUFRO 1976, p.27).

Pentti Hakkila was born on 22 December 1935 in Hämeenlinna, Finland. He obtained Bachelor (1959), Master (1961), Licentiate (1965) and Doctor (1966) degrees at the Faculty of Agriculture and Forestry of the University of Helsinki. He also earned a M.Sc. from Michigan State University, USA, in 1966.

He began his professional career as a research officer at the Finnish Forest Research Institute in 1959 and acted as Professor of Forest Operations in 1972–1976 and again in 1979–1999. In 1976–1979 he was Research Professor of Complete Tree Utilization at the Academy of Finland, and in 1999–2004 the Research Director of the national Wood Energy Technology Program of Finland at VTT Energy. He acted in the 1980s as an Associate Professor of Forest Technology at the University of Helsinki and of Wood Technology at the University of Joensuu.

Dr. Hakkila served in several national and international organizations including IUFRO: the Deputy Coordinator of Division 3 (1982–1990), a member of the Executive Board (1991–1995) and the Deputy Chairman of the Organizing Committee of the XX IUFRO World Congress in Tampere (1991–1995). He was a member of the Prize Selection Committee of the Marcus Wallenberg Foundation in 1991–1995. He carried out many advisory tasks in developed and developing countries. The Council on Forest Engineering honoured him with the COFE International Forest Engineering Award in 1998. In 2009, he was recognized as an Honorary Doctor of the Faculty of Forest Sciences at the University of Joensuu, Finland. He is by invitation a member of the International Academy of Wood Science and the Finnish Academy of Science. Dr. Hakkila has published about 400 research papers, reports and articles in the field of wood science, wood utilization, forest biomass utilization, wood energy and timber harvesting.

Selected research sources:

1. *Investigations on the basic density of Finnish pine, spruce and birch wood.* CIFF 61.5, 98 p. 1966.
2. *Coniferous branches as a raw material source.* CIFF 75.1, 60 p. 1971.
3. *Mechanized harvesting of stumps and roots.* CIFF 77.1, 70 p. 1972.
4. Forest chips as fuel for heating plants in Finland. *Folia Forestalia* 586, 62 p. 1984.
5. *Utilization of residual forest biomass.* Springer Series in Wood Science. Springer Verlag Berlin and Heidelberg. GmbH & Co., 570 p. 1989.
6. *Developing technology for large-scale production of forest chips.* Wood Energy Technology Programme 1999–2003. Technology Programme Report 6/2004. Tekes, 98 p. 2004.

Personal sources:

1. *Finland's National Forest Programme 2010. Follow-up report 2005–2006.* L. Hytonen and A. Kotisaari, eds. Ministry of Agriculture and Forestry, 5b 2007. Vammalan Kirjapaino Oy, 56 p. 2007.
2. Hakkila, Pentti Tapani / Kuka kukin on (Aikalaiskirja): *Who's who in Finland*, p. 170. <http://runeberg.org/kuka/1978/0170.html> 1978. Retrieved 12.12.2018
3. URL: https://fi.wikipedia.org/wiki/Pentti_Hakkila Retrieved 9.12.2018.
4. Hakkila P. T. Personal communications (January 2019) at Pentti.hakkila@gmail.com



ISAEV, Alexander Sergeevich

Alexander Sergeevich Isaev received the IUFRO Scientific Achievement Award in 1976 for his important investigations into the resistance mechanisms of a tree against pests and for working out the scientific bases of the population dynamics of one of the most dangerous group of wood pests, the authorship of the general theory of forest association resistance to destructive insects, based on the principle of stability of mobile ecological systems. The principles of quantity regulation and mathematical modeling that he worked out are used in forestry practice of Siberia in integrated protection of forests (IUFRO 1976).

Alexander Isaev was born on 21 October 1936 in Moscow, USSR. He studied forestry and graduated from Leningrad Forest Technical Academy (1954). He began his professional career as a forest manager and worked on forest management and planning expeditions across the USSR (1954–1960). In 1960, he got his Ph.D. in Forestry with a specialization in entomology from VNIILM, and in 1972, his D.Sc. in Biological Sciences. In 1960–1988, he worked at the V.N. Sukachev Institute of Forest and Wood of the Siberian Branch of the USSR Academy of Science (Krasnoyarsk). He was promoted through Researcher (1960–1968), Head of the Laboratory (1968–1972), Deputy Director for Science (1972–1976), to Director of the Institute (1977–1988). Academician Isaev became the first Chair of the Presidium of the Krasnoyarsk Scientific Centre of the Siberian Branch of the USSR Academy of Sciences (1979–1988) and a Member of the Presidium of the USSR Academy of Sciences (1980–1991). In Moscow, he headed the USSR State Committee on Forest (1988–1991), the International Forest Institute and the RAS Center for Problems of Ecology and Forest Productivity (1991–2004), being its Scientific Director (from 2004), and an Advisor for the RAS (2005).

Academician Isaev was one of the leading world-level foresters and the organizer of scientific research in the field of forest ecology and population dynamics of forest insects. He actively participated in the training of forest specialists, and established and headed the Department of Ecology at Krasnoyarsk State University. He was a long-term Editor-in-Chief of the journal “*Lesovedenie*” (Forest Science) and served on the editorial boards of many other journals. He authored and co-authored more than 300 publications. He was the winner of the V.N. Sukachev Gold Medal of the RAS (1992), a Laureate of the Prize of the Government of the Russian Federation (2002). The Russian Government decorated him with five orders, including the Order of Honour (2012), for his contributions to the advancement of state forestry, forest science and education. He was an honorary member of the Society of American Foresters, an international member of the Bulgarian Academy of Sciences, and held an honorary doctorate from Moscow State Forest University.

Academician Alexander S. Isaev passed away in Moscow on 30 August 2018 at the age of 86 years.

Selected research sources (first author):

1. Взаимодействие дерева и насекомых-ксилофагов. Новосибирск, 346 p. (with G.I. Girs). [The interaction of wood and insect xylophages. Novosibirsk]. 1975.
2. Динамика численности лесных насекомых. Новосибирск, 224 p. (multi-authored). [The population dynamics of forest insects. Novosibirsk]. 1984.
3. Черный пихтовый усач. Новосибирск, 267 p. [*Monochamus urusovi*. Novosibirsk]. 1988.
4. Аэрокосмический мониторинг лесов. А.С. Исаев и В.И. Сухих, ред. М., 241 p. [Aerospace monitoring of forests. A.S. Isaev and V.I. Sukhikh, eds., Moscow]. 1991.
5. Лесное хозяйство на рубеже XXI века. А.С. Исаев, ред. М. 333 p. [Forestry at the turn of the XXI century. A. S. Isaev, ed. Moscow]. 1991.

Personal sources:

Исаев Александр Сергеевич. СО РАН: Персональный состав. Новосибирск: Наука, 2007, с. 104–105. [Isaev, Alexander Sergeevich. RAS, Siberian Branch: Personnel. Novosibirsk, 2007, p. 104–105].



NANSON, Alphonse Urbain Joseph Ghislain

Alphonse U. J. G. Nanson received the IUFRO Scientific Achievement Award in 1976 for his scientific work on provenance trials, heritability studies and the use of quantitative genetics in order to improve forest trees, particularly for seed-source studies and progeny testing; his development and use of methods to estimate heritabilities are of high value. Dr. Nanson has also developed valuable methods to estimate juvenile – mature genetic correlations between important traits. Furthermore, his work on a tabulation system that shows the efficiency of different systems of selection is very useful in forest tree improvement (IUFRO 1976, p. 28).

Alphonse Nanson was born on 12 September 1936 in Verviers, Belgium. In 1959, he graduated at the *Faculté des Sciences Agronomiques* in Gembloux (now *Gembloux Agro-Bio Tech, Université de Liège*) as Engineer of Waters and Forests, followed by a degree in Education, enabling him to teach as a Professor (1960), and a Ph.D. in Agricultural Sciences in 1968. He became Senior Lecturer (1970–1977) then part-time Professor of *Genetics and Improvement of Forest Trees*. He began his professional career as a Research Assistant (1961), Research Officer (1962) and was promoted to Head of Works (1971) at the Water and Forest Research Station in Groenendaal. He transferred to the Forest Research Station in Gembloux Wallonia as First Attaché (1990), becoming Director in 1998.

Dr. Nanson's research interests are in the field of forest genetics, tree breeding, and progeny testing, as well as seeds and provenance studies, and the development and use of methods to estimate heritability especially of conifer species. As a practitioner, he established several seed orchards of conifers in Wallonia and during 1989–1996, he actively participated at the creation of the public Walloon forest tree seed centre, aiming to collect, treat, store and sell seeds from the best provenances. He authored and co-authored 140 scientific publications, books and reports. He made numerous presentations at various national and international scientific meetings. He is a member of the *Royal Forestry Society of Belgium*.

Dr. Nanson made great progress in the development of the best possible provenances for Walloon, Belgium and Western Europe. He has made many missions in Europe, the USA and in developing countries where he has participated in the establishment of *Improvement of Forest Species* programmes, including *Genetic Conservation of Tropical Species*; and the establishment of national Tree Breeding Programme through the creation of Tree Seed Centres in Madagascar, Rwanda, Iraq, Romania, North Korea, China, and other countries, as well as participating in UN FAO and OECD projects, the FAO–IUFRO Second World Consultation on Forest Tree Breeding (1969), and others. He has been responsible nationally for regulations on the control of forest reproductive material (FRM). He has received various academic awards.

Dr. Alphonse Nanson died in Auvelais on 21 November 2020 and was buried in Gembloux.

Selected research sources:

1. *La valeur des tests précoces dans la sélection des arbres forestiers, en particulier au point de vue de la croissance*. Doctorat Gembloux; Works at Water & Forest Res. Sta., Groenendaal, H.S. n° 38, 242 p. [The value of early testing in the selection of forest trees, especially from the point of view of growth]. 1968.
2. *Tests de descendance de pin sylvestre*. Travaux. Série E, No. 3. Groenendaal, Belgique: Station de Recherches des Eaux et Forêts, 52 p. [Progeny tests of Scots pine]. 1969.
3. *Génétique et amélioration des arbres forestiers*. Presses Agronomiques de Gembloux, 712 p. [Genetics and improvement of forest trees]. 2004.

Personal sources:

1. Alphonse Nanson. In: *Génétique et amélioration des arbres forestiers*, 2004.
2. Servais A. Personal communications (April 2019) at alain.servais@spw.wallonie.be
3. Nanson, Pierre, Personal communications (May 2019) at pierre.nanson@gmail.com



PETTY, James Alan

James Alan Petty received the IUFRO Scientific Achievement Award in 1976 for his major successes in the field of wood permeability, pioneering research demonstrating that a combination of gas flow and non-polar liquid flow through wood can be used to determine the effective pore size of the flow path, and the number of pores per tracheid, which forms the classic foundation of future work in this area. It led him to set out for the first time the correct mechanism of pit aspiration, leading to methods whereby pit aspiration may be avoided. He also succeeded in finding a more exact method than previously to measure the void spaces in the wood cell wall itself (IUFRO 1976, p. 28–29).

Alan Petty was born on 6 May 1942 in Ilkley, West Yorkshire, UK. He studied physics at Oxford University, receiving an M.A. (1964). The same year he began his scientific career as Research Fellow in the Biophysics Department of Leeds University from which he earned his PhD in Wood Sciences (1967) for his work on fluid flow in wood. He then moved to the Forestry Department at the University of Aberdeen where he became Lecturer, Senior lecturer and then Reader. In 1982 he was awarded the degree of Doctor of Science by Aberdeen University for his internationally recognized research in wood science.

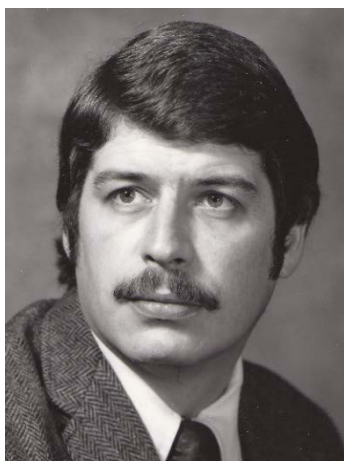
Dr. Petty's initial research concerned the fundamental theory and measurement of gas and liquid flow through wood. He applied this in the field of timber preservation, involving aqueous solutions and non-swelling solvents. He developed equations governing the flow of gas through the various structural components of wood. Later he devised a method to measure the permeability of cell wall material. Other work examined the effect of freezing and thawing on water transport in wood. He resolved the apparent discrepancy between different methods of measuring the density and void volume of cell wall material. Later work analyzed the physics of stem breakage of standing trees in high winds or due to snow loading. Another research theme concerned the influence of silviculture on the structure and therefore wood properties of softwoods and hardwoods, and also of rubberwood and rattan. He has a comprehensive list of scientific publications in the field of wood science. In 1974, he was awarded the Mallinson International Gold Medal for Timber Research for his work on permeability of wood. He was elected a Fellow of the International Academy of Wood Science (1981), joined the Board of the Academy (2001) and became the Chairman (2007). In 1989, he became a Fellow of the Institute of Chartered Foresters of the UK and served as a Council member (1989–1995). During this period, he was the Editor of the international journal *Forestry* published by Oxford University Press.

Selected research sources:

1. Electron probe microanalysis of metals in cell walls of conifer wood treated with preservatives. *Holzforschung* 22(6):174–177 (with R. D. Preston). 1968.
2. Diffusion of non-swelling gases through dry conifer wood. *Wood Sci. & Tech.* 7(4): 297–307. 1973.
3. Variation of susceptibility to aspiration of bordered pits in conifer wood. *Journal of Experimental Botany* 28(4): 935–941 (with A. J. Bolton). 1977.
4. Permeability to water of the cell wall material of spruce heartwood. *Wood Sci. & Tech.* 15: 161–169 (with M. A. Palin). 1981.
5. Freezing in conifer xylem. I. Pressure changes and growth velocity of ice. *Journal of Experimental Botany* 38(196): 1901–1908 (with D. J. Robson). 1987.
6. Effect of growth rate on wood properties of genetically improved Sitka spruce. *Forestry* 77(4): 325–334 (with A. K. Livingston, A. D. Cameron and S. Lee). 2004.

Personal sources:

Petty J. A. Personal communications (January 2019)



REICHLER, David Edward

David Edward Reichle received the IUFRO Scientific Achievement Award in 1976 for his innovative approach in recognizing the broad utility of such total ecosystem parameters as gross and net primary productivity, autotrophic and heterotrophic respiration, net ecosystem productivity and ecosystem efficiency. He has applied these concepts to both managed and natural systems, resulting in greater understanding of where ecosystem analyses can assist in solving problems that confront the professional forester. Making use of radio-isotopes, he was successful in demonstrating the functional relationship between decomposition processes, mineral cycling, and forest production (IUFRO 1976, p. 29).

David Reichle was born on 10 October 1938 in Cincinnati, Ohio, USA. He obtained his B.Sc. degree in Biology and Chemistry at Muskingum University in New Concord, OH in 1960. He continued his education at Northwestern University in Evanston, IL, where he earned M.Sc. (1961) and doctorate (1964) degrees in biological science. After lecturing at the Chicago Academy of Sciences and Northwestern University, Dr. Reichle was appointed as an AEC (Atomic Energy Commission) Postdoctoral Fellow in the Health Physics Div. of Oak Ridge National Laboratory (ORNL) in TN (1964–1966). In 1966, he joined the ORNL research staff.

In 1970, Dr. Reichle became Program Director of the ORNL Ecosystem Analysis Program and in 1981 manager of the Global Carbon Cycle Program. From 1986 to 1980 he was Director of the ORNL's Environmental Science Division, and in 1990 became Associate Director of ORNL responsible for biomedical, biotechnology, environmental, chemical technology and social science research. He was Vice President of Lockheed Martin Energy Research Corp., and from 1969 until his retirement in 2000 he was Adjunct Professor of Ecology at the University of Tennessee.

He has served on advisory committees for a number of federal agencies, including DOE, EPA, and NSF, and the Natl. Acad. of Sci. He is a Fellow of the AAAS, and has served on the scientific advisory committees of the Gas Research Institute, the Electric Power Research Institute, the National Board of Governors of The Nature Conservancy, the Board of Visitors for the School of Public and Environ. Affairs (SPEA) of Indiana Univ., and the Adv. Board for the S. Carolina Univ. Res. and Ed. Found. He was President of the Oak Ridge Rotary Club (1988–1989), a consulting environmental editor for Springer-Verlag NY, Inc., and on the editorial boards of two science journals. He authored and co-authored five books and more than 100 scientific articles and research papers. Dr. Reichle retired in 2000, but he is still active in various initiatives, events and societies.

Selected research sources:

1. *Analysis of temperate forest ecosystems*. David E. Reichle, ed. Ecological Studies; v. 1. Berlin, New York, Springer-Verlag, 304 p. 1970.
2. *Productivity of World Ecosystems*. D.E. Reichle. J.F. Franklin & D.W. Goodall, eds. US NAS. Washington, DC, 166 pp. 1972.
3. Advances in ecosystem analysis. *Bioscience* 25, 257–264. 1975.
4. *Dynamic properties of forest ecosystems*. David E. Reichle, ed. International Biological Program (series); 23. Cambridge; New York: Cambridge University Press, xxvi, 683 p. 1981.
5. *The changing carbon cycle: A global analysis*. John R. Trabalka and David E. Reichle, eds. Springer New York, 592 p. 1986.
6. *The Global Carbon Cycle and Climate Change. Scaling Ecological Energetics from Organism to the Biosphere*. Elsevier, 388 p. 2019.

Personal sources:

Reichle D. E. Personal communications (January 2019) at drr4der@aol.com

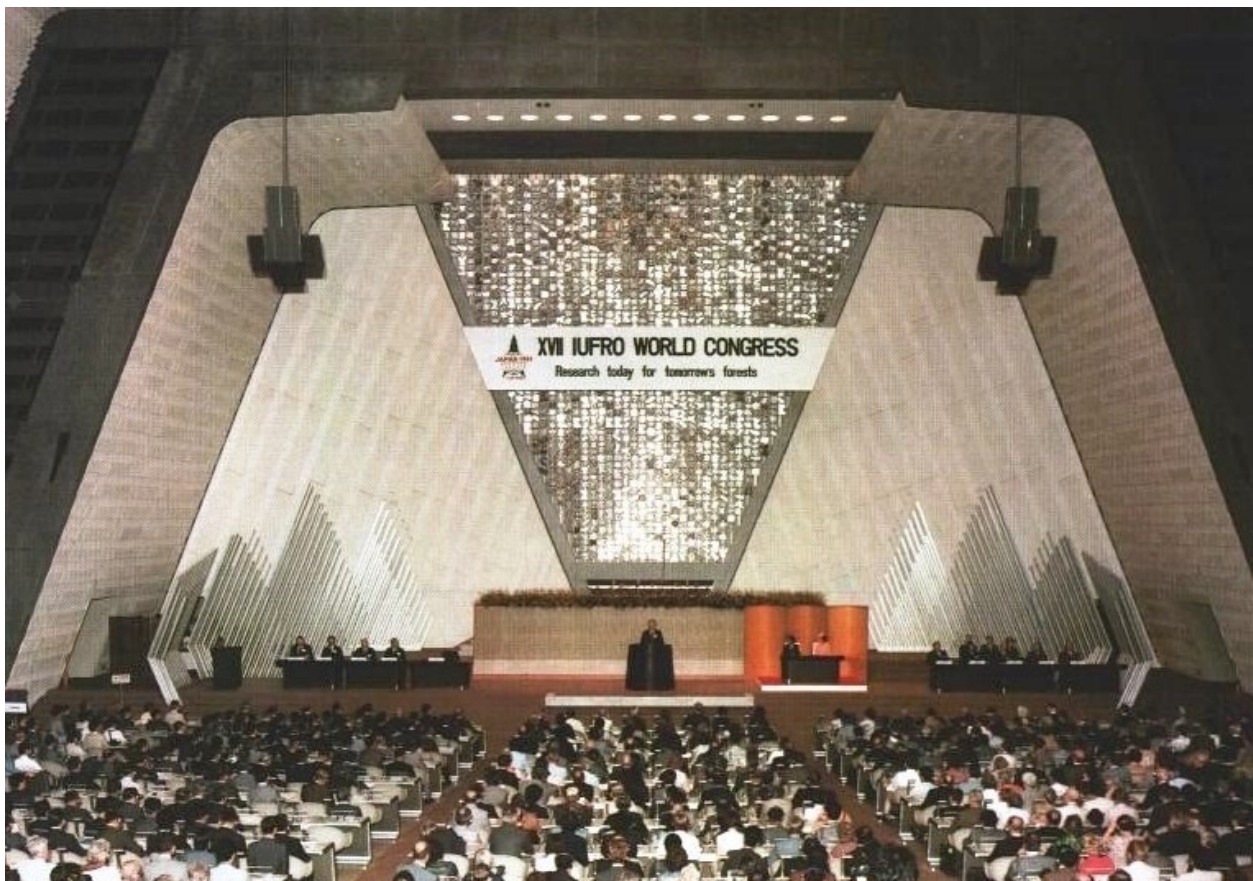
1981 (KYOTO, JAPAN)

On Monday, 7 September 1981, during the final part of the Opening Ceremony Dr. Liese made an announcement about the IUFRO SAA criteria: "According to the charter for the Scientific Achievement Award, the criteria for nomination read as follows:

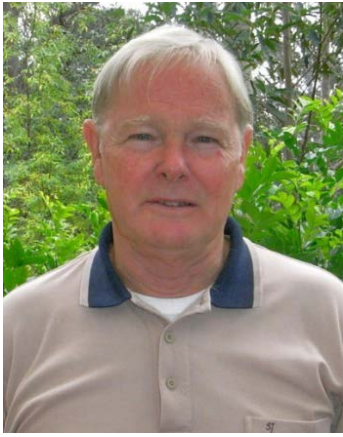
A significant piece of specific research or an extended period of major accomplishment in a particular field, the Award will be based on published results clearly demonstrating either originality or their importance for the future advancement in forestry. Any research worker under the age of 45, working within an IUFRO Member Organization, may be nominated for the Scientific Achievement Award." (IUFRO 1981, p.30).

The Award Committee including Colin Bassett (New Zealand), Edwin Donaubauer (Austria), Zygmunt Patalas (Poland), and Kalle Putkisto (Finland), under the Chairmanship of Robert E. Buckman (USA), selected seven awardees among 41 nominations. The IUFRO Executive Board approved that decision. Dr. Buckman conveyed the IUFRO SAA to the following scientists:

David I. BEVEGE	Australia
Harold E. BURKHART	USA
Suezone CHOW	Canada
Hugh G. MILLER	United Kingdom
Pekka J. KILKKI	Finland
Kent T. KIRK	USA
Makoto OGAWA	Japan



Congress Hall of the XVII IUFRO World Congress (7–12 September 1981, Kyoto, Japan).



BEVEGE, David (Ian)

David (Ian) Bevege received the IUFRO Scientific Achievement Award in 1981 for his soils and nutrition research, developing the concept of limiting basal area, scientific reference areas, and foliar analysis as well as techniques to stimulate tree growth through fungi associated with plant roots and for precise prediction of tree growth according to levels of nutrients applied. He worked on various issues related to decay processes, fertilizers, nitrogen and the nitrogen cycle, phosphorus, tree plantations, forest management, and forest policy. Much of his work was on pine, Araucaria and Eucalyptus (IUFRO 1981, SAFJ 1981).

David (Ian) Bevege was born 29 March 1939 Brisbane, Australia. He was a forestry cadet with the Queensland Forest Service from 1957. He studied forestry (1957–1958) at the University of Queensland and Australian Forestry School (AFS) in Canberra (1960–1961); awarded Diploma of Forestry with Distinction and the Schlich medal of the AFS (1961), graduated with a BSc in Forestry (1962) and a BSc in Forestry (First Class Honours) in 1965 from the University of Queensland. He was Silvicultural Research Forester at the Queensland Dept. of Forestry (1962–1967), and Research Fellow in Botany at the University of New England, Australia (1967–1970). He earned Ph.D. (1972) investigating the role of mycorrhizas in *Araucaria* nutrition and rhizospheric nitrogen fixation. He worked at the Division of Soils, CSIRO Adelaide, Australia (1969–1971) researching physiology of mycorrhizae of *Pinus*, *Araucaria* and crop plants. He returned to Queensland Dept. of Forestry in 1972, undertaking soils and nutrition research in natural forests and plantations up to 1982.

In 1982, Dr. Bevege joined New South Wales Forestry Commission as Chief, Wood Technology and Forest Research Division. In 1986, he was appointed Assistant Director General, Australian International Development Assistance Bureau and in 1991 Principal Advisor, Australian Centre for International Agricultural Research, from which he retired in 2002. He then undertook consultancies in development assistance and was active in the promotion of tropical hardwood plantation research and development in northern Australia.

Dr. Bevege served on several Australian forestry and forest products research planning and technical committees. His overseas forestry work involved projects and R&D planning mainly in the Asia-Pacific Region and China. He is nationally and internationally recognized for his contribution to forest research and management, and international development assistance. He is a Fellow of the Institute of Foresters of Australia (IFA), and a recipient of its Norman W. Jolly Medal (2009); he delivered the IFA Maxwell Jacobs Memorial Oration in 2009. He is an Associate of the Institute of Materials, Minerals and Mining (Wood Science & Technology Chapter). He has prepared over 120 research papers and technical reports.

Selected research sources:

1. Endogone strain and host plant difference in development of vesicular-arbuscular mycorrhizas. *Endomycorrhizas* 1975, 149–174 (with G. D. Bowen).
2. Response of *Pinus radiata* seedlings to carbon dioxide enrichment at different levels of water and phosphorus: growth, morphology and anatomy. *Annals of Botany* 51: 165–177 (with J. Conroy and E. W. R. Barlow). 1986.
3. Developing African mahogany (*Khaya senegalensis*) germplasm and its management for a sustainable forest plantation industry in northern Australia – progress and needs. *Australian Forestry* 71(1): 33–47 (with D. G. Nikles, G. R. Dickinson, M. W. Griffiths, D. F. Reilly and D. J. Lee). 2008.

Personal sources:

1. Brief on Dr Ian Bevege. *NARI News*, October–December, 4(4): 4. 2001.
2. Seven win international forestry research awards. *SAFJ*, December, 119: 34. 1981.
3. Bevege D.I. Personal communications (January 2019) at dbevege@bigpond.net.au



BURKHART, Harold Eugene

Harold Eugene Burkhart received the IUFRO Scientific Achievement Award in 1981 for developing new models for forecasting growth and yield for slash pine, radiata pine and hardwoods using advanced statistical methods and computer programs, integrating the effects of intensive management practices into growth and yield models, and developing an original system of forest forecasting for loblolly pine (Unasylva 1981).

Harold Burkhart was born on 29 February 1944 in Wellington, Kansas, USA. He obtained his B.Sc. in Forestry from Oklahoma State University (1965), and M.Sc. in Biometrics (1967) and Ph.D. (1969) from University of Georgia. In 1969, he became an Assistant Professor, then Associate Professor (1973–1978), Professor (1978–1981), Thomas M. Brooks and University Distinguished Professor (1999) in the Department of Forest Resources and Environmental Conservation at Virginia Tech, where he also served as Head of Department (1995–2008).

In 1979, Dr. Burkhart founded an industry-university cooperative research program at Virginia Tech, the Forest Modeling Research Cooperative, which is still operating. The Cooperative aims to develop improved models for predicting tree growth and stand development. He was a Senior Research Fellow (1976–1977) at the Forest Research Institute in Rotorua, New Zealand. He has served on a number of advisory and editorial boards, e.g., Editor of *Forest Science* (1986) and has served on the Advisory Boards of several journals.

Dr. Harold Burkhart is one of 14 University Distinguished Professors at Virginia Tech. He is a Fellow in the SAF and the AAAS, and holds professional memberships in the Biometric Society, AFA, Sigma Xi, Phi Kappa Phi, and Xi Sigma Pi. His contributions to forestry research and education have earned him the Virginia Academy of Science J. Shelton Horsley Research Award (1983), Outstanding Faculty Award of the State Council for Higher Education in Virginia (1988), the SAF Barrington Moore Memorial Award (1991), and the Distinguished Agriculture Alumnus award of Oklahoma State University (1993). He became Virginia's Outstanding Scientist of 2013, and the Forest Landowners Association Forest Champion of the Year (2013).

Since the 1980s, Professor Burkhart served IUFRO in several leadership positions with its divisions and research groups and was a member of IUFRO's Executive Board (1996-2000). He has organized many scientific meetings for the organization. He is the recipient of two of IUFRO's other honours: Distinguished Service Award (1995) and World Congress Host Country Scientific Achievement Award (2014). Professor Burkhart has supervised 65 graduate students, 14 postdoctoral fellows, and 7 visiting faculty members. He has authored two textbooks and over 250 research papers published in journals, research bulletins, book chapters, and proceedings papers in the area of modeling of forest stand dynamics, growth and yield, and applying quantitative analysis techniques to forestry problems.

Selected research sources:

1. *Forest Measurements*. 5th ed. New York, McGraw-Hill, 456 p. (with T. E. Avery). 2002.
2. *Modeling Forest Trees and Stands*. Springer-Verlag, 471 p. (with M. Tomé). 2012.

Personal sources:

1. Dr. Harold Burkhart. Biography. In: *Forest Measurements*.
2. Harold E. Burkhart receives international award for sustainable forest management models. <https://vtnews.vt.edu/articles/2014/09/091114-cnre-burkhartiufroaward.html> Retrieved 18.12.2018
3. *IUFRO News*, 43(8). <https://www.iufro.org/publications/news/electronic-news/io-news-14-special-awards/#c21735> 2014. Retrieved 18.12.2018.
4. Burkhart H. E. Personal communications (January 2019) at burkhart@vt.edu



CHOW, Suezzone

Suezzone Chow received the IUFRO Scientific Achievement Award in 1981 for his fundamental studies and development of technology related to wood adhesion, including sophisticated techniques, which have benefited wood adhesive researchers around the world (IUFRO 1981).

Suezzone Chow was born in 1937 in Taipei, in what is now Chinese Taipei. In 1959, he obtained his B.Sc. degree from the National Taiwan University (NTU), and worked as an instructor and researcher in the Department of Forestry (1962–1963). After emigrating to Canada (1963), he earned his M.Sc. in Forestry (1965) and a Ph.D. in Wood and Pulp Chemistry (1970), both at the University of British Columbia. Dr. Chow joined the CFS's Western Forest Products Laboratory as a Research Officer (1965), and progressed to Research Scientist (1968), Section Head (1976), and Research Scientist 4, the highest-ranking scientist in the Canadian Forest Products Laboratory (1979). In May 1979, he became Vice President of Ardeu Wood Products Ltd. in Merritt, BC. He then became Director and Vice President of Research and Development at Canfor Corporation (1980–2004), and served as Chairman of the Science Council of British Columbia (1993–1998), and as a member of Prime Minister's Advisory Council on Science and Technology, Canada (2005–2008).

Dr. Chow's primary research interests are on wood adhesion as applied to industry, causes of deterioration in high-temperature treated wood surfaces, on the curing mechanisms of adhesives, and the development of a new technique for finger-jointing independent of moisture content. He has developed sophisticated wood-adhesion knowledge and techniques. Dr. Chow has published over 100 research papers and reports, and since 1976, he has obtained 18 international patents and inventions in the field of wood properties, wood protection, wood stain, decay, adhesives and panels, composite wood products, and decoloration reduction.

He has developed a scientific reputation both nationally and internationally. Being fluent in both Japanese and English, he has combined his academic background with innovative industrial research, development, and international marketing and trade, especially in the Pacific Rim countries. He has dedicated much of his energy to the IAWS, being its Lifetime Contributor, among the first five scientists to deliver the IAWS lecture (1981), and President of the Academy (1996–1999). In recognition of his long-term contributions to the provincial forest industry development, Dr. Chow received the BC Science and Engineering Gold Medal (1985), the Canada Award for Business Excellence (1989), and has been awarded the Order of British Columbia (1992) and Queen's Jubilee medal (2002). As Adjunct Professor Dr. Chow has shared his knowledge and experience with the UBC students.

Selected research sources:

1. Effect of resin impregnated core veneer on shear strength of Douglas fir plywood. M.F. UBC, 1966.
2. Hydroxyl accessibility, moisture content and biochemical activity in cell walls of Douglas-fir trees. *TAPPI* 55(4): 540–544. 1972.
3. Molecular rheology of coniferous wood tissues. *Transaction of the Society of Rheology* 17:1109–1128. Ph.D. thesis.

Personal sources:

1. Order of British Columbia. 1992 Récipient: Suezzone Chow – Vancouver. <https://orderofbc.gov.bc.ca/members/obc-1992/1992-suezzone-chow/> Retrieved 19.12.2019.
2. New Science Council Chair Appointed https://www.cap.ca/onlineforms/temp_PiC_archive/1993-v49-n5.pdf Retrieved 19.12.2019.
3. Chow S. Personal communications (January 2019) at suezzonechow@telus.net



KILKKI, Pekka Juhani

Pekka Juhani Kilkki received the IUFRO Scientific Achievement Award in 1981 for his development of unique mathematical decision models for forest management, successfully combining the traditional forest management paradigm with optimisation models and computer techniques. He applied linear and dynamic programming to develop new forest-management planning methods (IUFRO 1981, Unasyuva 1981).

Pekka Kilkki was born on 7 October 1939 in Mikkeli, Finland. He started forestry studies at the University of Helsinki and obtained his Bachelor of Agricultural and Forest Sciences in 1962 and Master in 1965. He then studied at the University of California and finished an M.Sc. in 1967. He defended his doctoral thesis on "Income-oriented Cutting Budget" at the University of Helsinki in 1968.

In 1969, Dr. Kilkki began his career as an Assistant Professor of Forest Sciences at the University of Helsinki. From 1975, he worked as a Senior Researcher and then as a Professor at the Academy of Finland before moving in 1982 to the University of Joensuu (now part of the University of Eastern Finland). In Joensuu, he was Assistant Professor and Professor until 1988, when he started as a professor and leader of the National Forest Inventory at the Finnish Forest Research Institute. He worked on this task until his death on 8 September 1990.

Dr. Pekka Kilkki authored and co-authored over 50 research articles on linear optimization in forestry decision-making, forest measuring methods, and data processing techniques in forest valuation. He also published a few books and manuals. His works have had a great influence on Finnish forest science. Modern forest management planning methods are based on his dissertation. He introduced satellite data into the National Forest Inventory. His students remember him as an extraordinary teacher, researcher and personality, always keeping high scientific standards as a priority. He was the author of numerous columns and a bio-historical book about the famous Finnish professor and diplomat Werner Cajanus.

Selected research sources:

1. *Estimation of Strata Areas in Forest Survey*. AFF 81: 3. 27(2) p. (with A. Nyysönen). 1966
2. *Income-oriented Cutting Budget*. AFF 91. 54 p. (doctoral dissertation). 1966.
3. *Determination of the optimum cutting policy for the forest stand by means of dynamic programming*. AFF 102. 23 p. (with U. Väisänen). 1970.
4. *Metsänmittausoppi*. Helsingin yliopisto.; Metsänarvioimistieteen laitos.; Tiedonantoja, 161 p. [Forest Measurement Guide. Univ. of Helsinki; Dept. of Forest Mensuration, Information notes]. 1973.
5. *Timber Management Planning*. University of Helsinki, 105 p. 1979. (2d ed., 1980).
6. *Taper curve models for Scots pine and their applications*. AFF 174: 1–60. (with M. Varmola). 1981.
7. *Sample trees in timber volume estimation*. AFF 182: 1–35. 1983.
8. *Reference sample plots to combine field measurements and satellite data in forest inventory*. Dept. of Forest Mensuration, Univ. of Helsinki, Res. Notes 19. (with R. Päivinen). 1987.
9. *Werner Cajanus 1878–1919: Suomalainen metsäntutkija ja diplomaatti*. Helsingissä: Otava, 269 s. [Werner Cajanus 1878–1919: Finnish Forest Researcher and Diplomat]. 1988.

Personal sources:

1. URL: https://fi.wikipedia.org/wiki/Pekka_Kilkki (in Finnish) Retrieved 23.12.2018.
2. Päivinen R. Personal communications (January 2019) at paivinen.r@gmail.com, photo



MILLER, Hugh Graham

Hugh Graham Miller received the IUFRO Scientific Achievement Award in 1981 for his research in nutrient cycling through forest ecosystems, including processes in the growth response of trees and forest soils to fertilisers (IUFRO 1981, Unasylva 1981).

Hugh Miller was born on 22 November 1939 in Ndola, Zambia, where his father was a forest officer. He attended Strathallan School, Forgandenny, a few miles south of Perth, Perthshire, Scotland. In 1963, he graduated from the University of Aberdeen with a degree in forestry and began his professional career as a Scientific Officer at the Macaulay Institute for Soil Research in Aberdeen. In 1969, he obtained his Ph.D. from the University of Aberdeen. In 1970, he was promoted to Senior Scientific Officer and, in 1976, to Principal Scientific Officer. He led research into forest biogeochemistry at that Institute for over 20 years. In 1984, Dr. Miller was appointed Professor and Head of the Department of Forestry at the University of Aberdeen (serving until 2000), from which he retired (2004) as Emeritus Professor of Forestry.

Professor Miller was a Fellow and President of the Institute of Chartered Foresters (ICF, 1994–1996), Chairman of the FC Research Agency Advisory Committee (1994–2003), and Chairman of FC Regional Advisory Committee for the North of Scotland, and Director of the Forest Industries Development Council. In 2012, he was appointed the Chairman of PEFC UK, Ltd.

Professor Miller was Chairman of the UN FAO Forestry Education Committee until 1998, and he played an active role in IUFRO as Coordinator of the IUFRO Working Party on Forestry Education. He was the editor of the UK journal *Forestry* and a member of the editorial boards for *Tree Physiology* and *Scandinavian Journal of Forest Research*. He delivered invited lectures at the agricultural universities of Copenhagen, Vienna, Freiburg, Wageningen, Warsaw and Bogor (Indonesia).

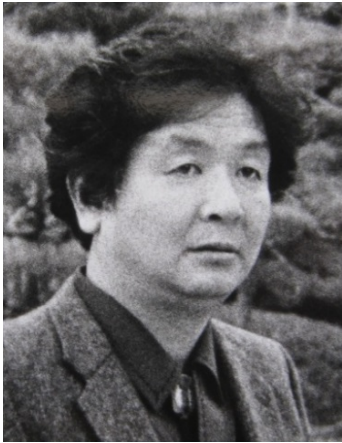
For his services and input to forestry, forest research and education, Prof. Miller was elected as a Fellow of the ICF (1979) and a holder of its Medal (2007), Fellow of the Royal Society of Edinburgh (FRSE, 1985), and he appointed an OBE (Officer of the British Empire) (1996).

Selected research sources:

1. *Effect of nitrogen fertilizer on tree growth and nutrient uptake in a stand of Corsican pine*. University of Aberdeen. Macaulay Institute for Soil Research, (thesis/dissertation). 1969.
2. *Forest Policy: The International and British Dimensions*. University of Aberdeen, 131 p. 1995.
3. Effect of nitrogen supply on nutrient uptake in Corsican Pine. *Journal of Applied Ecology* 13(3): 955–966 (with J. D. Miller and O. J. L. Pauline). 1996.

Personal sources:

1. URL: https://en.wikipedia.org/wiki/Hugh_Graham_Miller Retrieved 07.12.2018.
2. *One Hundred Years of Forestry Teaching and Research at the University of Aberdeen: A Brief History*. University of Aberdeen, 11 p. http://homepages.abdn.ac.uk/forestry/associated_links/One_hundred_years_of_forestry.pdf 2007. Retrieved 07.12.2018.
3. *RAE-2001 Submissions. Forestry, Rural and Environmental Economics Research Group*. University of Aberdeen. <http://www.rae.ac.uk/2001/submissions/Textform.asp?route=2&HESAInst=H-0170&UoA=15&Msub=A&Form=RA6a> 2002. Retrieved 24.12.2018.
4. *RSE Fellows ordered by Academic Discipline*, as at 11/10/2016. Royal Society of Edinburgh. http://www.royalsoced.org.uk/cms/files/fellows/lists/fellows_disciplines.pdf Retrieved 24.12.2018.
5. Miller H. G. Personal communications (January 2019) at hugh.miller3@btinternet.com



OGAWA, Makoto

Makoto Ogawa received the IUFRO Scientific Achievement Award in 1981 for his studies of fungal ecology, mycorrhizae and soil microorganisms and their roles in forest succession as well as invention of a new method to inoculate the mycorrhizal fungus in pine forests by means of saplings infected with mycelium around the fungus colony (IUFRO 1981, Unasylva 1981).

Makoto Ogawa [小川眞] was born on 30 October 1937 in Kyoto, Japan. He obtained his Bachelor (1961), Master (1963) and Doctoral (1966) degrees in Agriculture (Agricultural Biology) from Kyoto University. In 1967, he began his professional career at the MAFF of Japan as a Senior Researcher at its Forestry and Forest Products Research Institute in Tokyo (1967–1972). In 1973, he was promoted to Chief of the Soil Microbiology Laboratory (1973–1986), Section Leader for Planning (1986–1987) and Section Leader for Mushroom Science (1987–1991). He then served as Director of the Biological Environmental Institute, manager and later – a consultant of Kansai Environment Engineering Company Ltd., Uji, Japan (KANSO Tekunos Co. Ltd., 1991–2005) as well as a Visiting Professor on Environment Technology at Osaka Institute of Technology.

Over the years, Dr. Ogawa has continued his research on mushrooms, mycorrhiza, people and nature, as well as expanded his research into various forestry-related issues such as charcoal, effects of carbon emissions and sequestration and others. He is also a pioneer and initiator of the program for matsutake research in prefectural forestry organizations throughout Japan. In 1975–1980, Dr. Ogawa with colleagues published a series of books on the microbial ecology of the mycorrhizal fungus *Tricholoma matsutake* in pine forests.

In 1980, Dr. Ogawa with colleagues initiated studies on the utilization of charcoal in agriculture and forestry. He became the first President of the Japan Biochar Association (JBA), established on 4 April 2009 to respond to the requirement of the second International Biochar Initiative conference (London, September 2008). Dr. Ogawa is a member of the Japan Forestry Society, Japan Mycological Society, Japan Mycorrhiza Research Society, and Japan Biochar Association Fellow. Dr. Ogawa is a recipient of the Japan Forestry Award (Japan Forestry Society, 1980), NIKKEI Global Environment Technology Award (1998), and Japan Mycological Society Award (2000).

Selected research sources:

1. Microbial ecology of the mycorrhizal fungus *Tricholoma matsutake* Ito et Imai (Sing.) in pine forests. I: *The fungal colony (shiro) of Tricholoma matsutake*. Bull. 272. Tokyo: Government Forest Experiment Station, 121 p. In Japanese with English summary. 1975.
2. Symbiosis of people and nature in the tropics. *Farming Japan* 28(5): 10–34. 1994.
3. Utilization of symbiotic microorganisms and charcoal for desert greening. *Green Age* 14: 5–11. 1998.
4. Carbon sequestration by carbonization of biomass and forestation: Three case studies. *Mitigation and Adaptation Strategies for Global Change* 11(2): 421–436 (with Y. Okimori and F. Takahashi). 2006.

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2. URL: <https://prabook.com/web/makoto.ogawa/202735> Retrieved 08.12.2018.
3. McGreevy S. R., Shibata A., Tanabiki Y. Biochar in Japan: Makoto Ogawa recalls a lifetime of work on biochar, fungi, and plant growth interaction. *Biochar Journal*, 2016. Arbaz, Switzerland. www.biochar-journal.org/en/ct/75 2016. Retrieved 08.12.2018.
4. Ogawa M. Personal communications (January 2019) at makoto-ogawa@mvg.biglobe.ne.jp

1986 (LJUBLJANA, YUGOSLAVIA)

The IUFRO Scientific Achievement Awards were presented during the Opening of the 18th IUFRO World Congress on 8 September 1986. The Executive Board, upon recommendation by a Scientific Achievement Award Committee, selected the winners. James H. Cayford, Canadian Forest Service, Sault Ste. Marie, Canada, served as Chairman of this Committee, which consisted of Dr. S. Asakawa, Forestry and Forest Product Research Institute Tsukuba, Japan; Prof. Marten Bol, Agricultural University, Wageningen, The Netherlands; Dr. Lars Strand, Norwegian Forest Research Institute, Ås, Norway; Dr. Z. Patalas, Forest Research Institute, Warsaw, Poland (IUFRO 1986, p.53); and Dr. Cayford.

The IUFRO SAA was received by nine scientists out of 68 candidates, including

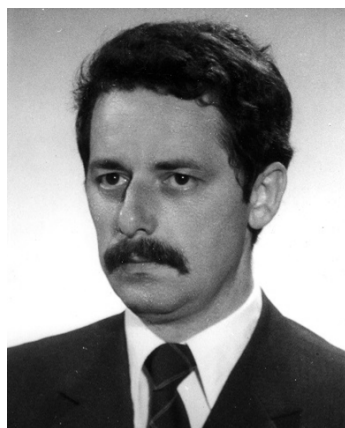
Wladislaw CHALUPKA	Poland
Wolfgang G. GLASSER	USA
Hamish KIMMINS	Canada
Niels E. KOCH	Denmark
Mitsuhiro MINOWA	Japan
Sten NILSSON	Sweden
Jacqueline ROBERTSON	USA
Roger SANDS	Australia
Yow Pong THO	Malaysia

As it was mentioned in the August issue of *The Forestry Chronicle* “this prestigious award carries with it an award of one thousand US. Dollars”³⁷. In 1986, the SAA was awarded to a female scientist for the first time.



From left to right: M. Minowa, W. Chalupka, W. G. Glasser, H. Kimmins, N. E. Koch, S. Nilsson, J. Robertson, R. Sands, Yow Pong Tho, *D. Mlinsek* and *J. H. Cayford* (Photo: IUFRO Secretariat).

³⁷ International Union of Forest Research Organizations Award. *The Forestry Chronicle*, August 1986, p.281.



CHALUPKA, Wladislaw

Wladislaw Chalupka received the IUFRO Scientific Achievement Award in 1986 for his extensive research into the physiology of flowering in coniferous trees for the management of forest seed orchards (IUFRO 1986).

Wladislaw Chalupka (*Polish*: Władysław Chałupka) was born on 16 June 1946 in Pławce, Poland. After finishing primary school in Przewóz, area Zary (1960), he achieved a baccalaureate from the Środa Wielkopolska's high school (1964). He then obtained Magister Engineer in Forestry (1969) and Ph.D. in Forest Sciences (1976) from the University of Agriculture in Poznań. In 1974, he undertook a 2-month scientific internship at METLA, Finland, and in 1992–1993, the University of Wisconsin, Madison, USA contracted him for a year.

He began his career as a researcher at the Institute of Dendrology, Polish Academy of Science (ID PAS). In 1982, he was promoted to Head of the Laboratory of Population Genetics. Some 12 years later, he became Head of the Generative Propagation Laboratory (1994–1996), Head of the Department of Genetics (1996–2004), and Head of the Laboratory of Biology of Propagation and Population Genetics (2005–2014). In 1986, he was habilitated in natural sciences at the Nicolaus Copernicus University in Toruń, and in 1994, he became Professor of Forestry Sciences.

Dr. Chalupka has been a member of different national and international, state and non-governmental organizations. At the national level, he contributed at different capacities to the work of the Polish General Directorate of State Forests (2003–2012), Ministry of Science and Information Technology (2005–2006), Polish Botanical Society (1973–1987), and Polish Forestry Society (since 1998). Dr. Chalupka served on the Scientific Council of the ID PAS as a member (since 1981), Secretary (1999–2002) and Deputy Chairman (2011–2014). Internationally, he was involved in IUFRO activities as a deputy coordinator and coordinator of several working groups (1986–2005), member of the IUFRO IC (2006–2014) and a Chair of the Polish National Committee for IUFRO (2011–2014).

The major areas of his research, with over 150 publications, are forest tree physiology, quantitative genetics of forest trees, preservation of genetic diversity, and the history of forestry. He has been a reviewer of scientific journals published in Poland, as well as *Annals of Forest Science*, *Baltic Forestry*, *Canadian Journal of Forest Research*, *Dendrobiology*, *Forest Ecology and Management*, *Forest Genetics*, *Silva Fennica*, and *Tree Physiology*. His input to forest research and education has been recognized by the Silver Badge (2003), Golden Badge (2008) and Honorary Membership of the Polish Forestry Society (2016), and the Cutlass of the Polish Forester awarded by the General Director of State Forests (2015).

Selected research sources:

1. Badania nad obfitością kwitnienia świerka pospolitego (*Picea abies* (L.) Karst.) w zależności od warunków siedliskowych. Instytut Dendrologii PAN, Kórnik, 98 str. [Research on abundance of flowering spruce (*Picea abies* (L.) Karst.) depending on habitat conditions] (thesis). 1976.
2. Influence of growth regulators and polythene covers on flowering of Scots pine and Norway spruce grafts. *Silvae Genet.* 30 (4–5): 142–146. 1981.
3. Regulation of *flowering* in seed orchards. In: *Genetics of Scots Pine*, M. Giertych and C. Matyas, eds. Series Development in Plant Genetics and Breeding, 3. Elsevier, Amsterdam, p. 173–182. 1991.
4. Environmental pollution changes in membrane lipids, antioxidants and vitality of Scots (*Pinus sylvestris* L.) pollen. *Acta Soc. Bot. Pol.* 72 (2): 99–104 (with P. Pukacki). 2003.

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2. Chałupka W. Personal communication (January 2019) at wrchalupka@gmail.com



GLASSER, Wolfgang Gerhard

Wolfgang Gerhard Glasser received the IUFRO Scientific Achievement Award in 1986 for his investigations of the utilization of lignin in high-value products (IUFRO 1986).

Wolfgang Glasser was born on 9 October 1941 in Zwickau, Germany. He earned a Diploma in Wood Science and Technology (Dipl.-Horzwirt, 1966) and Ph.D. in Wood Chemistry (Dr. rer. nat., 1969) from the University of Hamburg, Germany. As a post-doc, he moved to the University of Washington, where he got a position as Research Associate and Research Assistant Professor (1969–1972) and adjunct faculty member at the Department of Chemical Engineering.

He then moved to Virginia Tech, where he served in the Department of Wood Science and Forest Products as an Assistant Professor (1972–1975), Associate Professor (1975–1980), a Professor of Wood Chemistry since 1980, and Professor Emeritus of Virginia Tech (2002). In addition, he served as Associate Dean for Research and Graduate Studies (1993–1998) and as Director of the Biobased Materials Technology Development Center (1986–1991). From 1976, he was also a visiting professor and collaborator in many universities, institutions, and corporations: in São Paulo, Brazil; Grenoble, Toulouse, and Nancy, France; Pisa, Italy; Freiburg, Germany; Gothenburg and Stockholm, Sweden; Singapore; Kyoto, Japan; and Guadalajara, Mexico. He has been an advisor for governmental and industrial organizations, e.g., a visiting scientist with the Weyerhaeuser Corporation, and the Chief Scientific Officer of cycleWood Solutions, Inc.

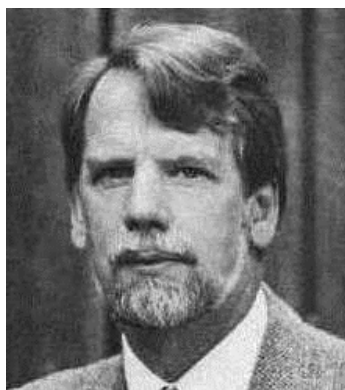
Dr. Glasser is a member of many research and professional organizations, as well as editorial and advisory boards of scientific journals such as *Holzforschung*, *Journal of Applied Polymer Science*, *Cellulose*, *Cellulose Chemistry and Technology* (Romania), and *Journal of Wood Science* (Japan). He is the former Editor-in-Chief of *Cellulose*, published by Kluwer Academic Publishers. He published over 200 research works in various journals and edited books, including the ACS Symposium Series. He holds 20 patents. He is a Member and a Fellow of the ACS, for which he has served in various capacities from Alternate Councilor to General Chair. He is a Fellow (1998) and Lifetime Contributor of IAWS, to which he has delivered the prestigious Academy Lecture (2007). Prof. Glasser is the recipient of the George Olmsted Award of the API/TAPPI (1974), Anselme Payen Award of the ACS's Cellulose, Paper and Textile Division (2000) and the Division Fellow Award (2003), and the Albert Nelson Marquis Lifetime Achievement Award (2018).

Selected research sources:

1. Simulation of reactions with lignin by computer (SIMREL). I. Polymerization of coniferyl alcohol monomers. *Macromolecules* 7: 17–27 (with H. R. Glasser). 1974.
2. *Lignin: properties and materials*. W. G. Glasser and S. Sarkanen, eds. Washington, DC: ACS, xiv, 545 p.. ACS symposium series, 397. 1989.
3. *Cellulose derivatives: modification, characterization, and nanostructures*. T. J. Heinze, W. G. Glasser, eds. Washington, DC: ACS, xii, 361 p. ACS symposium series, 688. 1998.
4. *Lignin: historical, biological, and materials perspectives*. W. G. Glasser, R. A. Northey and T. P. Schultz eds. Washington, DC: ACS, xv, 559 p. ACS symposium series, 742. 2000.
5. Recent industrial applications of lignin – A sustainable alternative to nonrenewable materials. *J. Polymers and the Environment* 10(1–2): 39–48 (with J. H. Lora). 2002.

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2. Glasser W. G. Personal communication (January 2019) at wglasser@vt.edu



KIMMINS, (Hamish) James Peter

James Peter (Hamish) Kimmins received the IUFRO Scientific Achievement Award in 1986 for development of a simulation model to investigate the consequences of intensive forest management on site productivity (IUFRO 1986).

Hamish Kimmins was born in 1942 in Alexandria, Egypt. He earned his B.Sc. in Forestry at the University of Wales (1964), M.Sc. in Forest Entomology at the University of California at Berkeley (1966), M.Phil. (1968) and Ph.D. in Forest Ecology with honours at Yale University (1970). In 1969, he began at the Faculty of Forestry, University of British Columbia (UBC), where he served in various capacities and retired on 31 December 2007 as Professor of Forest Ecology. In 2007, he received the title of Professor Emeritus at UBC.

Dr. Kimmins was a member of the UNESCO World Commission on the Ethics of Scientific Knowledge and Technology (COMEST) that was established in 1999, as well as a member of various commissions internationally and nationally. He was also Director of International Programs, Forestry Faculty, UBC, and a Director of the Forest Ecosystem Management Simulation Research Group in the Department of Forest Sciences, UBC. As a certified manager and RPF, Dr. Kimmins played an important role as a consultant and lecturer on various topics related to nature conservation, sustainable forest management, whole tree harvesting, and others with the B.C. Ministry of Forests and Canadian government, forestry industry and environmental groups. Internationally, he was involved in projects on land-use issues with the Tasmanian government and on the impacts of site preparation practices for the New Zealand government. For a long time he was an Associate of the Liu Centre for the Study of Global Issues at UBC.

Dr. Kimmins has prepared numerous research papers and reports. He is the author of the standard and globally used textbook *Forest Ecology* (1987) and the lay-person's guide *Balancing Act: Environmental Issues in Forestry* (1992), the second editions of which were published in 1997. He authored and co-authored over 100 journal papers, and a dozen book chapters.

In addition to the SAA (1986), Professor Kimmins received a number of other awards. The University of Toronto selected him as the 1986 Eddy Distinguished Lecturer; he received the CIF Scientific Achievement Award (1987) and was appointed to the Order of Canada (2014). He was appointed Doctor *honoris causa* by the University of Québec at Montreal. In recognition of his contributions to forest research, education, and management as well as the resolution of ecological issues, a Hamish Kimmins Scholarship in Forest Ecosystem Studies was established in his honour at UBC.

Selected research sources:

1. Sustained yield, timber mining, and the concept of ecological rotation: a British Columbian view. *For. Chron.* 50: 27–31. 1974.
2. *Forest Ecology*. Macmillan, London, 531 pp. 1987. (2nd ed. – *Forest ecology: a foundation for sustainable management*. Prentice Hall, Upper Saddle River, NJ, 596 p. 1997.).
3. The future of the forested landscapes of Canada. *For. Chron.* 61: 14–18. 1991.
4. *Balancing Act: Environmental Issues in Forestry*. UBC Press, Vancouver, Canada, 244 p. 1992.
5. Future shock in forestry. Where have we come from; where are we going; is there a “right way” to manage forests? Lessons from Thoreau, Leopold, Toffler, Botkin and Nature. *For. Chron.* 78(2): 263–271. 2002.

Personal sources:

1. Dean's message. 2007 Annual Report. Faculty of Forestry, UBC, 2008, 2–3.
2. Kimmins J. P. Personal communication (January 2019) at kimmings@interchange.ubc.ca



KOCH, Niels Elers

Niels Elers Koch received the IUFRO Scientific Achievement Award in 1986 for his comprehensive ecological and sociological studies on public use of Danish forests (IUFRO 1986).

Niels Elers Koch was born on 31 March 1951 in Aarhus, Denmark. He has an M.Sc. in Forestry (1975) and earned his D.Sc. (1985) in the field of forest policy from *Den Kongelige Veterinær- og Landbohøjskole* (KVL, the Royal Veterinary and Agricultural University). In 1987–1991, he held a high-level position in the Forest and Nature Agency of the Ministry of the Environment of Denmark responsible for silviculture and forest law. He was then appointed Director of the *Danish Forest and Landscape Research Institute* (1991–2003), and in 2004, he became Director General of the Center for *Skov & Landskab* (the *Danish Centre for Forest, Landscape and Planning at the University of Copenhagen*). For many years, he worked as a leader in the field of forest, environment and recreation research in Denmark. He has been teaching Landscape Management at the University of Copenhagen, where he also served as interim Dean of the Faculty of Life Sciences (2011–2012) and Head of the Dept. of Geosciences and Natural Resource Management (2013–2014).

In 1978–1988, he published in four parts the results of his fundamental research on forest recreation in Denmark – *Skovenes friluftsfunktion i Danmark* – totaling almost 1000 pages! He is the author of more than 200 research papers and a few books, and an editor of numerous reports and the proceedings of various meetings. He has been chairman for the Danish Forest Council (2004–2014), Chairman of the Directors of the National Research Institutes (2002–2003), member of the Board of the Danish Research Councils (1997–2003), member of the Royal Swedish Academy of Agriculture and Forestry since 1995, member of the Danish Academy of Technical Sciences since 1993, and member of the Board of the Nordic Forest Research Cooperation Committee (1991–2014).

Dr. Koch is a member of many national and international forest-related organizations and associations. Since 1976, he has been affiliated with IUFRO in different capacities, e.g., as a member of Working Groups, Deputy Coordinator and Coordinator of IUFRO Division VI Social, Economic, Information and Policy Sciences (1991–2005), Vice President for Research (2006–2010), President (2011–2014), and Immediate Past President (2014–2019) of the Union, as well as many other responsibilities. He organized and supported many national and international initiatives, seminars, conferences and congresses worldwide as well as supported the printing of their proceedings. For his input in the development of international forest research and education, Prof. Koch is a *recipient of* an Honorary Doctorate in Forest Science from the Swedish Agricultural University (2008), Honorary Doctorate from Moscow State Forest University (Russia, 2010), Honorary Professorship from the CAF (China, 2012), and Honorary Member Society of American Foresters (2012). In September 2014, Dr. Koch was appointed as CEO and Editor-in-Chief of *Trap Danmark A/S*.

Selected research sources:

1. Skovenes friluftsfunktion i Danmark. [Forest recreation in Denmark]. Part I. The use of the country's forests by the population. *Forstlige Forsoegsvaesen i Danmark* 35 (3): 289–451, 1978; Part II. The use of the forests considered regionally 37 (2): 73–383, 1980; Part III: The use of the forests considered locally 39 (2): 121–362, 1984; Part IV. The preferences of the population (with F. S. Jensen) 41: 243–516, 1988.
2. Twenty-five years of forest recreation research in Denmark and its influence on forest policy. *Scandinavian Journal of Forest Research* 19(4): 93–102 (with F. S. Jensen). 2002.

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2. Koch N. E. Personal communications (January 2019) at nek@trap.dk



MINOWA, Mitsuhiro

Mitsuhiro Minowa received the IUFRO Scientific Achievement Award in 1986 for development of a fundamental growth model theory to explain the relationship between forest growth and stand treatments (IUFRO 1986).

Mitsuhiro Minowa [箕輪 光博] was born on 25 May 1942 in Tokyo, Japan. He obtained all of his degrees from the University of Tokyo: B.Sc. (1966) and M.Sc. (1970) in Forestry, and his Ph.D. in Agriculture (1978). From 1971 to 1982, he worked as an Assistant Professor in Forest Mensuration and Management at the Department of Forest Science, Faculty of Regional Environment Science, University of Tokyo. In 1982, he was appointed Associate Professor in Forest Management and Economics at Mie University in Tsu, Japan. In 1986, he returned to the University of Tokyo where he worked until his retirement in 2004 as Professor Emeritus.

Since the 1970s, his primary area of concentration was forest mensuration, forest inventory, and forest management and planning, including modelling of forest growth based on mathematical approaches and advancement of vertical sampling theory. Later, he also became interested in socio-economic studies on forest use and forest conservation. His theoretical approaches have resulted in new methods of determination of stand volume using vertical line sampling (1976–1979) and of forest sampling, yield prediction and thinning. This work was published in a series of four papers entitled “Theoretical approach to forest growth modeling” (1982–1984). The IUFRO EB nominated Dr. Mitsuhiro Minowa and Dr. Walter Bitterlich (Austria) for the Marcus Wallenberg Prize in 1984.

He has authored and co-authored more than 50 scientific papers, book chapters, books, and presentations at various national and international conferences and meetings. He served as a member of the Editorial Board of *Forest Policy and Economics* and a number of Japanese scientific journals. In 1996, he was elected a member of the Japanese Forest Society and then was its President (1998–2000). He also served as a President of the Japan Forestry Association (2011–2015). He was active in IUFRO from the mid-1970s, especially, units S4.02-Forest Resource Inventory and S4-04-Forest Management Planning and Managerial Economics as well as the IUFRO-Japan Chapter. He received the Japan Agricultural Science Prize in 2006.

Selected research sources:

1. Stand volume estimation through upper-stem diameter. *J. Jap. For. Soc.* 58: 112–115. 1976.
2. A theoretical approach to forest growth modeling: (I) The log-Mitscherlich theory. *J. Jap. For. Soc.* 64: 461–467, 1982; (II) Further discussion on the self-thinning model. *J. Jap. For. Soc.* 65: 135–142, 1983; (III) Three-dimensional log-Mitscherlich equation system. *J. Jap. For. Soc.* 65: 417–426, 1983; (IV) Individual tree growth and allometry derived from the log-Mitscherlich equation and generalized Weibull distribution. *J. Jap. For. Soc.* 66: 183–191, 1984.
3. *Study of Tree Measurement* (in Japanese). Chikyu-sha, Tokyo, 243 p. (with H. Nagumo). 1990.
4. *Proceedings of the Symposium on Integrated Forest Management Information Systems*. Minowa, M. and S. Tsuyuki, eds. Japan Society of Forest Planning Press, Tokyo, 414 pp. 1992.
5. A modified exponential *distribution* for describing the stand structure of uneven-aged forests. *J. Jap. For. Soc.* 75(5): 449–451 (with Y. Hirata). 1993.
6. A GIS-based multi-criteria decision making approach to forest conservation planning at a landscape scale: a case study in the Kinabalu Area, Sabah, Malaysia. *Landscape and Urban Planning* 71(2–4): 207–222 (with Mui-How Phua). 2005.

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2. Minowa M. Personal communications (January 2019) at mitsuhiro-minowa@outlook.jp



NILSSON, Sten B.

Sten B. Nilsson received the IUFRO Scientific Achievement Award in 1986 for his extensive research in harvesting, forest planning, forest economics, marketing and forest sector modelling (IUFRO 1986).

Sten Nilsson was born on 15 July 1944 in Lund, Sweden. He earned his M.Sc. in Forestry (1971) and his Ph.D. in Economic Planning from the Royal College of Forestry in Stockholm (1975). In 1971–1976, he was a Project Leader at the Department of Operational Efficiency of the same college. In 1976–1996, he was Professor in Economic Planning at the Swedish University of Agricultural Sciences (SLU) and later became Leader of the Institute of Forest Products Industry Market Studies there.

In 1983–1984, he was appointed by the Canadian Government to set up new strategies for the forest sector in Canada. In 1985, he headed two commissions for the Swedish government concerning intensified research in the forest sector. After joining IIASA in January 1986, Prof. Nilsson became Leader of its Forestry Program (1990), and then was appointed Counselor to the Director (1998–2002) and Deputy Director (2002–2008). From May to December of 2008, he was Acting Director of IIASA, and in 2009, he retired from IIASA.

A native of Sweden, Professor Nilsson is an expert on boreal forests, has had a distinguished academic career in forest sector analysis with emphasis on policy analysis and global forest sector analysis. Many international organizations, e.g., UN FAO, WB, OECD, EC, WCFS, ASEAN, IUFRO, IBFRA, MCPFE, SIDA, and various NGOs, e.g., WWF, Forest Trends and the Rights and Resources Initiative requested his advice or to address various meetings. During his carrier, he has worked on issues related to the forest sector in all European countries, Russia, China, Japan, Korea, Australia, New Zealand, Malaysia, Indonesia, Thailand, Laos, Bangladesh, India, South Africa, Brazil, Chile, Mexico, USA and Canada.

Professor Nilsson is a Member of the Royal Swedish Academy of Agriculture and Forestry; the Scientific Committee of Academia Istropolitana Nova, Slovakia; the International Academy of Informatics, Moscow, Russia; and Foreign Member of the Lithuanian Academy of Sciences, Vilnius. He has authored and co-authored over 400 scientific publications and 10 books. Since the early 1990s, Prof. Sten Nilsson has contributed to the reports published by the IPCC, which was awarded the Nobel Peace Prize in 2007. He currently holds a Guest Research Scholar Ecosystems Services and Management affiliation with IIASA.

Selected research sources:

1. *The Forest Sector Analysis Project. An Analytical System for Investigating Economic and Policy Issues in Canada's Forest Sector.* Vancouver, UBC, 1983. (with P. Pearse and D. Williams).
2. Extent of forest decline in Europe: A synthesis of survey results. *Environment* 29(9): 4–9, 30–31 (with P. N. Duinker). 1987.
3. *Mountain World in Danger: Climate Change in the Forests and Mountains of Europe.* London: Earthscan Publications Ltd., 196 p. (with D. C. Pitt). 1991.
4. *The Forest Resources of the Former European USSR.* Lancaster: The Parthenon Publishing Group. xiii, 407 p. (with O. Sallnaes, M. Hugosson and A. Shvidenko). 1992.
5. *The Carbon Fixation and Release by the Arctic Tundra and the Boreal Forests under Current and Possible Future Temperature Regimes.* XQ-00-809, IIASA, Laxenburg, Austria, 2000.

Personal resources:

1. URL: <http://www.iiasa.ac.at/web/home/research/researchPrograms/EcosystemsServicesandManagement/Nilsson--Sten-.en.html> Retrieved 26.12.2018.
2. Nilsson S.B. Personal communications (December 2018) at stenbnilsson@gmail.com



ROBERTSON, Jacqueline Lee

Jacqueline Lee Robertson received the IUFRO Scientific Achievement Award in 1986 for development of laboratory bioassays and analytical and statistical techniques for evaluating and predicting response of forest insects to chemicals (IUFRO 1986).

Jacqueline Robertson was born on 9 July 1947 in Petaluma, CA, USA. In 1969, she earned her B.A. in Zoology (major) and History (minor), and in 1973, her Ph.D. in Entomology (1973), both from the University of California at Berkeley. She began her professional career in 1967 as a scientist at the Pacific Southwest Forest and Range Experiment Station, Berkeley, CA, where she worked until retirement in 1996. She was promoted to be Lead Scientist (1982–1990) and Senior Scientist (1990–1996). She founded LeOra Software, and from 1997 she worked as entomologist for this company and developed user-friendly software for biologists.

In parallel, from 1970 she lectured in various courses in insect physiology, entomology, statistical methods of research, statistical aspects of bioassay problems, and biochemical aspects of pests to pesticides, at the University of California campuses at Berkley, Davis and Santa Cruz; and Lincoln University in New Zealand. In addition, she worked as a consultant for numerous governmental, academic and business organisations.

Over her career, Dr. Robertson designed and developed software (POLO in different modifications), developed basic approaches to research in the field of modelling and simulations, developed management strategies as well as biochemical and genetic indicators of forest insect population status, assessed the use of chemicals to suppress pest outbreaks, and developed ecotoxicology as a distinct area of study. She is the author and co-author of over 150 scientific publications, several books, and one patent.

Dr. Robertson was a member of the Entomological Society of America, Entomological Society of Canada and American Phytopathological Society. She was Editor (1982–1997) and Subject Editor (1997–2007) of the *Journal of Economic Entomology* and *Canadian Entomologist* (1991–2000). She was a recipient of the USDA Superior Service Award (1981) and USDA Honor Group Award for Excellence (1998), the Outstanding Service Award of the Entomological Society of America (1996), and the C.W. Woodworth Award (1997).

Dr. Jacqueline L. Robertson, entomologist, researcher, software developer, writer, teacher, advisor, editor, inventor and collector, died on 21 July 2014 after a short illness.

Research sources:

1. POLO: A new computer program for probit analysis. *Bull. Entomol. Soc. Amer.* 23(3): 209–213 (with R. M. Russell and N. E. Savin). 1977.
2. Variation in response to insecticides by Douglas-fir tussock moth, *Orygia pseudotsugata* (Lepidoptera: Lymantriidae) populations. *Can. Ent.* 110: 325–328 (with L. M. Boelter, R. M. Russell, N. E. Savin). 1978.
3. *Pesticide bioassays with arthropods*. Boca Raton: CRC Press, 127 p. (with H. K. Preisler). 1992.
4. *Bioassays with arthropods*. 2nd ed. CRC Press, Boca Raton, Florida, 224 p. (with R. M. Russell, H. K. Preisler and N. E. Savin). 2007.
5. *Forest and Urban Tree Entomology* (Electronic book text). CRC Press, 576 p. 2012.

Personal sources:

1. Jacqueline Lee Robertson. www.entsoc.org/sites/default/files/cv_files/15962.pdf Retrieved 27.12.2018.
2. Gillette N. Personal communications (July 2019) at beetlegillette@yahoo.com
3. Troiano C. Personal communications (July 2019) at tajico@aol.com



SANDS, Roger

Roger Sands received the IUFRO Scientific Achievement Award in 1986 for extensive research in stress physiology of trees and the relationship between soil physical factors and tree growth (IUFRO 1986).

Roger Sands was born on 23 February 1944 in Brisbane, Australia. He obtained his Bachelor of Forestry Science with Honours (1967) and Ph.D. (1972) from Australia National University (ANU) in Canberra. He began his career as a Researcher at the CSIRO's Division of Applied Chemistry and Division of Soils (1973). His major research was in the area of tree physiology, tree and water relationships, properties of soils, root systems and tree growth. In 1982, Dr. Sands was appointed Reader and Director of the Forestry Section at the University of Melbourne, Creswick, Australia, and during this period, he played an important role in the establishment of the Co-operative Research Centre (CRC) for Hardwood Fibre and Paper Science. In 1995, Professor Sands became Head of the School of Forestry at the University of Canterbury, Christchurch, New Zealand, a position he filled with distinction until 2006. In 2007, he retired as Professor Emeritus.

Professor Roger Sands is a long-standing member of national and international professional societies and organisations including being a member of the Committee of Review for several Cooperative Research Centres, preparing research plans for Forest and Wood Products Australia, undertaking consultancies in the Middle East and the South Pacific, and being on the Editorial Board of *Forest Ecology and Management*.

In recognition of his input and achievements in forest science, forest education, and the forest industry, Professor Sands was made a Professorial Fellow of the School of Forest and Ecosystem Science, University of Melbourne, was mentioned in the Grants Honour Roll of the University of Canterbury (2002), and was invited to deliver the Maxwell Jacob's Oration to the combined conference of the Australian and New Zealand Institutes of Forestry (2003).

Selected research sources:

1. Water potential and leaf elongation in *Radiata* pine and wheat. *Physiologia Plantarum* 37 (4): 293–297 (with R. L. Correll). 1976.
2. Root regeneration and plant water status of *Pinus radiata* D. Don seedlings transplanted to different soil temperature. *J. Expt. Bot.* 30: 1119–1131 (with E. K. S. Nambiar and G. D. Bowen). 1979.
3. Hydraulic properties of pine and bean roots with varying degrees of suberization, vascular differentiation and mycorrhizal infection. *Aust. J. Plant Physiol.* 9: 559–569 (with E. I. Fiscus and C. P. P. Reid). 1982.
4. Water relations and photosynthesis in three families of radiata pine seedlings known to differ in their response to weed control. *Forest Ecology and Management* 9(3): 173–184 (with P. E. Kriedemann and P. P. Cotterill). 1984.
5. Configuration and development of root systems of cuttings and seedlings of *Eucalyptus globulus*. *New Forests* 14(2): 85–105 (with Jo Sasse). 1997.
6. *Forestry in a Global Context*. 2nd ed. CABI Publishing, Wallingford, UK, 264 p. 2013. (1st ed., 280 p., 2005).

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1. Falvey J. L. and Bardsley J. B. *Land and Food: Agricultural and Related Education in the Victorian Colleges and the University of Melbourne*. University of Melbourne, 226 p. 1997.
2. URL: <https://www.canterbury.ac.nz/engineering/schools/forestry/contact-us/> Retrieved 27.12.2018. (Roger Sands, Emeritus Professor).
3. Sands R. Personal communications (January 2019) at roger.sands@canterbury.ac.nz



THO, Yow Pong

Yow Pong Tho received the IUFRO Scientific Achievement Award in 1986 for his research in biology and taxonomy of termites and important insects of tropical forests and plantations (IUFRO 1986).

*Yow Pong Tho was born on 25 November 1945 on Penang Island, Malaysia. He earned his B.Sc. with Honours from Universiti Malaya (UM), and in 1982, his Ph.D. in Zoology from the University of Aberdeen, UK. He began his professional career in 1969 as a tutor and temporary Assistant Lecturer with the UM. He then joined FRIM as an entomologist (1973), being promoted to Head of the Entomology Section (1975), Senior Forest Entomologist, Director of the newly established Economic Technology Division (1986), and Director of another newly formed Environmental Science Division of FRIM (1988) that he held until his death (1991). In FRIM, he made a collection of insects numbering more than 200,000 specimens. In 1977–1991, he was also the Honorary Curator of the National Museum of Malaysia (*Muzium Negara*) entomological collection.*

Dedicated to nature conservation and being the MNS's Honorary Secretary, Dr. Tho put much effort into the foundation of the Kuala Selangor National Park (est. 1987), for the gazetting of Endau-Rompin National Park (est. 1993), drafting a management plan for the sustainable development of Pulau Island area, and other projects. His recognition as a scientist and conservationist led to his secondment by ISIS-Malaysia "to help chart the nation's course in matters pertaining to the environment". In 1974, Yow Pong Tho produced the first copy of the *Malaysian Naturalist* magazine, supported by the Malaysian Nature Society (MNS).

Dr. Tho authored and co-authored more than 40 papers on insect taxonomy, entomology, biodiversity, forest biology, and nature conservation. In 1990, he was invited to be an expert for the UNEP Ad-Hoc WGE on Biological Diversity to explore the need for an international convention on biological diversity. In 1982, he was awarded the Forest Department's Excellent Service Award.

At the young age of 46, Dr. Tho Yow Pong passed away in Petaling Jaya, Malaysia, on 13 December 1991 after an illness. His contributions to forest and nature conservation in Malaysia and internationally have been immortalized by having two insects, a crab and a palm named after him, as well as by the MNS and FRIM erecting a commemorative plaque in front of a bamboo clump named *Gigantochloa thoi* (1992), and by establishing the Environmental Fund for Children (1993).

Selected research sources:

1. The common mound-building termite. *Nat. Malay.* 3: 16–23. 1978.
2. Studies on the taxonomy and biology of termites (Isoptera) of Peninsular Malaysia. Ph.D. Thesis. University of Aberdeen, 1982.
3. Termites of Peninsular Malaysia. (L. G. Kirton ed.). *Malayan Forest Records*, No. 36. Forest Research Institute Malaysia, Kepong, ix, 224 pp. (based on his Ph.D.). 1992.
4. *The future of tropical rain forests in South East Asia: proceedings of a symposium organised by the Forest Research Institute, Kepong, Malaysia and the IUCN Commission on Ecology held in Kepong, Malaysia, on 1–2 September 1983.* J. Davidson, Tho Yow Pong and M. Bijleveld, Eds. Gland, Switzerland, IUCN, 127 p. (Contributor and editor). 1985.

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1. Chandran P. An entomologist's legacy for our children Malaysiakini. <https://www.malaysiakini.com/opinions/21334> 2002. Retrieved 14.12.2018.
2. Tho, Yow Pong. Obituary. *Journal of Tropical Forest Science*, December, 4(2): 183–184. 1992.
3. Salleh Mohd. Nor Personal communications (January 2019) at salleh.mohdnor@gmail.com

1990 (MONTREAL, CANADA)

At the Opening of the XIX IUFRO World Congress on 5 August 1990, nine young scientists out of 36 nominated (6 women, 30 men) received the Scientific Achievement Award (SAA). The selection was made by the Honours and Awards Committee, which consisted of Alan Brown (Chair), Australia; Lars Strand (Vice-Chair), Norway; Riccardo Morandini, Italy; Jíří Skoblik, Czech Republic; Richard Skok, USA; Heinrich Schmutzenhofer, Austria; Horst Schulz, Germany (Committee members) (Information from the unpublished IUFRO Board Minutes 1989). President R.E. Buckman delivered the awards to

Rene I. ALFARO	Canada
Reinhart CEULEMANS	Belgium
David O. LADIPO	Nigeria
Ross E. McMURTRIE³⁸	Australia
Jeffery J. MORRELL	USA
Jacek OLEKSYN	Poland
Anthony PIZZI	South Africa
Christian G. SALES	France
Melvin T. TYREE	USA



From left to right: *R. Buckman*, *M. T. Tyree*, *C. G. Sales*, *A. Pizzi*, *J. Oleksyn*, *J. J. Morrell*, *D. O. Ladipo*, *R. Ceulemans*, *R. I. Alfaro* and *R. Cromer* (on behalf of *R. E. McMurtrie*) (Photo: IUFRO Secretariat).

³⁸ Dr. R. McMurtrie was unable to attend the Congress, and on his behalf, Dr. Robin Cromer has accepted the award.



ALFARO, René Iván

René Iván Alfaro received the IUFRO Scientific Achievement Award in 1990 for his achievements in research on pest impacts on forest resources and ecology (IUFRO 1990).

René Alfaro was born on 27 February 1948 in Santiago, Chile. He earned his B.Sc. in Forestry from the University of Chile (1972) and his M.Sc. in Pest Management (1977) and Ph.D. in Forest Entomology (1980) from Simon Fraser University in British Columbia, Canada.

In June 1980, he was appointed as Research Scientist with the Canadian Forest Service of the Canadian Ministry of Natural Resources at its Pacific Forestry Centre (PFC), in Victoria, BC, where he worked over 35 years until his retirement in January 2016. He remained as Emeritus Research Scientist at PFC until 2018. The scope of his responsibilities covered developing, testing and applying proper sampling procedures to classify and measure damage caused by forest pests. From 2005, he was affiliated with the University of Victoria as an Adjunct Professor in the Department of Geography.

As an internationally recognized forest entomologist, Dr. Alfaro participated in numerous events, such as IUFRO World Congresses, International Congress of Entomology, World Forestry Congresses, and others. He was a member of the Advisory Committee for the XIII World Forestry Congress in Argentina (2009). For a long time he collaborated with IUFRO, first as a Deputy and then as Coordinator of the IUFRO Working groups on entomology until 2010. In 2005 and 2009 Dr. Alfaro made special presentations at the United Nations Forum on Forests (UNFF5 and UNFF8) in New York on the topic of *Changing paradigms in Forestry: lessons for the new millennium*. He is the author and co-author of about 250 research publications in various journals, as well as a co-editor of many congress proceedings and books. Dr. Alfaro's work has been cited 2800 times.

Besides the SAA (1990), Dr. Alfaro is a recipient of other distinguished awards, including the Canadian Forestry Scientific Achievement Award (2001), and the Canadian Forest Service Merit Award 2005, in recognition of his outstanding contribution to international partnerships, based on work with the IUFRO project World Forests, Society and Environment.

Selected research sources:

1. *Insects Affecting Reforestation: Biology and Damage*. R.I. Alfaro and S.G. Glover, eds. Proceedings: A meeting of the IUFRO working group on Insects affecting reforestation (S2.07-03) held under the auspices of the XVIII International Congress of Entomology. July 3–9, 1988, Vancouver. Forestry Canada, Pacific Forestry Centre, Victoria, BC. 256 p.
2. Tree mortality and radial growth losses caused by the western spruce budworm in a Douglas-fir stand in British Columbia. *Canadian Journal of Forest Research* 12(4): 780–787 (with A. Van Sickle and A. Thomson). 1982.
3. Influence of fire and mountain pine beetle on the dynamics of lodgepole pine stands in British Columbia, Canada. *Forest Ecology and Management* 257: 1874–1882 (with J. N. Axelson and B. Hawkes). 2009.
4. *Forests and Society – Responding to Global Drivers of Change*. Mery G., Katila P., Galloway G., Alfaro R. I., Kanninen M., Lobovikov M. and Varjo J., eds. / IUFRO World Series, Vol. 25. Vienna, 509 p. 2010.
5. Changing paradigms in the management of forest insect disturbances. *The Canadian Entomologist* 148(S1): S7–S18 (with D. Langor). 2016.

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1. PFRC Staff Appointments. Forestry Information. Canadian Forestry Service, Pacific Forest Research Centre, Summer 1980, 7(3): 6.
2. Alfaro R. I. Personal communications (January 2019) at ralfaro@uvic.ca



CEULEMANS, Reinhart Jan Maria

Reinhart J. M. Ceulemans received the IUFRO Scientific Achievement Award in 1990 for the development of early physiological selection indices for poplar (IUFRO 1990).

Reinhart Ceulemans was born on 15 January 1954 in Antwerp, Belgium. He graduated (1976), obtained his Ph.D. in Biology (1980) and habilitated (1990) at the University of Antwerp, where he also began his research and education career as Research Assistant and Research Associate (1976–1986) and Senior Research Associate (1989–1990). In 1987–1988, Dr. Ceulemans was visiting Professor and Fulbright Grantee at the University of Washington, Seattle, USA, then Research Associate at the Government Poplar Research Station in Geraardsbergen, Belgium (1988–1989, and Visiting Professor, Université Paris XI, Orsay, France (1989). Later on, he was a titular of the Belgian Francqui Chair at the Université Catholique de Louvain (UCL; 2006–2007), and since 2013 also Visiting Professor at the University of Ghent, Belgium. For 10 years (1990–1999), Dr. Ceulemans served as Research Director of the Fund for Scientific Research – Flanders (Belgium). Then he returned to his *alma mater* as a Professor of the Department of Biology, Vice-Chair (2001–2004) and Chair (2004–2006) of the Department. He was also a Vice-Dean of the Faculty of Science (2006–2009) and since 2000 the head of Research Group of Plants and Ecosystems at the University of Antwerp.

Dr. Ceulemans has a wide range of expertise including plant ecology, bio-energy crops, global change, biosphere–atmosphere fluxes and many others. He authored and co-authored over 500 scientific publications, including over 340 publications in peer-reviewed scientific journals, edited and co-edited nine books on plant responses to environmental factors and tree physiology. *Lab Times* (2007) named Professor Ceulemans amongst the 20 most-cited European authors in Plant Science during 1999–2005.

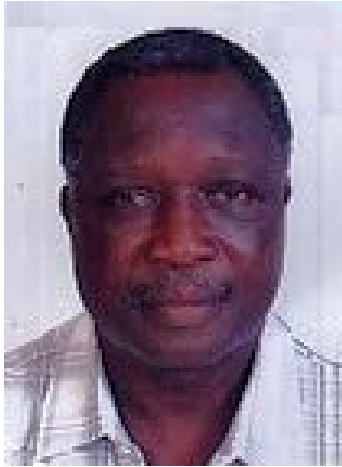
Dr. Ceulemans is Full Professor at the Department of Biology and Director of the Research Centre of Excellence ECO at the University of Antwerp. He also carried out a number of administrative and public duties as Chair of the LESC Standing Committee of the European Science Foundation (ESF; 2008–2015) and Chair of the WG on Biodiversity and Forests of the Federal Council for Sustainable Development (FCDD) and other responsibilities. His contribution into research and education were recognized in various ways. He is a Member of the Royal Academy of Sciences and the Arts of Belgium (RASAB; 2009) and Corresponding Member of the Slovenian Academy of Sciences and Arts (SAZU, 2015). He received an Honorary Doctorate at the Mendel University in Brno, Czech Republic (2010) as well as at the *Université d'Orléans*, France (2012).

Selected research sources:

1. *Genetic Variation in Functional and Structural Productivity Determinants in Poplar*. Thesis Publishers, Amsterdam, 101 p. 1990.
2. Tansley review: Effects of elevated atmospheric CO₂ on woody plants. *New Phytologist* 127: 425–446 (with M. Mousseau). 1994.
3. Tree responses to rising CO₂ in field experiments: implications for the future forest. *Plant, Cell & Environment* 22(6): 683–714 (with R. J. Norby, S. D. Wullschlegler, C. A. Gunderson, D. W. Johnson). 1999.
4. *The Impact of Carbon Dioxide and Other Greenhouse Gases on Forest Ecosystems*. CABI Publishing, Wallingford, UK, 357 p. (with D. F. Karnosky, G. E. Scarascia-Mugnozza, and J. L. Innes). 2001.
5. Genotypic differences in biomass production during three rotations of short-rotation coppice. *Biomass and Bioenergy* 119: 198–205 (with S. P. P. Vanbeveren). 2018.

Personal sources:

1. URL: <https://www.uantwerpen.be/en/staff/reinhart-ceulemans/personal-website/> Retrieved 29.12.2018.
2. Ceulemans R. Personal communications (January 2019) at reinhart.ceulemans@uantwerpen.be



LADIPO, David Olajide

David Olajide Ladipo received the IUFRO Scientific Achievement Award in 1990 for research to improve West African hardwoods (IUFRO 1990).

David Ladipo was born on 16 April 1949 in Kaduna, Nigeria. He received his B.Sc. in Botany (1974) from the University of Lagos (Unilag), Nigeria, and Ph.D. in Forestry (1981) from Edinburgh University, UK.

He began his professional research career as Head of the West African Hardwoods Improvement Project at the Forestry Research Institute Nigeria (FRIN) in Ibadan (1978–1990), with a break when he worked as a consultant to the UN-FAO in Rome (1989). He then moved for a year to Oregon State University, USA, and after returning home, he worked as a lead scientist on ICRAF projects in Ibadan (1990–1998) and Yaounde, Cameroon (1994).

As a plant geneticist, forest biologist and agroforester, Dr. Ladipo has contributed to and consulted for numerous local, national and international organizations, agencies and projects, including the World Bank and AfDB (Fadama project), the UN-FAO, IFAD, UNDP, ITTO, CBD and others. He was a National Biodiversity Consultant for Nigeria (2001–2003), Consultant to the Abuja Accelerated Greening Programme (2003–2005), National Consultant for the UNDP PGA (2011–2013), and the GEF's Niger Delta Biodiversity Project (2011–2016). He carried out an in-depth assessment (2006–2007) and development of the new Oyo State Blueprint for Forestry Development, Conservation and Ecotourism, consulted for the Sustainable Livelihood Training for the Ekiti State of Nigeria (Oct/Nov 2014), Sustainable Fuelwood Management project (2018), and a curriculum development for food production and environmental problems (erosion) management in Nigeria.

Dr. Ladipo also developed the concept note for the National Botanic Garden (The Tree Heritage Park in IITA-Ibadan). For his hard work and excellence, he was honoured as Patron of the Tree Heritage Park (2017). In 1990, Dr. Ladipo received the SAA and became the first African awardee of the World Scientific Achiever. He is Member of the Genetics Society of Nigeria (President, 1986–1988), and Nigerian Vice-President at the ISTF.

Dr. Ladipo holds a position as Chief Executive Officer at CENRAD, and since 2015, he is also Chief Consultant and Lead Advisor at Eagle & Dragon Int. Ventures, Ltd.

Selected research sources:

1. Clonal variation in apical dominance of *Triplochiton scleroxylon* K. Schum in response to decapitation. *Silvae Genetica* 40(3/4): 135–140 (with R. R. B. Leakey and J. Grace). 1991.
2. Ladipo D.O., Genetic improvement of west African tree species: past and present. In: *Tropical trees: the potential for domestication and rebuilding of forest resources*. R. R. B. Leakey & A. C. Newton, eds. HMSO, London, p. 239–248 (with S. P. K. Britwum, Z. Tchoundjeu, O. Oni and R. R. B. Leakey). 1994.
3. *Strategies for Farming Systems Development in sub-Saharan Africa*. E. A. Atayi and D. O. Ladipo, eds. Proceedings of the Ecoregional Program for the Humid and Sub Humid Tropics of sub-Saharan Africa (EPHA) Scientific Workshop; IITA, Ibadan, 17–20 November 1998. IITA and FAO. Ibadan, Daybis Ltd., x, 208 p. 2003.

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2. URL: <http://eagleandragon.com/index.php/our-management> Retrieved 29.12.2018.



McMURTRIE, Ross Edward

Ross Edward McMURTRIE received the IUFRO Scientific Achievement Award in 1990 for outstanding progress in process-based modelling of forest growth (IUFRO 1990).

Ross McMURTRIE was born on 6 November 1949 in Sydney, Australia. He studied physics at the University of Sydney, where he obtained a Bachelor degree with First Class Honours in 1972, followed by a Doctoral degree in Theoretical Physics (1976). His Ph.D. research was in the field of ecological modelling under the supervision of Robert May. After short-term positions at Princeton University (1974) and University of British Columbia (1976), he was appointed as Research Scientist, progressing to Principal Research Scientist in CSIRO's Division of Forest Research, in Canberra (1977–1990). At CSIRO he worked closely with colleagues from Australia, New Zealand and Sweden. In 1990 Dr. McMURTRIE accepted an appointment as Lecturer in the School of Biological, Earth and Environmental Sciences, University of New South Wales, Sydney, progressing to Professor in Biological Sciences and then Honorary Professorial Fellow (1990–2019).

Dr. McMURTRIE's research has focused on process-based modelling of forest ecosystems. He has authored and co-authored approximately 150 publications on the roles played by plant ecophysiology, changing atmospheric and climatic conditions, and soil-nutrient cycling, in regulating the carbon balance of local and global terrestrial ecosystems over contrasting timescales. His *BIOMASS* and *G'DAY* models have been used to investigate impacts of climate and land-use change, and to evaluate carbon/water/nutrient balances of grassland, savanna and forest ecosystems in a number of countries. He served as inaugural Principal Investigator for the Hawkesbury Forest Experiment (2004–2009), one of the world's major climate-change field experiments.

Dr. McMURTRIE has served as Treasurer of the Ecological Society of Australia, as co-chair of the IUFRO Working Party on Whole Plant Physiology, as leader of IGBP's Global Change and Terrestrial Ecosystems Core Project Task on *Modelling Global Change Impacts on Structure, Function and Productivity of Managed Forests.*, and as a member of the editorial boards of *Plant, Cell and Environment* and *Trees*.

Selected research sources:

1. Above- and below-ground growth of forest stands: a carbon budget model. *Annals of Botany* 52: 437–448 (with L. Wolf). 1983.
2. Forest productivity in relation to carbon partitioning and nutrient cycling: a mathematical model. In: M. G. R. Cannell and J. E. Jackson, eds. *Attributes of Trees as Crop Plants*. Inst. Terr. Ecol., and Natural Environ. Res. Council., Abbots Ripton, Huntingdon, England, pp. 194–207. 1985.
3. Modelling the yield of *Pinus radiata* on a site limited by water and nutrition. *For. Ecol. Mgmt.* 30: 381–413 (with D. A. Rook and F. M. Kelliher). 1990.
4. Long-term response of nutrient-limited forests to CO₂-enrichment; equilibrium behaviour of plant-soil models. *Ecological Applications* 3: 666–681 (with H. N. Comins). 1993.
5. Aboveground net primary production decline with stand age: potential causes. *Trends in Ecology and Evolution* 11: 378–382 (with S. T. Gower and D. Murty). 1996.
6. New insights into carbon allocation by trees from the hypothesis that annual wood production is maximized. *New Phytologist* 199: 981–990 (with R. C. Dewar). 2013.
7. Quantifying the contribution of mass flow to nitrogen acquisition by an individual plant root. *New Phytologist* 218: 119–130 (with T. Näsholm). 2018.

Personal sources:

McMURTRIE R. E. Personal communications (January 2019) at r.mcmurtrie@unsw.edu.au



MORRELL, Jeffrey Joseph

Jeff Joseph Morrell received the IUFRO Scientific Achievement Award in 1990 for his work on the interactions between biological agents, causing deterioration of wood with the wood structure and chemicals therein, and effectiveness of preservative agents applied to wood (IUFRO 1990).

Jeff Morrell was born 14 November 1955 in New York, NY, USA. He earned his B.Sc. in Forest Biology (1977) from SUNY-ESF, M.Sc. in Plant Pathology – at Pennsylvania State University (1979) and Ph.D. in Forest Pathology and Mycology (1986) from SUNY-ESF. Before joining Oregon State University (OSU) in 1983, he worked as an assistant engineer for an electrical utility. He rose through the academic ranks and was named a Distinguished University Professor in 2006.

During his 35 years in OSU's Department of Wood Science & Engineering, Professor Morrell successfully combined his research interests with teaching courses on wood science, wood bio-deterioration and preservation, wood use in adverse environments, and renewable materials. He is the author or co-author of over 200 peer-reviewed paper publications and numerous conference proceedings, book chapters and manuals. His co-authored book *Wood Microbiology: Decay and its Prevention*, with Robert A. Zabel, was published in 1992 and remains a key reference in the field.

He is a member of numerous professional societies and has served as President of the American Wood Protection Association (AWPA) and the International Research Group on Wood Protection (IRG). The AWPA recognized him with its Award of Merit (2015) and the IRG as an Honorary Life Long Member (2016).

In 2018, Professor Morrell moved to Australia to begin a 5-year appointment as Director of the National Centre for Timber Durability and Design Life (NCTDDL) at the University of the Sunshine Coast (USC), Queensland, Australia. This Centre is a strategic initiative led by Forest & Wood Products Australia to revitalize durability research in the country in collaboration with the University of Queensland and the Queensland Department of Agriculture and Fisheries.

Selected research sources:

1. *Safe use of preservatives and preservative-treated wood at home and on the farm: a guide for the Pacific Northwest*. Corvallis: OSU. Forest Research Laboratory, iv, 21 p. (with R. D. Graham and D. J. Miller). 1988.
2. Identity and distribution of Basidiomycotina colonizing Douglas-fir poles during three years of air-seasoning. *Mycological Res.* 96(5): 321–330 (with C. M. Sexton, S. M. Smith, B. R. Kropp, M. E. Corden, and R. D. Graham). 1992.
3. *Wood Microbiology: Decay and its Prevention*. San Diego, Acad. Press Inc., 476 p. (with R. A. Zabel). 1992.
4. *Wood pole maintenance manual*. Corvallis: OSU. Forest Research Laboratory, 47 p. 1996.
5. Effect of process variables on supercritical fluid impregnation of composites with tebuconazole. *Wood and Fiber Science* 29(3): 282–290 (with M. N. Acda and K. L. Levien). 1997.

Personal sources:

1. URL: <http://directory.forestry.oregonstate.edu/people/morrell-jeff> Retrieved 30.12.2018. (OSU, 2011).
2. URL: <https://www.usc.edu.au/explore/structure/faculty-of-arts-business-and-law/staff/professor-jeff-morrell> Retrieved 30.12.2018.
3. USC, NCTDDL: www.usc.edu.au/timber-durability
4. Morell J. J. Personal communications (January 2019) at Jeff.Morrell@oregonstate.edu



OLEKSYN, Jacek

Jacek Oleksyn received the IUFRO Scientific Achievement Award in 1990 for his outstanding Scots pine provenance studies (IUFRO 1990).

Jacek Oleksyn was born on 26 April 1953 in Legnica, Poland. He graduated from the Leningrad Forest Technical Academy, USSR (1976), obtained his Ph.D. in Biological Sciences (1982) from the Univ. of Silesia, Katowice, Poland and habilitation in Forestry (1994) at the Faculty of Forestry of the Agricultural Academy (now the Univ. of Life Sciences), Poznań, Poland. He began his professional career in 1976 at the Institute of Dendrology of the Polish Academy of Science in Kórnik, where he was appointed as Head of the Laboratory of Abiotic Diseases (1982–1988), moving on to Head the Department of Ecology (1996–1999) and the Laboratory of Ecophysiology (from 1999), and then becoming Director of the Institute (2011–2018). His scientific interests are in the area of forest tree biology, ecology, ecophysiology, and modeling of regional and global environmental changes.

In 1988–2019, he worked on various collaborative research projects in Poland and at various US universities. He was a Senior Fulbright Scholar at the Laboratory of Tree-Ring Research, Univ. of Arizona, Tucson (1988–1989), then at Univ. of Wisconsin-Madison (1989–1991), and the Department of Forest Resources, Univ. of Minnesota, where he worked for over 14 years in total. He coordinated various research grants, including those of the EU, National Science Foundation (USA), National Geographic Society (USA), and others.

Dr. Oleksyn received the title of Professor of Biological Sciences at the Adam Mickiewicz University in Poznań, Poland (2002), and in 2007 was elected to the Polish Academy of Sciences. For his achievements in science he received the Award of the Foundation for Polish Science in the field of biological and medical sciences for his “contribution to the discovery of universal biogeographic relationships between plant traits that are important for understanding ecological processes on a global scale” (2008). He authored and co-authored over 145 scientific publications, cited 13,170 times (Web of Science) at the age of 46. In 2018 he and Dr. P. B. Reich of the University of Minnesota (USA) jointly won the AAAS and the Foundation for Polish Science Award for outstanding scientific achievements in the areas of environmental and plant sciences.

Selected research sources:

1. The worldwide leaf economics spectrum. *Nature* 428(6985): 821–827 (with Wright I. J., Reich P. B., Westoby M., Ackerly D. D., Baruch Z., Bongers F., Cavender-Bares J., Chapin F. S., Cornelissen J. H. C., Diemer M., Flexas J., Garnier E., Groom P. K., Gulias J., Hikosaka K., Lamont B. B., Lee T., Lee W., Lusk C., Midgley J. J., Navas M-L., Niinemets Ü., Osada N., Poorter H., Poot P., Prior L., Pyankov V. I., Roumet C., Thomas S. C., Tjoelker M. G., Veneklaas E., Villar R.). 2004.
2. Universal scaling of respiratory metabolism, size and nitrogen in plants. *Nature* 439(7075): 457–461 (with P. B. Reich, M. G. Tjoelker and J.-L. Machado). 2006.
3. Biogeographic variation in evergreen conifer needle longevity and impacts on boreal forest carbon cycle projections. *Proc. Nat. Acad. Sci. USA* 111: 13703–13708 (with P. B. Reich, R. L. Rich, X. Lu and Y-P. Wang). 2014.

Personal sources:

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2. URL: <http://www.biomasaesna.eu:80/prelegent/prof-jacek-oleksyn/> Retrieved 31.12.2018.
3. URL: <https://www.fnp.org.pl/prof-jacek-oleksyn-laureat-nagrody-fnp-2008/> Retrieved 31.12.2018. (Prof. Jacek Oleksyn – laureat Nagrody FNP 2008).
4. Oleksyn J. Personal communications (January 2019) at jacekoleksyn@gmail.com



PIZZI, Anthony (Tony, Antonio)

Anthony Pizzi received the IUFRO Scientific Achievement Award in 1990 for extensive work on adhesives and substantial contributions on chromium wood preservatives (IUFRO 1990).

Antonio Pizzi was born on 15 May 1946 in Rome, Italy. In 1963–1970, he studied the physical chemistry of organo-biological polymers and received his Chemistry Doctorate at the University of Rome in Italy (1970). He earned his Ph.D. in Organic Chemistry (1978) from the University of the Orange Free State at Bloemfontein, RSA, and a Science Doctorate in Wood Science (1985) from the University of Stellenbosch, RSA. His key research areas were adhesives, composites, panel production, wood and polymer chemistry, wood preservation, structure of wood constituents, and other fields.

He began his professional career as a Process Research Chemist in the Sentrachem group, Johannesburg (1970), continued as Quality control Chemist (1971–1972) and Head of Research at Isoroy-Novobord particleboard factory in Port Elizabeth (1971–1976). He then progressed from a project leader (1976) via various leading positions on adhesives, wood gluing, and composite products sections, to Assistant Director and Director of the CSIR's National Timber Research Institute (1984–1987), and Director of the CSIR's Division of Processing and Chemical Manufacturing Technology (1987–1989).

Practical experience gained in industry and research organizations allowed Dr. Pizzi to serve successfully as Professor of Polymer Chemistry (1989–1995) and Head of Dept. of Chemistry (1991–1993) at the University of the Witwatersrand, Johannesburg, RSA. In 1994, Professor Pizzi returned to Europe as Professor and Chair of Industrial Chemistry at LERMAB-ENSTIB, *Université de Lorraine*. He has authored and co-authored over 800 scientific publications, including over 80 edited proceedings and 10 books; he has 40 patents. His *Handbook of Adhesive Technology* ran to three editions between 1994 and 2018. In 2012–2013, Professor Pizzi was named as one of the most highly cited researchers in materials science.

Professor Pizzi is a member of numerous societies and associations, advisory and editorial boards of scientific journals in Chile, Germany, Japan, UK, and the USA. In 1981–2000, he served as Deputy Chair and Chair of IUFRO working party on Adhesives and Wood Glueing. His contributions have been recognized by numerous national and international prizes, honours and awards in the USA (1980, 1985), UK (1986), four awards in RSA (1986–1988), Belgium (2000), France (2000, 2005, 2013), Austria (2005, 2008) including the Schweighofer Wood Innovation prize, Switzerland (2006), Germany (2013), EC (2000 and 2005) including the Descartes Research Prize of the European Commission with the distinction being the only person to date to have won it twice. He is mentioned in Marquis Who's Who in the World (1996 onward), and he holds the title of Professor Emeritus.

Selected research sources:

1. Wood adhesives, present and future: papers presented at the International Union of Forestry Research Organizations (IUFRO) All-Division 5 Conference, Madison, Wisconsin, June 27 – July 5, 1983. *Applied Polymer Symposium* No. 40. A. Pizzi, ed. New York: J. Wiley, v, 267 p. 1984.
2. *Handbook of adhesive technology*. New York: M. Dekker, xi, 680 p. (with K. L. Mittal). 1994.
3. *Lignocellulosic Fibers and Wood Handbook: Renewable Materials for Today's Environment*. A. Pizzi, M. N. Belgacem eds., Hoboken, New Jersey Scrivener Publishing, Wiley, online resource 1240 p. DOI:10.1002/9781118773727. 2016.

Personal sources:

1. URL: https://www.researchgate.net/profile/ApiZZi_Pizzi Retrieved 31.12.2018.
2. Pizzi A. Personal communications (January 2019) at antonio.pizzi@univ-lorraine.fr



SALES, Christian Georges

Christian Georges Sales received the IUFRO Scientific Achievement Award in 1990 for the breadth of his contributions, ranging through analyses of the mechanics of standing trees, the stresses encountered in drying and structures and the dynamics of sawblades (IUFRO 1990).

Christian Sales was born on 25 June 1949 in Béziers, France. He obtained his B.Sc. in 1967 from University of Montpellier, his M.Sc. in 1972 from the University of Lyon, and Ph.D. in 1984 from the University of Nancy. In 1973, he started his career as a Researcher and worked at the Centre Technique Forestier Tropical (CTFT, *Tropical Forestry Centre*) in Nogent-sur-Marne (1973–1985). In 1986, he was promoted to Senior Researcher at *Centre Technique du Bois et de l'Ameublement* (CTBA, Wood and Furniture Industry Technical Centre). He managed the research program of the Centre as Deputy Manager until 1996. He then served as Program Manager of Forest Unit at the *Centre for International Cooperation in Agricultural Research for Development* (CIRAD-Forêt) in Montpellier (1997) until his retirement in 2014.

The major research interests of Dr. Sales were in the area of biomass, change of wood properties under stress, energy from wood waste, using various sawing methods, and in bio-products in tropical forests. He organized a number of important international meetings, e.g., training in tropical timber classification, workshop on the development of the EU teak wood research program, and meetings on sustainable tropical forest management. Dr. Sales authored and co-authored more than 80 scientific publications, including a few book chapters and a book on the theory of sawing and the utilization of the band sawmill.

Dr. Sales was active in IUFRO for over 25 years and served as a Project Group Leader P5.01.00, Properties and utilization of tropical woods (1987–1990), Deputy Coordinator IUFRO Division 5 (1991–1995, 1998–2000) and Coordinator of IUFRO Division 5 (1996–1997). He is an IAWS Fellow, Lifetime Contributor and Supporting Member. His expertise has been requested by many national and international organizations (ITTO, FAO).

Dr. Sales has received various honours and awards in addition to the IUFRO SAA.

Selected research sources:

1. Properties and utilization of tropical woods. *Proceedings. XVIII World Congress, Ljubljana*. C. G. Sales, ed. Vienna (Austria): IUFRO, 100 p. 1986.
2. *La scie à ruban. Théorie et pratique du sciage des bois en grumes*. Nogent-sur-Marne: CIRAD-CTFT, 152 p. [The band saw. Theory and practice of sawing logs]. 1990.
3. Innovation technologique et valorisation des sous-produits des filières bois. *Bois et Forêts des Tropiques* 277: 35-43. [Technological innovation and energy production from timber waste]. 2003.
4. Energie, les promesses de la biomasse. *La Recherche* 406, suppl.: pp. 24–25. 2007.
5. *Quels VEGétaux et systèmes de production dur Ables pour satisfaire les besoins en bioénergie, synthons et matériaux biosourcés?* Colonna P., Kammoun A., Montagne X., Sales C., eds. Rapport CIRAD – IFPEN – INRA (France), 409 p. [Which VEGétaux and sustainable production systems to meet the needs of bioenergy, synthons and bio-based materials?]. 2013.
6. *Tropical Timber Atlas*. Jean Gérard, ed. Versailles: Ed. Quae, 999 p. (multi-authored). 2017.

Personal sources:

1. URL: <https://agritrop.cirad.fr/view/auteurcirad/1952.html> Retrieved 11.01.2019.
2. Sales C. Personal communications (July 2019) salesc@wanadoo.fr



TYREE, Melvin (Mel) Thomas

Melvin Thomas Tyree received the IUFRO Scientific Achievement Award in 1990 for his outstanding contributions to the understanding of both biophysical and physiological aspects of transport in plants over many years, invention and popularization of current pressure bomb theory, and development of a rigorous mathematical formulation for the flow of solutions through plants (IUFRO 1990).

Mel Tyree was born on 15 November 1946 in Santa Ana, CA, USA. He earned his B.A. in Physical Chemistry from Pomona College in Claremont, California (1968). During his graduate study, he often went for summer work at the Harvard Forest, Petersham, MA, where he tested the Onsager equations for steady state thermodynamics to describe for the first time the impact of hydrodynamic, electric, and other forces acting upon the flow of solutes through a tree.

In 1972, he obtained his Ph.D. in Plant Biophysics from Cambridge University, U.K., and moved to Canada, where served as a Professor at the University of Toronto (1971–1985) and then as a Research Professor at the Department of Plant Biology, University of Vermont in Burlington (1985–1997). He also served as Director of the Maple Research Center at the University, introducing the “Adopt-a-Tree” program.

In 1991–2012, he was a Project Manager at the USDA FS Aiken Forestry Sciences Lab NE Forest Exp. Sta. in Burlington, while working as a Visiting (Adjunct) Scientist at STRI in Panamá, Panama (1987–2002) and a Professor (2005–2011) and an Adjunct Professor (after 2011) at the University of Alberta in Edmonton, Canada. After retirement from his governmental position, the central government of PRC invited him as 1000-talents professor of Biophysical Plant Ecology to the Northwest *Agriculture* and Forestry University in Yangling, and in 2017 as Distinguished Professor with the College of Chemistry and Life Sciences at Zhejiang Normal University, Jinhua, PRC.

Professor Tyree received many honours and awards, including fellowships in IAWS (Germany, 2003) and WIF (UK, 2003), and the von Humboldt Research Award for Senior United States Scientists (Germany, 1996). He received the Marcus Wallenberg Prize (2002) for pioneering research in forestry and forest products, an Honorary Doctorate LLD at St. Francis Xavier University of Nova Scotia (2003), Presidential Rank Award (2005), the David J. Gifford Award in Tree Physiology (2007), and FRSC (2008). In 2003, Dr. Tyree was designated a Senior Scientist, one of eight in the Forest Service. Professor Tyree authored and co-authored about 300 scientific publications.

Selected research sources:

1. The measurement of the turgor pressure and the water relations of plants by the pressure-bomb technique. *Journal of Experimental Botany* 23(1): 267–282 (with H. T. Hammel). 1972.
2. A method for measuring hydraulic conductivity and embolism in xylem. *Plant, Cell & Environment* 11(1): 35–40 (with J. S. Sperry and J. R. Donnelly). 1987.
3. Vulnerability of xylem to cavitation and embolism. *Annual Review of Plant Biology* 40(1): 19–36 (with J. S. Sperry). 1989.
4. The ascent of water. *Nature* 423: 923. 2003.
5. *Xylem Structure and the Ascent of Sap* (Springer Series in Wood Science). Springer Science & Business Media, 284 p. (with M.H. Zimmermann). 2002 and 2013.

Personal sources:

1. URL: https://www.researchgate.net/profile/Melvin_Tyree Retrieved 31.12.2018.
2. Tyree M. T. Personal communications (January 2019) at mel.tyree@cantab.net

1995 (TAMPERE, FINLAND)

The Opening of the XX IUFRO World Congress on 7 August 1995 included the presentation of IUFRO Scientific Achievement Awards to 10 scientists. They were selected from 48 nominations by the Honours and Award Committee chaired by Dr. J. H. Cayford, Canada, and consisted of the representatives from the regions Dr. J. A. Prado, Chile, and M. J. Lambert, Australia; Division 1 and 3 Coordinators – Drs. J. L. Whitmore, USA, and P. O. Nilsson, Sweden; President's nominees Dr. A. P. Petrov, Russia, and W. Kadri, Indonesia; and ex-officio – Immediate Past President R. E. Buckman, USA, and IUFRO Secretary H. Schmutzenhofer.

Vice-President James Cayford welcomed the winners to the stage. He presented their work and delivered awards together with President Salleh and Secretary Heinrich Schmutzenhofer to the following scientists (IUFRO 1995):

Ann M. FURUBERG	Norway
John L. INNES	Switzerland
Antoine J. KREMER	France
Constance I. MILLAR	USA
Abd. Latif MOHMOD	Malaysia
John N. SADDLER	Canada
Thomas A. SPIES	USA
Pauline T. STENBERG	Finland
Luis A. UGALDE ARIAS	Costa Rica
Zhong-Qi YANG	China



From left to right: L. A. Ugalde Arias, A. M. Furuberg, J. L. Innes, A. J. Kremer, C. Millar, Abd. Latif Mohmod, J. N. Saddler, T. A. Spies, P. T. Stenberg, Z.-Q. Yang (Photo: IUFRO Secretariat).



FURUBERG, Ann Merete

Ann Merete Furuberg received the IUFRO Scientific Achievement Award in 1995 for her distinguished forest science research at an international scale in forest engineering: off-road transport of timber, environmentally sound forest technology (IUFRO 1995).

Ann Merete Furuberg Gjedtjernet (then – Furuberg) was born on 25 March 1955 in Grue, Hedmark County, Norway. She finished the Norwegian School of Practical Forestry (1975), studied basic forestry and forestry operating technology (graduated in 1981), and in 1991, she earned her Ph.D. in forest engineering from the Norwegian University of Agriculture. Thus, she became the first woman to earn a doctorate in forest engineering. She obtained further education from the Norwegian Institute of Technology in machine learning (1991) and product development (1992). She held various jobs, including schoolteacher (1975–1976) and seasonal forestry worker (1975–1981). She began her research career as Research Assistant (1981) and a Researcher (1986) at the Norwegian Forest Research Institute (NISK), where she combined research and teaching until 2000. Since then, she has been receiving short assignments as an Assistant Professor at the Department of Forestry and Wildlife Management at Hedmark University College. In addition, she is a politician and has been an office holder in several boards in research, agriculture and forestry at the regional, national and international levels.

Since an early stage in her career, Dr. Furuberg has been a strong proponent of a wider women's involvement into forestry. She established the organization "Women in Forestry" in Norway and initiated the first Worldwide Symposium on Women and Forestry (Lillehammer, Norway, 1999). She published a number of articles, and has participated in research organized by national and international organizations. Dr. Furuberg has a wide international experience via participation in various initiatives and organizations. In 1982–1984, she was a Secretary of the Nordic Forest Work Studies Council. In 1995–1999, she was a Member of the Standing Committee of the Council of Europe (CE) and several other CE bodies. In February 2008, she participated in the UN Commission on the Status of Women (CSW).

Dr. Furuberg actively participated in IUFRO as a Leader of PG Forest Operations and Environmental Protection (1990–1995), Deputy Coordinator for Division 3 and a Member of IUFRO's EEB (1996–2000). Dr. Furuberg was also involved in the PG on small-scale forestry; she coordinated a newly established RG 6.18.00 Gender and Forestry (2001–2005) and WP 3.11.02 Forest Operations on Sensitive Sites (2001–2005), and was a Member of the IUFRO TF on Human Health and Forests (2007–2011). From 2010 to 2018 she was president of The Farmers and Small Holders Union in Norway. She runs a farm with animals and vegetables in addition to a forest property.

Selected research sources:

1. Fruktbart nordisk samarbeid innenfor skogbrukets driftsteknikk. *Norsk Skogbr.* 28(9): 30–31 (with I. Samset). [Fruitful Nordic co-operation within operating technology in forestry]. 1982.
2. *Environmentally friendly forest machine. Mechanical engineering design. Report.* The Norwegian Institute of Technology. The University of Trondheim, 46 pp. 1992.
3. *Driftsteknikk: teknisk fagskole fordypningsområde skogbruk.* 328 s. (with Jan Bjerketvedt). [Operating technique: vocational school specialized in forestry]. 2003.
4. *Time for Action. Changing the Gender Situation in Forestry.* Report of the UNECE/FAO Team of Specialists in Gender and Forestry. Rome, vii, 186 p. 2006.

Personal sources:

1. URL: <https://meretefuruberg.com/om-merete/> Retrieved 01.01.2019. (Merete. Curriculum Vitae).
2. Furuberg M. Personal communications (January 2019) at finnskogen.nakuhel@gmail.com



INNES, John Lockhart

John Lockhart Innes received the IUFRO Scientific Achievement Award in 1995 for his distinguished forest science research at an international scale on long-term changes in forest ecosystems (IUFRO 1995).

John Innes was born on 3 September 1957, in Kirkcaldy, U.K. He earned his B.A. (1979) and Ph.D. in Geography (1982) from the University of Cambridge. He was NERC Research Fellow at University College Cardiff (1983–1985) and then Senior Research Associate at the University of East Anglia (1985), and Senior Scientific Officer at the UK FC Research Division (1986–1992).

In 1992, Dr. Innes moved to Switzerland, becoming Head of the Forest Ecosystems and Long-term Monitoring Department at WSL in Birmensdorf, Switzerland (1992–1999). In 1999, he became Professor and Forest Renewal BC Chair of Forest Management at the University of British Columbia in Vancouver, Canada, and from 2010 until now, he has been Dean of the Faculty of Forestry there. During his career, Professor Innes has researched and taught a wide range of subjects including geomorphology, climate change, international forestry, forest ecology, forest management, biodiversity conservation and social aspects of forest practices. He has participated in research projects in BC and Yukon Territory (Canada) as well as in the USA, Peru, RSA, India, PRC, Myanmar, Laos, Malaysia and Australia. He is an Honorary Professor at the University of Melbourne and at five different universities in the PRC. He was part of the IPCC team that shared the Nobel Peace Prize (2007) and he holds the International Forestry Achievement Award of the Canadian Institute of Foresters (2015). In 2018 he was elected as an International Fellow of the Royal Swedish Academy of Agriculture and Forestry.

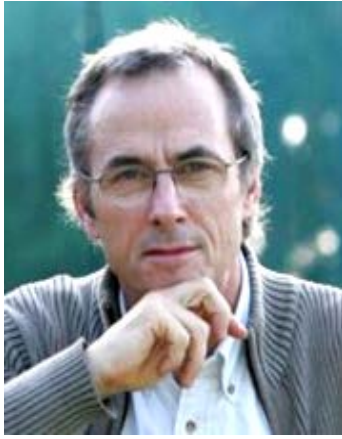
Professor Innes is Associate Editor of *Environmental Conservation* and a member of the Editorial Advisory Board of several other journals, research series and encyclopedias. He has authored, co-authored and edited over 300 papers and 18 books. In addition, he is involved with many international organizations. He is the Chair (now President) of the CFA (since 2010), Chair of the Standing Committee on Commonwealth Forestry, a chair or a member of various organizations and associations on forest research and education, e.g., Chair of the Asia-Pacific – Forest Education Coordination Mechanism. Since 1990, he has been strongly associated with IUFRO, serving as a Chair of three Task Forces (Climate Change and Air Pollution, Environmental Change, and Resources for the Future; Chair of the IUFRO Congress Scientific Committee (2001–2005), Vice President Policy (2006–2010), and Chair of the Honours and Awards Committee (2014–2019). For his service, Professor Innes received the IUFRO DSA in 2005.

Selected research sources:

1. *Forest Health: Its Assessment and Status*. CAB International, Wallingford, 677 p. 1993.
2. Methods to estimate forest health. *Silva Fennica* 27(2): 145–152. 1993
3. *Biomass Burning and Its Inter-relationships with the Climate System*. J. L. Innes, M. Beniston, M. M. Verstrate, eds. Kluwer Academic, Dordrecht, 358 p. 2000.
4. *Sustainable Forest Management: From Concept to Practice*, 1st Ed. Edited by John L. Innes, Anna V. Tikina. Routledge, 396 p. 2016.

Personal sources:

1. John L. Innes. About the Editorial Board. In: *Encyclopedia of Environmental Change: Three Volume Set*. SAGE, 2014. John A. Matthews, general editor.
2. John L. Innes. Biographical sketch. In: *Forests and Forest Plants. Volume I. / Encyclopedia of Life Support Systems (UNESCO-EOLSS)*. John N. Owens, H. Gyde Lund, eds. EOLSS Publishers, 2009, p. 260–261.
3. Innes J. L. Personal communications (January 2019) at john.innes@ubc.ca



KREMER, Antoine J.

Antoine J. Kremer received the IUFRO Scientific Achievement Award in 1995 for distinguished science research at an international scale in forest genetics, population genetics and development of early selection procedures (IUFRO 1995).

Antoine Kremer was born on 11 December 1951 in Sarreguemines, France. He obtained his Forest Engineer Degree (1976) from *Ecole Nationale des Ingénieurs des travaux des Eaux et Forêts* (ENITF), and his Ph.D. in Quantitative Genetics (1992) and Habilitation Degree (HDR) in Population Genetics (1995) from University of Paris XI Orsay. He began his professional career as scientist at INRA in 1976. He spent a sabbatical stay in 1980–1981 at the USDA (Rhineland) and University of Wisconsin. In 1995, Dr. Kremer was appointed Research Director at INRA and in 2001 – Director of the IFB. In 2003 he played an active role in establishing the Joint Research Unit BioGeCo (INRA and University of Bordeaux), where he became Director until 2010. He was teaching forest population and quantitative genetics at the University of Bordeaux. In 2010, he initiated the launch of the cluster of Excellence COTE at the University of Bordeaux, where he became director. During his career, he coordinated six collaborative research projects supported by framework research programs at the European Union (DG Research), particularly the Network of Excellence EVOLTREE (2006–2010). In 2014 he was granted an ERC advanced Grant.

After pedunculate oak forests started to decline in the mid-1970s, Dr. Kremer initiated a Europe-wide research program on the genetic diversity of European temperate oaks based on population genetics and evolutionary biology. Through the support of EU projects and the contribution of partner labs from many European countries, he coordinated the construction of continental wide synthetic maps of genetic diversity of oaks. These maps served as a basis to reconstruct the Holocene history of oaks across Europe. While focusing at the beginning of his career on the past history of oaks, his ongoing research addresses their future evolution in the context of environmental changes.

Dr. Kremer is a member of many national and international initiatives, boards and organizations. He was a Coordinator of IUFRO Working Group S2-02-22 (1986–1990), and on the SAB for EFI (2005–2009). He was on the Editorial Board of *Annals of Forest Science*, *Forest Genetics*, *Tree Genetics and Genomes*, and *Conservation Genetics*. He has authored and co-authored more than 350 scientific papers, chapters of the books and many project reports. Dr. Kremer has received the European Forest Research Award (2003), Marcus Wallenberg Prize (2006), Knight of the “Legion of Honor” (2007), Member of the French Academy of Agriculture (2009), INRA Agricultural Research Award (2011), and Doctor *honoris causa* from the *Universidad Politécnica de Madrid* (2016). He is a Corresponding member of the Royal Academy of Engineering of Spain (2014).

Selected research sources:

1. Predictions of age-age correlations of total height based on serial correlations between height increments in Maritime pine (*Pinus pinaster* Ait.). *Theor. & Applied Genetics* 85(2–3): 152–158. 1992.
2. Geographic structure of chloroplast DNA polymorphisms in European oaks. *Theor. & Applied Genetics* 87(1–2): 122–128 (with R. J. Petit and D. B. Wagner). 1993.
3. Chloroplast DNA footprints of postglacial recolonization by oaks. *Proc. Nat. Acad. Sci. USA* 94(18): 9996–10001 (with R.J. Petit, E. Pineau, B. Demesure, R. Bacilieri and A. Ducouso). 1997.
4. Genomics of Fagaceae. *Tree Genetics & Genomes* 8: 583–610 (with A. G. Abbott, J. E. Carlson, P. S. Manos, C. Plomion, P. Sisco, M. E. Staton, S. Ueno and G. G. Vendramin). 2012.

Personal sources:

1. URL: https://www.researchgate.net/profile/Antoine_Kremer Retrieved 6.01.2019.
2. Kremer A. Personal communications (January 2019) at antoine.kremer@inra.fr



MILLAR, Constance (Connie) Irene

Constance Irene Millar received the IUFRO Scientific Achievement Award in 1995 for her distinguished forest science research at an international scale in forest genetics, population genetics, evolutionary genetics, conservation genetics (IUFRO 1995).

Connie Millar was born on 17 June 1954 in Lansing, MI, USA. She earned her B.Sc. in Forest Science from the University of Washington in Seattle, WA USA (1977), and M.Sc. in Forest Genetics (1979) and Ph.D. in Genetics (1985), both from the University of California, Berkeley (UC-Berkeley), CA, USA, where she also began her research career as Project Leader and Research Geneticist of the California Forest Germplasm Conservation Project (1985–1987). Since 1987, Connie has been a research scientist with the USDA Forest Service, Pacific Southwest Research Station (Albany, CA). She was a research geneticist with the Institute of Forest Genetics (1987–2001), then research ecologist (2001–2014). In 2014 she received Senior Scientist status, an honorary designation given only to distinguished federal scientists. Connie was the first female scientist in the USFS to receive this honour.

Dr. Millar's research is interdisciplinary, and includes climate change, geomorphology, paleoecology, forest ecology and evolution, with a focus on mountain environments. Much of her career has been devoted to integrating science knowledge into natural-resource management and developing principles of genetic and biodiversity conservation for maintaining healthy forest ecosystems. She is a recognized leader in developing climate adaptation strategies, and was instrumental in pioneering practices that led to early guidebooks for forest resource managers to implement practices of climate adaptation in working forests.

She is founder and Director of the Consortium for Integrated Climate Change (CIRMOUNT) and Chair of the NA Chapter of the Global Observation Research Initiative in Alpine Environments (GLORIA), a global project to assess alpine plant responses to climate change. She is affiliated with many professional societies including the AAAS, American Geophysical Union, American Quaternary Association, The Wildlife Society, Wildlife Conservation Society, California Forest Conservancy, and World Lagomorph Society.

Dr. Connie Millar has authored and co-authored more than 150 scientific papers, book chapters, and reports. She has received a number of honours and awards including Pew Scholar in Conservation and the Environment (1992) and Decadal Award (2002) from Pew Charitable Trusts, Deputy Chief's Distinguished Scientist Award (2010) and Chief's Award in Science and Technology (2013) from the USDA FS.

Selected research sources:

1. A steep cline in *Pinus muricata*. *Evolution* 37: 311–319. 1983.
2. Gene conservation in California's forests. *Fremontia* 14(1): 6–7. 1986.
3. Impact of the Eocene on the evolution of *Pinus* L. *Ann. Missouri Bot. Gard.* 80: 471–498. 1993.
4. *Restoring Diversity: Strategies for Reintroduction of Endangered Plants*. D. C. Falk, C. I. Millar and P. Olwell, eds. Island Press, 512p. 1996.
5. Climate change and forests of the future: managing in the face of uncertainty. *Ecol. Appl.* 17: 2145–2151 (with N. L. Stephenson and S. L. Stephens). 2007.
6. Temperate forest health in an era of emerging megadisturbance. *Science* 349(6250): 823–826 (with N. L. Stephenson). 2015.

Personal sources:

1. URL: <https://www.fs.fed.us/research/people/profile.php?alias=cmillar> Retrieved 07.01.2019.
2. Millar C. I. Personal communications (January 2019) at cmillar@fs.fed.us



MOHMOD, Abd. Latif

Abd. Latif Mohmod received the IUFRO Scientific Achievement Award in 1995 for his outstanding research on properties and utilization of non-timber forest products such as bamboo, rattan and palms (IUFRO 1995).

Abd. Latif Mohmod was born in August 1960 in Johor, Malaysia. He graduated from the National University of Malaysia (1984), and earned his M.Sc. in Forestry (1992) and Ph.D. in Non-Wood Forest Products (1996) from the Agricultural University of Malaysia. In 2014 he was elected Fellow of the Academy of Sciences Malaysia (ASM). Dr. Latif spent the bulk of his career working at Forest Research Institute Malaysia (FRIM) progressing from a Research Officer (1985) to Deputy Director (2005–2008) and Director-General of the Institute (since 2008). During this time, he has led many projects resulting for example in the recognition of FRIM as a Natural Heritage Site (2009), and as a National Heritage (2012) aiming to get UNESCO Heritage status by 2020. In addition, FRIM received a number of prestigious national and international awards in appreciation of its leadership as the centre of tropical forestry research, development and innovation.

Dr. Latif has a wide scope of research interests in the field of properties and utilization of non-timber forest products such as rattan, bamboo and palm as well as sustainability, plant biology, wood sciences and others. His pioneering research and achievements in these fields has gained him national and international recognition. He is the Vice Chairman of the Plant Resources of South East Asia (PROSEA) and Chairman of the Asia Pacific Association of Forestry Research Institutions (APAFRI). He authored and co-authored over 300 research articles, book chapters, reports and other papers in national and international peer-reviewed journals. He has also invented 50 machines (12 registered) for processing of rattan, bamboo, *Pandanus* and palms. In addition, he holds six individual Malaysia Book of Records.

His contributions have been highly recognized since his student's years. He became the first and only forestry scientist ever honoured with the Malaysian National Young Scientist Award (1993), National Inventor Award (1997), as well as named Outstanding Young Malaysian (1999). He was also granted Eisenhower Fellow of USA (1999) and the Rotary Research Gold Medal Award (2012). He was selected as FRIM's Most Prolific Author of High Impact Factor Journals (2010), conferred with the Science and Technology Achievement Award (2012) by the Malaysian Scientific Association, recognized as ASM Top Research Scientist Malaysia (2013) and received the BrandLaureate Most Eminent Brand Icon Leadership Award (2017).

Selected research sources:

1. Rattan processing industry of Peninsular Malaysia – Its status, problems and prospects. *Malaysian Forester* 50(3-4): 329–342. 1987.
2. Comparative studies on the suitability of selected palms for flooring. *J. of Trop. For. Sci.* 3(1): 66–71 (with Hilmi Md. Tahir). 1990.
3. A note on the proximate chemical composition and fibre morphology of *Bambusa vulgaris*. *J. of Trop. For. Sci.* 6(3): 356–357. 1994.
4. *Identification and Properties of Malaysian Timbers*. S.C. Lim, A.S. Nordahlia, M. Abd Latif, K.S. Gan, and S. Rahim / Malaysian Forest Records No. 53, 538 p. 2016.
5. *Bamboo: From Traditional to Innovative Products*. Abd Hamid S., Abd. Latif M., Hamdan H., Yanti A. K., Tuan Anis Nadia T. M. S., Shazwani A. R., & Muhammad Syamil K. / FRIM Spec. Publ. No. 11, 118 p. 2016.

Personal sources:

1. Dato' Dr. Abd Latif Bin Mohmod. Curriculum Vitae (2018). FRIM, Kuala Lumpur, Malaysia.
2. Mohmod A. L. Personal communications (January 2019) at latif@frim.gov.my



SADDLER, Jack (John) Nicholas

John Nicholas Saddler received the IUFRO Scientific Achievement Award in 1995 for his distinguished forest science research at an international scale on application of micro-organisms and enzymes to the pulp and paper industries, bioconversion of wood wastes to fuels and chemicals (IUFRO 1995).

John Saddler was born on 26 March 1953 in Edinburgh, UK. He earned his B.Sc. in Microbiology (1975) from the University of Edinburgh and Ph.D. in Microbiology/Biochemistry (1978) from the Department of Microbiology, University of Glasgow, UK. In 1978, he was appointed as a Research Associate at the National Research Council of Canada where he initiated their biomass-to-ethanol program. He joined Forintek Canada Corp. (1979), where he became the manager of the Biotechnology and Chemistry group (1982). In 1989, the Federal Government assigned him to the Science Directorate of the Canadian Forest Service where he was responsible for Biotechnology and Industry partnerships. When he moved to Canada, while at Forintek, he was also appointed Adjunct Professor in the Department of Biology at the University of Ottawa (1981). In 1990, he was awarded an NSERC-Industry Senior (Endowed) Chair at UBC, Vancouver, in Forest Products Biotechnology/Bioenergy. He also served as the Head of the Department of Wood Science (1998–2000) and as the Dean of the Faculty of Forestry (2000–2010), later being granted the title Dean Emeritus.

Dr. Saddler is a world-recognized specialist in biofuels, bioenergy and biorefinery areas. He has worked on the application of enzymes in enhancing pulp and fibre properties, fibre modification and bleach boosting pulps, bioconversion of lignocellulosic residues to ethanol, microbiology of waste water treatment as well as application of fungi to upgrading and modification of forest products, pulp and paper and waste streams. He has a professional affiliation with the chemical and microbiological associations and societies – ACS, ASM and SIM. For more than 30 years, Dr. Saddler has been involved in many national and international organizations. He served as Co-Task Leader for the IEA network on Liquid Biofuels. He has reviewed many national and international programs on biotechnology/bioenergy in North America, Europe, and Asia. He provided services as an advisor and a consultant for many organisation such as the USDoE, USDA, World Bank, UN FAO, Vinnova (Sweden), the Finnish Luke StAB. He is on the selection committee of the Marcus Wallenberg Prize. He is a fellow of the Royal Society of Canada.

He has authored and co-authored more than 400 refereed research papers, several books, numerous reports, and several patents. His work is cited extensively (Impact H-factor 90, almost 30,000 citations), has trained 100 graduate students and post docs and runs a group of about 15 people. He holds a variety of honours and awards including the Charles D. Scott Award from the SBFC (1998), Advances in Science and Technology Award from the USDA, Peoria Illinois (2000), Fellowship of the RSC (2007), the BC Leadership Award from the LSBC (2009), Green Fuels Industry Leadership Award from the CRFA (2015), and the Linneborn Prize from the European Biomass Conference (2016).

Selected research sources:

1. Multiplicity of beta-1, 4-xylanase in microorganisms: functions and applications. *Microbiological Reviews* 52(3): 305 (with K. K. Wong and L. U. L. Tan). 1988.
2. Substrate and enzyme characteristics that limit cellulose hydrolysis. *Biotechnology Progress* 15(5): 804–816 (with S. D. Mansfield and C. Mooney). 1999.

Personal sources:

1. URL: <http://bioenfapesp.org/scopebioenergy/index.php/project-overview/roster-of-experts/55-scientific-committee/72-jack-n-saddler> Retrieved 6.01.2019
2. URL: <https://profiles.forestry.ubc.ca/person/jack-john-saddler/> Retrieved 6.01.2019
3. Saddler J. N. Personal communications (January 2019) at jack.saddler@ubc.ca



SPIES, Thomas (Tom) Allen

Thomas Allen Spies received the IUFRO Scientific Achievement Award in 1995 for his distinguished forest science research at an international scale in landscape analysis, ecosystem analysis, forest community structure, old-growth forests (IUFRO 1995).

Thomas Spies was born on 31 May 1951 in Menominee, MI, USA. He earned his B.Sc. (1974), M.Sc. (1978) and Ph.D. (1983) from the University of Michigan in Ann Arbor, MI. In 1979, he was a German Academic Exchange Fellow at Hohenheim University in Stuttgart and the University of Göttingen. His research interests are in forest ecology, succession, stand and landscape structure and dynamics, old-growth forest ecology and conservation, and integration of social and ecological science. He began his career as a postdoctoral researcher at Oregon State University and became a research forester with USDA Forest Service Pacific NW Research Station in Corvallis, Oregon in 1985. He was promoted to Senior Scientist in 2012 and retired from the Forest Service in 2018.

While working for the PNW Research Station, he joined the faculty in the Dept. of Forest Science (then Forest Ecosystems and Society) at Oregon State University in Corvallis (1986) and in 1997 was promoted to professor (courtesy). He served as major professor for 16 graduate students including 9 Ph.D.s. He was a Bullard Fellow at Harvard University in 1993–1994 and a Fellow at Australian National University and University of Queensland in 2007. He has collaborated with colleagues at the Universities of Washington, Georgia, and Massachusetts, as well as with colleagues from Austria, Australia, Germany and Sweden. He was a member of the Forest Ecosystem Management Team in 1993 that developed the NW Forest Plan for federal forests in the Pacific Northwest. He was the lead author for a three-volume PNW General Technical Report *Synthesis of science to inform land management within the Northwest Forest Plan area* (2018).

Dr. Spies has been a leader of two major forest landscape research studies, the Coastal Landscape Analysis and Modeling study (1996–2008) in the Oregon Coast Range, and the Forest People Fire project (2010–2016) in the eastern Cascades of Oregon. He was a co-PI for the Long-term Ecological Research site at the H.J. Andrews Experimental Forest (2008–2014) and served for 12 years as team leader in the PNW Landscape and Ecosystem Processes Program. He has authored and co-authored more than 200 scientific papers and book chapters. Dr. Spies was given a Superior Scientist award by the Chief of the Forest Service in 2002 and he was named PNW Research Station Emeritus Scientist in 2018.

Selected research sources:

1. Coarse woody debris in Douglas-fir forests of western Oregon and Washington. *Ecology* 69(6): 1689–1702 (with J.F. Franklin and T.B. Thomas). 1988.
2. Light regimes beneath closed canopies and tree-fall gaps in temperate and tropical forests. *Can. J. For. Res.* 20(5): 620–631 (with C. D. Canham, J. S. Denslow, W. J. Platt, J. R. Runkle and P. S. White). 1990.
3. Conserving biodiversity in managed forests. *BioScience* 41(6): 382–392 (with A. J. Hansen, F. J. Swanson and J. L. Ohmann). 1991.
4. Cumulative ecological and socioeconomic effects of forest policies in coastal Oregon. *Ecological Applications* 17(1): 5–17 (with K. N. Johnson, K. M. Burnett, J. L. Ohmann, *et al.*). 2007.
5. *Old Growth in a New World: A Pacific Northwest Icon Reexamined*. T. A. Spies and S. L. Duncan, eds. Island Press, 360 p., 2008; e-book format: 2012.

Personal sources:

1. URL: <https://www.fs.fed.us/research/people/profile.php?alias=tspies> Retrieved 07.01.2019.
2. URL: <http://fpf.forestry.oregonstate.edu/faculty/thomas-spies> Retrieved 07.01.2019.
3. Spies T. A. Personal communications (January 2019) at tspies@fs.fed.us Tom.Spies@oregonstate.edu



STENBERG, Pauline Teresa

Pauline Teresa Stenberg received the IUFRO Scientific Achievement Award in 1995 for her research on solar radiation regime of conifer canopies (IUFRO 1995).

Pauline Stenberg (formerly Oker-Blom, née Stenberg) was born on 19 September 1950 in Helsinki, Finland. She earned her M.Sc. degree in Mathematics (1973) and Ph.D. in Forestry (1987) at the University of Helsinki (UH). As a postdoctoral researcher, she studied at the University of Georgia, USA (1989–1990). Dr. Stenberg spent the bulk of her professional career at the University of Helsinki as an Academy Research Fellow and Senior Scientist in several research projects (1990–2007). Since 1991 she held Adjunct Professorships in Forest Biology at the University of Helsinki and in Forest Ecology at the University of Joensuu. Dr. Stenberg also served as Secretary for the Finnish Society of Forest Science (2002–2005) and Secretary General for the Nordic Forest Research Co-operation Committee (2006–2007). In 2007 she was appointed Professor of Forest Mensuration at the UH's Dept. of Forest Sciences, a position which she held until retirement in 2016 as Professor Emerita.

From the beginning, Dr. Stenberg's primary research interest was on mathematical modeling of forest canopy structure and radiation regime, with special focus on the grouped structure of boreal coniferous forests. She developed models for light absorption and photosynthesis that have diverse applications in forest production ecology. Later she became engaged in quantitative remote sensing of the forest and specialized in developing physically based models for simulating forest reflectance (albedo). These models are urgently needed in the derivation of biophysical and climate related variables from satellite data.

Dr. Stenberg has published more than 150 scientific articles, a majority of them in leading journals of forest sciences and remote sensing. She has also served as an Editor of *Tree Physiology* (2000–2007), Associate Editor of *Silva Fennica* (2002–2005), a member of the Editorial Board for *Scandinavian Journal of Forest Research* (2009–2014), and a Review Board member for *Agricultural and Forest Meteorology* (1999–2006). She was also a reviewer for a number of journals including *Remote Sensing of Environment*, *IEEE Transactions on Geoscience and Remote Sensing*, *Canadian Journal of Remote Sensing*, *Canadian Journal of Forest Research*, *Journal of Quantitative Spectroscopy and Radiative Transfer*. For her teaching and research accomplishments and publication services, Dr. Pauline Stenberg was honoured with the Cajander Bronze Medal from the Finnish Society of Forest Sciences (2009).

Selected research sources:

1. The ratio of shoot silhouette area to total needle area in Scots pine. *Forest Science* 34(4): 894–906 (with H. Smolander). 1988.
2. Performance of the LAI-2000 plant canopy analyzer in estimating leaf area index of some Scots pine stands. *Tree Physiology* 14(7-8-9): 981–995 (with S. Linder, H. Smolander and J. Flower-Ellis). 1994.
3. Correcting LAI-2000 estimates for the clumping of needles in shoots of conifers. *Agricultural and Forest Meteorology* 79: 1–8. 1996.
4. Simple parameterizations of the radiation budget of uniform broadleaved and coniferous canopies. *Remote Sensing of Environment* 94: 355–363 (with S. Smolander). 2005.
5. Simple analytical formula for calculating average photon recollision probability in vegetation canopies. *Remote Sensing of Environment* 109: 221–224. 2007.

Personal sources:

1. URL: <https://scholar.google.com/citations?user=kXiHA2IS9jUC&hl=en> Retrieved 10.01.2019.
2. Stenberg P. Personal communications (January 2019) at pola.stenberg@gmail.com



UGALDE ARIAS (UGALDE), Luis Alberto

Luis Alberto Ugalde Arias received the IUFRO Scientific Achievement Award in 1995 for his distinguished forest science research at an international scale on management information systems for natural resources, databases and information schemes for plantations and agroforestry systems (IUFRO 1995).

Luis Ugalde Arias was born on 26 January 1954 in Alajuela, Costa Rica. He studied Forestry Engineering at the National University Costa Rica in Heredia, and became Dipl.-Engineer (1978). He obtained his M.Sc. in Renewable Natural Resources with specialization in Plantation Forestry from CATIE in Turrialba, Costa Rica (1980). He then advanced at the OFI's Specialization Courses at Oxford University, and earned his Ph.D. in Forest Resources Management, with specialization in Forest Information Management Systems, from University of Minnesota, USA (1988). He began as a Forestry Instructor at CATIE's Department of Renewable Natural Resources (1981) and spent the bulk of his professional career there, becoming a Professor of Management of Forest Plantations (1982) at CATIE's Graduate School.

Dr. Ugalde has extensive experience in academia and the private sector. His research interests are mainly in the area of development of the MiraSilv (Trees Resources Information Management) software and system to monitor and evaluate forest plantations, the Chain-of-Custody (MiraSilv-CdeC) for plantations and natural forests, and international forestry. He is a specialist in tropical plantations of Teak, Melina, *Acacia mangium*, *Eucalyptus*, *Pinus* and native species such as Guanacaste (*Enterolobium cyclocarpum*), Cedro (*Cedrus* spp.), Ron-ron (*Astronium graveolens*), Pochote (*Pachira quinata*), among others. Dr. Ugalde served as an international forestry adviser to companies with forest plantation projects with emphasis on growing plantations of high commercial value in Central and Latin American, and a few Asian and African countries.

Professor Ugalde has authored and co-authored more than 50 scientific papers on tropical forestry aspects in plantations, agroforestry systems, Chain-of-Custody, and management of forest information systems. He has served as a IUFRO officer holder for various units including the Teak Plantations, the Management information, and as a specialist in forest information, Dr. Ugalde was selected Vice Chair (1995) of a Committee for further networking of IUFRO and CIBAGRO, a Spanish language platform of forest information database.

Selected research sources:

1. Guía para el establecimiento y medición de parcelas para el Monitoreo y Evaluación del crecimiento de Árboles en investigación y en programas de reforestación con la metodología del Sistema MIRA. Turrialba, CATIE, 18 p. [Guide for the establishment and measurement of plots for the monitoring and evaluation of the growth of trees in research and in reforestation programs with the MIRA System]. 2001.
2. Stand growth scenarios for *Bombacopsis quinata* plantations in Costa Rica. *Forest Ecology and Management* 174(1): 345–352 (with D. Pérez and M. Kanninen). 2003.
3. *TEAK: New trends in silviculture, commercialization and wood utilization*. Luis Alberto Ugalde Arias. – 1 ed. – Cartago, C.R.: International Forestry and Agroforestry INFOA, 568 p. 2013.

Personal sources:

1. URL: <https://internationalforestry.org/curriculum-vitae/> Retrieved 01.01.2019.
2. Luis Ugalde. Personal communications (May 2019) at laugalde@gmail.com



YANG, Zhong-Qi

Yang Zhong-Qi received the IUFRO Scientific Achievement Award in 1995 for his important investigations and taxonomies of parasitoids of forest insect pests, as well as the biological control achievements of many severe invasive and native forest pests (IUFRO 1995).

Yang Zhong-Qi was born on 17 April 1952 in Shaanxi Province, China. He studied Forestry and graduated from Northwestern University of Agriculture in 1974, from which he got his Doctoral Degree in Science with specialization in entomology in 1990. He began his professional career as a teacher and researcher on forest entomology in his *alma mater* and at Northwest College of Forestry (1975–1995), in which he progressed from a Lecture to Associate Professor and Professor of Forest Entomology (1990–1995).

Since 1996, Dr. Yang has been working for the Chinese Academy of Forestry (CAF). At the same time, he was Deputy Director of the CAF's two Research Institutes (1996–2002) – Head of the Academic Committee. In addition, since 1998 he has served as Head of the Key Laboratory of Forest Protection, China National Forestry Administration (CNFA).

Dr. Yang has a strong reputation both in taxonomy of parasitic wasps and biological control of forest insect pests. He was Vice President of the Entomological Society of China (1997–2012), Vice President of the Beijing Entomological Society (since 2002), and member of the CNFA's Standing Committee, Scientific and Technological Work Committee (since 2018). He also served as Coordinator of IUFRO 7.03.08 - Forest Protection in Northeast Asia (since 2010), Executive Vice-Editor of *China Forestry Science* and a member of editorial board for over ten Chinese journals on forestry, entomology, zoology and biocontrol.

Dr. Yang Zhong-Qi has elaborated over 20 scientific research programs on both severe invasive and native forest insect pests and successfully solved many problems for effectively controlling them with natural enemies, such as *Hyphantria cunea*, *Monochamus alternatus*, *Anoplophora glabripennis*, *Dendroctonus valens*, *Massicus raddei*, *Apriona swainsoni*, *Batocera lineolata*, *Agrilus planipennis*, *A. mali* and others. He has described 256 new species of parasitic wasps to science, and published 5 monographs on taxonomy of natural enemies, as well as 265 papers on biocontrol and taxonomy of parasitic wasps.

His achievements were recognized with China National Science and Technology Advanced Achievement Award in 2006, and 12 Provincial and/or Ministerial Advanced Science and Technology Awards. In 2015, he was appointed a Consultant of the State Council of China.

Selected research sources:

1. *Parasitic wasps of bark beetles in China*. Science Press, Beijing, 363 p. 1996.
2. *Biological Control technique of Apriona swainsoni (Cerambycidae), a major forest pest in China*. Beijing: China Forestry Press, 152 p. 2014.
3. Recent advances in biological control of important native and invasive forest pests in China. *Biological Control* 68: 117–128 (with X. Y. Wang and Y. N. Zhang). 2014.
4. *Chalcidoids parasitizing forest defoliators in China (Hymenoptera)*. Beijing: Science Press, 283 p. (with Yao Yan-Xia and Cao Liang-Ming). 2015.

Personal sources:

Yang Zhong-Qi. Personal communications (February 2019) at yangzhqi@126.com

2000 (KUALA LUMPUR, MALAYSIA)

The Nominating and Selection Committee was chaired by Dr. J. Youngquist (USA) and consisted of Drs. F. J. Kruger (Representative from Africa), R. Guevara (Rep. from Latin America), D. K. Lee (Rep. from Asia), L. Sennerby-Forsse (Rep. from Europe and from Divisions), and J. L. Whitmore (Vice-President Administration), with J. Burley (President) and H. Schmutzenhofer (Secretary General) as *ex officio*. They selected 11 winners out of 35 nominations. At this Congress, the restriction of 45 years for the nomination was omitted, and seven scientists above this age received the Award.

On 7 August at the Opening Ceremony of XXI IUFRO World Congress, on behalf of the Committee, Dr. Youngquist made an announcement about the decision to grant the IUFRO SAA to the following winners:

Per K. ANGELSTAM	Sweden
K. M. BHAT	India
Bruce DANCIK	Canada
Stepan A. GENSIRUK³⁹	Ukraine
Jyrki J. KANGAS	Finland
Su See LEE	Malaysia
Colin PRICE	United Kingdom
David D. REED	USA
Robert A. VERTESSY	Australia
Michael J. WINGFIELD	South Africa
Francis Cho-Hao YEH	Canada



From left to right: J. A. Youngquist, R. Seppälä, H. Schmutzenhofer, B. Burger, P. K. Angelstam, K. M. Bhat, B. Dancik, J. J. Kangas, S. S. Lee, C. Price, D. D. Reed, R. A. Vertessy, M.J. Wingfield, and F. C.-H. Yeh (Photo: Abdul Rahim Nik, COC).

³⁹ Prof. S. A. Gensiruk received special recognition for his lifetime scientific achievements. He was not able to attend this Congress, and IUFRO Secretary General Heinrich Schmutzenhofer presented the Award to him in 2001 at the IUFRO Secretariat in Vienna-Schönbrunn.



ANGELSTAM, Per Krister

Per Krister Angelstam received the IUFRO Scientific Achievement Award in 2000 for scientific achievements in the field of ecological structure and processes in natural taiga-landscapes (IUFRO 2000).

Per Angelstam was born on 27 March 1953 in Örebro, Sweden. He obtained his B.Sc. (1976) in chemistry, biology and physical geography at Lund University, and his Ph.D. in Zooecology (1983) from Uppsala University, where he then undertook research in the Department of Zoology. In 1988 he was appointed Director of the Swedish EPA's Grimsö Wildlife Research Station. He then became a Senior Researcher at the Swedish University of Agricultural Sciences' (SLU) Departments of Wildlife Ecology and Conservation Biology (1992–2004). He also undertook his research at the Department of Natural Sciences, Örebro University (2000–2003). In 2004 he moved to SLU's Faculty of Forest Sciences, and in 2005 became a Professor of Forest and Natural Resource Management at the School for Forest Management in Skinnskatteberg in the informal Bergslagen region.

Professor Angelstam is a member of a number of editorial boards including the Russian *Forestry Journal* (Arkhangelsk) and the *Siberian Journal of Forest Science* (Krasnoyarsk), and co-editor of a special issue of the *Ecological Bulletins: Targets and Tools for the Maintenance of Forest Biodiversity* (2004, No. 51). He is a Chair of the local NGO Sustainable Bergslagen, which is a member of the International Model Forest Network, and co-ordinates the Long-Term Socio-Ecological Research (LTSER) platform Bergslagen.

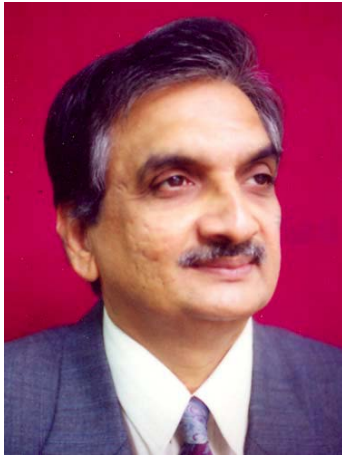
The research interests of Professor Angelstam are wide: from zoology, forest ecology, biodiversity, and nature conservation, to sustainability, environmental planning, landscape ecology, rural development and natural resources management. He later put more effort into studies of socio-ecological issues at the landscape level, and the role of different models for governance and management across spatial and temporal scales. He initiated and is actively involved in a number of landscape case studies in central and eastern European countries, in Fennoscandia and Russia. He authored and co-authored over 170 peer-review scientific articles, 40 books and book chapters, more than 80 conference papers, 80 popular science publications and more than 65 research reports. In recognition of his research accomplishments, he received Research Awards from Oregon State University, Corvallis, USA (1998) and Honorary Professor in Wildlife Biology at the BOKU in Vienna, Austria (2002)

Selected research sources:

1. Population dynamics of tetranoids, especially black grouse *Tetrao tetrix* L., in boreal forests. Ph.D. thesis. Abstracts of Uppsala Dissertations from the Faculty of Science 67, 33 pp. 1983.
2. Maintaining and restoring biodiversity in European boreal forests by developing natural disturbance regimes. *Journal of Vegetation Science* 9 (4): 593–602. 1998.
3. Measurement, collaborative learning and research for sustainable use of ecosystem services: Landscape concepts and Europe as laboratory. *AMBIO* 42(2): 129–145. 2013.
4. LTSER platforms as a place-based transdisciplinary research infrastructure: Learning landscape approach through evaluation. *Landscape Ecology*, DOI: <https://doi.org/10.1007/s10980-018-0737-6>. 2018.
5. Wood production and biodiversity conservation are rival forestry objectives in Europe's Baltic Sea Region. *Ecosphere* 9(3), Article e02119. DOI:10.1002/ecs2.2119 101, (96–110). 2019.
6. Knowledge production and learning for sustainable forest landscapes: the European continent's west and east as a laboratory. *Lesnoi Zhurnal* (1): 9–31. 2019.

Personal sources:

1. URL: https://www.researchgate.net/profile/Per_Angelstam Retrieved 07.01.2019.
2. Angelstam P. K. Personal communications (January 2019) at per.angelstam@slu.se



BHAT, Kanithila Mahabala

Kanithila Mahabala Bhat received the IUFRO Scientific Achievement Award in 2000 for his outstanding contribution to fundamental and applied research in the fields of forest products, wood sciences and technology (IUFRO 2000).

Mahabala Bhat was born on 19 June 1950 in Puthur, Karnataka, India. He earned his B.Sc. (1970) and M.Sc. (1972) degrees in Botany from the University of Mysore in India, L.Sc. in Wood Technology and D.Sc. in Wood Technology, received in 1981 from the University of Helsinki, Finland. Dr. K.M. Bhat spent the bulk of his career at KFRI, Peechi, India, in various positions starting in 1979 as a Scientist of the Wood Science Division and progressing to its Head and Programme Coordinator for Forest Utilization. He was also the TEAKNET Coordinator of the International Teak Information Network established by FAO and functioning in KFRI since 2008.

Dr. K.M. Bhat was a highly respected scientist in the field of wood science especially in the study of quality of teak wood. He initiated and elaborated various programs and projects, and organized and convened numerous conferences, seminars and other meetings under the auspice of national and international organizations and networks, including UN FAO, IUFRO, ITTO, TEAKNET, TEAK 2000 and others. He served as consultant to many industrial forest and wood companies worldwide. He authored and co-authored more than 190 articles in peer-reviewed journals, book chapters and monographs, and papers presented at national and international congresses, conferences and workshops. He was closely associated with IUFRO as a Deputy Coordinator of Division 5 Forest Products and a member of IUFRO EEB (2001–2010), and a founder and a Coordinator of IUFRO WP 5.06.02 Utilization of Planted Teak (from 2001).

His contributions to forest and timber products research were widely recognized. He was elected a Fellow of Indian (1987) and International (1991) Academies of Wood Science, received an Invitation Fellowship of the Japan Society for Promotion of Science (1997), granted ITTO (1997, 2000) and FAO (1997) fellowships and was elected Vice-President of the Indian Academy of Wood Science (1999) and to the IAWS's Board (2006). He held a Rising Personalities of India Award and a Medal for outstanding contributions to rattan development in India and the Asia Pacific Region (1999). Dr. Bhat passed away on 2 January 2009 after a short illness. In his commemoration, the Dr. K.M. Bhat Endowment Award was established to recognize the Ph.D. work completed at KFRI each year. The award carries a Gold Medal, Certificate of Merit and cash prize of Rs. 5,000.

Selected research sources:

1. *A handbook of Kerala timbers*. KFRI Research Report, No. 9. 260 p. (with Nazma, P. M. Ganapathy, N. Sasidharan and R. Gnanaharan). 1981.
2. Bark specific gravity in stem and branches of nine Indian timbers grown in Kerala. *Indian J. Forestry* 13(1): 26–29 (with K. V. Bhat and T. K. Dhamodaran). 1990.
3. Rattan (cane) processing techniques in India: A case study of oil curing. *RIC Bulletin* 9(2): 15–21 (with K. Yekantappa and T. K. Dhamodaran). 1990.
4. Anatomical diversity of Indian rattan palms (*Calamoideae*) in relation to biogeography and systematics. *Bot. J. of the Linnean Society* 125(1): 71–86 (with Ancy Mathew). 1997.
5. *A handbook of lesser-known timbers*. KFRI Rep. 304, 225 p. (with P. K. Thulasidas and K. H. Hussain). 2007.

Personal sources:

1. Obituary: Dr. Kanthila Mahabala Bhat. *IUFRO News*, 38(2): 3. 2009.
2. Obituaries: Kanthila Mahabala Bhat (1950–2009). *IAWS Bulletin*, 1: 2224. By P.K. Thulasidas; Adya Singh and Andrew Wong. 2009.
3. Viswanath S. Personal communications (January 2019) director@kfri.org



DANCIK, Bruce Paul

Bruce Paul Dancik received the IUFRO Scientific Achievement Award in 2000 for his outstanding contributions to forest genetic research, sustainable forest management practice and leadership in forest policy development (IUFRO 2000).

Bruce Dancik was born on 27 December 1943 in Chicago, USA. From 1962 he studied forestry, forest genetics and ecology and obtained his B.Sc. (1965), M.Sc. (1967) and Ph.D. in Forest Genetics and Ecology (1972) from the University of Michigan in Ann Arbor. He began his career as an Assistant Professor at Saginaw Valley College (MI) in 1972. He then moved to Canada and joined the Department of Renewable Resources, University of Alberta in Edmonton. Dr. Dancik progressed from Assistant Professor (1973) to Associate Professor (1977), Professor (1984), and Professor Emeritus in Renewable Resources (2011). During this period, he also served as Chair of Forest Science (1989–1994), then Chair of the new Department of Renewable Resources (1994–1995), and Associate Vice-President (Academic) of the University (1995–2000). He was also Director of the University of Alberta's Devonian Botanic Garden (2001–2011) and remains a member of the Board of Directors.

The major research interests of Dr. Dancik are in the field of population genetics, structure and evolution of trees, management of genetic resources, biodiversity, gene conservation, and ethical issues of land use and conservation. In this area, his most notable achievement was the identification, nomenclature and confirmation of new birch species (1985), the first proof of maternal inheritance of cpDNA in a conifer (1987) and first isolation of a tree gene (1988). For his outstanding contribution to forest science and follow up accomplishments, Dr. Dancik was recognized with Scientific Achievement Award (2000). He is the recipient of many other prestigious awards, including the Canadian Forestry Achievement Award (1979), the Tree of Life Award (1991–1992), and a Queen's Golden Jubilee Medal (2002). He has authored and co-authored more than 80 scientific publications.

Dr. Bruce Dancik has dedicated the bulk of his career to the development of the National Research Council Research Press (now Canadian Science Publishing). He joined the company as the editor of the *Canadian Journal of Forest Research* (1981), was then appointed Editor-in-Chief of the NRC Research Journals for the next 20 years (1990–2010). Since 2010, he was also a member of the Board of Directors when the NRC Research Press was incorporated as a not-for-profit company. Under his governance, the Press established its Monograph Publishing Program (1994). For his outstanding contribution, Dr. Dancik was granted the Council of Science Editors Award for Meritorious Achievement (2002). The program grew from publishing 12 journals to 21 scientific and engineering journals, the largest scientific publisher in Canada. In 2016, the Royal Society of Canada designated him a Specially Elected Fellow for his 35 years of unpaid service to the NRC Research Press.

Selected research sources:

1. Novel chloroplast DNA polymorphism in a sympatric region. *J. Evolut. Biology* 2: 49–59 (with D. R. Govindaraju & D. B. Wagner). 1989.
2. Maternal transmission of mitochondrial DNA in interspecific hybrids of *Populus*. *Current Genetics* 22: 141–145 (with O. P. Rajora, J. W. Barrett and C. Strobeck). 1992.
3. Population genetic variation, structure, and evolution in Engelmann spruce, white spruce, and their natural hybrid complex in Alberta. *Can. J. Botany* 78: 768–780 (with O. P. Rajora). 2000.

Personal sources:

1. URL: <http://www.nrcresearchpress.com/page/about/ourhistory> Retrieved 16.01.2019.
2. Dancik B. Personal communications (January 2019) at bruce.dancik@ualberta.ca



GENSIRUK, Stepan Antonovych

Stepan Antonovych Gensiruk received the IUFRO Scientific Achievement Award in 2000 for his research achievements in dynamics of forest changes in mountainous areas and formulation of an ecological system for managing nature reserves (IUFRO 2000, p. 181).

Stepan Gensiruk (also spelled Hensiruk) was born on 6 January 1923 in Budki, Ternopil Oblast, Ukraine. He finished forestry school (1943), and then received a Diploma with honours of Forest Engineer (1949) and Ph.D. (1955) from the State Agricultural Institute in Lviv. He earned a D.Sc. in Forest Sciences, Silviculture and Economics from Timiryazev State Agricultural Academy in Moscow (1966), and was habilitated as Professor (1976) of the Ukrainian Agricultural Academy (now *National University of Bioresources and Natural Resource Use of Ukraine*) in Kyiv.

Having a great voice, in parallel to forestry, he graduated from the Vocal Department of Lviv State Conservatory (the Academy of Music), became the winner of the All-Ukrainian as well the International Vocal Competition (Moscow, 1949), was recommended by the Panel of Judges to be sent to the Italian Opera for further studies, but he did not go.

Dr. Gensiruk began his research career as an Assistant Professor (1951) and reached Professor of Department of Forestry at Lviv Forestry Institute (LLTI, now the Ukrainian National Forestry University). His main areas of teaching and research activities were forest management, forest history, systems of final harvesting, forest ecology, reproduction of forests on disturbed lands, optimization of forest cover, and microclimatic influence of protective forests on agricultural lands. He served at the Ukrainian Council for the Study of Productive Forces at the National Academy of Science (NAS) of Ukraine, in Kyiv.

Professor Gensiruk authored and co-authored more than 500 scientific, methodological and popular science publications, including 35 books. He was the founder and editor-in-chief of the first two volumes of Ukrainian Encyclopedia of Forestry (1999–2007). His book of *Forests of Ukraine* is a significant contribution to world forestry sciences (*The Forestry Chronicle*, 2005, p. 449). For his scientific research and knowledge sharing achievements, Professor Gensiruk became a Laureate of the State Prize of Ukraine in the field of Science and Technology, and was awarded the Ukrainian Order of Merit. Professor Gensiruk passed away on 23 October 2014.

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5. Ліси Західного регіону України. Львів: Атлас, 408 p. (with M. С. Нижник and Л. І. Копій). [Forests of the Western region of Ukraine]. 1998.

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3. Nijnik M. Personal communications (February 2019) at Maria.Nijnik@hutton.ac.uk



KANGAS, Jyrki Juhani

Jyrki Juhani Kangas received the IUFRO Scientific Achievement Award in 2000 for his research achievements and world-wide recognition in the areas of optimization methods, modelling expertise and participatory and interactive planning of multi-functional forestry (IUFRO 2000).

Jyrki Kangas was born on 5 February 1962 in Harjavalta, Finland. He graduated from the University of Joensuu (1986) and earned his Ph.D. (1992) in Agriculture and Forestry from the University of Joensuu. His thesis was on supporting forestry decision-making of private non-industrial forest owners. Dr. Kangas has had significant career achievements in the forest industry as well as in research and teaching. After two years in private forestry (1987–1988), he took up several Researcher positions at the University of Joensuu and METLA (1989–1993). In 1994 he was Director at METLA's Joensuu Research Station and after that at Kannus Research Station (1995–2001). He was then appointed the first Professor of Forest Planning at METLA (2001–2003). In 2015, Dr. Kangas was appointed Professor of Forest Bioeconomy of the University of Eastern Finland. He is an Adjunct Professor (Docent) of Forest Planning at the University of Helsinki (since 2003). He was employed as Director of Forestry at UPM-Kymmene Ltd. (2003–2006) and CEO of UPM's real estate subsidiary Bonvesta Oy. He then was appointed as CEO and DG of Metsähallitus – the Finnish State Forest Enterprise (2007–2014) governing all the State-owned lands and waters in Finland. Metsähallitus has both business operations, public services and administration duties. He has served on various positions of trust such as Chairman of the FEFR (2010–2012), Vice-President of the EUSTAFOR (2012–2014), Member of the European HLG of the FTP (2010–2014), and the CoB of the Koli Forum (2016–2018).

Professor Kangas has research interests in the area of multi-functional forestry, decision support, strategy processes, and the forest bioeconomy. He has authored and co-authored more than 350 research papers and book chapters, of which more than 100 are peer-reviewed ones. Kangas was awarded the Golden Medal of the Forest Management Club of the Finnish Society of Forest Science (2008). The Finnish Society of Forest Sciences awarded him with a Cajander bronze medal (2014), and he was selected by the Union of Finnish Academic Foresters as the Forester of the Year (2014). The Finnish Operations Research Society awarded him the OR Person of the Year (2006). He has also received other awards, including the Golden Medal of Land Survey (2009), Medal of Military Merit (2008), Medal of the Finnish Border Guard (2013), the Golden Badge of Merit by MTK (2017), and Commander of the Order of the Lion of Finland (2013).

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1. Utilizing the analytic hierarchy process (AHP) in SWOT analysis – a hybrid method and its application to a forest-certification case. *For. Pol. Econ.* 1(1): 41–52 (with M. Kurttila, M. Pesonen, M. Kajanus), 2000.
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5. *Decision Support for Forest Management*. Springer. 224 p. (with A. Kangas, M. Kurttila, K. Eyvindson and T. Hujala), 2015.

Personal sources:

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2. Kangas J. J. Personal communications (January 2019) at jyrki.kangas@uef.fi



LEE, Su See

Su See Lee received the IUFRO Scientific Achievement Award in 2000 for her scientific contributions to forest pathology as applied to diseases of fast-growing plantation trees and to dipterocarp ectomycorrhiza research (IUFRO 2000).

Su See Lee was born on 9 January 1955 in Kuala Lumpur, Malaysia. She obtained her B.Sc. (Hons.) in Botany (1979) from the University of Malaya (UM), Kuala Lumpur, and M.Sc. in Forest Pathology from Universiti Pertanian Malaysia (UPM, now *Universiti Putra Malaysia*) Serdang, Selangor (1981), where she also worked as a Tutor (1979–1981) and Lecturer (until 1990). She earned her Ph.D. in Plant Sciences from the University of Aberdeen, UK (1992). Dr. Lee spent the bulk of her career with FRIM where she began as a Senior Researcher and Head of Mycology and Pathology Laboratory (1990). She progressed to Principal Researcher (2007), Deputy Division Director and Head, Forest Health and Conservation Programme, Biodiversity Division (2009), from which she retired in 2015. Dr. Lee also dedicated much time to teaching and supervision of post-graduate students, e.g., as external supervisor at University of Aberdeen, UPM, and University Gadjah Mada, Indonesia, Adjunct Professor at Universiti Malaysia Terengganu and consulting on forest health in Indonesia and Malaysia. Currently, Dr. Su See Lee is a freelance consultant on forest and tree health.

Dr. Lee serves as a Scientific Advisor and Referee for the IFS, Sweden (since 1993) and was a member of the Scientific Advisory Committee for the KFRI, RoK (2012–2014). She served as reviewer, editor, co-editor and member of various editorial boards for professional journals in Malaysia, Indonesia, South Africa, Southeast Asia, Australasia and the UK. Her contribution to forest science, education and public outreach is widely recognized. In 1994–2012, Dr. Lee received more than a dozen of the FRIM Publication Awards in various categories, the FRIM Best Scientist Award (2010), and two FRIM Director-General awards. She received the Malaysian Fulbright Exchange Programme Award (2002), was granted the *Ahli Mangku Negara* (A.M.N.) by the King of Malaysia (2007) and became Honorary Member of the Malaysian Nature Society (2009).

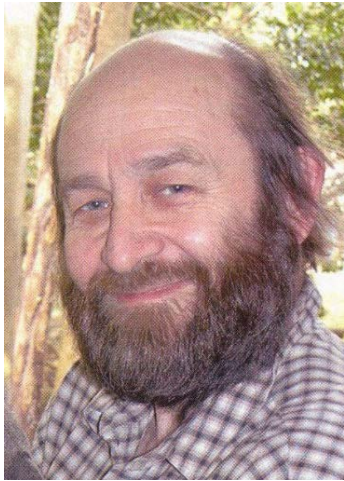
Since 1995, Dr. Lee served IUFRO in various capacities as Deputy Coordinator and Coordinator for different WPs and WGs (1995–2005), MC member (2006–2014), General Board Member (2006–2010), IUFRO Honours & Awards Committee (Chair, 2006–2010, Member, 2011–2014) and IUFRO Vice President (2010–2014), becoming the first female at such a high administrative position in the history of the Union. In recognition of her service to IUFRO, Dr. Lee was granted IUFRO Honorary Membership in 2016.

Selected research sources:

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2. Forest health in plantation forests in South-East Asia. *Australasian Plant Pathology* 28: 283–291. 1999.
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7. Observations on the successes and failures of *Acacia* plantations in Sabah and Sarawak and the way forward. *J. of Trop. For. Sci.* 30 (Anniversary Issue): 468–475. 2018.

Personal sources:

Lee, Su See. Personal communications (January 2019) at leesusee08@gmail.com



PRICE, Colin

Colin Price received the IUFRO Scientific Achievement Award in 2000 for contributions to science and distinguished research achievements in the field of theory and application of forest and environmental economics (IUFRO 2000).

Colin Price was born on 13 March 1948 in Rossett, Wrexham County Borough, Wales. He earned his Bachelor's degree in forestry with 1st class honours in 1970, and Master's degree and D.Phil. in land use economics in 1975, all at Oxford University. In 1975 and 1976 he held teaching appointments in town planning economics at Oxford Polytechnic, and in land use economics at Oxford University. In 1976 he joined the University of Wales, Bangor, where he taught many forestry subjects, and in 1996 was appointed Professor of Environmental and Forestry Economics.

His wide-ranging research interests focus on cost—benefit analysis and on the economics of forestry policy, silviculture, harvesting, carbon fluxes, recreation, tree disease, biodiversity, resource depletion, urban planning and economic development. He is particularly known for his research on discounting and on landscape economics, his work on the latter bringing the appellation “Father of Landscape Economics”. He has authored three major books and about 250 journal papers and book chapters, and is a member of the editorial boards of *Journal of Forest Economics*, *Forestry* and *Landscape Research*.

Professor Price has been involved in research projects in, and supervised postgraduates from, Bangladesh, Canada, China, Denmark, Finland, France, Germany, India, Italy, Japan, Malawi, Malaysia, Norway, Pakistan, Sudan, Thailand, Tanzania, Uganda and the United States, and has made numerous presentations at international conferences.

He has served as consultant on landscape, land use and forestry economics to many regional, national and international organizations. Among those have been: the South-West Region of England, the Countryside Council for Wales, the Countryside Commissions of England & Wales and of Scotland, the UK's Forestry Commissions, the former UK Department of the Environment, Department for Environment, Food and Rural Affairs, Food and Environment Research Agency, Council of Europe and UN's FAO. After forty years in university employment, he has gone free-lance, working as “Colin Price Free-lance Academic Services”.

Selected research sources:

1. *Landscape Economics*. Macmillan, 168 p.; 2nd ed. Palgrave Macmillan, 504 p. 1978, 2017.
2. *The Theory and Application of Forest Economics*. Wiley-Blackwell, 416 p. 1989.
3. *Time, Discounting and Value*. Blackwell, 393 p. 1993.
4. Does social cost—benefit analysis measure overall utility change? *Econ. Letters* 26: 357–361. 1988.
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6. Quantifying the aesthetic benefits of urban forestry. *Urban Forestry & Urban Greening* 1: 123–133. 2003.
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Personal sources:

Price C. Personal communications (January 2019) at c.price@bangor.ac.uk



REED, David Doss

David Doss Reed received the IUFRO Scientific Achievement Award in 2000 for his research on forest biometrics as applied to the quantitative assessment of impacts of stress on forest trees and stands (IUFRO 2000, p. 181).

David Reed was born on 14 September 1956 in Jonesboro, Arkansas, USA. He earned his B.Sc. in Forest Science at the University of Arkansas-Monticello (1977), M.Sc. in Statistics (1982), M.Sc. and Ph.D. in Forest Biometrics (1979 and 1982) at Virginia Polytechnic Institute and State University. In 1982 he began his teaching career as an Assistant Professor at the School of Forestry and Wood Products (now School of Forest Resources and Environmental Science), Michigan Technological University (MTU) in Houghton. In 1990 he was appointed Professor of the School. He has established good research relationships and conducted various research projects with sponsorship gained from many organizations and companies, ranging from the US National Science Foundation to the USDA Forest Service, and the Mead Paper Corporation, Dayton, Ohio, USA.

His research interests and expertise lie in the field of biometrics, environmental statistics and statistical analysis, modeling of complex systems, and experimental design. In 1996, as a Fulbright Scholar, he worked at the Technical University of Lisbon, Portugal, where he established close research contacts with European scientists. He is the author, co-author and editor of over 135 research papers published in peer-reviewed journals, books and book chapters, project reports and conference proceedings. He has been a frequent presenter at national and international congresses and symposia on various forest-related issues.

Professor Reed has received a number of honours and awards in recognition of his teaching and research accomplishments. He received the Faculty Excellence Award from the Society of American Foresters student chapter (1994) and the Forest Science Award from the Society of American Foresters (2002). Since 2001 he has served as the MTU Vice President for Research. From 2004 to 2007 he also served as Provost and Vice President for Academic Affairs and from 2018 to 2019 he served as MTU Chief Financial Officer and Senior Vice President for Administration.

Selected research sources:

1. Compatible stem taper and volume ratio equations. *Forest Science* 30(4): 977–990 (with E. J. Green). 1984.
2. Complex compatible taper and volume estimation systems for red and loblolly pine. *Forest Science* 32(2): 423–443 (with J. C. Byrne). 1986.
3. Leaf area and foliar biomass relationships in northern hardwood forests located along an 800 km acid deposition gradient. *Forest Science* 37(4): 1041–1059 (with A. J. Burton and K. S. Pregitzer). 1991.
4. Using GIS to estimate forest resource changes: A case study in northern Michigan. *J. of Forestry* 90(12): 22–26 (with A. L. Maclean, G. D. Mroz, G. W. Lyon and T. Edison). 1992.
5. *Resource Assessment in Forested Landscapes*. John Wiley & Sons. 386 p. (with G. D. Mroz). 1997.
6. *Modelling Forest Systems*. A. Amaro, D. Reed and P. Soares, eds., CABI Publishing, Oxford. xii, 401 p. (Papers from a workshop held in Sesimbra, Portugal, June 2–5, 2002). 2003.

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2. Reed D. D. Personal communications (January 2019) at ddreed@mtu.edu



VERTESSY, Robert (Rob) Alexander

Robert Alexander Vertessy received the IUFRO Scientific Achievement Award in 2000 for scientific contributions in the field of deterministic modelling of forest catchment hydrologic processes and in the area of hydrologic field measurement techniques (IUFRO 2000, p. 181).

Robert Vertessy was born on 29 April 1961 in Victoria, Australia. He obtained his B.A. (Hons.) in Physical Geography from Monash University in Melbourne (1983), and Ph.D. in Fluvial Geomorphology from the Australian National University (ANU) in Canberra (1990). He joined CSIRO as a Research Scientist (1987) and progressed to Director of the CRC Centre for Catchment Hydrology (2002–2004) and Chief of CSIRO’s Land and Water Division (2004–2007). He was seconded from CSIRO to the Department of the Prime Minister & Cabinet (2006–2007) as a team member to design the National Plan for Water Security, and then to the Bureau of Meteorology (BoM) in Canberra as Chief Hydrologist (2007–2008). He served as the BoM’s Deputy Director for Climate and Water (2008–2011), Acting Director (2011), and Director and CEO from 2012 until his retirement from the governmental position in 2016. During his time as Director of Meteorology, he served as Australia’s Representative to the World Meteorological Organization. In January 2017, he took up a part-time role of Enterprise Professor (Water Resources) at the School of Engineering, University of Melbourne. In 2013, Professor Vertessy was elected a Fellow of the Australian Academy of Technological Sciences and Engineering, where he chairs its water forum.

Professor Vertessy’s research interests are in forest and watershed hydrology, distributed catchment modelling, water information, water resources management, water resource assessment and the impacts of climate change on water security. He authored and co-authored more than 120 scientific papers, book chapters, books, and reports as well as presentations at various national and international meetings, conferences and symposia. He is the founder and Principal of Global Change Advisory, a consultancy focused on environmental intelligence, providing advice to governments in Australia and abroad on matters related to water management, water information, water policy, water security and climate change. He is an active participant in the Australian Water Partnership, and has represented them recently on missions to India, Pakistan, Jordan, Iran, Thailand, Laos and Cambodia. In November 2018, he was appointed as Chair of the Murray-Darling Basin Authority Advisory Committee on Social, Economic and Environmental Sciences. In January 2019, the Australian Government appointed him to lead an independent scientific assessment into the causes of mass fish deaths in the lower Darling River, in NSW, Australia.

Selected research sources:

1. Long term growth and water balance predictions for a mountain ash (*E. regnans*) forest subject to clearfelling and regeneration. *Tree Physiology* 16: 221–232 (with T. J. Hatton, R. J. Benyon, and W. R. Dawes). 1996.
2. Estimating stand water use of large mountain ash trees and validation of the sap flow measurement technique. *Tree Physiology* 17(12): 747–756 (with T. J. Hatton, P. Reece, S. K. O’Sullivan, and R. G. Benyon). 1997.
3. Factors determining relations between stand age and catchment water yield in mountain ash forests. *Forest Ecology and Management* 143(1–3): 13–26 (with F. G. R. Watson, and S. K. O’Sullivan). 2001.
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Personal sources:

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2. LinkedIn profile at <https://www.linkedin.com/in/robvertessy/>
3. Vertessy R. A. Personal communications (January 2019) at robert.vertessy@unimelb.edu.au



WINGFIELD, Michael (Mike) John

Michael John Wingfield received the IUFRO Scientific Achievement Award in 2000 for his research achievements in the field of plant pathology and the establishment of the Tree Protection Cooperative Programme (IUFRO 2000).

Mike Wingfield was born on 21 April 1954 in Warner Beach near Scottburgh, KwaZulu-Natal, South Africa. He earned a B.Sc. in Botany and Plant Pathology (1976) and a B.Sc. (Hons. *cum laude*) in Plant Pathology from the University of Natal (1977), followed by an M.Sc. (*cum laude*) in Plant Pathology from the University of Stellenbosch (1979), and a Ph.D. in Plant Pathology from the University of Minnesota, USA (1983). He completed the Harvard Business School, Advanced Management Programme (2008).

Dr. Wingfield began his career with the Department of Agriculture of South Africa (1978–1988) and then moved to the University of the Free State (1988–1998) where he established the Tree Protection Cooperative Programme. He moved with his research team of 56 people to the University of Pretoria in 1998 as Professor to establish the Forestry and Agricultural Biotechnology Institute (FABI). As a professor and member of Senate at the University of Pretoria he served as Director of FABI, the Tree Protection Cooperative Programme (since 1990) and Director of the Centre of Excellence in Tree Health Biotechnology (since 2004). He stepped down from these positions in 2018 to assume a role as advisor to the Executive of the University of Pretoria.

Dr. Wingfield's primary interest is in tree health, especially in the impact and global movement of insect pests and pathogens mainly, but not exclusively in the tropics and Southern Hemisphere. He has been actively involved in various IUFRO activities for more than 30 years, starting from coordinator of a IUFRO unit to Vice President (2006–2010) and President of the Union (since 2014). He is a fellow of many scientific societies, member of editorial boards of leading scientific journals as well as of various advisory and research committees at different organizations, associations and societies.

As a leading scientist and academic, Mike Wingfield provides consultancy on various issues to many forest and industrial companies worldwide. He has been the adviser to more than 100 Doctoral and Post-Doctoral students. For more than 30 years he has worked and published widely in the area of tree health and his publications include more than 1000 research papers, 10 books and numerous invited presentations globally. He has received many national and international awards for his contributions to forest research, education, administration and international development. Among others, these include the Kwame Nkrumah Scientific Award from the African Union (2013) which is the highest honour paid to an African scientist and Honorary Doctoral degrees from the University of British Columbia (Canada) in 2013 and North Carolina State University (USA) in 2014.

Selected research sources:

1. *Ceratocystis and Ophiostoma. Biology, Taxonomy and Ecology*. Wingfield, M. J., K. A. Seifert and J. F. Webber, eds. Amer. Phytopathological Society Press, St. Paul, Minnesota, USA, ix, 293 p. 1993.
2. *The Sirex Woodwasp and its Fungal Symbiont: Research and Management of a Worldwide Invasive Pest*. B. Slippers, P. de Groot and M. J. Wingfield, eds. Dordrecht; New York: Springer. xii, 301 p. 2011.
3. Planted forest health: The need for a global strategy. *Science* 349: 832–836 (with E. G. Brockerhoff, B. D. Wingfield and B. Slippers). 2015.

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2. Prof. Mike Wingfield. Biography. Unpublished. 209 p. 2017. <http://www.fabinet.up.ac.za/mwingfield>
3. Wingfield M. J. Personal communications (January 2019) at mike.wingfield@fabi.up.ac.za



YEH, Francis Cho-Hao

Francis Cho-Hao Yeh received the IUFRO Scientific Achievement Award in 2000 for pioneering achievements in the field of molecular, population and quantitative genetics of forest trees (IUFRO 2000).

Francis Yeh was born on 20 December 1945 in Wuhan, China. He earned his B.Sc. in Animal Science (1970) and a Ph.D. in Genetics (1974), both at the University of Calgary. In 1975, he began his career as Technical Advisor to the Research Branch, BC Ministry of Forests and an Adjunct Professor at the University of Alberta (1981). He was then appointed Professor of Forest Genetics & Biotechnology at the University of Alberta (1986), and was later named as Professor Emeritus of Renewable Resources (2015). He also served as Associate Dean for Research, Faculty of Agricultural Life and Environmental

Sciences (2000–2006).

Dr. Yeh's major research interests are in the areas of comparative genomics at the population level, evolutionary, ecological, quantitative, population, and conservation genetics, biosystematics, tree improvement, biotechnology, and forest conservation. He has authored and co-authored 158 scientific papers, book chapters, books and reports as well as presentations at national and international conferences and symposia. He led the group of scientists developing POPGENE, user-friendly shareware for population genetic analysis (1997).

Dr. Yeh has actively participated in IUFRO RG 2.04.00 Genetics. He was Chair of the Forest Genetics Resources Task Force (1997–1999); Co-Chair of Scientific Program-Genetic Conservation, IUFRO all Division 2 Conference (Beijing 1998); Chair of IUFRO Conference on Forest Diversity and Adaptation (Vancouver 1996) and Leader, IUFRO Working Party in Population, Ecological and Conservation Genetics (1992–2002). As a Chair of the IUFRO Task Force on Gene Resources, he was invited to the FAO/IUFRO International Expert Task Force on Management and Conservation of Forest Gene Resources (1998–1999). He has also been consultant to governments, academic institutions and industries in a number of countries. Dr. Yeh was elected Chair of the NSERC North American Quantitative Forest Genetics Group (1979), Industry–University Research Chair (1987) and was named McCalla Research Professor (1999) and Honorary Professor of Nanjing Forestry University (1989) and the Chinese Academy of Forestry (2004).

Selected research sources:

1. The organization of genetic variability in central and marginal populations of lodgepole pine *Pinus contorta* spp. *latifolia*. *Can. J. Genet. Cytol.* 21: 487–503 (with C. Layton). 1979.
2. Population differentiation in lodgepole pine, *Pinus contorta* spp. *latifolia*: a discriminant analysis of allozyme variation. *Can. J. Genet. Cytol.* 27: 210–218 (with W. M. Cheliak, B. P. Dancik, K. Illingworth, D. C. Trust and B. A. Pryhitka). 1985.
3. Isozyme variation of *Thuja plicata* in British Columbia. *Biochem Syst & Ecology* 16: 373–377. 1988.
4. *POPGENE, the user-friendly shareware for population genetic analysis*. Molecular Biol. and Biotech. Centre, University of Alberta, Canada (with R.-C. Yang, T. B. J. Boyle, Z.-H. Ye and J. X. Mao). 1997.
5. Postglacial colonization and population genetic relationships in the *Pinus contorta* complex. *Can J. Bot.* 84: 223–234 (with A. Fazekas). 2006.
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2. Yeh F. C.-H. Personal communications (February 2019) at francis.yeh@ualberta.ca

2005 (BRISBANE, AUSTRALIA)

The IUFRO Honours and Awards Committee was chaired by Dr. Karel Vančura (Czech Republic) and consisted of Drs. Gordon Miller (Canada), Zohra Bennadji (Uruguay), Björn Hanell (Sweden), Rahim Nik (Malaysia), Margarida Tomé (Portugal), and *ex officio* IUFRO President Risto Seppälä and IUFRO Executive Secretary Heinrich Schmutzenhofer (2001–2003) and then Executive Director Peter Mayer. They selected 10 winners from 15 nominations.

During the Opening Ceremony of the XXII IUFRO World Congress on Monday, 8 August 2005, announced by the Chair of the Committee, IUFRO Vice-President Eric Teissier du Cross assisted by Peter Mayer presented the IUFRO Scientific Achievements Awards to the following scientists (IUFRO News 2005):

Joseph BUONGIORNO⁴⁰	USA
Shashi KANT	Canada
David KARNOSKY	USA
Victor LIEFFERS	Canada
P. K. NAIR	USA
David PETERSON⁴⁰	USA
Rémy PETIT⁴⁰	France
John R. SPENCE	Canada
John TURNER	Australia
S. Y. Tony ZHANG⁴⁰	Canada



From left to right: K. Vancura, *James Turner* (for J. Buongiorno), S. Kant, D. Karnosky, V. Lieffers, P. K. Nair, E. Teissier du Cross, P. Mayer, *Morris Johnson* (for D. Peterson), *Antoine Kremer* (for R. Petit), J. R. Spence, J. Turner, and *Ian de la Roche* (for S. Y. Tony Zhang) (Photo: V. Teplyakov).

⁴⁰ Prof. J. Buongiorno, Dr. D. Peterson, Dr. R. Petit, and Dr. S. Y. Tony Zhang were unable to attend the Congress and their colleagues accepted the awards on their behalf.



BUONGIORNO, Joseph

Joseph Buongiorno received the IUFRO Scientific Achievement Award in 2005 for his contribution to the study of international forest product markets, and to the management of mixed-species uneven-aged forests (IUFRO 2005, p.2).

Joseph Buongiorno was born on 15 January 1944 in Golfech, France. He finished his *Baccalauréat* in Mathematics (1962) at the Lycée Pierre de Fermat in Toulouse and obtained his *Diplôme d'ingénieur* in Wood Products (1967) from the École Supérieure du Bois in Paris. He then moved to the USA, where earned his M.Sc. in Forestry Economics (1969) from the College of Environmental Science and Forestry, SUNY, Syracuse, and a Ph.D. in Resources Science (1972) from the University of California, Berkeley.

He gained his research experience working as Research Assistant (1967–1971) and Forestry Officer at UN FAO in Rome (1971–1975). He then spent the bulk of his career at the University of Wisconsin-Madison (UW-M) starting as Assistant Professor (1975) and progressing to Associate Professor (1978), Professor (1982–2000) and John N. McGovern WARF Professor (since 2000) and Class of 1933 Bascom Professor (since 2004) at the UW-M's Department of Forest and Wildlife Ecology. He has also taught and researched in Italy (1981–1982), Austria (1983), and France (1993).

During his 35-year of teaching (1975–2009), Professor Buongiorno trained thousands of students, including 69 Ph.D. and M.Sc. as well as advising of 16 visiting scholars from North (USA) and South (Brazil) Americas, Europe (Finland, France, Germany, Greece, Italy, Norway, and Spain), Asia (PRC, Indonesia, Iran, Korea Rep., Japan, and Turkey), Australasia (New Zealand). With colleagues, he developed multiple decision-support computer models, including the internationally used Global Forest Products Model (GFPM) for forecasting and policy analysis. He has served as short-term consultant for many projects elaborated in different countries by the UN FAO, ITTO, the World Bank, Seneca Associates LLC, and Scion.

Professor Buongiorno is a member of many national and international societies, including SAF (1975), American Economic Association (1975), French Academy of Agriculture (2004), IAWS (2008) and others. For many years, he served on the Boards of various scientific journals, e.g., *Forest Science*, *Scandinavian Journal of Forest Research*, *Journal of Forest Economics*, *Bois et Forêts des Tropiques*, *New Forests*, and others. He has published 181 peer-reviewed papers, 11 books, 28 chapters in books and 79 chapters in proceedings, and about 110 reports for 50 international and 100 national projects.

Professor Buongiorno is a recipient of the first SAF' Science Award (1998), the Hardwood Research Council National Award (1989), the UW-M's Hilldale Award (1990), Japanese Government Research Award (2001), Doctor *honoris causa* of the Swedish University of Agricultural Sciences (2005) and the Norwegian University of Life Sciences (2009) to name just a few. His teaching has been distinguished by the John W. Jung Award of Excellence in Teaching (1982) and the first SAF's Carl Schenk Award (1988).

Selected research sources:

1. *Forest Management and Economics: A Primer in Quantitative Methods* (Biological Resource Management). Macmillan USA, 320 p. (with J. K. Gilless). 1987.
2. *Decision Methods for Forest Resource Management*. Academic Press, 439 p. (with J. K. Gilless). 2003.
3. *The Global Forest Products Model: Structure, Estimation, Applications*. Academic Press, 300 p. (with S. Zhu, D. Zhang, J. Turner and D. Tomberlin). 2003.

Personal sources:

1. URL: <http://labs.russell.wisc.edu/buongiorno/> Retrieved 24.01.2019.
2. Buongiorno J. Personal communications (January 2019) at jbuongio@wisc.edu



KANT, Shashi

Shashi Kant received the IUFRO Scientific Achievement Award in 2005 for his research on choices in non-market situations; institutional and evolutionary aspects, social production process, forestry organizations, public participation, aboriginal issues, international trade, game theoretic and agent-based models, economics of uneven-aged forests, tropical deforestation, and co-management (IUFRO News 2005).

Shashi Kant was born in Ahrola Noabad, Uttar Pradesh, India. In India he earned a Bachelor of Engineering (Hons) at Birla Institute of Technology and Science (1978), Pilani, Post Graduate Diploma in Forest Science at State Forest Service College, Coimbatore (1982), Post Graduate Diploma in Remote Sensing at Indian Institute of Remote Sensing, Dehradun (1986), Diploma in Management at AIMA, New Delhi (1992). He then obtained his M.A. in Economics (1995) and Ph.D. in Forest Economics (1996) from the University of Toronto (UT), Canada. In India, he worked as a professional forester for ten years and Assistant Professor (1988–1992) at Indian Institute of Forest Management in Bhopal. In Canada, he was appointed, Assistant Professor (1997–2002) and Professor of Forest Resource Economics & Management at the UT Faculty of Forestry since 2008.

Dr. Kant has been a chair, vice-chair and member of numerous research, education and administration boards and committees in India, Canada and internationally. Since 2012, he has been Director, Master of Science in Sustainability Management Program, Institute for Management and Innovation, University of Toronto Mississauga. He has studied forest resources co-management and SFM, the international trade in forest products, and preferences of Aboriginal peoples, working in Canada, China, India, and Vietnam and serving as a consultant to FAO, SIDA, UNEP, INBAR and many others. He is affiliated with numerous Canadian and international professional associations and societies. Since 2001, he has served IUFRO units 4.04.02 and 9.04.00, as well as a chair and co-chair of many sessions, and a member of committees for several IUFRO World Congresses.

He is Editor-in-Chief of the book series “Sustainability, Economics, and Natural Resources” published by Springer. He has edited and co-edited many books and proceedings and serves as reviewer for many scientific journals. He has authored and co-authored more than 200 refereed and non-refereed papers, book chapters, reports and presentations. Professor Kant has received many awards, including the Premier’s Research Excellence Award by the Premier of Ontario, Canada (2004), Canadian Forestry Scientific Achievement Award (CIF, 2007), the Queen’s Award for Forestry (2008), International Students Excellence Award (2012), and the Order of Ontario (2018), to name just a few. He was named Honorary Professor, Nanjing Forestry University, PRC (2011).

Selected research sources:

1. *Institutions, Sustainability, and Natural Resources: Institutions for Sustainable Forest Management*. Kant, S., and R. A. Berry, eds. Dordrecht: Springer, 361 p. 2005.
2. *Economics, Sustainability, and Natural Resources: Economics of Sustainable Forest Management*. Kant, S., and R. A. Berry, eds. Dordrecht: Springer, 272 p. 2005.
3. *Post-Faustmann Forest Resource Economics*. Kant, S., ed. Dordrecht: Springer, 293 p. 2013.
4. *Handbook of Forest Resource Economics*. Kant, S. and J. Alavalapati, eds. Earthscan from Routledge, New York, 560 p. 2014.

Personal sources:

1. URL: <https://www.utm.utoronto.ca/mscsm/dr-shashi-kant-publications> Retrieved 24.01.2019.
2. Kant S. Personal communications (January 2019) at shashi.kant@utoronto.ca



KARNOSKY, David Frank

David Frank Karnosky received the IUFRO Scientific Achievement Award in 2005 for his ground-breaking studies of pollution-induced population changes and for his pioneering work on genetic engineering of larch (IUFRO 2005, p.2).

David Karnosky was born on 12 October 1949 in Rhinelander, Oneida County, Wisconsin, USA. He graduated from Rhinelander High School (1967) and then obtained his B.Sc. in Forestry (1971), M.Sc. (1972) and Ph.D. (1975) in Forest Genetics, all from the University of Wisconsin-Madison. In 1975, Dr. Karnosky became Director of the Institute of Urban Horticulture at the New York Botanical Garden and Forest Geneticist at the Garden's Cary Arboretum.

In 1983, Dr. Karnosky moved to *Michigan Technological University* (MTU), where he became Professor of Forest Genetics and Biotechnology, and accepted an appointment as the Robbins Chair in Sustainable Management of the Environment. He was the Director of MTU's Ecosystem Science Center and Director of the Aspen FACE (Free-Air Carbon Dioxide Enrichment) Experiment. Dr. Karnosky combined teaching with research. His research interests were in the areas of genetic aspects of air pollution and climate change, improving forest productivity in northern regions, and gene isolation and transfer in forest trees. His research involved colleagues from Europe, Asia, and Africa. An internationally recognized leader in forest genetics and global change, he published over 300 peer-reviewed papers and four edited books.

Professor Karnosky held various offices in IUFRO between 1987 and 2008. He was Coordinator of Division 7 (Forest Health) and Executive Board member (1996–2000), and then functioned as Coordinator of WP 7.01.04. He also served as a member of the IUFRO-led Expert Panel on Adaptation of Forests to Climate Change. Besides the SAA, he received the MTU Research Award (1993) and was elected as an Honorary Doctor of the University of Tartu, Estonia (2006).

Professor Karnosky died on 24 October 2008 at his home in Chassell, Michigan. Just before his death, he had co-authored two chapters for the IUFRO book that became dedicated in his memory. A Karnosky Memorial Fund was established to build an arboretum at MTU's School of Forest Resources and Environmental Science. In 2009, the Aspen FACE field laboratory near Rhinelander, was named the David F. Karnosky Laboratory.

Selected research sources:

1. *Improving the Quality of Urban Life with Plants: Proceedings of the June 21–23, 1983 International Symposium on Urban Horticulture*. D. F. Karnosky and S. L. Karnosky, eds. Millbrook, NY: New York Botanical Garden, (Institute of Urban Horticulture, no. 2). 200 p. 1985.
2. *The impact of carbon dioxide and other greenhouse gases on forest ecosystems: report no. 3 of the IUFRO Task Force on Environmental Change*. D. Karnosky, R. Ceulemans, G. Scarascia-Mugnozza, and J.L. Innes, eds. Wallingford, Oxon, UK; New York: CABI Pub., in association with the IUFRO, IUFRO research series, 8, 352 p. 2001.
3. *Air Pollution, Global Change and Forests in the New Millennium*. Vol. 3. Karnosky, D. F., K. E. Percy, A. H. Chappelka, C. Simpson, and J. M. Pikkarainen, eds. Elsevier Press, Amsterdam, 492 p. 2003.
4. *The Global Assessment Report*. Seppälä, R.; Buck, A.; Katila, P, eds. IUFRO World Series, vol. 22. Helsinki: IUFRO, 224 p. 2009.

Personal sources:

1. King J. S., Percy K. E., Matyssek R. Dedication to Dr. David F. Karnosky. *Environ. Pollut.* 158(4): 953–954. 2010.
2. King J. S. Personal communications (January 2019) at john_king@ncsu.edu



LIEFFERS, Victor James

Victor James Lieffers received the IUFRO Scientific Achievement Award in 2005 for his outstanding research on ecological management of boreal mixedwoods, competitive dynamics, clonal regeneration of hardwoods, light transmission in forests, hydraulic architecture of forest trees in relation to silviculture, and understanding crown shyness in maturing conifer stands (IUFRO News 2005).

Victor Lieffers was born on 28 November 1951 in Cudworth, Saskatchewan, Canada. He obtained his B.Sc. (Hons) in Biology (1974) from the University of Saskatchewan in Saskatoon and his Ph.D. in Botany (1981) from the University of Manitoba in Winnipeg, Canada. He then spent most of his professional career in forest research and education at the University of Alberta in Edmonton. Starting as a Postdoctoral fellow (1981–1983), he progressed from Assistant Professor of Forest Ecology (1983–1988) to Associate Professor (1988–1993), and to Professor of Silviculture and Forest Ecology at the Department of Renewable Resources (since 1993).

His research interests are in the field of boreal and mixedwood forests dynamics and using this knowledge to improve forest management, as well as topics related to tree recruitment, competitive relations and ecophysiology of trees, shrubs and herbs. Roots systems adaptation to cold soils, photosynthesis in low light, light transmission through mixed canopies, natural reproduction of spruce and aspen, and development of regeneration standards for public lands are also research interests. He was Chief Editor of the *Canadian Journal of Forest Research* and member of the Editorial Boards of the *Canadian Journal of Botany*, *the Forestry Chronicle* and *Tree Physiology*. He has authored and co-authored more than 200 refereed publications and supervised more than 70 graduate student and PDFs.

Dr. Lieffers has linked his scientific expertise with forestry practice. He was an NSERC Industrial Research Chair (1985–1995) and Department Chair of Renewable Resources (2011–2016) for the University of Alberta, and Board Member of Foothills Research Institute (2011–2016). He was Deputy Coordinator of IUFRO unit 1.01.01 Boreal forest silviculture and management (2014–2018). In addition to the SAA, Professor Lieffers has received the Tree of Life Award (2010) from the Canadian Institute of Forestry. He is the recipient of Killam Professorship (1999), Faculty of Agricultural, Life & Environmental Sciences' Teacher of the Year Award (2007, 2006 and 2001), Ed and Peggy Tyrchniewicz Award for Innovation in Teaching (2002), and Certificate of Reviewing Excellence in Forest Ecology and Management (2014).

Selected research sources:

1. Growth of understory *Picea glauca*, *Calamagrostis canadensis*, and *Epilobium angustifolium* in relation to overstory light transmission. *Can. J. For. Res.* 24 (6): 1193–1198 (with K. J. Stadt). 1994.
2. Predicting and managing light in the understory of boreal forests. *Can. J. For. Res.* 29(6): 796–811 (with C. Messier, K. J. Stadt, F. Gendron and P. G. Comeau). 1999.
3. Preventing crown collisions increases the crown cover and leaf area of maturing lodgepole pine. *J. Ecol.* 94: 681–686 (with S. X. Meng, M. Rudnicki, D. E. B. Reid, and U. Silins). 2006.
4. Defoliation increases risk of carbon starvation in root systems of mature aspen. *Trees – Structure and Function* 26: 653–661 (with S. M. Landhäusser). 2012.
5. Natural regeneration of forest vegetation on seismic lines in boreal habitats. *Biological Conservation* 184: 127–135 (with C. Van Rensen, S. Nielsen, B. White, and T. Vinge). 2015.

Personal sources:

1. URL: https://prabook.com/web/victor_james.lieffers/3442570 Retrieved 22.01.2019.
2. Lieffers V. J. Personal communications (January 2019) at victor.lieffers@ualberta.ca



NAIR, P. K. Ramachandran

P. K. Ramachandran Nair received the IUFRO Scientific Achievement Award in 2005 for his pioneering research in agroforestry (IUFRO 2005).

Ramachandran Nair was born on 12 March 1942 in Kerala, India. He earned his B.Sc. (1961) and M.Sc. (1968) in Agriculture at Kerala Agricultural University while working as a Research Assistant/Lecturer (1961–1968) there. He then obtained his Ph.D. (1971) in Agronomy and Soil Science from Pantnagar Agricultural University, and D.Sc. (1978) in Tropical Land Use and Soil Science from *Georg-August-Universität Göttingen*, Germany, while being a Senior Humboldt Fellow (1976–1978) there. In 1971–1972, he was a Post-Doctoral Fellow in Soil Chemistry at Rothamsted Experiment Station, Herts,

U.K. Later he worked as Agronomist (Soils) at the Central Plantation Crops Research Institute of the Indian Council of Agricultural Research (ICAR–CPCRI) in Kasaragod (1972–1976), Kerala, where he developed the multi-storeyed cropping systems with tree crops.

During 1978–1987, Dr. Nair worked in Nairobi, Kenya where he was International Core Scientist and a founding member of the International Centre for Research in Agroforestry (ICRAF, World Agroforestry Centre, CGIAR – formerly the Consultative Group for International Agricultural Research). He moved to the USA and joined the University of Florida (UF) in Gainesville as a Professor (1987–2001), and Distinguished Professor (since 2001). He established the Agroforestry Program and the UF Center for Subtropical Agroforestry, of which he was the Director (2001–2011). He was Visiting Professor at the Environment and Policy Institute, Honolulu, USA (1984) and Distinguished Visiting Professor at Kyoto University, Japan (2000). Dr. Nair was an initiator and the chair of the Organizing Committee for the first World Congress of Agroforestry held in Florida, USA (2004), and was actively involved in the consecutive ones held in Nairobi, Kenya (2009) and New Delhi, India (2014). At the University of Florida, he graduated 30 Ph.D. students; two of them receiving ODRAs at IUFRO World Congresses in 2000 and 2005.

Dr. Nair has travelled extensively in developing countries and provided a wide spectrum of consulting services for many national and international organizations in agriculture, forestry and various industries, including seven UN agencies. He has published extensively in the international scientific and technical media. He has authored and co-authored 5 and edited 12 books, more than 200 journal articles and 75 book chapters. He was a founding member (1982) and Editor-in-Chief (1994–2005) of *Agroforestry Systems* and is the Book Series Editor for *Advances in Agroforestry* by Springer (since 2004), Chief Editor of the Section Agroecology and Land-Use Systems, *Frontiers in Environmental Science* (since 2013–2018) and a member of the board of several other scientific journals.

Professor Nair was awarded the Humboldt Prize, the highest academic honour of Germany (2006). He is a Fellow of the American Association for the Advancement of Science, American Society of Agronomy, Crop Science Society of America, Soil Science Society of America, National Academy of Agricultural Sciences (India), World Innovation Foundation (U.K.) and many others. He has received four Doctor *honoris causa* degrees (Japan, Ghana, Canada, Spain) and numerous other honours, e.g., various awards in agronomy and soil science, Fulbright Program, SAF's Barrington Moore Award (2004) and Outstanding Research Award (2014), Mahatma Gandhi Medal for Global Achievers (2013), and many University of Florida recognitions.

Selected research sources:

1. *Agroforestry Species – A Crop Sheets Manual*. ICRAF 003e, ICRAF, Nairobi, 336 p. 1980.
2. *Agroforestry Systems in the Tropics*. P. K. Nair, ed. Dordrecht, The Netherlands, Kluwer, 664 p. 1989.
3. *An Introduction to Agroforestry*. Kluwer Academic Publishers, XIV, 499 p. 1993. (Also in Japanese, 1996; Spanish, 1997; and Thai, 2002, languages).

Personal sources:

1. URL: <http://sfrc.ufl.edu/people/faculty/nair/> Retrieved 25.01.2019
2. Nair P. K. R. Personal communications (January 2019) at pknair@ufl.edu



PETERSON, David (Dave) Lawrence

David Lawrence Peterson received the IUFRO Scientific Achievement Award in 2005 for his research on fire ecology, mountain ecology, and climate change (IUFRO News 2005).

David Peterson was born on 17 February 1954 in Harvey, Illinois, USA. He earned all his degrees at the University of Illinois: B.Sc. in Zoology (1976), M.Sc. in Botany (1977), and Ph.D. in Forest Ecology (1980). He began his research career as a Research Ecologist and a Leader of the research unit at the U.S. Forest Service Pacific Southwest Research Station, Riverside, California (1981–1989) and continued as a Research Biologist and Field Station Leader of National Park Service and U.S. Geological Survey research units in Seattle, Washington (1989–2001).

Dr. Peterson returned to the Forest Service as a Research Biologist and Team Leader of the Fire and Environmental Research Applications team at the Pacific Northwest Research Station (2001–2013), advancing to Senior Research Biologist (2014) and Emeritus Senior Research Biologist (since 2018) with the Climate Science Applications Team. In 1989, Dr. Peterson began his 30-year career as a Professor in the College of Forest Resources (now School of Environmental and Forest Sciences) at the University of Washington, directing the Fire and Mountain Ecology laboratory where he mentored 31 graduate students.

Dr. Peterson has published 230 scientific articles and 4 books on climate change, fire ecology, subalpine forest ecology, resource management on public lands, and ecological scale applications. As co-founder and principal investigator for the Western Mountain Initiative, a scientific consortium focused on climate-change effects in mountain ecosystems, and as a contributing author for the IPCC, he was a co-recipient of the Nobel Peace Prize in 2007. He was a leader in assessing the effects of climate change on forests for the 2014 and 2018 U.S. National Climate Assessments.

Dr. Peterson is active in national and international projects and events on climate change, fire effects in forests, and natural resource management. For his contribution to forest research and education he received the Distinguished Science Award (2014), the highest honour for research in the U.S. Forest Service, and Honorary Life Membership in the Northwest Scientific Association (1998) for his leadership in research in the Pacific Northwest, USA. He and his wife live on a certified Tree Farm where they have restored native forest habitat and grow fruits, vegetables, flowers, bonsai, and epiphytic cacti.

Selected research sources:

1. *Human Ecology and Climate Change: Human Ecology and Climate Change*. Peterson, D. L. and Johnson D. R., eds. Taylor & Francis, 192 p. 1995.
2. *Ecological Scale: Theory and Applications*. Peterson, D. L. and V. T. Parker, eds. Columbia University Press, New York, NY, 608 p. 1998.
3. *Climate Change and United States Forests*. Peterson D. L., J. M. Vose and T. Patel-Weynand, eds. Springer Netherlands, xxxii, 261 p. (Advances in Global Change Research, 57). 2014.
4. *Climate Change and Rocky Mountain Ecosystems*. Halofsky, J. E. and D.L. Peterson, eds. Springer, Switzerland, xvii, 236 p. (Advances in Global Change Research, 63). 2018.

Personal sources:

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2. Peterson D. L. Personal communications (January 2019) at wild@uw.edu



PETIT, Rémy Jacques

Rémy Jacques Petit received the IUFRO Scientific Achievement Award in 2005 for his contribution to forest trees evolutionary biology and tree phylogeographic and palaeogenetic studies (IUFRO 2005).

Rémy Petit was born on 7 July 1962 in Lille, France. He completed his undergraduate education at University of Lille I and Paris XI, obtained an M.Sc. in Plant Genetics & Breeding (1988) from the University of Paris XI and a Ph.D. in Life Sciences (1992) from the same university while being a Visiting Scientist at the University of Kentucky, Lexington, USA (1989–1990).

In 1985–1987, he served as assistant in botany and plant ecology in French Southern Territories (Crozet Archipelago) and at the University of Rennes I. In 1993–2001, he worked as an Associate Researcher at INRA Forest Research Centre in Cestas, while spending a year as Invited Researcher at the Institute for Forest Genetics and Forest Tree Breeding, Grosshansdorf, Germany (1999–2000). He then served as Director of Research at INRA, Cestas (2001–2007), Head of the Laboratory of Genetics of UMR BIOGECO (2007–2010), Head of the Genome-Transcriptome Facility of the Functional Genomics Centre of Bordeaux (2008–2012) and Director of the UMR BIOGECO Research Unit (2011–2018).

Dr. Petit has a wide range of interests in molecular ecology, phylogeography, forest history, palaeogenetics, speciation and the conservation biology of trees. He has developed widely used molecular markers and methods of diversity analysis for population genetic surveys. He is co-inventor of a method to trace the geographic origin of wood. His work also resulted in the first confirmed retrieval of DNA from dry wood, including in ancient samples, and has helped clarify the dynamics of introgression between hybridizing species as well as the extent of past translocations of tree populations. Dr. Petit gives lectures at the University of Bordeaux, and he was an Invited Professor at the Free University of Brussels, Belgium (2002).

Dr. Petit has been associate editor for *Conservation Genetics* (2002–2006) and for *Molecular Ecology* (2003–2016) as well as a referee for over 20 journals. He authored and co-authored more than 120 scientific papers in peer-reviewed journals, 14 book chapters and 2 patents. The French National Academy of Agriculture awarded him with the Ruby Medal (1998). Thomson Reuters listed him among the highly cited researchers in environment and ecology (2014–2016).

Selected research sources:

1. Identifying populations for conservation on the basis of genetic markers. *Conservation Biology* 12(4): 844–855 (with A. El Mousadik and O. Pons). 1998.
2. Conserving biodiversity under climate change: the rear edge matters. *Ecology Letters* 8(5): 461–467 (with A. Hampe). 2005.
3. Forests of the past: A window to future changes. *Science* 320: 1450–1452 (with F. S. Hu and C. W. Dick). 2008.
4. Paleoecology meets genetics: Deciphering past vegetational dynamics. *Frontiers in Ecology and Environment* 7: 371–379 (with F. S. Hu and A. Hampe). 2009.
5. Gene flow and species delimitation. *Trends in Ecology & Evolution* 24: 386–393 (with L. Excoffier). 2009.

Personal sources:

1. URL: https://www6.bordeaux-aquitaine.inra.fr/biogeco_eng/Staff/Staff-directory/M-P/Petit-Remy
Retrieved 25.01.2019.
2. Petit R. J. Personal communications (February 2019) at remy.petit@inra.fr



SPENCE, John Richard

John Richard Spence received the IUFRO Scientific Achievement Award in 2005 for his achievements in entomology, population and conservation biology, forest ecology, forest pest management and biological control (IUFRO News 2005).

John Spence was born 5 November 1948 in Warren, PA, USA. He earned his B.Sc. (1970) in Biology at Washington and Jefferson College, his M.Sc. (1974) in Zoology at the University of Vermont, USA, and his Ph.D. (1979) in Zoology at the University of British Columbia, Canada. His entire professional career was based at the University of Alberta in Edmonton. In 1980, he was appointed Assistant Professor of Entomology and became Professor of Entomology in 1990. He was transferred to the Department of Zoology (1994) and then moved to the Department of Renewable Resources (2001–2017) where he served as Chair (2001–2011). He retired in 2017 and is now Professor Emeritus. He was a visiting academic at the University of Oxford (1986–1987), Michigan State University (1996–1997), and Sun Yat-Sen University (2012–2013).

His interests include population biology and community structure of arthropods, biological diversity, and forest ecology and pest management. Together with colleagues from the Canadian Forest Service, Professor Spence led the development of the Ecosystem Management by Emulating Natural Disturbance (EMEND) experiment to investigate downstream impacts of variable retention harvest in the boreal forest (1997–2017). He authored and co-authored more than 200 scientific papers, book chapters, and reports. He was a member of a number of professional societies, and served on many national and international review panels. He served as Deputy Editor for *Ecography* (2001–2006), and on the editorial boards for *Ecography* (1999–2018), *Agricultural and Forest Entomology* (1999–present) and *Canadian Journal of Zoology* (1991–1996), in addition to reviewing manuscripts for numerous scientific journals.

In addition to the SAA, Professor Spence has received the Canadian Institute of Forestry's Scientific Achievement Award (2003) and Tree of Life Award (2017), and has been elected to the Mexican Academy of Forestry (2004). He is also a Gold Medalist (2001) and Fellow (2018) of the Entomological Society of Canada and was elected to the Finnish Academy of Science and Letters (2002).

Selected research sources:

1. Effects of clear-cut harvesting on boreal ground-beetle assemblages (Coleoptera: Carabidae) in western Canada. *Conservation Biology* 7(3): 551–561 (with J. Niemelä and D. Langor). 1993.
2. Responses of natural enemies to experimentally increased populations of the forest tent caterpillar, *Malacosoma disstria* (Lepidoptera: Lasiocampidae). *Ecological Entomology* 22(1): 97–108 (with D. Parry and J. Volney). 1997.
3. Arthropod responses to harvesting and wildfire: implications for emulation of natural disturbance in forest management. *Biological Conservation* 128(3): 346–357 (with C. Buddle, D. Langor and G. Pohl). 2006.
4. Higher levels of variable retention required to maintain ground beetle biodiversity in boreal mixedwood forests. *Ecological Applications* 20 (3): 741–751 (with T. Work, J. Jacobs and J. Volney). 2010.
5. Fine-scale forest variability and biodiversity in the boreal mixedwood forest. *Ecography* 41(5): 753–769 (with J. Pinzon, L. Wu and F. He). 2018.

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2. Spence J. R. Personal communications (January 2019) at John.Spence@ualberta.ca



TURNER, John

John Turner received the IUFRO Scientific Achievement Award in 2005 for his outstanding research in nutrition, nutrient cycling and nutritional management in fast grown plantations and natural forests (IUFRO News 2005).

John Turner was born in May 1947 in Yorkshire, England. He obtained his B.Sc. in Forestry Science (1970) from the Australian National University (ANU) Canberra, and his Ph.D. in Forest Nutrient Cycling (1975) from the University of Washington, Seattle, WA. His thesis analyzed nutrient cycling changes in an age sequence of Douglas-fir tree stands and was sponsored by the International Biological Program.

He started his career as a forester with the Forestry Commission of New South Wales before becoming firstly a research scientist and then a Senior Research Scientist (1975–1986). He was promoted to Director of Research, NSW Forestry Commission (1986–1996), the Research Division at that time covering biology, chemistry, silviculture, wood properties and timber engineering. In 1996, he collaborated with Marcia Lambert in establishing Forsci Pty Ltd., a private forest research consultancy company, through which he continues to contribute to the forestry industry. He is a Member of the Institute of Foresters of Australia and of the British Ecological Society and in 2003, he was admitted as one of the first Registered Professional Foresters (RPF) by the Institute of Foresters of Australia. Dr. Turner was appointed Adjunct Professor (1998) of the School of Resource Science and Management at Southern Cross University (SCU) in Lismore, NSW.

His research work over his career has covered plantation and native forest nutrition, nutrient cycling, and management of forest soils, the focus being on Site Specific Management. He has undertaken research in various Australian States and abroad, addressing site selection for a range of species, nutrition and the impacts of management on nutrient cycling and productivity. Dr. Turner has published extensively in his field and has authored and co-authored over 280 scientific publications on soil evaluation, nutritional status, forest/site interactions, catchment management, monitoring water quality, fertilizer usage in forests, nutrient cycling, and management impacts. He continues to undertake research on site specific management.

Selected research sources:

1. *Commercial Forest Plantations on Saline Lands*. CSIRO Publishing, Collingwood, Vic., Australia, 216 p. (with M. J. Lambert). 2000.
2. Site variation in *Pinus radiata* plantation and implications for site specific management. *New Forests* 21: 249–282 (with M. J. Lambert, P. Hopmans and J. McGrath). 2001.
3. Long-term accumulation of nitrogen in soils of dry mixed eucalypt forest in the absence of fire. *Forest Ecology and Management* 256: 1133–1142 (with M. J. Lambert, V. Jurskis and H. Bi). 2008.
4. *Management of Victoria's publicly-owned native forests for wood production. A review of the science of public native forest management for sustainable timber production in Victoria*. FWPA Project No.: PRC 174-0809. Forest & Wood Products Australia, February, 216 p. (with D. W. Flinn, M. J. Lambert, K. Wareing and S. Murphy). 2011.
5. Analysing inter-rotational productivity and nutrition in a New South Wales radiata pine plantation. *New Forests* 44: 785–798 (with M. J. Lambert). 2013.
6. Pattern of carbon and nutrient cycling in a small *Eucalyptus* forest catchment, NSW. *Forest Ecology and Management* 372: 258–268 (with M. J. Lambert). 2016.

Personal sources:

1. Turner, John (1947–) <http://www.eoas.info/biogs/P005433b.htm> Retrieved 23.01.2019.
2. Turner J. Personal communications (January 2019) at john.forsci@gmail.com



ZHANG, Shu-Yin (Tony)

Shu-Yin Zhang received the IUFRO Scientific Achievement Award in 2005 for his research on the entire wood value chain from forest management to product recovery in order to achieve improved forest management and value-added wood utilization through an integrated approach (IUFRO News 2005).

Shu-Yin Zhang was born on 21 August 1962 in Jingxian, Anhui, China. He obtained his B.Sc. in Forest Science in 1983 and M.Sc. in Wood Technology in 1986 from Anhui Agricultural University and Ph.D. in Wood Science in 1992 from Leiden University, the Netherlands. He began his research career in the Nancy Forest Research Centre in France. He then became a Senior Scientist and Leader of the Resource Assessment and Utilization Program at Forintek (Canada's Wood Products Research Institute, part of FPInnovations since 2007) in Quebec, and from 2006 to 2014 worked at the FPInnovations-Forintek Head Office in Vancouver, Canada.

Dr. Zhang also served as Adjunct and Honorary Professor at several Chinese and Canadian universities including Laval University, University of Quebec, University of New Brunswick and University of Toronto where he supervised and co-supervised over 100 Postdoctoral Fellows and graduate students. He has initiated some 80 research projects including ForValueNet, an NSERC-funded multi-institutional, multi-year and multi-million-dollar network project, and much of his research has been undertaken in collaboration with leading forest and wood research institutions across Canada.

Dr. Zhang is frequently called upon by national and international forest industries and government agencies for technical assistance and advice. He served in various positions in IUFRO Division 5 and a number of other national and international professional organizations (e.g. IAWS, FPS, SWST, CTIA, IAWA). He has organized and co-organized 15 national and international workshops, conferences and seminars, and given over 120 invited presentations at various conferences and symposia. Dr. Zhang authored and co-authored over 200 scientific papers on his integrated research areas and published three scientific books.

Dr. Zhang has received a number of awards and honours. He is a Fellow and Lifetime Contributor of the International Academy of Wood Science (IAWS), headed the Fellow Selection Committee of the IAWS and was a member of the Academy Board (2009–2012).

Selected research sources:

1. *Wood Anatomy of the Rosaceae*. Leiden University Press, Leiden, the Netherlands, 211 p. 1992.
2. *Timber management toward wood quality and end-product value*. S. Y. Zhang, R. Grosselin & G. Chauret, eds. Proc. IUFRO-CTIA International Wood Quality Workshop, Quebec, Canada, Aug. 550 p. 1997.
3. Characterization of paper mill sludge and its utilization for the manufacture of fibreboards. *Wood Fiber Sciences* 39(2): 345–351 (with X. L. Geng and J. Deng). 2007.
4. Formation and properties of solid aspen wood/melamine-urea-formaldehyde/clay nanocomposites. *Holzforschung* 61: 148–154 (with X. Cai, H. Wan and B. Riedl). 2007.
5. *Softwoods of Eastern Canada: Silvics, Wood Characteristics, Processing and End Uses*. FPInnovations Special Publication, SP-526E, 330 p. (with A. Koubaa). 2008.
6. Characterizing the wood attributes of Canadian tree species: A thirty-year chronicle. *The Forestry Chronicle* 85(3): 392–400 (with G. R. Middleton). 2009.

Personal sources:

Zhang S.Y. Personal communications (February 2019) at tonyzhangcc@gmail.com

2010 (SEOUL, REPUBLIC OF KOREA)

Dr. Su See Lee, Chair of the IUFRO Honours and Awards Committee (2006-2010), Drs. Bailian Li (Coordinator Division 2), Shirong Liu (General Board Member), Tuija Sievänen (Deputy Coordinator Division 6), Mike Wingfield (Coordinator Division 7), Roberto Ipinza (General Board Member), and *ex-officio* IUFRO President Don K. Lee and IUFRO Executive Director Peter Mayer selected 11 out of 24 nominations for the SAA.

During the Opening Ceremony of the XXIII IUFRO World Congress on Monday, 23 August 2010, President Don Koo Lee and Su See Lee on behalf of the IUFRO International Council and the Board delivered awards to the following 11 scientists (IUFRO 2010, vol. 39):

Janaki ALAVALAPATI	India/USA
Michael BATTAGLIA	Australia
Yousry A. EL-KASSABY	Canada
Tonni A. KURNIAWAN	Republic of China
Sun-Young LEE	Republic of Korea
Andrew M. LIEBHOLD	USA
Shawn MANSFIELD	Canada
NOR AZAH Mohd Ali	Malaysia
Jerry VANCLAY	Australia
Jiaojun ZHU	Republic of China
Janusz ZWIAZEK	Canada



From left to right: J. Zwiazek, J. Zhu, J. Vanclay, Nor Azah Mohd Ali, S. Mansfield, A.M. Liebhold, S.-Y. Lee, T. A. Kurniawan, Y. El-Kassaby, M. Battaglia, J. Alavalapati, D. K. Lee, and S. S. Lee (Photo: IUFRO COC)



ALAVALAPATI, Janaki Rami Reddy

Janaki Rami Reddy Alavalapati received the IUFRO Scientific Achievement Award in 2010 for his research in exploring market solutions to promote sustainable use and management of forests and environment at local, national, and international levels (IUFRO News 2010).

Janaki Alavalapati was born on 1 June 1953 in Agadur, Andhra Pradesh, India. He obtained his B.Sc. (1973) and M.Sc. in Botany (1975) from the Sri Venkateswara University, India. He served as a Forest Officer in Andhra Pradesh, India for ten years. He then moved to Canada and earned his M.Sc. in Forest Rural Sociology (1990) and Ph.D. in Forest Economics (1995) from the University of Alberta. He served as Assistant, Associate, and Professor in the School of Forest Resources and Conservation at the University of Florida in Gainesville, FL (1998–2008). He was a Professor and Head of the Dept. of Forest Resources and Environmental Conservation at Virginia Tech in Blacksburg, VA (2008–2015), and in 2015 he was named Dean of Auburn’s School of Forestry and Wildlife Sciences (SFWS), Auburn, Alabama.

In addition to having a Jefferson Science Fellowship, Dr. Alavalapati served as a Senior Advisor to International Energy Affairs (2007–2008) and as a Senior Fellow of the Energy and Climate Partnership of the Americas (2011–2016) at the US Dept. of State, Washington, D.C. He initiated the establishment of Conserved Forest Ecosystems: Outreach and Research (CFEOR), and acted as its Director (2007–2008). Through this, he coordinated research with 11 governmental and nongovernmental organizations to promote sustainability of Florida’s forest ecosystems.

Dr. Alavalapati has maintained internationally recognized scientific research and teaching programs related to forestry, marketing and sustainable natural resources use, management and conservation in Asia, Africa, Europe, and the Americas. He has authored and co-authored over 200 books, book chapters, and refereed and non-refereed articles, made over 150 presentations at various meetings, and actively engaged in professional forestry activities and organizations. He has served as the Policy Chair for the US National Association of University Forest Resource Programs 2009–2018 and is currently the President Elect of this association. He served on the editorial boards of *Forest Policy and Economics*, *Outdoor Recreation and Tourism*, and *Bioproducts Business*. He also served as the Chair of the SAF’s Economics, Policy, and Law Working Group (2008–2009) and Deputy Coordinator of Social and Economic Aspects of Forestry Unit, IUFRO (2005–2010).

Dr. Alavalapati is a recipient of the Indian Forester Prize 1978, CIDA Fellowship 1987–1989 and T.W. Manning prize, Canada 1988 and 1992, IFAS/UF Graduate Teacher/Advisor (2003–2004), Stephen Spurr Award by the SAF’s Florida Division 2005, the UF’s Research Foundation Professorship 2006–2009, and Superior Honor Award from the US Department of State (2008).

Selected research sources:

1. *Working Forests in the Neotropics: Conservation Through Sustainable Management?* D. Zarin, J. Alavalapati, F. Putz and M. Schmink, eds. Columbia University Press, 416 p. (Biology and Resource Management Series, Kindle Edition). 2005.
2. *Valuing Agroforestry Systems: Methods and Applications.* J. R. R. Alavalapati and D. E. Mercer, eds. Springer, 314 p. (Advances in Agroforestry Book 2, Kindle Edition). 2004.
3. *Handbook of Forest Resource Economics.* Kant, S. and J. Alavalapati, eds. Earthscan, NY, 560 p. 2014.

Personal sources:

1. URL: <https://sowc.alueducation.com/people/prof-alavalapati/> Retrieved 25.01.2019
2. Alavalapati A. R. R. Personal communications (January 2019) at ajanaki@auburn.edu



BATTAGLIA, Michael

Michael Battaglia received the IUFRO Scientific Achievement Award in 2010 for his research achievements in the physiology of Eucalyptus, developing innovative and versatile process-based models serving as research engines for Australian forest science and leading the applications of models to complex modern forest management issues at the landscape, regional and continental scale (IUFRO News 2010).

Michael Battaglia was born 11 October 1962 in Melbourne, Australia. He obtained his B.Sc. (Hons) in Forest Science (1984) from the University Melbourne and Ph.D. in Botany (1994) from the University of Tasmania. He then was a Post-doctoral Research Fellow at the Australian Research Council (1994–1995), participated in the Business School ‘Excelerator’ Leadership Programme at Auckland University (2007), and received a Certificate in Executive Management and Development from the Australian Graduate School of Management, University New South Wales (2009). He is an Adjunct Professor at the University of Tasmania.

Dr. Battaglia began his career as an Officer at the Forest Commission Tasmania (1987–1992), and progressed from a Research Scientist (1995–2003) to the leader of various research groups, themes and programs (2003–2017), Deputy Director for the Sustainable Agriculture Flagship (2013–2014), and Research Director for Agriculture and Global Change at CSIRO Australia (since 2017). He has made major contributions through his internationally recognized research and his leadership of multidisciplinary teams dealing with forest planning and production systems, managing and monitoring, environmental services, climate-smart agriculture, agricultural GHG mitigation and abatement, and carbon storage, and lately in the application of systems science and innovation systems analysis to help deliver the global sustainable development agenda.

Dr. Battaglia has created a mechanism for international science exchange in Forests and Climate Change research resulting in more than 40 staff exchanges between France, Portugal, UK, Australia and New Zealand as well as support for sustainable tropical forestry with a focus on small growers in Indonesia and Vietnam and other countries. He has also developed forest models used in Australia, New Zealand, Portugal, Chile and Australia to support forest management as well as conducting international research on dryland grains, legumes, and agroforestry. Dr. Battaglia is CEO of FutureFeed, a company looking to deliver a natural livestock feed supplement based on seaweed that eliminates methane and improves animal production. He has served as an advisor and a member of many different committees and boards dealing with CRC in forestry, GHG mitigation, and bilateral and multilateral initiatives. He has authored and co-authored more than 80 scientific publications on quantitative plant physiology and plant ecology, forest and tree growth modelling, greenhouse gas mitigation and agriculture, agri-informatics and related fields.

Selected research sources:

1. Photosynthetic temperature responses of *Eucalyptus globulus* and *Eucalyptus nitens*. *Tree Physiology* 16(1–2): 81–89 (with C. Beadle and S. Loughhead). 1996.
2. CABALA: a linked carbon, water and nitrogen model of forest growth for silvicultural decision support. *Forest Ecology and Management* 193(1–2): 251–282 (with P. Sands, D. White, D. Mummery). 2004.
3. A history of forestry management responses to climatic variability and their current relevance for developing climate change adaptation strategies. *Forestry* 88(2): 155–171 (multi-authored). 2015.
4. Direct climate change impacts on growth and drought risk in blue gum (*Eucalyptus globulus*) plantations in Australia. *Australian Forestry* 80(4): 216–227 (with J. Bruce). 2017.

Personal sources:

1. URL: <https://people.csiro.au/B/M/Michael-Battaglia> Retrieved 26.01.2019.
2. Battaglia M. Personal communications (January 2019) at michael.battaglia@csiro.au



EL-KASSABY, Yousry A.

Yousry A. El-Kassaby received the IUFRO Scientific Achievement Award in 2010 for his research achievements in the field of tree domestication, tree breeding, forest genetics and genomics, and association genetics (IUFRO 2010).

Yousry El-Kassaby was born on 24 April 1948 in Alexandria, Egypt. He obtained his B.Sc. in Genetics from the University of Alexandria (1970), an M.Sc. in Quantitative Genetics from the University of Tanta, Egypt (1977), and his Ph.D. in Population and Quantitative Genetics (1980) followed by 2 years as a Postdoctoral fellow, at the Faculty of Forestry, the UBC, Vancouver, Canada.

Dr. El-Kassaby began his professional career as a forest genetics and biometrics instructor at the University of British Columbia (1982–1984). He then worked in industry as Director in Applied Forest Research at Pacific Forest Products Ltd. (1984–1998) and then as Director of Genetics & Product Development at CellFor Inc. (1998–2005), both located in Victoria, BC. At the same time, he was a Part-Time Professor at UBC. Since 1995, he has been a Professor and then Associate Dean for Graduate and Postdoctoral Studies at the Faculty of Forestry, The University of British Columbia. In addition, he is a Registered Professional Forester and Industry-NSERC Research Chair in the UBC Department of Forest and Conservation Sciences, a position partly funded by industry and government through the Natural Sciences and Engineering Research Council of Canada (NSERC).

Dr. El-Kassaby has long-term research interests in tree domestication and breeding, tree improvement delivery systems, seed and seedling biology and production, seed orchards' genetics, gene conservation, biotechnology, association genetics and genomics selection.

Dr. El-Kassaby is Professor *Honoris causa* at the Czech University of Life Sciences in Prague, Czech Republic (2011), Adjunct Professor at Fujian University and Nanjing University and Honorary Professor at Beijing Forestry University (PRC). He has served as Associate Editor for several scientific journals, including the *Canadian Journal of Forest Research*, *International Journal of Forestry Research*, *Forest Genetics*, and *Tree Physiology*. He has authored and co-authored more than 400 publications, book chapters, and invited papers. He is the Canadian Forestry Scientific Achievement Award holder (2017).

Professor El-Kassaby is affiliated with the UN FAO, IUFRO, CIF, UBC's Genetic Data Centre (GDC), UBC's Centre for Forest Gene Conservation (CFGC) and other professional organizations and associations. He is the Representative of IUFRO on the Forest Genetic Resources Panel of Experts of the UN FAO in Rome and the OECD in Paris. Within IUFRO, he is a Member of the IUFRO Board, Coordinator of Division 2 Physiology and Genetics (2010–2019) and a member of TFs on Forest Biotechnology and on Forests and Genetically Modified Trees (2006–2010).

Selected research sources:

1. The nature of inbreeding in a seed orchard of Douglas fir as shown by an efficient multilocus model. *Theoretical and Applied Genetics* 71(3): 375–384 (with K. Ritland). 1985.
2. Genetic diversity in a seed production population vs. natural populations of Sitka spruce. *Biodiversity and Conservation* 3(6): 512–523 (with K. Chaisurisri). 1994.
3. Breeding without breeding. *Genetics Research* 91 (2): 111–120 (with M. Lstibůrek). 2009.
4. Quantitative genetics and genomics converge to accelerate forest tree breeding. *Front. Plant Sci.* 22 November 2018. <https://doi.org/10.3389/fpls.2018.01693> (with several authors).

Personal sources:

El-Kassaby Y. A. Personal communications (January 2019) at y.el-kassaby@ubc.ca



KURNIAWAN, Tonni Agustiono

Tonni Agustiono Kurniawan received the IUFRO Scientific Achievement Award in 2010 for his research achievements in applied biology, chemical technology and environmental chemistry (IUFRO News 2010).

Tonni Kurniawan was born in August 1975 in Pati (Indonesia). He earned his B.Sc. in Chemistry at Bogor Agricultural University, Indonesia (1993–1998), M.Sc. in Environmental Technology at Sirindhorn International Institute of Technology of Thammasat University, Thailand (2001–2003), and Ph.D. in Applied Biology and Chemical Technology at the Hong Kong Polytechnic University, PRC (2004–2007). He then conducted postdoctoral research at the University of Eastern Finland (Joensuu) as a Marie Curie Experienced Researcher (2008–2010). He became one of the 200 Young Global Leaders (YGLs) chosen as the class of 2014 by a committee chaired by H.M. Queen Rania (Jordan). He was also a Member of Global Young Academy (2013–2018).

Dr. Kurniawan began his research career as a student, and proceeded as a Postdoctoral Researcher at the United Nations University-Institute for the Advanced Study of Sustainability in Tokyo (2011–2014). In October 2014, he continued his academic career as Associate Professor at Xiamen University (PRC).

Dr. Kurniawan has undertaken his research training at the interface between applied technology and environmental sustainability. His research has been published in various peer-reviewed SCI journals with high impact factor, conference proceedings, and book chapters. He has authored and co-authored more than 80 scientific publications. Recently the Essential Science Indicators of Institute for Scientific Information (ISI)-Thomson Reuter identified him as one of the top 1% most-cited scientists in the field of engineering.

Dr. Tonni Kurniawan is a recipient of the Best Thesis Award from Bioinfo Bank Institute, Poland (2009), the Waste Management Award from A&WMA, USA (2011), the Young Scientist Award from the World Economic Forum (WEF), Switzerland (2013), Young Global Leaders from WEF (2014), the ASEAN Green Award (2015), IAP Fellowship for 2015 World Science Forum in Budapest, Hungary (2015), DAAD Fellowship for participating in Science Tour in Germany (2016) and Science for Peace – GYA at World Science Forum (2017). In June 2010, Dr. Kurniawan was invited to participate in the “60th Interdisciplinary Nobel Laureates Meeting” in Lindau, Germany.

Selected research sources:

1. Low cost adsorbents for heavy metals uptake from contaminated water: a review. *J. of Hazard. Mat.* 97(1–3): 219–243 (with S Babel). 2003.
2. Physico-chemical treatment techniques for wastewater laden with heavy metals. *Chemical Engineering* 118(1–2): 83–98 (with G. Y. S. Chan, W. H. Lo and S. Babel). 2006.
3. Removal of refractory compounds from stabilized landfill leachate using an integrated H₂O₂ oxidation and granular activated carbon adsorption treatment. *Water Research* 43(16): 4079–4091 (with W. Lo). 2009.
4. Biological processes for treatment of landfill leachate. *J. Environ. Monit.* 12 (11): 2032–2047 (with W. Lo, G. Chan and M. E. T. Sillanpää). 2010.

Personal sources:

1. URL: https://www.greentalents.de/awardees_awardees2010_tonni-kurniawan.php Retrieved 28.01.2019. (Tonni Kurniawan, PhD in Applied Chemical Technology (Hong Kong))
2. URL: <http://icee.xmu.edu.cn/people/faculty/tonni-agustiono-kurniawan> Retrieved 28.01.2019. (Tonni Agustiono Kurniawan, Associate Professor)
3. Kurniawan T. A. Personal communications (January 2019) at tonni696390@gmail.com



LEE, Sun-Young

Sun-Young Lee received the IUFRO Scientific Achievement Award in 2010 for his research achievements in the areas of wood plastic composites, nanocomposite materials, nanocellulose, nanopapers, and secondary ion battery separators (IUFRO News 2010).

Sun-Young Lee was born on 27 January 1965 in Seoul, Republic of Korea. He obtained his B.Sc. and M.Sc. degrees in Forestry (1988) and Forest Products (1990) from Korea University. After service as a second lieutenant in the Korean Army (1990–1991), he continued his study. He earned an M.Sc. in Paper Science and Engineering (1995) at the University of Washington in Seattle, and Ph.D. in Forest Products (2003) at Louisiana State University in Baton Rouge, USA. Since 2003, Dr. Lee has been a Research Scientist in the Department of Forest Products at the National Institute of Forest Science in Seoul and was promoted to a Senior Researcher in 2014.

Dr. Lee combines forest products technology with nanotechnology. His research has resulted in considerable technical support for industry. He has developed multifunctional biocomposites and cellulose nanofibers and cellulose nanocrystals using mechanical and chemical treatments for engineering performance and durability, using low cost natural resources and efficient manufacturing parameters. He has also developed methods for the manufacture of nanopapers using cellulose nanofibers that are ultrastrong compared to commercial papers. He developed a way how to substitute the expensive secondary ion battery separator with chemically modified web-bonded ultra-strong nanopapers. He is also working on the development of flexible and foldable paper batteries, and biomedical materials such as synthetic bones, hemostats and anti-adhesion materials. Dr. Lee has published over 120 scientific research papers and given many professional conference presentations. In addition, he has been awarded 30 patents that are registered for various manufacturing methods of nanocellulose paper with ultra-strength, paper batteries, biomedical materials, and mesoporous titania membranes.

Dr. Lee is a Director of Korea Wood Science & Technology, and Deputy Coordinator of the IUFRO unit 5.05.00 – Composite and reconstituted products. He is a recipient of the Outstanding Researcher Award granted by National Institute of Forest Science (2017, 2018), and other awards, granted by the Korean Ministry of Agriculture and Forestry (2010) and Korea Forest Service (2011), as well as the Presidential Award for an Outstanding Public Official (2014).

Selected research sources:

1. Nanocellulose reinforced PVA composite films: effects of acid treatment and filler loading. *Fibers and Polymers* 10 (1), 77–82 (with D.J. Mohan, I.A. Kang, G.H. Doh, S. Lee and S.O. Han). 2009.
2. Preparation of ultra-strength nanopaper using cellulose nanofibrils. *J. Ind. Eng. Chem.* 17(3): 521–526 (with S.J. Chun, G.H. Doh and J.H. Kim). 2011.
3. All-solid-state flexible supercapacitors fabricated with bacterial nanocellulose papers, carbon nanotubes, and triblock-copolymer ion gels. *ACS Nano* 6 (7): 6400–6406 (with Y.J. Kang, S.J. Chun, S.S. Lee, B.Y. Kim, J.H. Kim, H. Chung and W. Kim). 2012.
4. Cellulose nanoparticles: structure–morphology–rheology relationships. *ACS Sustainable Chemistry and Engineering* 3(5): 821–832 (with M.C. Li, Q. Wu, K. Song, Y. Qing and Y. Wu). 2015.
5. Mesoporous titania films templated by cellulose nanocrystals: Cellulose nanoparticles: morphology and spectrometric properties. *Cellulose* 25(11), 6591–6602. (multi-authored). 2018.

Personal sources:

1. URL: <https://prabook.com/web/sun-young.lee/437706> Retrieved 27.01.2019.
2. Lee S.-Y. Personal communications (January 2019) at nararawood@korea.kr



LIEBHOLD, Andrew (“Sandy”) Michael

Andrew Michael Liebhold received the IUFRO Scientific Achievement Award in 2010 for his achievements in the population ecology of forest insect invasions and spatial dynamics of forest insect outbreaks. He is acknowledged as a pioneer in recognizing the importance of forest insect and disease invasions and is a global advocate on this important topic (IUFRO 2010).

Andrew Liebhold was born on 17 March 1956 in Cincinnati, Ohio, USA. He obtained his B.Sc. in Biology (1978) from Allegheny College in Meadville, PA, USA, Ph.D. in Entomology (1984) from the University of California at Berkeley, and undertook postdoctoral studies in entomology at the University of Massachusetts at Amherst (1984–1988). Dr. Liebhold spent the bulk of his career at the USDA FS Northern Research Station in Morgantown, VA, where he began his career as a Researcher (1988). He is also an Adjunct Professor at West Virginia (since 1992) and Pennsylvania State (since 2003) Universities. He has served as scientific coordinator in the Faculty of Forestry and Wood Sciences, Czech University of Life Sciences, Prague since 2016.

Dr. Liebhold is amongst the best-known and most highly respected forest entomologists in the world. His research has focused on invasive forest insects, considering concepts relating to their spread and to developing a holistic understanding of forest insect and disease invasion biology. He has authored and co-authored over 360 scientific papers. He is a member of the Editorial Boards of *Population Ecology* (2005), *Ecology Letters* (2010) and *Biological Invasions* (2013) and a referee for many high-ranking journals.

Dr. Liebhold is a member of AAAS (1979), Entomological Society of America (1980) and Ecological Society of America (1988) as well as a Research Associate of the Carnegie Museum of Natural History in Pittsburgh, PA, and the IUCN’s Invasive Species Specialist Group (ISSG). During the course of his career, Dr. Liebhold has been deeply involved in IUFRO activities, including terms as a Coordinator of RG 7.03 Entomology (since 2005), Coordinator of WP 7.03.07 (1995–2005), and Coordinator of the Task Force on Biological Invasions in Forests (since 2014). He was also Division 7 Web Moderator and Deputy Coordinator as well as IUFRO Board Member (since 2011). Dr. Liebhold also served as Chair of the Congress Scientific Committee for the IUFRO 125th Anniversary Congress (2017) in Freiburg, Germany.

Dr. Liebhold has been recognized with numerous awards including the USDA Distinguished Scientist Award (2006), Lifetime Achievement Award by the National Gypsy Moth Management Board (2011), and a Fellow of the AAAS (2015).

Selected research sources:

1. Population dynamics of gypsy moth in North America. *Ann. Rev. Entomol.* 35(1): 571–596 (with J. S. Elkinton). 1990.
2. Invasion by Exotic Forest Pests: A Threat to Forest Ecosystems. *Forest Science Monographs* 30, 49 p. (with W. L. Macdonald, D. Bergdahl, and V. C. Mastro). 1995.
3. Spatial synchrony in population dynamics. *Ann. Rev. Ecol. Evol. Syst.* 35: 467–490 (with W. D. Koenig and O. N. Bjørnstad). 2004.
4. Live plant imports: the major pathway for forest insect and pathogen invasions of the US. *Frontiers Ecol. Envir.* 10(3): 135–143 (with E. G. Brockerhoff, L. J. Garrett, J. L. Parke and K. O. Britton). 2012.
5. Benefits of invasion prevention: Effect of time lags, spread rates, and damage persistence. *Ecological Economics* 116: 146–153 (with R. S. Epanchin-Niell). 2015.

Personal sources:

1. URL: <https://www.fs.fed.us/research/people/profile.php?alias=aliebhold> Retrieved 28.01.2019.
2. Liebhold A. M. Personal communications (January 2019) at aliebhold@fs.fed.us aliebhold@gmail.com



MANSFIELD, Shawn D.

Shawn D. Mansfield received the IUFRO Scientific Achievement Award in 2010 for his achievements in understanding the innate differences in fibre composition and morphological characteristics existing in tree lines within species, and elucidating what impact these phenotypic traits have on wood processing and product quality (IUFRO News 2010).

Shawn Mansfield was born on 6 February 1969 in Germany. He earned his B.Sc. (Hons) in Biology (1992) at the Mount Allison University in Sackville, New Brunswick, M.Sc. in Microbiology/Immunology (1994) at Dalhousie University in Halifax, Nova Scotia, and Ph.D. in Forestry (1997) at the University of British Columbia. He spent 1998–2000 in New Zealand as a Research Scientist at Forest Research (Scion), and Visiting Lecturer at the Dept. of Biological Sciences, Waikato University in Hamilton. After returning to Canada, he progressed from Assistant Professor (2000) to Associate Professor (2005), to Professor of Wood Science (2009), and is currently also an associate member of the Department of Botany at UBC. During this time he also served as a Canada Research Chair in Wood and Fibre Quality, NSERC (2002–2013).

Dr. Mansfield's research interests include the biochemistry and genetics of plant cell wall development, with a major emphasis on cellulose and lignin biosynthesis. He is best recognized for his achievements in the field of tree biotechnology and genomics. His research employs a unique combination of molecular biology, functional genomics, biochemistry, analytical chemistry and plant cell wall characterization techniques, to elucidate the influence of various biosynthetic pathways on the growth and development of secondary xylem formation in trees. He has established several collaborative projects with a number of international researchers. Dr. Mansfield has authored and more than 300 refereed and non-refereed papers, reports, and presentations at various conference and symposia. Web of Science named Dr. Mansfield a Highly Cited Researcher in 2016, 2017, and 2018.

Dr. Mansfield is affiliated with the Canadian Society of Plant Physiologists and Poplar Council of Canada. His contribution to forest research and education has been recognized by numerous honours including his election as a Fellow of the International Academy of Wood Science (2007) and Sir Frederick MacMaster Fellow, CSIRO Australia (2007), David Gifford Award in Tree Biology by Canadian Society of Plant Biologist (2014), Tree Biotechnologist of the Year by Institute of Forest BioSciences (2014), UBC Killiam Research Prize (2016) and others. In 2018 Dr. Mansfield was elected Member of the Royal Society of Canada.

Selected research sources:

1. RNAi-mediated suppression of *p*-coumaroyl-CoA 3'-hydroxylase in hybrid poplar impacts on lignin deposition and soluble secondary metabolism. *Proc. Nat. Acad. Sci. USA* 105(11):4501–4506 (multi-authored). 2008.
2. Sucrose synthase affects carbon partitioning to increase cellulose production and altered cell wall ultrastructure. *Proc. Nat. Acad. Sci. USA* 106(31): 13118–13123 (with H.D. Coleman and J. Yan). 2009.
3. Ferulate monolignol transferase introduces chemically labile ester bonds into the lignin backbone. *Science* 344: 90–93 (multi-authored). 2014.
4. Visualization of cellulose synthases in *Arabidopsis* secondary cell walls. *Science* 350:198–203 (multi-authored). 2015.

Personal sources:

1. URL: <https://profiles.forestry.ubc.ca/person/shawn-mansfield/> Retrieved 31.01.2019.
2. Mansfield S. D. Personal communications (February 2019) at shawn.mansfield@ubc.ca



NOR AZAH Mohamad Ali

Nor Azah Mohamad Ali received the IUFRO Scientific Achievement Award in 2010 for her outstanding research in natural products and analytical chemistry related to forestry and agriculture, essential oils and herbal industries (IUFRO News 2010).

Nor Azah Mohamad Ali was born on 17 March 1963 in Batu Gajah Perak, Malaysia. She obtained her B.Sc. in Chemistry (1985) from the University of Waterloo, Canada, M.Sc. in Chemistry (1996) from the University Kebangsaan Malaysia and Ph.D. in Natural Products Chemistry (2004) from the University Putra Malaysia. Upon graduation (1987), Nor Azah joined the Forest Research Institute Malaysia (FRIM) as a Researcher and was then promoted to Research Officer, Medicinal Plants Division (1996) and Senior Research Officer, Biotechnology Division (2002) and Head of FRIM's Herbal Product Development Programme (2011). Dr. Nor Azah has been director of the Natural Products Division FRIM since 2018. In addition, she has been a leader of many projects and a contributor of over 20 Malaysian/ISO Standards on essential oils and other products.

Dr. Nor Azah is a member of numerous technical and organizational committees at FRIM and other national associations, including the Malaysia Institute of Chemistry (1994), Malaysia Natural Product Society (1996) including membership of its Executive Committee (2001), Malaysian Association of Research Scientist (2005), Malaysia Science Association (2005), and National Committee of Codex Spices and Culinary Herbs (2015). She has authored and co-authored over 200 scientific papers, book chapters, working papers as well as invited papers and presentations at different scientific fora.

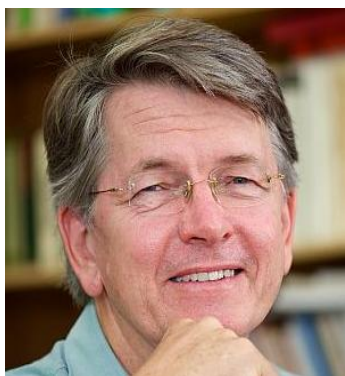
Dr. Nor Azah has received a number of honours and awards including FRIM Excellent Service Award (2001), Best Thesis Award (2005), FRIM Best Scientist Award (2009) and numerous Bronze, Silver and Gold medals and other awards at various innovation exhibitions for her work on essential oils and Gaharu Sense-intelligent classification system for agarwood (2009, 2010). She recently was awarded FRIM best Research Project (2013) and was recognized as one of Top Research Scientists Malaysia (TRSM) in 2015. Her research has been taken up and commercialized by the herbal industries.

Selected research sources:

1. A comparative study of the essential oils of five *Piper* species from Peninsular Malaysia. *Flavour and Fragrance Journal* 9: 339–342 (with J. Ibrahim, A. Abd. Rashih and A. Abu Said). 1994.
2. Chemical composition and antimicrobial activities of the essential oils of *Cinnamomum aureofulvum* Gamb. *J. Essential Oil Research* 14: 135–138 (with M. Mastura S. Khozirah, R. Mawardi, A. Abdul Manaf and J. Ibrahim). 2002.
3. Comparison of chemical profiles of selected Gaharu Oils from peninsular Malaysia. *Journal of Analytical Sciences* 12 (2): 338–340 (multi-authored). 2008.
4. The kinetics of extraction of the medicinal ginger bioactive compounds using hot compressed water. *Separation and Purification Technology* 124: 141–147 (with M. S. M. Sarip, N. A. Morad, Y. A. M. Yusof and M. A. C. Yunus). 2014.
5. Agarwood (*Aquilaria malaccensis*) Oils. In: *Essential Oils in Food preservatives, Flavor and Safety*. V. R. Preedy, ed. Elsevier, pp. 173–180 (with Che Beng jin and Mailina Jamil). 2016.
6. Discrimination of pure and mixture agarwood oils via electronic nose coupled with k-NN kfold classifier. *Procedia Chemistry* 20: 63–68 (with L. Sahrim, J. Mailina, A. Majid jalil and Mohd F. O.). 2016.

Personal sources:

1. URL: www.frim.gov.my Retrieved 01.02.2019. (Dr. Nor Azah Mohamad Ali. Curriculum Vitae).
2. Nor Azah M. A. Personal communications (February 2019) at norazah@frim.gov.my



VANCLAY, Jerome (Jerry) Klaas

Jerome Klaas Vanclay received the IUFRO Scientific Achievement Award in 2010 for his wide and profound contributions to forest modelling, from mensuration to biodiversity, and from the social to the political arena (IUFRO 2010).

Jerry Vanclay was born on 20 June 1956 in Wageningen, Netherlands. He earned his B.Sc. (Forestry) with first class honours from the Australian National University in 1977. He diversified his studies with a Postgraduate Diploma in Computer Science (1980), and a B.A. (with a major in statistics, 1984) from the University of Queensland. He completed an M.Sc. in Forestry at Oxford University in 1983, and was awarded a higher Doctorate in Forestry by the University of Queensland in 1992. He began his career with the Queensland Department of Forestry in resource estimation and modelling (1978–1991), and proceeded as Professor of Tropical Forestry at Royal Veterinary and Agricultural University in Copenhagen, Denmark (1991–1994), Principal Scientist at CIFOR, Indonesia (1995–1999), and since 1999 as Professor of Sustainable Forestry at Southern Cross University (SCU). Professor Vanclay has also served as Head of SCU's School of Environment, Science and Engineering (2017–2019), and as Dean of Science (2011–2019).

Dr. Vanclay has wide-ranging research interests, and he has published numerous papers on biodiversity, biomass, forest growth, modelling, rainforests, mixed plantings, tree breeding, site productivity, sustainability, wood properties and many others including several myth-busting papers on private native forestry, on faunal richness, and on timber harvesting. He has written over 400 publications, with more than 180 in refereed journals, such as *Science*, *Scientometrics*, *Forest Ecology and Management*, *Conservation Ecology*, *Journal of Wood Science*, and *Forest Ecology and Management*.

Dr. Vanclay has made substantial contributions to the extension and promotion of science, research and education in Australia, Zimbabwe, the Philippines, Denmark, and Ghana. He has a long-term record of service in IUFRO as a representative of Australia at International Council, Coordinator of TF – Foresight for Forest Sector Planning, member of IUFRO Enlarged Board, Deputy Coordinator Division 4 – Forest Assessment, Modelling and Management, and currently – Chair of Congress Science Committee for the XXV IUFRO World Congress in Curitiba, Brazil (2019).

Professor Vanclay was elected a Fellow of the Royal Society of NSW (2014), and a Fellow of the Institute of Foresters of Australia (2015). He received the Queen's Award for Forestry in 1997.

Selected research sources:

1. The effectiveness of parks. *Science* 293: 1007. 2001.
2. *Modelling Forest Growth and Yield: Applications to Mixed Tropical Forests*. CAB International, Wallingford, U.K. 330 p. 1994.
3. *Realizing Community Futures: A practical guide to harnessing Natural Resources*. Earthscan/Routledge, London, U.K., 162 p. (with R. Prabhu and F. Sinclair). 2006.
4. *Forest Growth and Yield Modeling*. Wiley, 428 p. (with A. R. Weiskittel, D. W. Hann and J. A. Kershaw). 2011.

Personal sources:

1. URL: <https://www.scu.edu.au/about/contacts/staff-directory/staff/20686.php>; <http://jkv.50megs.com/> Retrieved 01.02.2019.
2. Vanclay J. K. Personal communications (March 2019) at jerry.vanclay@scu.edu.au



ZHU, Jiaojun

Jiaojun Zhu received the IUFRO Scientific Achievement Award in 2010 for significant research contributions dealing both with the theories of protective maturity, methods for structure determination and decline mechanisms of shelter forests and practical techniques for their management (IUFRO 2010).

Jiaojun Zhu was born on 18 February 1965 in Inner Mongolia, China. He earned his B.Sc. in Agronomy (1987) at Shenyang Agricultural University, M.Sc. in Ecology (1990) at the Institute of Applied Ecology (IAE) of Chinese Academy of Sciences (CAS), and M.Sc. in Agriculture (1998) and Ph.D. in Biosphere Science (2001) at Niigata University, Japan. He served as Research Assistant and Research Associate Professor (1990–1995) in the IAE CAS, and continued his career as a Researcher (1996) and Scholar Researcher (2001–2002) in Niigata University. In 2002, Dr. Zhu was selected for the “Hundred Talents Program Award” by Chinese Academy of Sciences, and returned to China. In 2002, he was appointed Head of Qingyuan Forest CERN, CAS, and at the IAE CAS he then was promoted to PI of the Research Group (2003–2015), Vice Director of State Key Laboratory of Forest and Soil Ecology (2011–2015), the IAE Deputy Director (2015–2018), and the IAE Director General (since 2018). His major research interests are in the area of Forest Ecology and Silviculture, particularly in the management of shelter forests, secondary forests and plantation forests in the Temperate Zone.

Dr. Zhu has published more than 200 scientific papers including about 100 in Chinese and 100 in English as first or corresponding author, 6 authorized patents and 5 books. Dr. Zhu is Vice Chairman of the Chinese Society of Ecology, a member of Editorial Board of *Journal of Forestry Research*, *Chinese Journal of Plant Ecology*, *Chinese Journal of Applied Ecology* and others, and many national and international professional associations including the UNCCD Knowledge Hub (2015).

Dr. Zhu has been recognized with many honours and awards including the National Award for Progress in Sciences and Technologies (2008), National Science Fund for Distinguished Young Scholars (2010) and The Chief Scientist of National Basic Research Program of China (2012), three awards from Liaoning Province of China (2012–2016), Natural Science Award of Liaoning Province of China (2016), and the CAS Science and Technology for Development Award (2016).

Selected research sources:

1. Effect of gap size created by thinning on seedling emergency, survival and establishment in a coastal pine forest. *For. Ecol. and Mgmt.* 182(1–3): 339–354 (with T. Matsuzaki, F. Q. Lee and Y. Gonda). 2003.
2. The role of ectomycorrhizal fungi in alleviating pine decline in semiarid sandy soil of northern China: an experimental approach. *Annals of Forest Science* 65: 304 p. 1–12 (with F. Q. Li, M. L. Xu, H. Z. Kang). 2008.
3. Determination of canopy gap tridimensional profiles using two hemispherical photographs. *Agricultural and Forest Meteorology* 149: 862–872 (with L. L. Hu). 2009.
4. On the size of forest gaps: can their lower and upper limits be objectively defined? *Agriculture and Forest Meteorology* 213: 64–76 (with G. Q. Zhang, G. G. Wang, Q. L. Yan, D. L. Lu, X. F. Li and X. Zheng). 2015.
5. Effects of gap size and within-gap position on seedling growth and biomass allocation: Is the gap partitioning hypothesis applicable to the temperate secondary forest ecosystem? *For. Ecol. and Mgmt.* 429: 351–362 (with D. L. Lu, G. G. Wang, Q. L. Yan and T. Gao). 2018.

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1. URL: http://sourcedb.iae.cas.cn/yw/eiaexport/Professor/201708/t20170823_4851221.html Retrieved 19.01.2019.
2. Zhu J. Personal communications (February 2019) at jiaojunzhu@iae.ac.cn, iae-director@iae.ac.cn



ZWIAZEK, Janusz Jerzy

Janusz Jerzy Zwiazek received the IUFRO Scientific Achievement Award in 2010 for his achievements in research on tree physiology, stress resistance to drought and pollution, physiological, biochemical and structural adaptations of trees to stress, and using ectomycorrhizas to improve tree performance under stress (IUFRO News 2010).

Janusz Zwiazek was born on 21 November 1955 in Konstancin-Jeziorna, Poland. He earned his M.Sc. in Botany (1980) at the University of Silesia in Katowice, Poland. He began his professional career in 1982 as a Research Assistant in the Department of Botany, the University of Manitoba in Winnipeg, from which he earned his Ph.D. in Botany (1987). He then received an NSERC Forestry Postdoctoral Fellowship to study the mechanisms of stress tolerance in conifer seedlings at the University of Toronto. He obtained his Habilitation degree at the University of Warsaw, Poland. In 1989, Dr. Zwiazek was appointed Assistant Professor at the University of Alberta, and progressed to Professor of Forest Ecology and Management (2000). He has served as the Associate Chair (Research) for the Department of Forest Sciences (2004–2010).

Having expertise in botany, tree physiology and soil science, Professor Zwiazek served as a consultant for many national and international businesses and organizations, including the World Bank, FAO, and Yangtze River Reforestation Program. Professor Zwiazek has authored or co-authored more than 150 peer-reviewed articles in high impact international journals. He also served as a member of editorial board for *Canadian Journal of Forest Research*, *Acta Physiologiae Plantarum*, *PLOS One*, *BMC Plant Biology*, *Plant and Soil*, and as a reviewer for numerous journals.

Professor Zwiazek was appointed as University of Alberta Annual Killam Professor (2002–2003), McCalla Professorship (2003–2004, 2009–2010), Faculty of Agriculture, Life and Environmental Sciences Teacher of the Year Awards (2000, 2004, 2011–2018), Faculty of Agriculture, Life and Environmental Sciences Teaching Award (2015), North American Colleges and Teachers of Agriculture (NACTA) Teaching award of Merit (2018), and The David J. Gifford Award in Tree Physiology (2010).

Selected research sources:

1. Mercuric chloride effects on root water transport in aspen seedlings. *Plant Physiology* 121(3): 939–946 (with X. Wan). 1999.
2. Metabolic inhibition of root water flow in red-osier dogwood (*Cornus stolonifera*) seedlings. *J. Exper. Botany* 52(357): 739–745 (with M. Kamaluddin). 2001.
3. Ectomycorrhizas and water relations of trees: a review. *Mycorrhiza* 21: 71–90 (with T. Lehto). 2011.
4. Overexpression of *Laccaria bicolor* aquaporin JQ585595 alters root water transport properties in ectomycorrhizal white spruce (*Picea glauca*) seedlings. *New Phytologist* 205: 757–770 (with H. Xu, M. Kemppainen, W. Kayal, S. H. Lee, A. G. Pardo and J. E. K. Cooke). 2015.
5. Boreal forest plant species responses to pH: ecological interpretation and application to reclamation. *Plant and Soil* 420: 195–208 (with M. Calvo-Polanco, W. Zhang, S. E. Macdonald, and J. Señorans). 2017.
6. Variation in aquaporin and physiological responses among *Pinus contorta* families under different moisture conditions. *Plants* 8, 13 (with S. Khan, B. R. Thomas, R. de la Mata, M. Randall and W. Zhang). 2019.

Personal sources:

1. URL: <https://www.ualberta.ca/agriculture-life-environment-sciences/about-us/contact-us/facultylecturer-directory/janusz-zwiazek> Retrieved 21.12.2018.
2. Zwiazek J.J. Personal communications (January 2019) at janusz.zwiazek@ualberta.ca

2014 (SALT-LAKE-CITY, UTAH, USA)

On 6 October 2014, at the Opening Ceremony of the XXIV IUFRO World Congress, Dr. Shirong Liu, Chair of the IUFRO Honours and Awards Committee (2010–2014) announced the results of the competition for the Scientific Achievement Award. The H&A Committee, comprising Drs. Su See Lee (Malaysia), Ben Chikamai (Kenya), Elena Kulikova (Russia), Tuija Sievänen (Finland), John Parrotta (USA), Jerry Vanclay (Australia), *ex-officio* IUFRO President Niels Elers Koch (Denmark) and Executive Director Alexander Buck (Austria), and IFSA representative Yasemin Öztürk (Turkey) followed by Lena Lackner (Austria), selected 10 SAA winners out of 25 nominations.

President Niels Elers Koch presented SAA certificates to the following scientists:

Sally AITKEN	Canada
Jürgen BAUHUS	Germany
Benjamin CASHORE	USA/Canada
Aino Annikki MÄKELÄ	Finland
Richard HAMELIN	Canada
Chris E. HARWOOD	Australia
Shibu JOSE	USA
Robert A. KOZAK	Canada
Jolanda ROUX	South Africa
Giuseppe SCARASCIA	Italy



From left to right: A. Buck, N. E. Koch, S. Aitken, J. Bauhus, B. Cashore, R. Hamelin, C. E. Harwood, S. Jose, R. Kozak, A. A. Mäkelä-Carter, J. Roux, G. Scarascia, R. Prueller, S. Liu (Photo: V. V. Nikitin).



AITKEN, Sally Nora

Sally Nora Aitken received the IUFRO Scientific Achievement Award in 2014 for research achievements in conservation biology, forest genetics, population genetics, population genomics, and conservation genetics (IUFRO 2014).

Sally Aitken was born on 10 August 1961 in Calgary, Alberta, Canada. She obtained her B.Sc. (1984) from UBC in Vancouver, Canada, and her M.Sc. (1986) and Ph.D. (1989) from the University of California at Berkeley, USA. She was a Research Assistant Professor at Oregon State University in Corvallis, USA (1991–1996). She returned to her *alma mater* as Assistant Professor (1996–2000), and then she became Associate Professor (2000–2005), and then Professor of Forest Genetics in the Department of Forest and Conservation Sciences, UBC. She carried out the responsibilities as an NSERC/Industry Junior Chair in Genetics aiming at the application of forest genetics research to forest management practice, and served as Director of the Forest Sciences undergraduate program. Currently, Dr. Sally Aitken is Associate Dean for Research and Innovation of the UBC Faculty of Forestry. She is Director of the Centre for Forest Conservation Genetics (CFCG) and an associate of the Biodiversity Research Centre (BRC). In addition, she is affiliated with the Canadian Forest Genetics Association (CFGA), and Western Forest Genetics Association (WFGA).

Dr. Sally Aitken now leads the AdapTree and CoAdapTree large-scale genomics projects on linking new developments in genomics with climate modelling, evolutionary biology, and economic analysis. The projects use tree DNA and seedling traits in controlled experiments in order to see how trees adapt to varied climatic conditions. The outputs of this research will inform reforestation efforts to allow the matching of trees with habitats for their better growth and adaptation to climate change. Her teaching responsibilities are scattered across many disciplines, including evolutionary and forest biology, alpine ecology, adaptation of trees species, conservation genetics and others. She actively participates in forest genetic conservation initiatives in North America and Europe.

Dr. Sally Aitken has authored and co-authored well over 100 scientific papers, co-authored the textbook “Conservation and the Genetics of Populations”, and contributed to other books on forest genetics and related areas. She is a Fellow of the Royal Society of Canada, received the Canadian Forestry Scientific Achievement Award from the CIF (2009), the UBC Killam Teaching Prize (2010) and was named a Wall Scholar at the Peter Wall Institute for Advanced Studies (2014). In 2018, Dr. Aitken won the Genome BC award for Scientific Excellence.

Selected research sources:

1. Population genetics of *Pinus contorta* on coastal and pygmy-forest sites in Mendocino County, California. Ph.D. thesis. Wildland Resource Science, University of California, Berkeley, 1990.
2. From genotype to phenotype: unraveling the complexities of cold adaptation in forest trees. *Can. J. Botany* 81(12): 1247–66 (with G. T. Howe, D. B. Neale, K. D. Jermstad, N. C. Wheeler, T. H. H. Chen). 2003.
3. Adaptation, migration or extirpation: climate change outcomes for tree populations. *Evolutionary Applications* 1(1): 95–111 (with S. Yeaman, J. A. Holliday, T. Wang and S. Curtis-McLane). 2008.
4. *Conservation and the Genetics of Populations*. 2nd ed. Oxford, Wiley-Blackwell, 624 p. (with F. W. Allendorf and G. H. Luikart). 2013.

Personal sources:

1. URL: <http://www.oldforests.com.au/pages/speakers.htm> Retrieved 5.01.2019.
2. URL: <https://profiles.forestry.ubc.ca/> Retrieved 5.01.2019.
3. Aitken S. N. Personal communications (January 2019) at sally.aitken@ubc.ca



BAUHUS, Jürgen

Jürgen Bauhus received the IUFRO Scientific Achievement Award in 2014 for his important contributions to the research of biodiversity and mixed-species stands in native, semi-natural and plantation forests (IUFRO News 2014).

Jürgen Bauhus was born on 23 June 1964 in Lünen, Germany. In 1989, he obtained his Diploma (Hons, First Class) in Forestry and in 1994 his Dr. of Forest Sciences (*Summa Cum Laude*) from Georg-August University in Göttingen. He began his professional career in 1989 as a Research Assistant at the Institute of Silviculture, Göttingen University, and as a DAAD Pre-Doctoral Fellow, he continued his research in the Forest Ecology Research Group at CSIRO, Australia (1990). For Post-Doctoral studies, he moved to the University of Québec at Montréal, Canada (1994–1996) and then returned to Australia as a Lecturer (1996–1999) and then Senior Lecturer in Silviculture and Tree Physiology (1999–2003), Australian National University. In 2003, he was appointed Professor of Silviculture at Freiburg University. Here, he developed an international M.Sc. program in forest sciences and founded the graduate school “Environment, Society and Global Change” in 2008. He also served as Dean (2011–2013) of the Faculty of Forest and Environmental Sciences and subsequently as Deputy Dean (2014–2016). Currently, he is the Director of the Institute of Forest Sciences at the Faculty of Environment and Natural Resources.

Dr. Bauhus has worked in forest research institutions on three continents. His research on the structure and dynamics of mixed-species plantations and native forests, on ecological interactions and the relationships between forest structure, composition and function, above ground and below ground, on nutrient and carbon cycles in forest ecosystems, and the adaptation of forests to global change is truly international. Dr. Bauhus is a member of the Scientific Advisory Board on Forest Policy at the German Federal Ministry of Food and Agriculture and member of the review board for Agriculture, Forestry, Horticulture and Veterinary Sciences of the German Research foundation (DFG) and the College of Expert Reviewers of the European Science Foundation.

Dr. Bauhus has authored and co-authored more than 180 peer-reviewed research publications in international journals, 5 books and held numerous presentations at national and international scientific fora. He served in different capacities for editorial boards of *Forest Ecosystems*, *European Journal of Forest Research*, *Frontiers in Forests and Global Change*, *Canadian Journal of Forest Research*, *Australian Forestry*, *Forests*. Dr. Bauhus has been recognized with a number of fellowships, honours and awards including the Teaching Award of the University by Freiburg (2008) and the 2008 Professor of the Year Award by the German University magazine UNICUM.

Selected research sources:

1. Effects of tree species, stand age and soil type on soil microbial biomass and its activity in a southern boreal forest. *Soil Biology and Biochemistry* 30(8): 1077–1089 (with D. Pare and L. Coté). 1998.
2. Mixed-species plantations of *Eucalyptus* with nitrogen-fixing trees: a review. *Forest Ecology and Management* 233(2–3): 211–230 (with D. I. Forrester, A. L. Cowie and J. K. Vanclay). 2006.
3. *Ecosystem Goods and Services from Plantation Forests*. J. Bauhus, P. van der Meer and M. Kanninen, eds. Earthscan, 272 p. 2010.
4. *Mixed-Species Forests: Ecology and Management*. Springer Verlag, 653 p. (with H. Pretzsch and D. I. Forrester). 2017.

Personal sources:

Bauhus J. Personal communications (February 2019) at waldbau@waldbau.uni-freiburg.de



CASHORE, Benjamin (Ben) William

Benjamin William Cashore received the IUFRO Scientific Achievement Award in 2014 for his contribution to global/comparative research on the environmental dimensions of forest policy and governance (IUFRO 2014).

Benjamin Cashore was born on 23 June 1964 in Prince Rupert, British Columbia, Canada. He obtained his degrees in political science – B.A. (High. Hons) in 1986, an M.A. in 1989 from Carleton University, Ottawa, and a Ph.D. in 1997 from the University of Toronto. He was a Fulbright Scholar at Harvard University (1996–1997) and a Postdoctoral Fellow at UBC Forest Economics and Policy Analysis Research Unit (1997–1998). He holds a Certificate in French Studies (1989) from Université d’Aix-Marseille III, France. Dr. Cashore began his teaching career as Assistant Professor of Forest Policy at Auburn University’s School of Forestry and Wildlife Sciences 1998–2001. He joined Yale University’s School of Forestry and Environmental Studies as Assistant Professor of sustainable forest policy in 2001. He was promoted to Associate Professor in 2004 and full professor, environmental governance and political science in 2007. He led the Program on Forest Certification from 2001–2005, the Program on Forest Policy and Governance from 2005–2011, and the Governance, Environment and Markets (GEM) initiative from 2011–2019. He also holds a courtesy appointment in Yale’s Department of Political Science.

Dr. Cashore has authored and co-authored over 125 scientific publications. He has presented at numerous national and international conferences and scientific fora as well as co-authored and co-edited a number of books on forest governance and forest policy. He has served as director of a student exchange program at Yale’s MacMillan Center, and on advisory boards including Yale’s Tropical Resources Institute (TRI) and the Environment, Leadership and Training Initiative (ELTI). He was an Editor-in-Chief, *Journal of Forest Policy and Economics* from 2001 to June 2015 and serves on the editorial boards of the *Earth System Governance* journal and the *International Review of Public Policy*.

Dr. Cashore served as Coordinator of IUFRO Task Force T27 – International Forest Governance (2011–2014), and since 2014 as Deputy Coordinator 9.05.05 – Forest Policy Learning Architectures. He was awarded (with Bernstein) the John McMenemy Prize (2001) and (with Auld and Newsom) the International Studies Association’s Harold and Margaret Sprout prize (2005). In 2018 he was recognized as authoring (with Bernstein) one of the most ‘influential articles’ in *Regulation and Governance* from 2008–2018. He was also a recipient of the Best Lecturer Award, Yale School of Forestry and Environmental Studies (2013), and the Fulbright Canada Research Chair in the Sustainable Economy, University of Ottawa (2017–2018).

Selected research sources:

1. *In Search of Sustainability. British Columbia Forest Policy in the 1990s.* UBC Press, 340 p. (with M. Howlett, J. Wilson, G. Hoberg and J. Rayner). 2001.
2. *Forest Policy for Private Forestry.* L. D. Teeter, B. Cashore and D. Zhang, eds. CABI, xx, 307 p. 2002.
3. *Governing Through Markets. Forest Certification and the Emergence of Non-State Authority.* B. Cashore, G. Auld, D. Newsom, eds. Yale University Press, New Haven, 327 p. 2001. (2d ed., 2019).
4. Can non-state global governance be legitimate? An analytical framework. *Regulation & Governance* 1(4): 347–371 (with S. Bernstein). 2007.
5. *Global Environmental Forest Policies: An International Comparison.* London, Earthscan, 373 p. (with C. McDermott and P. Kanowski). 2010.

Personal sources:

1. URL: <https://environment.yale.edu/profile/cashore/> Retrieved 4.02.2019.
2. Cashore B. Personal communications (February 2019) at benjamin.cashore@yale.edu



HAMELIN, Richard Claude

Richard Claude Hamelin received the IUFRO Scientific Achievement Award in 2014 for his pioneering research in the field of molecular forest pathology and development of molecular diagnostic tools for detecting and monitoring forest pests using genomics (IUFRO News 2014).

Richard Hamelin was born 16 June 1960 in Grand-Mère, Quebec, Canada. He obtained his B.Sc. in Agronomy with specialization in plant science (1982) from McGill University in Montreal, M.Sc. in Pest Management (1986) from Simon Fraser University in Burnaby, both in Canada, and Ph.D. in Plant Pathology (1990) from the University of Kentucky in Lexington, USA. He undertook post-doctoral training as an NSERC fellow at Laval University (1991–1992), and in 1994 he became Adjunct Professor there. In 1992 Dr. Hamelin became Research Scientist with Natural Resources Canada – Canadian Forest Service at Laurentian Forestry Centre in Québec, and then Senior Research Scientist (1992–2015). In 2005 he was appointed as Professor at UBC, and in 2016 he became also Honorary Professor to Laval University.

Dr. Hamelin's research interests are in the area of pathogen detection and monitoring, population dynamics, and molecular ecology, using genetics and genomics to understand epidemiology of forest fungal pathogens and forest genetics. His multidisciplinary approach to answering complex research questions, along with his capacity for bringing together scientists of various expertise, has led Dr. Hamelin to become an inspiring model for young scientists as well as for more experienced colleagues. Dr. Hamelin is associated with the Quebec Society for Plant Protection, Poplar Council of Canada, Canadian and American Phytopathological Societies, and IUFRO WG on Rusts of Forest Trees. He has authored and co-authored over 120 peer-reviewed scientific *papers and numerous reports and presentations at national and international symposia*. He served as Associate Editor for *Canadian Journal of Forest Research*, Section Editor for *Canadian Journal of Plant Pathology* and Senior Editor for *Phytopathology*.

Dr. Hamelin has received numerous awards starting from his student's years when he was granted President's award from Simon Fraser University (1984) and Technology Award from BC Science Council (1985). He then received of Certificate of Recognition, Canadian Food Inspection Agency (2007), Natural Resources Canada's Merit Award for Creativity and Innovation (2008), Merit Award by Canadian Forest Service (2008) and René-Pomerleau Award for work in forest pathology by Quebec Society for the Protection of Plants (2008), The Queen Elizabeth II Diamond Jubilee Medal (2012) as well as Genome Canada and Genome BC funding (2010, 2015).

Selected research sources:

1. Obligate biotrophy features unraveled by the genomic analysis of rust fungi. *Proc. Nat. Acad. Sci. USA* 108(22): 9166–9171 (multi-authored). 2011.
2. Nuclear ribosomal internal transcribed spacer (ITS) region as a universal DNA barcode marker for fungi. *Proc. Nat. Acad. Sci. USA* 109(16): 6241–6246 (multi-authored). 2012.
3. Horizontal gene transfer and gene dosage drives adaptation to wood colonization in a tree pathogen. *Proc. Nat. Acad. Sci. U.S.A.* 112(11): 3451–3456 (multi-authored). 2017.
4. Say hello to my little friends: how microbiota can modulate tree health. *New Phytologist* 215(2): 508–510 (with N. Feau). 2017.
5. Genetic and genomic evidence of niche partitioning and adaptive radiation in mountain pine beetle fungal symbionts. *Mol. Ecol.* 26(7): 2077–2091 (multi-authored). 2017.

Personal sources:

1. URL: <https://profiles.forestry.ubc.ca/person/richard-hamelin/> Retrieved 31.01.2019.
2. Hamelin R. C. Personal communications (February 2019) at richard.hamelin@ubc.ca



HARWOOD, Christopher (Chris) Eric

Christopher Eric Harwood received the IUFRO Scientific Achievement Award in 2014 for his significant long-term research and applications that address the ecology, genetics, breeding, plantation deployment and wood utilization of Australian tree species (IUFRO News 2014).

Chris Harwood was born on 2 April 1950 in Hobart, Tasmania. He earned his B.Sc. (Hons 1) in Botany at the University of Tasmania (1973) and a Ph.D. in Environmental Biology at Australian National University (1977). In 1977, he started his research career conducting biological surveys for the Tasmanian Conservation Trust. Dr. Harwood spent most of his career at CSIRO, commencing work in 1987 at the Australian Tree Seed Centre in the then Division of Forestry. He progressed to Senior Principal Research Scientist with CSIRO Land and Water and remains an Honorary Research Fellow since his retirement in 2014. He is also a Research Associate at the University of Tasmania, and works with the World Agroforestry Centre (ICRAF) on agroforestry tree domestication.

Dr. Harwood has led major research efforts for dryland forestry, improving the value of plantation-grown eucalypts for solid- and engineered-wood product processing and sustainable wood production from short-rotation plantations. He pioneered studies on tree reproductive biology of *Acacia*, *Eucalyptus* and *Grevillea robusta* to underpin genetic improvement and seed orchard development. His work has advanced understanding of the science that underpins successful tree breeding that delivers improved germplasm to tree growers in the tropics. He has supported developing-country scientists through provision of many scientific and technical training courses, supervision of post-graduate students and mentoring scientists in-country, travelling frequently to countries such as Vietnam, India and Malaysia.

Dr. Harwood has authored and co-authored over 100 peer-reviewed journal articles, 30 conference presentations and 6 books. He served as a Reviewer for the International Science Foundation (1995–2002) and for the Third External Programme and Management Review of ICRAF (2005–2006), as Associate Editor for *New Zealand Journal of Forestry Science* (2009–2016) as a member of the Editorial Panel for *Journal of Tropical Forest Science* (since 2006) and as a Panel Editor for *Australian Forestry Journal* (since 2017). Besides the SAA, Dr. Harwood is a recipient of the CSIRO Medal (1994) and received two awards from the Ministry of Agriculture and Rural Development, Government of Vietnam for his contributions in forest development in Vietnam (1995, 2012). In 2018, he was awarded the SE Asia-Pacific Regional Award of Excellence by the Commonwealth Forestry Association.

Selected research sources:

1. *Eucalypt Domestication and Breeding*. Oxford University Press, Oxford UK, 288 p. (with K. G. Eldridge, J. Davidson and G. Van Wyk). 1993.
2. Genetic variation in growth, stem straightness and branch thickness in clonal trials of *Acacia auriculiformis* at three contrasting sites in Vietnam. *Forest Ecology and Management* 255(1): 156–167 (with P. H. Hai, G. Jansson, B. Hannrup and H. H. Thinh). 2008.
3. *Sustainable plantation forestry in South-East Asia. Technical Report TP084*. CSIRO Ecosystem Sciences, Canberra, Australia, 100 p. (with E. K. S. Nambiar). <https://www.aciar.gov.au/node/12221> 2014.
4. Acacia plantations in Vietnam: research and knowledge application to secure a sustainable future. *Southern Forests*, 77(1): 1–10 (with E. K. S. Nambiar, and N. Kien). 2015.
5. Genetic improvement of tropical acacias: achievements and challenges. *Southern Forests* 77(1): 11–18 (with E. H. Hardiyanto and W. C. Yong). 2015.

Personal sources:

1. URL: http://caets2018.anu.org.au/wp-content/uploads/2018/05/CV_Chris-Harwood.pdf Retrieved 11.01.2019.
2. Harwood C. E. Personal communications (February 2019) at chris.harwood@csiro.au



JOSE, Shibu

Shibu Jose received the IUFRO Scientific Achievement Award in 2014 for his research that helped addressing ecological sustainability challenges of forested ecosystems at local, national and international levels with global impacts (IUFRO 2014).

Shibu Jose was born in Kerala, India. He earned his B.Sc. in Forestry (1991) at Kerala Agricultural University, India, and his M.Sc. (1994) and Ph.D. in Forest Science (1997) at Purdue University, USA. In 1998, Dr. Jose was appointed Professor of Forest Ecology at the School of Forest Resources and Conservation at the University of Florida. In 2009, he moved to the University of Missouri where he served as the H.E. Garrett Endowed Chair Professor, Director of the Center for Agroforestry, and Director of the School of Natural Resources (2009–2018). In 2019, Dr. Jose was appointed as Interim Associate Dean (Research) in the College of Agriculture, Food and Natural Resources (CAFNR), and Interim Director of the Missouri Agricultural Experiment Station.

Dr. Jose's research program has the overarching goal of identifying and quantifying key ecological processes and interactions that define ecological sustainability of forested ecosystems. He examines how resource availability (e.g., light, water, nutrients, carbon) and disturbances (e.g., management interventions, fire, exotic invasions) influence ecosystem structure and function (e.g., productivity, nutrient cycling) in natural forests, short-rotation plantation forests and agroforests. He uses ecological information in designing agroforestry systems and restoring degraded and damaged forest ecosystems.

Dr. Jose has authored and co-authored nearly 200 research articles published in peer-reviewed journals, eight edited books and several invention disclosures, two patents (pending) and one start-up company. He serves as Editor-In-Chief of *Agroforestry Systems* and editorial board member of several other journals. He also serves as the Chair of the Forestry Research Advisory Council that advises the U.S. Secretary of Agriculture. He is also active in IUFRO, serving as Coordinator of Unit 8.02.04 Ecology of alien invasives.

Over the past 20 years his research team has conducted projects in the USA., Australia, Costa Rica, Panama, Belize, Ukraine, Pakistan, India, and Bangladesh, where he served as a Fulbright Scholar. He has received many honours and awards, including the SAF Barrington Moore Memorial Award (2014), the Distinguished Alumni Award from the College of Agriculture, Purdue University (2018), and inaugural Partner in Leadership Advancement Award from the University of Missouri (2018).

Selected research sources:

1. *The Longleaf Pine Ecosystem: Ecology, Silviculture, and Restoration*. S. Jose, E. J. Jokela and D. L. Miller, eds. Springer Science, New York, 438p. 2006. (Second print edition published in June 2007)
2. Agroforestry for ecosystem services and environmental benefits: an overview. *Agroforestry Systems* 76(1): 1–10. 2009.
3. Managing native and non-native plants in agroforestry. *Agroforestry Systems* 83: 101–266. 2011.
4. *Invasive Plant Ecology*. S. Jose, H. Singh, R. Kohli and D. Batish, eds. CRC Press, 282p. 2013.
5. *Biomass and Biofuels: Advanced Biorefineries for Sustainable Production and Distribution*. S. Jose and T. Bhaskar, eds. CRC Press Boca Raton, FL, 392 p. 2015.

Personal sources:

1. URL: <https://cafnr.missouri.edu/person/shibu-jose/> Retrieved 07.02.2019.
2. Jose S. Personal communications (February 2019) at joses@missouri.edu



KOZAK, Robert Antal

Robert Antal Kozak received the IUFRO Scientific Achievement Award in 2014 for pioneering interdisciplinary efforts in the creation of a 'new wave' of business research within the forestry domain which focuses on conservation-based business management practices that promote sustainability of our global forest resources (IUFRO News 2014).

Robert Kozak was born in 1965 in Vancouver, British Columbia, Canada. He earned his B.Sc. (Forestry) in Wood Science (1987) and Ph.D. in Forest Products Marketing and Utilization (1996) at the University of British Columbia. He has spent the majority of his research career at the UBC Faculty of Forestry, progressing to Professor of Sustainable Business in 2008. He served as Head of the Department of Wood Science (2011–2015) and has been Associate Dean, Academic at the UBC Faculty of Forestry since 2016.

Working with colleagues from around the world and students in the Forest and Communities in Transition (FACT) lab, he sees his role as being a researcher who 'connects the dots' between the complex and multifaceted issues that occur in the world of forestry at the nexus of social, economic, and ecological realms. He has authored or co-authored over 250 papers and spoken at over 200 conferences around the world on business topics ranging from wood use in non-residential construction, value-added wood products, supply chain management, forest certification, corporate social responsibility, and most recently, poverty alleviation and community wellbeing. He is a member of editorial board of the *Canadian Journal of Forest Research*, *BioProducts Business*, and the *Journal of Forest Products Business Research*.

Professor Kozak has been associated with a number of Centres of Excellence, and affiliated with the United Nations Economic Commission for Europe Timber Committee, the Canadian Institute of Forestry, the Commonwealth Forestry Association, the Society of Wood Science and Technology, the Forest Products Society, and the Institute of Materials, Minerals and Mining. He provided valuable service to IUFRO as Deputy Coordinator of Unit 5.10.00 – Forest products marketing and business management (2014) and as Chair of the Local Organising Committee for the All Division 5 meeting in Vancouver, Canada (2017).

His contribution to forest research and education has been recognized in many ways. He was elected a Fellow of the Institute of Materials, Minerals and Mining (2000), and has received numerous awards, including the Killam Teaching Prize (2001 and 2014), the SAA (2014), the FLARE Pathways to Prosperity Award (2016), the Sheth Foundation Best Paper Award (2007), and the Association of BC Forest Professionals Best Article of the Year Award (2007).

Selected research sources:

1. How specifiers learn about structural materials. *Wood & Fiber Sci.* 29(4):381–396 (with D. Cohen). 1997.
2. Alternative business models for forest-dependent communities in Africa: A pragmatic consideration of small-scale enterprises and a path forward. *Madagascar Conserv. Develop.* 4(2): 76–81. 2009.
3. "What now, Mr. Jones? Some thoughts about today's forest sector and tomorrow's Great Leap Forward". Chapter 18, pp. 431–445. In: *The Global Forest Sector: Changes, Practices, and Prospects*, E. Hansen, R. Panwar, and R. Vlosky, eds. CRC Press (Taylor & Francis Group), Boca Raton. 2014.
4. Adoption and implementation of corporate responsibility practices: A proposed framework. *Business and Society* 54(5): 701–717 (with N. Vidal and E. Hansen). 2015.
5. *Forests, Business and Sustainability*. R. Panwar, R. Kozak, E. Hansen, eds. Routledge, 214 p. 2016.

Personal sources:

1. URL: <https://profiles.forestry.ubc.ca/person/robert-kozak/> Retrieved 31.01.2019.
2. Kozak R. A. Personal communications (February 2019) at rob.kozak@ubc.ca



MÄKELÄ-CARTER, Aino Annikki

Aino Annikki Mäkelä-Carter received the IUFRO Scientific Achievement Award in 2014 for her pioneering work in dynamic models of trees and stands, which translate material balances and structural models of trees into information and forecasts that are useful to both the research and forest management communities (IUFRO 2014, p. 4).

Ainikki Mäkelä was born on 10 July 1954 in Tampere, Finland. She earned her M.Sc. in Engineering (1980) and Licentiate Tech. (1982) in Systems Theory at the Helsinki University of Technology (HUT), and Ph.D. in Forestry (1988) at the University of Helsinki (UH). She started her career in 1978 as a Project Researcher at the UH's Department of Silviculture, and then as Assistant in Systems Theory at HUT (1980), Research Assistant (1981–1985), Junior Researcher (1987–1995) and Academy Researcher (1998–2003) at the Academy of Finland. Dr. Mäkelä-Carter served as a Project researcher at the UH (1995–1998). Since 2003, she served as Lecturer at UH, and since 2005 – Professor of Silviculture/Applied Forest Ecology. She has carried out numerous other responsibilities including Head of the Department, and Member of University Collegium (2010–2013).

Dr. Mäkelä-Carter has primary research interests in the area of growth, production, and population dynamics of boreal forests and practical applications of quantitative models, including her well-known CROBAS and PIPEQUAL models. As a Visiting Scientist (Research Scholar), she also studied at the Grassland Research Institute, Hurley, UK (1982–1983), IIASA, Vienna (1985–1987), UK Forestry Commission, Farnham (1988–1989), USDA FS, Durham, NH (2010, 2018), and the Swedish University of Agricultural Sciences (2018). She has also served as a Chair of IUFRO Working Party 4.01.09 Process-based models for predicting forest growth and timber quality (1996–2005).

She participated in various European universities, projects and programs, including the EU COST Action FP (2008–2015). She has published over 200 research papers, book chapters and presentations, and has served as Editor-in-Chief (Terrestrial Ecology) of *Boreal Environment Research* (1999–2002), on the editorial boards of *Scandinavian Journal of Forest Research* (2001–2004) and *Tree Physiology* (2006–...), and reviewers' boards of *Annals of Forest Science*, *Forest Ecology and Management*, *Frontiers in Forests and Global Change*, and as Guest Editor of several special issues of *Tree Physiology*. Dr. Mäkelä-Carter is a member of the Finnish Academy of Science and Letters (2004), and has served on the Governing Board of the Finnish Society of Forest Science (2002–2005). She has received the A.K. Cajander Bronze Medal from the Finnish Society of Forest Sciences (2009) and the First class Medal of the Order of the Finnish White Rose (2015).

Selected research sources:

1. Implications of the pipe model theory on dry matter partitioning and height growth in trees. *Journal of Theoretical Biology* 123(1): 103–120. 1986.
2. A carbon balance model of growth and self-pruning in trees based on structural relationships. *Forest Science* 43(1): 7–24. 1997.
3. Process-based models for forest ecosystem management: current state of the art and challenges for practical implementation. *Tree Physiology* 20(5–6): 289–298 (with A. Mäkelä, J. Landsberg, *et al.*). 2000.
4. Modeling forest stand dynamics from optimal balances of carbon and nitrogen. *New Phytologist* 194: 961–971 (with H. T. Valentine). 2012.
5. Bridging empirical and carbon-balance based forest site productivity – significance of below-ground allocation. *Forest Ecology and Management* 372: 64–77 (with M. Pulkkinen and H. Mäkinen). 2016.

Personal sources:

1. URL: https://tuhat.helsinki.fi/portal/files/121105963/Makela_CV.pdf Retrieved 07.02.2019.
2. Mäkelä-Carter A. A. Personal communications (February 2019) at ainikki.makela@helsinki.fi



ROUX, Jolanda

Jolanda Roux received the IUFRO Scientific Achievement Award in 2014 for her research accomplishments in the field of fungal diseases of trees on the African continent and beyond (IUFRO 2014, p.5).

Jolanda Roux was born on 14 February 1972 in Escourt, South Africa. She obtained her B.Sc. in 1993, B.Sc. (Hons.) in 1994, M.Sc. in 1996 and Ph.D. in 1999 from the University of the Free State in South Africa. In 1996, while still busy with her studies, she was appointed as Field Extension Officer in forest pathology for the South African forestry industry. In 1999 she was appointed as a Researcher at the University of Pretoria, where she worked as researcher, field extension specialist and member of the management committees for the Tree Protection Cooperative Programme (TPCP), DST-NRF Centre of Excellence for Tree Health Biotechnology (CTHB) and Forestry & Agricultural Biotechnology Institute (FABI) until 2017. She was promoted to Associate Professor in the Department of Microbiology and Plant Pathology (2005) and to full Professor (2009). She is currently the Programme Leader of the Pest and Disease Programme of Sappi Forests in South Africa.

Dr. Roux's research focuses on fungi, and their insect associates, that cause diseases of trees, particularly on the African continent. Her research has allowed her to collaborate extensively with scientists from Asia, Australia, Europe, North and South America. She has consulted and collaborated with foresters and researchers in Cameroon, Kenya, Ghana, Republic of Congo, Mozambique, Malawi, Uganda, Tanzania, Zambia and Madagascar. As a mentor of numerous Ph.D. and M.Sc. students and postdocs, she has had a major impact on the development of forest science in South Africa and the entire African region. Her work on diagnosis of tree health problems both in commercial plantation forests and in biologically sensitive and endangered native forests has resulted in a significant increase in knowledge regarding fungal tree pathogens as well as in the description of more than 70 novel fungal species from the African continent.

Dr. Roux has authored and co-authored more than 500 research papers, book chapters and presentations at national and international scientific symposia. She serves, or has served, on the editorial boards of the *South African Journal of Science*, *Forestry*, *Forest Pathology*, *Southern Forests*, *Tropical Plant Pathology*, and as a reviewer for many scientific journals. She also served on a number of international committees and boards, e.g., Vice-President of the Southern African Society for Plant Pathology (2011–2015), the ISPP Chair on Forest Pathology (2008–2013), and a member of IUFRO RG on Forest Pathology (2001–2016). Dr. Roux is a recipient of numerous honours and awards including the Queen's Award for Forestry by the CFA (2011), the DSTs Distinguished Young Women in Science Award (2011), the NSTF-BHP-Billiton Award (2012), and several other recognitions. She was also an Honorary Guest Professor in the Chinese Academy of Forestry (2011).

Selected research sources:

1. A serious new disease of *Eucalyptus* caused by *Ceratocystis fimbriata* in Central Africa. *Forest Pathology* 30: 175–184 (with M. J. Wingfield, B. D. Wingfield, J. P. Bouillett, A. C. Alfenas). 2000.
2. Diseases of plantation forestry trees species in Eastern and Southern Africa. *S. African Journal of Science* 101: 409–413 (multi-authored). 2005.
3. *Ceratocystis* species: Emerging pathogens of non-native plantation *Eucalyptus* and *Acacia* species. *Southern Forests* 71: 115–120 (with M. J. Wingfield). 2009.
4. Armillaria Root Rot of *Theobroma cacao*. In: *Cacao Diseases: A History of Old Enemies and New Encounters*. Bailey B. A., Meinhardt L. W., eds. Springer, pp. 429–447 (with M. P. A. Coetzee). 2016.

Personal sources:

1. URL: https://www.up.ac.za/faculty-of-natural-agricultural-sciences/news/post_1646492-prof-jolanda-roux-receives-iufro-scientific-award Retrieved 08.02.2019.
2. Roux J. Personal communications (February 2019) at jolanda.roux@fab.up.ac.za



SCARASCIA-MUGNOZZA, Giuseppe Edmondo

Giuseppe Edmondo Scarascia-Mugnozza received the IUFRO Scientific Achievement Award in 2014 for developing new methods for exposing whole trees to elevated atmospheric CO₂, pioneering ecosystem-level assessment of forest productivity and carbon sequestration by eddy covariance (IUFRO 2014).

Giuseppe Scarascia-Mugnozza was born on 5 September 1954 in Rome, Italy. He earned his B.Sc. (Hons.) in Agricultural Sciences (1977) and M.Sc. in Forest Sciences (1983) at the University of Bari, Italy, and Ph.D. in Forest Ecology and Management (1991) at the University of Washington, Seattle, USA. From 1981 to 2002, he has served as a Researcher, Assistant Professor, Lecturer and Professor in the fields of Silviculture and Forest Ecology, Physiology and Genetics at University of Bari in Bari and the University in Viterbo. In 1991–2002, Dr. Scarascia-Mugnozza was Ph.D. supervisor in Forest Ecology at *Tuscia University*. He was then responsible for research and administration as Director of the Institute of Agro-Environmental and Forest Biology of the National Research Council (CNR) of Italy (2002–2008), Director of the Division of Forestry and Land Use of the Research Council on Agriculture of Italy (2009–2013), Chair of the EFI Board (2015–2017), Chair of the Scientific Council of the “European Forest Technology Platform” (2005–2007), Member of the ESF’s Life, Earth and Environmental Science Committee (2008–2012), and Vice-Chair of the ESF-COST Domain “Forests, their Products and Services” (2005–2014). Since 2013 he has been Head of the Department of Biotechnology, Agrofood, and Forest Innovation at the University of Tuscia.

Dr. Scarascia-Mugnozza works at the leading edge of forest science focused on understanding the effects of climate change on the forest environment. He was among the first to demonstrate the impact of elevated CO₂ on forest tree species and ecosystems, with participation in European research projects since the early 1990s. He authored and co-authored over 240 scientific publications. He is founder and a member of the Italian Society of Silviculture and Forest Ecology, and of the international journal *iForest*, which has rapidly become a well-recognized open-access ISI journal. He is a referee for numerous scientific journals including Ecology, Tree Physiology, and Forest Science. In 2017, he was elected Correspondent and Associate Member of the Academie d’Agriculture de France. He is also a member of American Association for the Advancement of Science, Academy of Georgofili, Italian Academy of Forest Sciences, National Academy of Agriculture, Italian Botanical Society, Italian Society of Ecology, and the Italian Association of Remote Sensing.

Selected research sources:

1. An experimental test of the eddy correlation technique over a Mediterranean macchia canopy. *Plant, Cell and Environment* 14: 987–994 (with R. Valentini, P. De Angelis and R. Bimbi). 1991.
2. Long-term CO₂-enrichment in a Mediterranean natural forest: an application of large open top chambers. *Chemosphere* 36: 763–770 (with P. De Angelis). 1998.
3. Increased litter build up and soil organic matter stabilization in a poplar plantation after 6 years of atmospheric CO₂ enrichment (FACE): Final results of POP-EuroFACE compared to other forest FACE experiments. *Ecosystems* 12: 220–239 (with M. R. Hoosbeek). 2009.
4. Five steps for managing Europe’s forests. *Nature* 519: 407–409 (with S. Fares, P. Corona, M. Palahi). 2015.
5. UAV-Based thermal imaging for high-throughput field phenotyping of black poplar response to drought. *Frontiers in Plant Science* 8: 1681 (with R. Ludovisi, F. Tauro, R. Salvati, S. Khoury and A. Harfouche). DOI: [10.3389/fpls.2017.01681](https://doi.org/10.3389/fpls.2017.01681). 2017.

Personal sources:

1. Giuseppe Scarascia-Mugnozza. CV. https://www.urp.cnr.it/copertine/formazione/form_concorsi/CV_Commissari/CV%20Scarascia%20Mugnozza%20Giuseppe.pdf Retrieved 07.02.2019.
2. Scarascia-Mugnozza G. E. Personal communications (February 2019) at gscaras@unitus.it

2019 (CURITIBA, PARANÁ, BRAZIL)

On 30 September 2019, at the Opening Ceremony of the XXV IUFRO World Congress Dr. John L. Innes, the Chair of the IUFRO Honours and Awards Committee announced the results of competition for the Scientific Achievement Award. Members of the HAC, consisting of Drs. John Innes (Canada), Pil Sun Park (Republic of Korea), Dario Grattapaglia (Brazil), Ola Lindroos (Sweden), Jerry Vanclay (Australia), Pekka Saranpaa (Finland), Taylor Stein (USA), Sandra Luque (France), Eckehard Brockerhoff (Switzerland), Daniela Kleinschmit (Germany) and Mr. David Shonowo (Nigeria), and *ex officio*: Mike Wingfield (South Africa) and Alexander Buck (Austria) had chosen 10 winners, endorsed by the IUFRO Board, out of 22 nominations submitted (IUFRO News 2019). President Wingfield delivered the IUFRO SAA to the following scientists⁴¹:

Ellen MACDONALD	Canada
José de MORAES GONCALVES	Brazil
Maria NIJNIK	Scotland/Netherlands
David J. NOWAK	USA
Elena PAOLETTI	Italy
Marielos PEÑA-CLAROS	Bolivia/Netherlands
Terry SUNDERLAND	Canada/UK
Margarida TOMÉ	Portugal
Daowei ZHANG	USA/China
Junyong ZHU	USA/China



From left to right: *J. L. Innes*, *E. Macdonald*, *J. de Moraes Goncalves*, *D. J. Novak*, *E. Paoletti*, *M. Peña-Claros*, *T. Sutherland*, *M. Tomé*, *D. Zhang*, and *M. J. Wingfield* (Photo: *M. Booij-Liewes*, *FABI*, South Africa).

⁴¹ Maria Nijnik and Junyong Zhu were unable to attend the ceremony.



MACDONALD, S. Ellen

Ellen S. Macdonald received the IUFRO Scientific Achievement Award in 2019 for her outstanding individual scientific achievements within the fields of research covered by the Union (IUFRO News 2019).

Ellen Macdonald was born in London, Ontario, Canada. She obtained her B.Sc. (Hons.) in Environmental Biology (1983) and Ph.D. in Plant Ecology (1988) from the University of Calgary. During her study, she received several major scholarships. Dr. Macdonald has spent the majority of her professional career at the University of Alberta (UA) in Edmonton, Alberta, Canada. She began as a Post-doctoral Fellow (1988) and progressed from Assistant Professor in Forest Ecology in the Department of Forest Science (1989) to Associate Professor (1994) and Professor (since 1999) in the Department of Renewable Resources, in which she also served as Associate Chair (1999–2001), and Chair (since 2016). In addition, Professor Macdonald has been Associate Dean at the UA Faculty of Graduate Studies and Research (2001–2004) and Associate Dean Research & Graduate Studies at the UA Faculty of Agricultural, Life & Environmental Sciences (2009–2012).

Professor Macdonald's research interests cover the influence of natural and anthropogenic disturbances on the ecology and plant biodiversity of the boreal forest, regeneration processes and successional dynamics of boreal mixedwood forests, and restoration ecology in northern ecosystems. A major focus has been her work on the Ecosystem Management Emulating Natural Disturbance (EMEND) project. In this and related fields she has authored and co-authored more than 135 scientific publications in peer reviewed journals and a book chapter. She is frequently called upon to give invited talks or plenary presentations at national and international conferences, symposia and other meetings.

Professor Macdonald is a member of professional societies and associations including the Canadian Botanical Association, Canadian Society for Ecology and Evolution, Ecological Society of America, Society for Ecological Restoration, Society for Conservation Biology, and has served on major granting panels in Canada and Sweden. She was an Associate Editor of the *Canadian Journal of Forest Research* (2009–2018) and became Co-Editor-in-Chief in 2018. Professor Macdonald received a number of recognitions as a Teacher of the Year (2004, 2008, 2009, and 2010), Izaak Walton Killam Annual Professor (2007–2008), and Ed and Peggy Tyrchniewicz Award for Innovation in Teaching (2015) at the University of Alberta, as well as the Scientific Achievement Award from the Canadian Institute of Forestry (2014).

Selected research sources:

1. Edge influence on forest structure and composition in fragmented landscapes. *Cons. Biology* 19: 768–782 (multi-authored). 2005.
2. Effects of partial post-fire salvage harvesting on vegetation communities in the boreal mixedwood forest region of northeastern Alberta, Canada. *For. Ecol. and Mgmt.* 239: 21–31. 2007.
3. Understorey plant communities of boreal mixedwood forests in western Canada: natural patterns and response to variable-retention harvesting. *For. Ecol. and Mgmt.* 242: 34–48 (with T. E. Fenniak). 2007.
4. Forest restoration following surface mining disturbance: Challenges and solutions. *New Forests* 46: 703–732. (The first author in multi-authored paper). 2015.

Personal sources:

1. URL: <https://www.ualberta.ca/agriculture-life-environment-sciences/about-us/contact-us/faculty-lecturer-directory/ellen-macdonald> Retrieved 01.05.2019.
2. Macdonald S. E. Personal communications (May 2019) at ellen.macdonald@ualberta.ca



GONÇALVES, José Leonardo de Moraes

José Leonardo de Moraes Gonçalves received the IUFRO Scientific Achievement Award in 2019 for his contributions to the focus area of soil conservation and site management for eucalypt plantations in the diverse sub-tropical and tropical environments (IUFRO News 2019).

Leonardo Gonçalves was born on 5 April 1960 in Brazil. He earned his B.Sc. in Agronomy (1983) and M.Sc. in Soil and Plant Nutrition (1987) at the Federal University of Viçosa, Brazil, and his Ph.D. in Soil and Forest Nutrition (1990) at the University of São Paulo (USP), Brazil. He spent an academic year (1992–1993) as a Visiting Scientist at CSIRO, Forestry and Forest Products, Australia. Since 1988, he has spent most of his professional career with

Department of Forest Sciences, the USP “Luiz de Queiroz” College of Agriculture (ESALQ). He has served as Associate Professor (1988–2008), full Professor (2008), Manager at Laboratory of Applied Ecology (since 1994), Manager, Post-graduate Program on Forest Science (2003–2007), Deputy Head (2007–2008) and Head (2008–2012) of the Department. Since 1994, he has supervised five Post-Doctoral researchers, 28 PhDs, 26 M.Sc. and 150 undergraduate students.

Dr. Gonçalves has primary research interests in the area of soil conservation, site management, eucalypt plantations development and treatment, integrating silvicultural strategies for planting improved germplasm for production, environmental risks management, forest soils nutrition and fertilizer prescriptions, and multidisciplinary research. Within his professional expertise, Dr. Gonçalves leads several national and international projects and programs, including one at the *Instituto de Pesquisas e Estudos Florestais* (IPEF, Institute for Forest Research and Study), a member of IUFRO. Internationally, he has collaborated within the CIFOR international network (1996–2006), in the partnership between CIRAD/INRA France and USP/ESALQ (since 2002), CSIRO/IPEF/USP/ESALQ Agreement (2005–2012), with the University of Washington, USA on site-soil and nutrient management (since 2014), and others. He has also served as Assistant Editor of the *Journal of the Brazilian Society of Soil Science* (1998–2010) and Editorial Advisory Board of *Scientia Agricola Journal* (Brazil), and was co-editor of a special issue in *Forest Ecology and Management* (2013).

Dr. Gonçalves has actively collaborated with IUFRO in various positions since 1994. Since 1994, he has been the coordinator of the IPEF Cooperative Program of Forestry and Management and was a member (2008–2015) of the IPEF Deliberative Council. He has served as Coordinator of IUFRO WP 2.08.03 Improvement and Culture of Eucalypts (2008–2012) and chaired the conference held in Brazil in 2014. Since 2015 he has served as Deputy Coordinator of WP 1.02.01 Ecology and Silviculture of Plantation Forests in the Tropics, and since 2016, he has been a member of the IUFRO TF on Soil and Water Interactions.

Selected research sources:

1. Soil conservation. In: J. L. M. Gonçalves, J. L. Stape, eds. *Conservation and cultivation of soils for forest plantations*. 1 ed. Piracicaba-SP: IPEF, Vol. 1, pp. 47–129. 2002. (Portuguese).
2. *Forest Nutrition and Fertilization*. J. L. M. Gonçalves, V. Benedetti, eds. Piracicaba: IPEF, V. 1, 421 p. 2004.
3. Challenges and opportunities for sustainable management of eucalypt plantations. J. P. Laclau, J. L. M. Gonçalves, J. L. Stape, guest eds. *For. Ecol. and Mgmt.* 301, 141 p. 2013.
4. Simulating the effects of different potassium and water supply regimes on soil water content and water table depth over a rotation of a tropical *Eucalyptus grandis* plantation. *For. Ecol. and Mgmt.* 418: 4–14 (multi-authored paper). 2018.

Personal sources:

Gonçalves J. L. M. Personal communications (May 2019) at jlmgonca@usp.br



NIJNIK, Maria

Maria Nijnik received the IUFRO Scientific Achievement Award in 2019 for her outstanding scientific achievements within the fields of research covered by the Union (IUFRO News 2019).

Maria Nijnik (b. Gensiruk) was born on 7 April 1956 in Lviv, Ukraine. She graduated with Dipl. Eng/M.Sc. (Hon.) from the Ukrainian National Forestry University (1978), obtained a Ph.D. (1984) from the Institute of Economics, the Academy of Sciences of Ukraine, and continued in the Netherlands: receiving an M.Sc. in Environmental Policy and Management from the Network of Dutch Universities (1995), Post-Graduate Diplomas from the Network on General and Quantitative Economics (1999) and the Mansholt Institute (2002), and a Ph.D. in Social Sciences from Wageningen University.

Dr. Nijnik worked as a Researcher at the Institute of Economics (1978–1991) and Associate Professor of Lviv State University (1991–1994). She continued as a Researcher at the Institute for Environmental Studies, Free University Amsterdam (1996–2000) and the Agricultural Economics and Rural Policy Group, Wageningen University (2000–2002). Since 2002, she has worked at the James Hutton Institute in the UK where she is currently Principal Scientist of the Social, Economic and Geographical Sciences Group and among her other duties is the Coordinator of EU H2020 Project Social Innovation in Marginalized Rural Areas and Leadership on social innovation for the Scottish Government Strategic Research Programme.

Dr. Nijnik has 320 scientific outputs, with 60 peer-reviewed journal articles on forest economics, policy and management, climate change, sustainability and rural development. She developed novel ways of evaluation of landscape change; conceptualised multi-functional forestry by explaining the heterogeneity of attitudes to woodlands; provided evidence of the cost-effectiveness and social acceptability of forest plantations; deconstructed the sources of leakage and livelihood outcomes of reforestation, etc. Her suggestions on how social innovation can help to strengthen the resilience of socio-ecological systems and whether carbon accounting can promote economic development in forest-dependent communities could form a basis for improved decision-making.

Dr Nijnik is IUFRO Office holder. Being Dep. Coordinator of Unit 4.05.02 in 2010–2019, currently, she coordinates a new Working Party on Social Innovation and Entrepreneurship. She is also a Member of the Scientific Advisory Boards of the European Forest Institute; Institute for Regional Development, EURAC; H2020 InnoForEst project and Science for the Carpathians. She was Member of the Management/Steering Committees of COST Actions: FP0703 – ECHOES (2008-2011) and ES1203 – SENSFOR; FP1203 – Non-wood forest products; FP1207 – Forest-related policy analyses (2013–2016) and Co-Leader of the Valuation and Uptake Process Area of the Ecosystems Community Scotland, and has had many other duties. She has given numerous talks, including one on depopulation in rural areas for HMs the King and Queen of the Netherlands and others at the Royal Palace in Amsterdam (2017).

Selected research sources:

1. Accounting for uncertainties and time preference in economic analysis of tackling climate change through forestry and selected policy implications for Scotland & Ukraine. *Clim. Ch.* 124: 677–690 (with G. Pajot). 2014.
2. Exploring the linkages between multi-functional forestry goals and the legacy of spruce plantations in Scotland. *Canadian Journal of Forest Research* 46: 1247–1254 (with A. Nijnik and I. Brown). 2016.
3. Is forest related decision-making in European treeline areas socially innovative? A Q-methodology enquiry into the perspectives of international experts. *Forest Pol. Economics* 92: 210–219 (with A. Nijnik, S. Sarkki, J. Muñoz-Rojas, D. Miller and S. Kopyi). 2018.

Personal sources:

1. URL: <https://www.hutton.ac.uk/staff/maria-nijnik> Retrieved 21.04.2019.
2. Nijnik M. Personal communications (April 2019) at maria.nijnik@hutton.ac.uk



NOWAK, David John

David John Nowak received the IUFRO Scientific Achievement Award in 2019 for novel, innovative and pioneering research on assessing the structure, services and values derived from urban forests globally, and how these forests are changing (IUFRO News 2019).

David Nowak was born on 16 December 1961 in Buffalo, NY, USA. In 1984, he obtained his B.Sc. (Hons), dual major: Resource Management & Forest Biology, and M.Sc. in Urban Forestry (1986) at SUNY College of Environmental Science and Forestry, Syracuse, NY. In 1991, he earned his Ph.D. at the University of California-Berkeley and began his professional career as a Research Forester at the USDA Forest Service Northeastern Research Station. He then progressed to a Project Leader (1997) and was promoted to a Government Senior Scientist (ST) position (2016). Since 1997, Dr. Nowak is also an Adjunct Professor at the SUNY College of Environmental Science and Forestry.

Dr. Nowak's research focuses on assessing urban forest structure and health, and its associated impacts on human health and well-being. His research also investigates long-term changes to urban forests and he leads the development of the i-Tree modeling suite (www.itreetools.org). This suite includes numerous easy-to-use and freely available tools to aid in the assessment of urban and rural forest structure, ecosystem services and values globally. He also leads national and global assessments of urban forests.

Dr. Nowak's awards include the International Society of Arboriculture's L.C. Chadwick Award for Arboricultural Research and R.W. Harris Author's Citation; J. Sterling Morton Award – National Arbor Day Foundation's highest honor; US EPA Office of Research and Development Honor Award; American Forests Urban Forest Medal; Distinguished Science Award for Northeastern Research Station and he was a contributing member of Nobel Peace Prize winning Intergovernmental Panel on Climate Change. He has given over 550 presentations and authored or co-authored over 300 publications including numerous book chapters and over 100 articles in referred scientific journals such as *Forest Science*, *Bioscience*, and *Environmental Pollution*.

Dr. Nowak has been invited to consult and participate in numerous international projects in America, Europe, Asia, and Oceania (e.g., United States, Canada, Mexico, Colombia, Brazil, United Kingdom, Italy, Australia, New Zealand, and South Korea). He is a member of the International Society of Arboriculture and was an IUFRO as Deputy Coordinator (2005–2010) and current Coordinator of IUFRO Research Group S6.07.00 – Urban Forestry (2010–2019). His research has set the global standard for assessing and valuing urban forests, and is helping improve the health and well-being of urban residents across the world.

Selected research sources:

1. Contrasting natural regeneration and tree planting in 14 North American cities. *Urban Forestry and Urban Greening* 11: 374–382. 2012.
2. Tree and forest effects on air quality and human health in the United States. *Environmental Pollution* 193: 119–129 (with S. Hirabayashi, A. Bodine and E. Greenfield). 2014.
3. U.S. urban forest statistics, values and projections. *J. For.* 116(2): 164–177 (with E. J. Greenfield). 2018.
4. Declining urban and community tree cover in the United States. *Urban Forestry and Urban Greening* 32: 32–55 (with E. J. Greenfield). 2018.

Personal sources:

1. URL: <https://www.nrs.fs.fed.us/people/dnowak> Retrieved 20.04.2019.
2. Nowak D. J. Personal communications (April 2019) at dnowak@fs.fed.us



PAOLETTI, Elena

Elena Paoletti received the IUFRO Scientific Achievement Award in 2019 for her work at the leading edge of forest science in understanding mechanisms of action and effects of climate change factors on the forest environment (IUFRO News 2019).

Elena Paoletti was born on 11 January 1963 in Firenze, Italy. She earned her Master (Hons.) in Forest Science (1987) and Ph.D. in Agricultural Biology (1991) at the University of Florence, Italy. In 1994–1995, she was a post-doc at the Institute of Forest and Agricultural Pathology and Zoology, University of Firenze, and habilitated in 2014. She started her professional career as a researcher working on grants at CNR, Firenze, and via various senior positions, she progressed to Research Director (since 2010) at the National Research Council of Italy the major Italian institution in this field and is now at the Institute of Research on Terrestrial Ecosystems (IRET). She is a Professor at the Chinese Academy of Science in Beijing, China, and other academic institutions in Italy and Japan.

In recent years, Dr. Paoletti has focused her research on a neglected aspect of climate change, i.e. the greenhouse gas and phytotoxic pollutant ground-level ozone, and has contributed fundamental knowledge to the action mechanisms, promoted novel methods for exposing whole trees to elevated atmospheric ozone concentrations under realistic conditions, and developed innovative approaches of integrated forest monitoring. She has authored and co-authored around 190 scientific publications in leading peer-reviewed journals as well as edited numerous proceedings of conferences and workshops.

Dr. Paoletti is a member of the Italian Academy of Forest Science. She became the first female scientist elected a member of the Scientific Committee of the Italian Society of Silviculture and Forest Ecology (SISEF) and its Vice President (2008–2011, 2016–2019). She is Chair of the EFI (European Forest Institute) Scientific Advisory Board (since 2017). She has (co)organized 50 congresses/workshops, including the 2017 session at the United Nations Forum for Forests (UNFF) in New York, as was an invited speaker there in 2019. She is member of several national and international networks, editorial and review boards of professional journals including Elsevier publishers. She is a holder of numerous national and international and awards.

Since 1996, Dr. Paoletti has been an active IUFRO officeholder. She served as Deputy Chair of WP 7.04.02 Biochemical and physiological aspects of air pollution effects on forest ecosystems (1996–2000), a member of IUFRO TF on Environmental Change (1997–2000), Coordinator of RG 7.01.00 Impacts of Air Pollution and Climate Change on Forest Ecosystems (since 2001), and Deputy Coordinator of Division 7 Forest Health. She is Coordinator of the IUFRO TF on Climate Change and Forest Health and a member of the IUFRO Enlarged Board (since 2014). In 2010, Dr. Paoletti received the IUFRO Division 7 Forest Health Award for Achievement in Forest Health Research.

Selected research sources:

1. Impact of ozone on Mediterranean forests: a review. *Environmental Pollution* 144(2): 463–474. 2006.
2. Integrated effects of air pollution and climate change on forests: a northern hemisphere perspective. *Environmental Pollution* 147(3): 438–445 (with A. Bytnerowicz and K. Omasa). 2007.
3. Ozone-induced stomatal sluggishness changes carbon and water balance of temperate deciduous forests. *Scientific Reports* 5, srep09871 (with Y. Hoshika, G. Katata, M. Deushi, M. Watanabe, T. Koike). 2015.

Personal sources:

Paoletti E. Personal communications (May 2019) at elena.paoletti@cnr.it



PEÑA-CLAROS, Marielos

Marielos Peña-Claros received the IUFRO Scientific Achievement Award in 2019 for her outstanding individual scientific achievements within the fields of research covered by the Union (IUFRO News 2019).

Marielos Peña-Claros was born on 21 June 1969 in Santa Cruz, Bolivia. She obtained her B.Sc. in Biology from the University of São Paulo (USP), Brazil (1990), M.Sc. in Tropical Ecology from the University of Florida, USA (1996), and Ph.D. in Ecology from Utrecht University, the Netherlands (2001). In 2001 Dr. Peña-Claros was appointed as sub-director and in 2002 as the Director of the Research Unit of the Bolivian Forest Management project – BOLFOR. In 2003 she became the Executive Director of the Bolivian Forest Research Institute – IBIF Santa Cruz, Bolivia. In early 2006 she moved to the Netherlands as a visiting researcher at Wageningen University & Research (WUR), where she worked in different positions (2007–2014). Since 2015 she has been Associate Professor at the Forest Ecology and Forest Management group at WUR. Dr. Peña-Claros has focused her research on tropical forest ecology, sustainable forest management, silviculture, forest certification, and forest recovery after human disturbances. In her research, she addresses fundamental research questions with applied relevance. She has given 58 oral presentations, most of them as invited or keynote speaker. She has authored or co-authored 94 scientific papers, 12 books or book chapters, and 19 miscellaneous publications. She has served as a member of editorial boards, co-editor of special issue “REDD+SCIENCE+GOVERNANCE: Opportunities and challenges”, and subject and associate editor at *Biotropica*. She is a reviewer of several leading forest journals including *Forest Ecology and Management*, *Journal of Tropical Ecology*, *Canadian Journal of Forest Research* and others. She is member of several research networks, including the Tropical managed Forest Observatory (TmFO) and the Secondary Forest Network (2ndFor). She has supervised 11 Ph.D. students and over 60 B.Sc. and M.Sc. students.

Dr. Peña-Claros has served as a member of numerous scientific committees for various meetings held in Bolivia, Brazil, China, France, Germany, Mexico, Panama, and Switzerland. She has also been a member of several boards including the Board of Directors of the Bolivian Council for Forest Certification (1997–2000, 2004–2006), three terms at the IBIF Board of Directors (2012–2017) and others. She was President of the Association of Tropical Biology and Conservation (2016–2018). Dr. Peña-Claros was awarded the Martin Cardenas Award by the Bolivian National Academy of Science as distinguished researcher in botany and related research fields (2012).

Selected research sources:

1. Changes in forest structure and species composition during secondary forest succession in the Bolivian Amazon. *Biotropica* 35: 450–461. 2003.
2. The integration of empirical, remote sensing and modelling approaches enhances insight in the role of biodiversity in climate change mitigation by tropical forests. *Current Opinion in Environmental Sustainability* 26: 69–76 (Multi-authored paper). 2017.
3. Beyond reduced-impact logging: silvicultural treatments to increase growth rates of tropical trees. *Forest Ecology and Management* 256: 1458–1467 (multi-authored paper). 2008.
4. Persistent effects of pre-Columbian plant domestication on Amazonian forest composition. *Science* 355: 925–931 (Levis C., F. R. C. Costa, F. Bongers, M. Peña-Claros, and other 121 authors). 2017.

Personal sources:

Peña-Claros M. Personal communications (May 2019) at marielos.penaclaros@wur.nl



SUNDERLAND, Terence (Terry) C. H.

Terence C. H. Sunderland received the IUFRO Scientific Achievement Award in 2019 for his outstanding individual scientific achievements within the fields of research covered by the Union (IUFRO News 2019).

Terry Sunderland was born on 25 May 1967 in Crowborough, UK. He obtained his Diploma in Horticulture (Hons.) from the Royal Botanic Gardens at Kew (1991), M.Sc. in Forestry and its Relation to Land (Distinct.) from the University of Oxford (1993), and Ph.D. in Anthropology and Biology (2000) at University College in London, where he also completed his post-doctoral study in forest product utilization (2000–2003). Dr. Sunderland began his professional career in 1983 as a Horticultural Trainee at Brighton’s Park and Recreation Department prior to pursuing higher education. He then worked in Cameroon as a Technical Officer of the Overseas Development Administration (1993–1996), Programme Manager (1996–2004) of the African Rattan Research Programme, Project Director of Wildlife Conservation Society in Cameroon and Nigeria (2004–2006), and, latterly, Senior/Principal Scientist at CIFOR, Bogor, Indonesia (2006–2017). In January 2018, Dr. Sunderland was appointed as a Professor of Tropical Forestry at the UBC’s Faculty of Forestry. To date, he has supervised or co-supervised more than 40 graduate students.

Dr. Sunderland’s academic career indicated a gradual transition from a focus on botany towards the social sciences, from biodiversity and conservation, forest management, land-use change and sustainability, to communities and livelihoods, ecosystem services, landscape ecology, and social science at large. He has authored and co-authored more than 260 scientific papers, book chapters and working papers, and edited 13 books on various topics of his professional interest as well as numerous blogs and media coverage. He served as editor and a member of editorial boards of a number of scientific journals and has also contributed to numerous global science committees, including the IUFRO GFEP report on “Forests, Trees and Landscapes for Food Security and Nutrition: A Global Assessment Report.” and chairing the HLPE report on “Sustainable Forestry for Food Security and Nutrition” (2017).

Dr. Sunderland’s achievements have been recognized with a number of honours and awards including Hallett Science Award from East Sussex County Council (1988, 1991), G.C. Johnson Memorial Prize, Dummer Memorial Prize from the Royal Botanic Gardens (1991), and the Jubilee Prize by University of Oxford (1993).

Selected research sources:

1. A methodological approach for assessing cross-site landscape change: Understanding socio-ecological systems. *Forest Policy and Economics* 84: 83–91 (multi-authored paper). 2017.
2. Challenging perceptions about men, women, and forest resources: Results from the PEN global dataset. *World Development* 64: S56–S66 (multi-authored paper). 2014.
3. The landscape approach: ten principles to apply at the nexus of agriculture, conservation and other competing land-uses. *Proc. Nat. Acad. Sci. USA* 110 (21) 8345–8348 (multi-authored paper). 2013.
4. Food security: why is biodiversity important? *International Forestry Review* 13(3): 265–274. 2011.
5. Conservation and development in tropical forest landscapes: a time to face the trade-offs? *Environmental Conservation* 34(4): 276–279 (with C. Ehringhaus and B. M. Campbell). 2008.

Personal sources:

Sunderland T. Personal communications (April 2019) at terry.sunderland@ubc.ca



TOMÉ, Maria Margarida Branco de Brito Tavares

Maria Margarida Branco de Brito Tavares Tomé received the IUFRO Scientific Achievement Award in 2019 for her outstanding individual scientific achievements within the fields of research covered by the Union (IUFRO News 2019).

Margarida Tomé was born on 29 June 1954 in Lisbon, Portugal. The entire career of Dr. Tomé is tightly linked with her *alma mater* – *Instituto Superior de Agronomia* (ISA) in Lisbon. She graduated in Forestry (1977) and earned her Ph.D. in Forestry (1986) and Habilitation (1996) from ISA. She also graduated in Applied Mathematics: statistics, operations research and informatics (1984) and obtained her minor in Statistics (1986) from *Universidade de Lisboa*. She has grown up professionally at the same institutions from Teaching Assistant (1978) to Assistant Professor (1989), Associate Professor (1990) and full Professor (since 2000). Dr. Tomé has been actively involved in the ISA's public and management affairs. She progressed from a Member of the Educational Board (1980) to Chair of the Educational Board (1993–1996), from member of Board of Directors (1984–1996) to Head of the ISA Computing Centre (1997–1998), from Member of the Executive Board (1987–1991) to Deputy Chair (1998–2000) and Chair (2002–2004) of the Forestry Department, and to Chair of the ISA Scientific Board (2009–2013). At the international level, she served as member of Scientific Advisory Board of the EFI (2000–2004), EFIATLANTIC (2009–2012) and EFIMED (since 2011). She coordinates the Forest Ecosystem Management under Global Change (ForChange) group, one of the research groups of CEF (Forest Research Centre).

Having a strong background in forest biometry, forest inventory, forest modelling (growth, wood and non-wood products, risks, and ecosystem services), Dr. Tomé's research covers a wide range of forest-related studies. Among them are improvement of methods for forest ecosystem assessment, enhancement of forest models in order to cope with the complexity of the Atlantic and Mediterranean ecosystems as well as with the context of multi-faceted changes, integration of forest models into forest simulators, and in developing monitoring methodologies for carbon stocks. She has authored and co-authored more than 350 articles, books and manuals, project reports and other publications. She has edited the Kluwer/Springer series "Managing Forest Ecosystems" since 2000 and edited numerous proceedings of scientific conferences, seminars and other symposia. As a scholar, educator and administrator, Dr. Tomé has been recognized with numerous honours and awards of *Instituto Superior de Agronomia*, *Junta nacional de Investigação Científica* (Portugal) and National Academy of Sciences (USA), ESRI Award for best scientific paper in Geographic Information Systems and others.

Dr. Tomé started her collaboration in IUFRO as Co-chair (1991) and Chair (1996) of WP S4.01-04, and from 2005 to 2014, she was Coordinator of Division 4. Then she was a member of the IUFRO TF "The role of forests in carbon cycles, sequestration and storage" (2001–2005), and Co-chair of the IUFRO TF "Sustainable planted forests for a greener future" (since 2015). Dr. Tomé received the IUFRO Best Poster Award (2000) and the IUFRO Distinguished Service Award (2017).

Selected research sources:

1. *Sustainable Forest Management*. K. von Gadow, M. Tomé, and T. Pukkala, eds. Series Managing Forest Ecosystems, Kluwer Academic Publishers B. V. Series. 2000.
2. Special issue on selected results from the FORSEE project. M. Tomé and T. Farrell, eds. *Annals of Forest Science* 66(3). 2009.
3. *Modeling Forest Trees and Stands*. Springer, xiv, 476 p. (with H. Burkhart). 2012.

Personal sources:

Tomé M. Personal communications (April 2019) at magatome@isa.ulisboa.pt



ZHANG, Daowei

Daowei Zhang received the IUFRO Scientific Achievement Award in 2019 for his outstanding research contributions that have national, regional, and global impacts (IUFRO News 2019).

Daowei Zhang was born on 6 November 1963 in Rudian Village, Henan Province, China. He obtained his B.Sc. Forestry (1984) from South-Central University of Forestry and Technology, China, M.Sc. in Forest Economics and Management (1989) from Beijing Forestry University, and Ph.D. in Forest Economics and Policy (1994) from the University of British Columbia, Canada. He began his professional career in China's Ministry of Forestry in 1984 and worked (1988–1989) as Project Coordinator at the State Investment Cooperation of Forestry (now China Development Bank). In 1994 he started his academic career as Assistant Professor at Auburn University, Alabama, USA, and reached Associate Professor (1999), Professor (2003), and Alumni and George Peake Jr. Professor of Forest Economics and Policy (2011). Since 2017 he has taken a long sabbatical leave, serving as Senior Forestry Officer and Team Leader to the UN FAO Forestry Department.

Professor Zhang's research interests are in the economic and policy aspects of forest resource management, especially property rights, political economy, forest products trade, land use change, environmental services, forest finance and valuation, and international forestry. He has authored or co-authored more than 120 refereed publications and served as an Associate Editor for *Forest Science*, *Southern Journal of Applied Forestry*, *Journal of Forest Economics*, and *Forest Economic Review*.

Professor Zhang has been a consultant for, or contributor to the UN FAO, CIFOR, U.S. Forest Service, U.S. Department of Justice, University of Helsinki, China's State Forestry Administration, and a dozen private companies in the United States. He has experience in 20 plus countries and served on the Board of Directors of the Pinchot Institute for Conservation (2000–2006). He has been a Society of American Foresters (SAF) Fellow since 2016, and was appointed to the SAF's Science and Technology Board. He received Auburn Author Award (2008, 2012, and 2014) and the SAF's Award in Forest Science (2009), and Research and Development Award (from Southeastern SAF, 2018).

Selected research sources:

1. *The Softwood Lumber War: Politics, Economics, and the Long U.S.-Canada Trade Dispute*. Routledge, Resource for the Future Press, 320 p. 2007.
2. *Forest Economics*. University of British Columbia Press, 412 p. (with P. H. Pearse). 2011. Also published in Chinese, Spanish and Russian.
3. Policy instruments for developing planted forests: Theory and practices in China, the U.S., Brazil, and France. *Journal of Forest Economics* 21: 223–237 (with A. Stenger and P. A. Harou). 2015.
4. From senators to the president: Solving the lumber problem or else. *Public Choice* 123: 393–410 (with D. LaBand). 2005.
5. Endangered Species Act and timber harvesting: The case of Red-Cockaded Woodpeckers. *Economic Inquiry* 42(1): 150–165. 2004.
6. Why so much forestland in China does not grow trees? *Management World* 3: 120–125. 2001.
7. Sticks, carrots, and reforestation investment. *Land Economics* 77 (3): 443–56 (with W. Flick). 2001.
8. Differences in silvicultural investment under various types of forest tenure in British Columbia. *Forest Science* 44(4): 442–449 (with P. H. Pearse). 1996.

Personal sources:

1. URL: <http://webhome.auburn.edu/~zhangd1/> Retrieved 30.04.2019.
2. Zhang D. Personal communications (May 2019) at Zhangd1@auburn.edu



ZHU, JunYong (J.Y.)

Junyong (J.Y.) Zhu received the IUFRO Scientific Achievement Award in 2019 for his outstanding contribution to forest products research in advanced wood and fiber utilization (IUFRO News 2019).

Junyong (J.Y.) Zhu was born on 25 August 1963 in a village in Kunshan County, Jiangsu Province, P.R. China. He passed the National College Entrance Examination with honour. He received his B.Sc. (1983) and M.Sc. (1986) both in Aeronautical Engineering at Beijing Institute of Aeronautics and Astronautics (BIAA). In 1986, he continued his education in the USA with research assistantships. He received his M.Sc. in Mechanical Engineering from Arizona State University (1988) and Ph.D. in Engineering from the University of California – Irvine (1991). After a brief stay in the aerospace industry in the Silicon Valley, CA, in 1993 Dr. Zhu became a faculty member at the Institute of Paper Science and Technology (now the Renewable Bioproducts Institute RBI) at Georgia Tech. in Atlanta, GA. In 2003, Dr. Zhu joined the USDA FS, Forest Products Laboratory in Madison, WI, as a research unit/scientific leader. He is Adjunct Professor at the Department of Biological Systems Engineering at the University of Wisconsin at Madison.

Dr. Zhu's research interest covers the broad area of biofuels, biochemicals, and biomaterials, including mechanical and chemical pretreatments of woody biomass for bioconversion, cellulose nanomaterials, biorefinery, and traditional papermaking fibers to name just a few. His research ranges from laboratory studies to commercial-scale demonstrations. He has co-authored over 200 publications in refereed journals and is co-inventor of 17 US patents and patent applications. Dr. Zhu serves on the editorial boards and as associate editor of various professional journals, including *TAPPI Journal*, *BioEnergy Research*, and *China Pulp and Paper*. Dr. Zhu is a member of the American Association for the Advancement of Science (AAAS), American Chemical Society (ACS), American Institute of Chemical Engineers (AIChE, Past Chair of the Forest Bioproducts Division), Technical Association of the Pulp and Paper Industry (TAPPI), and International Academy of Wood Science (IAWS).

Dr. Zhu has been recognized with numerous honours and awards including USDA Exemplary R&D in Agriculture, Food, Nutrition, and Natural Resources, (2011), USFS Deputy Chief for R&D's Distinguished Science Award (2013), TAPPI International R&D Technical Award and William H. Aiken Prize (2014), American Institute of Chemical Engineer Andrew Chase Award (2016), Fulbright scholarship and the inaugural Fulbright-Aalto University Distinguished Chairmanship in Sustainable Use of Renewable Natural Resources, Helsinki, Finland, for the 2015–2016 academic year.

Selected research sources:

1. A simple and rapid method to determine hexenuronic acid groups in chemical pulps. *J. Pulp Paper Sci.* 27(5): 165 (with X.S. Chai and J. Li). 2001.
2. Sulfite pretreatment (SPORL) for robust enzymatic saccharification of spruce and red pine. *Bioresour. Technol.*, 100(8): 2411–2418 (with X. J. Pan, G. S Wang and R. Gleisner). 2009.
3. pH-induced lignin surface modification to reduce nonspecific cellulase binding and enhance enzymatic saccharification of lignocelluloses. *ChemSusChem* 6(5): 919–927 (with H. Lou, T. Q. Lan, H. Lai and X. Qiu). 2013.
4. Highly thermal-stable and functional cellulose nanocrystals and nanofibrils produced using fully recyclable organic acids. *Green Chem.* 18: 3835–3843 (with L. Chen, C. Baez, P. Kitin and T. Elder). 2016.

Personal sources:

1. URL: <https://bse.wisc.edu/staff/zhu-junyong-jy/> Retrieved 18.04.2019.
2. Zhu J. Y. Personal communications (April 2019) at junyong.zhu@usda.gov

CONCLUSIONS

Over 50 years (1971–2020), some 97 scientists representing 31 countries from all continents have been granted with IUFRO Scientific Achievements Award for their research on a wide spectrum of theoretical and practical issues. The USA has had the highest number of the recipients – 20 scientists, followed by Canada – 16, Australia – 9, and Finland – 5 people. Many other countries have had less than five awardees, e.g., China, Malaysia and United Kingdom – 4 scientists each, France, Republic of South Africa, and Sweden – 3 each, Belgium, India, Italy, Japan, and Poland – 2 each, Austria, Bolivia, Brazil, Costa Rica, Czechoslovakia, Denmark, Germany, Indonesia, Republic of Korea, Netherlands, Nigeria, Norway, Portugal, Switzerland, Ukraine, and the USSR (Russia) – 1 scientist. It should be also mentioned that eight scientists achieved their distinction working in two or more countries.

Several scientists who received the IUFRO SAA are also the recipients of other IUFRO awards. Among them are four individuals who later became Honorary Members of IUFRO: in 2010 – Professor Risto Seppälä (Finland) and Dr. Eric Teissier du Cros (France), in 2014 – Dr. Su See Lee (Malaysia), and in 2019 – Dr. Niels Elers Koch (Denmark). Three researchers were also granted IUFRO Distinguished Service Awards: in 1995 – Professor Harold Burkhart (USA) who also received the IUFRO Host Country Award in 2014. Professor John Innes (Canada) was granted IUFRO DSA in 2005, Professor Margarida Tomé (Portugal) received IUFRO DSA in 2017, and Professor Jerry Vanclay (Australia) received IUFRO DSA in 2019.

The research areas covered by IUFRO SAA recipients go far beyond the forest issues represented by the 9 IUFRO Divisions and numerous acting and former Task Forces, project and interdisciplinary groups. Many awardees are widely recognized scientists, researchers, teachers, and administrators. Many have served in Universities' Presidential and Rector Offices, or as the Deans of colleges, or as Councillors and advisors of academic, governmental and business structures. Almost all are members of editorial boards and reviewers of scientific journals that publish peer-reviewed papers.

Much of the research conducted by IUFRO awardees can be considered as breakthrough science, and their results have created the basis for many useful pioneering applications in forest practice.

The author hopes that this booklet will help young researchers to visualize the historical development of forest and wood sciences over half of a century. This information and relevant knowledge in specific fields could help young scientists formulate their goals and objectives for their personal professional growth, bearing in mind that success in forest sciences is reached mostly through hard and long routine work.

This booklet is not the end of the story about forest research and forest researchers. It is the beginning of the tributes to our teachers and colleagues who have advanced forestry, forest management and use, who have helped save the environment for future generations via a deep understanding of forests and the role that they play for humans and nature.

Part Three

The Distinguished Service Award of the International Union of Forest Research Organizations: 1981–2020

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INTRODUCTION

The idea for a series of books about prominent scientists and active offices collaborating in the International Union of Forest Research Organizations (IUFRO) was announced at the IUFRO Anniversary Congress 125 in Eberswalde-Freiburg in September 2017. The first two books in the series have since been published: *Honorary Members of IUFRO: 1953 – 2017* (Teplyakov 2018) and *The IUFRO's Scientific Achievement Award: 1971 – 2019* (Teplyakov 2019).

In the forest-related community, service to IUFRO is recognized as a highly valued and prestigious professional and public activity that occurs in a voluntary capacity outside normal terms of employment. The Union has over 600 research units (i.e. Divisions, Research Groups, Working Parties, Task Forces, Special Programmes, Projects, and Chapters), which annually hold 70–80 regional conferences and meetings worldwide, besides IUFRO World and Regional Congresses and all-Divisional Conferences. Each symposium involves from a few dozens to hundreds, and sometimes thousands, of people. This requires that the organizers have both professional and strong organizational skills as well as the public recognition and administrative support of the host city and country.

The IUFRO differentiates important services to the Union through a number of honours and awards, including Honorary Membership, the Distinguished Service Award, a Certificate of Appreciation, an Anniversary Certificate and a Membership Certificate. The Distinguished Service Award (DSA) was the third IUFRO award to be established, being approved in 1978 and awarded for the first time in 1981 to Dr. Mitsuma Matsui, Chair of the Congress Organizing Committee of the XVII IUFRO World Congress in Kyoto, Japan. The design of this Award has symbolized the unity of the IUFRO members from 5 continents: it consisted of four cubes and a mount, made out of wood of five different tree species from the 5 continents. A metal name plaque is attached before the award presentation.

A new design for the award was developed by Dr. Allan David Schwarz from the Mezimbite Forest Centre in Mozambique and was delivered for the first time at the XXV IUFRO World Congress held in Curitiba, Brazil. It is made out of 10 different African tropical tree species – nine pieces of upright wood and a mount. It could be said to symbolize the nine Divisions of IUFRO and their integrity within the Union. The ten species are: Mahogany (*Khaya nyassica* Stapf.), Teak (*Tectona grandis* L.), Leadwood (*Combretum imberbe* Wawra), Coconut (*Cocos nucifera* L.), Songololo (*Swartzia madagascariensis* Desv.), Panga Panga (*Millettia stuhlmannii* Taub.), Mekungu Shitum (*Acacia nigrescens* Oliv.), Kiaat (*Pterocarpus angolensis* DC.), Mezimbite (*Androstachys johnsonii* Prain.) and Mopane (*Colophospermum mopane* (Benth.) J. Léonard.). In the 40 years since it was first awarded, the IUFRO DSA has been presented to over one hundred representatives of the Union's member organizations as well as to renowned people from partner organizations in recognition of their promotion of IUFRO in the international arena.

This book is an assembly of biographical sketches prepared especially for this edition. Where possible, each sketch was reviewed by the awardees or, in the case of deceased recipients, by their relatives, colleagues or former students. Each sketch is a one-page compilation of the materials available from on-line open sources. They include the citations for each award, as published in IUFRO Congress reports, IUFRO News, letters of award from the IUFRO President or other sources. These are followed by some brief information about the awardee (date and place of birth, education, career development, professional activities, IUFRO services, and major recognitions). Each sketch also includes a short list of selected publications (*Selected research sources*), and the references that underlie this narration (*Personal sources*). References about the nomination and delivery of the DSA at the IUFRO Congresses are presented in the Bibliography.

The information for each individual was collected from open sources and translated into English from Croatian, Danish, Finnish, French, German, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Russian, Serbian, Spanish, and Swedish languages. All photographs for this publication were taken from the Internet and published articles about the recipients of the IUFRO DSA or were submitted by the recipients themselves.

ACKNOWLEDGEMENTS

I would like to express my gratitude to the people who helped me in my work on this book about the recipients of the IUFRO Distinguished Service Award. Any work of such scope and diversity of languages and countries involved requires the strong support of many individuals, both active and retired, friends and colleagues, well-known and unknown to me, from universities and research institutes, governmental agencies and professional associations, national libraries and wood businesses, and various other institutions and organizations.

First of all, I am grateful to the relatives, wives, daughters and sons of deceased laureates of the IUFRO DSA, namely, Irene Neumann (b. Kronfellner-Kraus), René Bein and Johannes Mayer (Austria), Susie Sziklai (Canada), Cveta Tomanić (Croatia), Claus Barner (Denmark), Mikko Nyysönen (Finland), Dietrich Schmidt-Vogt, Jeanne Rubner, Sabine Dimitri, Gerhard Scholz (Germany), Franceska and Guilberto Fugalli, Marina Merlo (Italy), Mrs. Kikkawa (Japan/Australia), Arata Kikkawa and Sue Matsui (Japan), Christa van Kraayenoord (New Zealand), Irena Siwecka (Poland), Cosmin Carcea (Romania), Adolf Priesol (Slovak Republic), Samuel and Anders Sirén, Lars and Per Thunell, and Anna Nilsson (Sweden), Andri Baltensweiler, Martin and Urs Keller (Switzerland), Sue Adlard and Helen Brazier (UK), Brian Corcoran, Susan Gessel, David Hawksworth and Linda Lux, wife of Tom Ledig (USA), and Davorin Kajba for Mirko Vidaković (Yugoslavia).

My endless gratitude should go to the names of people who have made great efforts to find information, photos and contacts of living and late recipients and / or their relatives. I received a lot of help from Gary Bacon (Australia), who helped with my inquiries for Australia and New Zealand, Heinrich Schmutzenhofer (Austria) for Austria, Europe, Central and South America, John Innes (Canada) for Canada and North America, Walter Liese (Germany) for Germany and Western Europe, Jeff Burley (UK) for Great Britain and the Commonwealth, Csaba Máttyàs (Hungary) for the Hungarians in Europe and North America, Ladislav Paule (Slovak Republic) for Central and Eastern Europe, and Sumire Williams-Kawamoto (Japan/USA) for Japan and Australia.

I am also grateful to many people for their energetic help in establishing contacts and communicating with various people, colleagues and organizations in search of the information, as well as for providing photos of the recipients, and who also helped me in finding contacts in their home countries, in the areas of their professional interests or their everyday work. Among them are Sassan Asgari, Mark Dieters, Ross McMurtrie and Peter Walker (Australia), Gudrun Csikos, Raphael Klumpp, Hubert Sterba, Peter Mayer and Hans Jöbstl (Austria), José de Moraes Goncalves (Brazil), Silvie Gauthier, Kate Edwards, John Innes, Brian Titus, Margaret Warren, Colin Wood and Sue Vogl (Canada), Davorin Kajba (Croatia), Vit Šrámek (Czech Republic), Niels Elers Koch (Denmark), Johanna Buchert, Pentti Hakila, Pekka Nygren, Risto Paivinen, and Risto Seppala (Finland), Eric Teissier du Cros and Xavier Deglise (France), Marcus Ammer, Bernd Degen, Klaus von Gadow, Dietrich Liese, Axel Roeder, Georg von Wühlisch (Germany), P.K.Nair, R.K. Jain and B.M.Kumar (India), Paola Gatto (Italy), Kazuhiro Eguchi and Koji Matsushita (Japan), Don Koo Lee (Republic of Korea), Salleh Mohd. Nor (Malaysia), Svein Solberg and Lars V. Strand (Norway), Maciej_Giertych and Jacek Oleksyn (Poland), Ovidiu Badea (Romania), Oleg A. Kulinich (Russia), Robert Brus (Slovak Republic), Pär Aronsson, Birgitta Håfors, Björn Hånell, Åsa Karlsson and Andreas Tjerneld (Sweden), Peter Bebi, Rodolphe Schlaepfer, Jürg Schweizer, Walter Schönenberger, Manfred Stähli (Switzerland), Joan Cottrel and Keith Rennolls (UK), Steven and Andrea Anderson, Deborah Finch, George Gertner, Ted Howard, Sandy Liebhold, Deborah Lynn Rogers, Sarah McPartland-Good, Howard Rosen, Sara Senn, Stephen Shaler, Mildred Steen and Daniel Vogt (USA).

Special thanks should go to all recipients of the IUFRO DSA and to all involved into this venture: those who reviewed individual sketches and made helpful comments on the first drafts, as well as to my colleagues from the editorial board.

I am thankful to the IUFRO immediate past President Michael Wingfield, President John Parrotta and former Vice President Björn Hånell for their support, and to the IUFRO Secretariat for invaluable help, particularly Alexander Buck for his navigation of the EU Regulation on the protection of personal data (GDPR), and to Gerda Wolfrum and Renate Pruessler for providing information from the IUFRO archives and making valuable suggestions.

Special and endless thanks should go to Professor John Innes who took on the burden of language editing of the book.

It is rather difficult to name all individuals who helped me in this endeavor, and if I missed any, please accept my apologies in advance.

Unfortunately, I was unable to find critical information about Helge Bryndum (Denmark), Sven-Eric Appelroth (Finland), Walter G. Kauman (France), Syama P. Raychaudhuri (India), and Hansruedi In Der Gand (Netherlands/Switzerland). Nor was I able to contact their relatives who might have provided information about them. I would be very grateful to anyone who could provide contact information about the relatives or additional information about these five individuals.

I would like to add that this is a living project, and I would very much appreciate any further suggestions, comments and proposals for improvements of any particular biographical sketch in order to make this book more comprehensive and complete.

The author

THE DISTINGUISHED SERVICE AWARD

“Recognizes those whose work has substantially contributed to furthering the scientific, technical, and organizational aims of IUFRO, such as accomplishing a special task in improving IUFRO’s organization, outstanding work as an officeholder, strengthening IUFRO’s activities in a geographic region, fostering IUFRO’s international position, or outstanding research accomplishments not otherwise recognized by other awards. The DSA can only be given to the individual once in his/her lifetime. Normally two to three Distinguished Service Awards are made each year.

Nominations can be made by IUFRO officeholders and members any time, but at least two month prior to the next Board meeting. Nominations and supporting material should be sent to the Chair of the Honours and Awards Committee with a copy to the Executive Director. Nominations are approved by the Board.

The awards are presented either by the President or by a high-ranking officeholder acting on the President’s behalf. The time and place for presenting each award is coordinated by the IUFRO Secretariat, in conjunction with the appropriate IUFRO officeholders. The names of the recipients are published in IUFRO News, the Annual Report and the Congress Report.

Criteria:

1. The candidate must have been officially associated with IUFRO (e.g. officeholder, staff member).

2. The candidate must have displayed distinguished service to IUFRO including exemplary actions in at least two of the following:

- organized one or more IUFRO training courses, seminars or conferences;*
- organized one or more conferences or sessions at a IUFRO Congress;*
- increased/encouraged IUFRO membership enrolment;*
- raised funds or encouraged sponsorship for IUFRO activities;*
- developed new IUFRO initiatives, e.g. Working Parties, programmes, Task Forces, etc.;*
- produced publications for IUFRO, e.g. proceedings, policy briefs, other IUFRO publications;*
- chaired IUFRO committee(s);*
- represented/promoted IUFRO at international meetings.*

Number or Frequency: *On average two to three awards can be made annually, depending on the quality of nominations.”*

IUFRO Honours and Awards 2010, p. 9–10

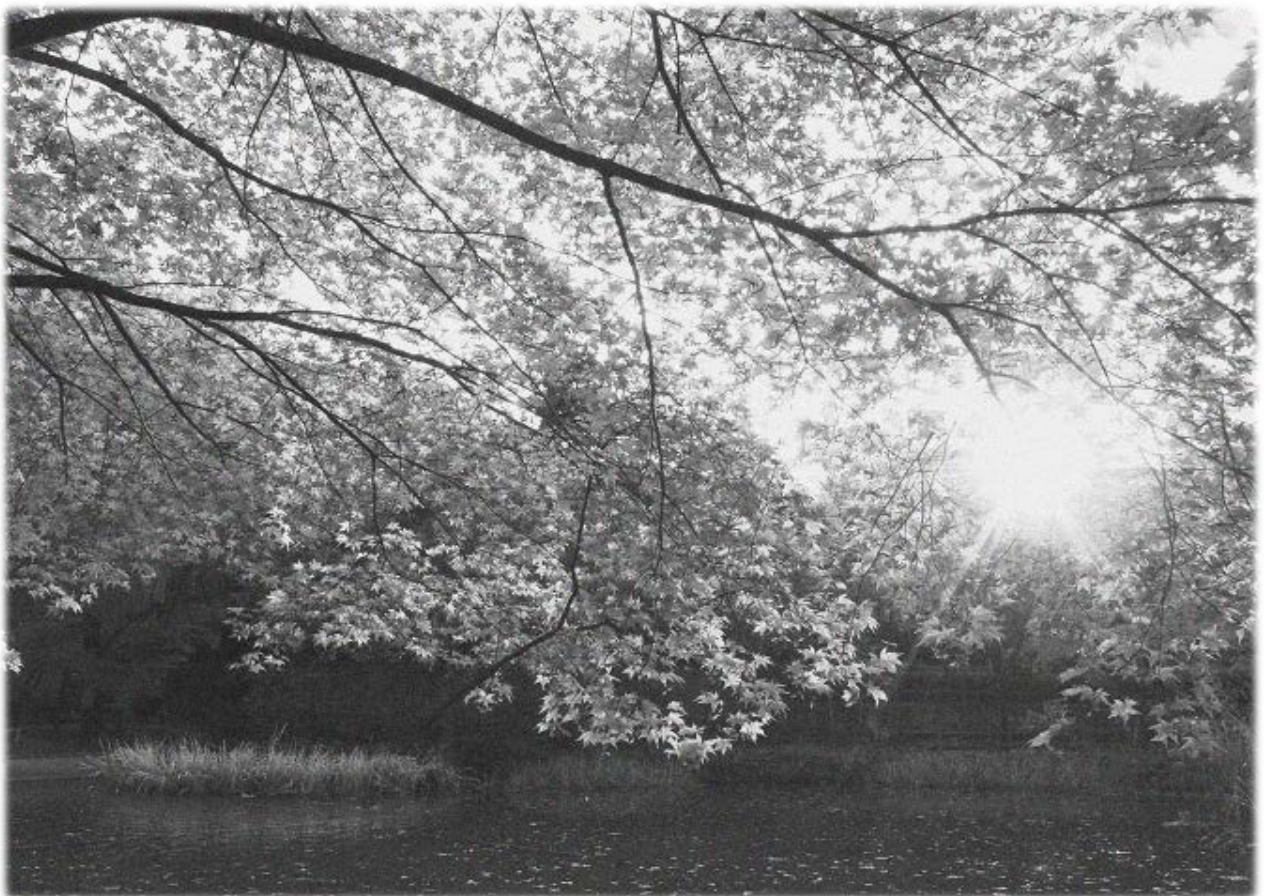
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THE DSA RECIPIENTS:

1981 – 1986

<i>Mitsuma MATSUI</i>	<i>Japan</i>	<i>1981</i>
<i>Helmuth von BARNER</i>	<i>Denmark</i>	<i>1983</i>
<i>Sven-Eric APPELROTH</i>	<i>Finland</i>	<i>1986</i>
<i>Gottfried KRONFELLNER-KRAUS</i>	<i>Austria</i>	<i>1986</i>
<i>John D. BRAZIER</i>	<i>UK</i>	<i>1986</i>
<i>Frank G. HAWKSWORTH</i>	<i>USA</i>	<i>1986</i>
<i>Hansruedi IN DER GAND</i>	<i>Switzerland</i>	<i>1986</i>
<i>Hans M. KELLER</i>	<i>Switzerland</i>	<i>1986</i>
<i>William E. WARREN</i>	<i>Canada</i>	<i>1986</i>
<i>Filimon CARCEA</i>	<i>Romania</i>	<i>1986</i>





MATSUI, Mitsuma

Mitsuma Matsui received the IUFRO Distinguished Service Award in 1981 for his promotion of forestry research and for the organization of the 17th IUFRO World Congress in Japan.

Mitsuma Matsui [松井光瑤] was born on 10 September 1920 in Tokyo, Japan. He grew up in the Sendai area until the third year of junior high school. He graduated in 1944, and obtained his Ph.D. in Agriculture from Department of Forestry, Faculty of Agriculture at the University of Tokyo in 1979. He began his professional career as a researcher, and during 1947–1981 he progressed to the Research Manager of the Soil Research Department at the Government Forest Experiment Station, Forestry Agency, Japan Ministry of Agriculture, Forestry and Fisheries. In 1962, Dr. Matsui was appointed General Manager at Tohoku Branch Office, and in 1978 as Director-General of the Forestry and Forest Products Research Institute, where he served until his retirement from this governmental position in September 1981.

Dr. Matsui's research interests were in the research and management of forest soils, soil fertility, classification and survey at a national level. He was also interested in national and private forest management, forest use and reforestation. He put much effort into establishing a research system, aiming at nature and the environment as well as into research in response to social and administrative needs. He authored and co-authored more than 100 scientific papers, books, manuals and reports. Dr. Matsui played a leading role at a national level, serving as Chair of the Forest Chemicals Association of Japan (1983–2008), Adviser to the Japan Forestry Technology Association (1981–1989), Director of Agriculture, Forestry and Fisheries Promotion Council, and its Vice-Chair, and Councillor (1990–2008). He contributed greatly to the development of the Japan Forestry Association as its Vice President (1989–1993), President (1993–1997), and Honorary Chairman (1997–2008). Internationally, Dr. Matsui was a well-recognized specialist and administrator who promoted international cooperation related to forests and forestry and overseas research projects with Tunisia, Peru and many other countries.

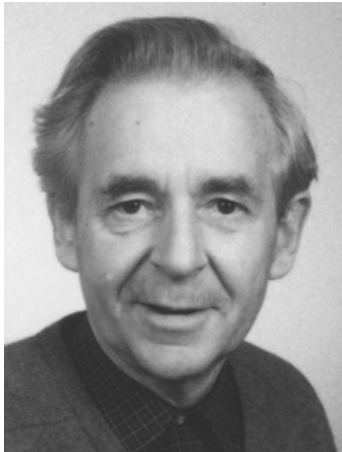
Dr. Matsui actively promoted IUFRO in Japan. He was the first Japanese forestry scientist to lead the Forestry Service of the Government of Japan to cooperate with IUFRO and, as an observer, represented Japan at the IUFRO management meeting in 1973 when the Forestry Service of the Government of Japan was invited by IUFRO President Dr. Ivar Samset to attend. In 1970, Dr. Matsui launched a IUFRO Japanese group (later – IUFRO–Japan Secretariat) to increase the number of Japanese organizations in IUFRO. By connecting IUFRO members in Japan, he ensured the success of IUFRO World Congress in Kyoto. Dr. Matsui served as an Observer on the Executive Board of IUFRO (1977–1981). He greatly contributed to the organization of the XVII IUFRO World Congress in Japan (1981) and became the first researcher to receive the IUFRO Distinguished Service Award. Dr. Mitsuma Matsui passed away in Tokyo at the age of 88, after a long illness.

Selected research sources:

1. Japan's Forest Resources: Coexistence forestry and farming. *Unasylva*, 32(128): 19–20. 1980.
2. World Forestry: Forest Resources in Japan. *J. of For.* 78(2): 96–99. 1980.
3. ユフロ日本大会を思い出す *Sanrin*, 6: 32–38. [Retrospective view of the IUFRO World Congress Japan]. 1997.

Personal sources:

1. 小林富士雄. 松井光瑤氏を偲ぶ. *森林技術* 11, 800: 45 [Fujio Kobayash. In memory of Mr. Mitsuma Matsui. Forest Technology, November 2008, 800: 45]. 2008.
2. 鈴木和夫. 松井光瑤氏を偲ぶ. *樹木医学研究* 13(1), 1–1, 2009-01-31 [Kazuo Suzuki. In memory of Mr. Mitsuma Matsui. Journal of Tree and Forest Health, 13(1), 1–1, 2009-01-31].
3. Williams-Kawamoto S. Personal communication (April 2019) at sumirekw@gmail.com



BARNER, Helmuth Axel von

Helmuth Axel von Barner received the IUFRO Distinguished Service Award in 1983 for his coordination of several series of international provenance tests of tree species from northwestern America.

Helmuth von Barner was born on 25 March 1921 in Copenhagen, Denmark. After passing his matriculation examination (1938), he obtained his M.Sc. in Forestry (1945) from *Landbohøjskolen* (Royal Veterinary and Agricultural University, now – Faculty of Science, University of Copenhagen) at Frederiksberg. In 1945 he began his professional career as an Assistant at *Landbohøjskolens Have* (the University's Botanical Garden), Frederiksberg, then received a scholarship at the *Landbohøjskolen* Hereditary Laboratory (1947). He was also a part-time employee at the State Forestry Office (1947–1950), and as an Assistant to Professor C. Syrach-Larsen participated in the establishment of the Danish State Forest Trees Improvement Station (1950), where he served as a Deputy Director (1950) and then Director (1955–1986).

Mr. von Barner has focused his research on provenance testing and forest seed production, forest tree breeding, forest genetics and tree improvement, and on the importance of bringing together research and practice and ensuring the benefits of such a symbiosis. He believed that this work would make Danish forestry healthier, more productive and of higher quality. He published many scientific and professional articles in scientific and popular journals, as well as books, chapters and reports.

Mr. von Barner served as a consultant to OECD's Forest Tree Seed Scheme (1965–1983). He participated in an Indo-Danish Project on Seed Procurement and Tree Improvement and in establishing land-based projects for seed supply. Supported by the UNFAO and Danish International Development Assistance (Danida), from the mid-1960s, he initiated a series of courses on forest genetic resources management in Denmark (1966), Kenya (1973), and Thailand (1975). With Henrik Keiding he initiated and contributed to the establishment of the Danida Forest Seed Center and was its first Head (1969–1990), making it well-known and respected worldwide. He was a member of numerous national and international committees, including the Joint Committee for Provenance testing (1960–1974), the Nordic Forestry Forest and Plant Council (1968–1983), the FAO Panel of Experts on Forest Gene Resources (1968–1974), and the Danish State Committee for Control with Understanding Propagation Material (1975–1983), to name just a few.

Mr. von Barner was elected in 1970 as a foreign member of the Swedish Royal Forest and Agricultural Academy. He received the Annual Tree Award (1992) and the Danish Forest Association's Forest Prize (1999). He was a leader of IUFRO WG on Seed Procurement for Provenance Research (1965–1980) and coordinated several series of international provenance tests of tree species from northwestern America. Helmuth von Barner died in Hornbæk, Denmark on 18 June 2007 at the age of 86.

Selected research sources:

1. The Formation of Pollen, the pollination and the determination of the most favourable time for controlled pollination in *Larix*. *Silvae Genetica* 9: 1–11 (with H. Christiansen). 1960.
2. *The Strategies and Procedures for an Integrated National Tree Seed Programme for Seed Procurement, Tree Improvement and Genetic Resources*. Danida Forest Seed Centre, 21 p. (with B. Ditlevsen). 1988.

Personal sources:

1. Nordansjö I. (2009) Helmuth von Barner / *Småskrifter nr 9. Kungl. Skogs- och Lantbruksakademiens minnesord över ledamöter avlidna 2007–2008*. Stockholm, p. 56–57. Photo. 2009.
2. Barner, C. von. Personal communications (August 2019) at c.barner@mail.dk



APPELROTH, Sven-Eric Wilhelm

Sven-Eric Wilhelm Appelroth received the IUFRO Distinguished Service Award in 1986 for his long-term contributions to IUFRO activities, especially Division 3.

Sven-Eric Appelroth was born on 30 December 1929 in Viipuri (Viborg), Finland. He studied Forestry at the University of Helsinki, from where he earned all his degrees – B.Sc. (1954), M.Sc. (1963), Licenciate (1977) and Ph.D. in Forestry (1983). He began his professional career as a Forest Officer at Saxen & Co. (1954–1957) and worked as a District Forest Officer at W. Rosenlew & Co. (1957–1959). He then tightly linked his research and teaching activities with *Metsäntutkimuslaitos* (METLA, the Finnish Forest Research Institute) as Research Officer of the Department of Forest Technology (1959–1961), then Senior Research Officer (1961–1985), and Assistant Professor in Technology of Forest Regeneration (1985–1992) until his retirement in 1992. In parallel, he delivered lectures at the University of Joensuu.

Dr. Appelroth's research interests were focused in the field of mechanization of forestry, including seed collection in tree orchards, the maintenance of tree nurseries, site preparation, and the treatment of seedlings and other materials. He also worked intensively on afforestation, reforestation, and silvicultural treatment of forests, improvement of techniques and machinery, wood and wood bark recycling and other issues. In these fields he authored and co-authored numerous papers in scientific and professional journals, book chapters and reports. He served as a member of the editorial board of *Forest Engineering* (until 1991) when he had to resign for health reasons.

Dr. Appelroth was a member of the Finnish Forestry Society (1968–2011), Finnish Genealogical Society (1989) and several international associations and professional organizations. He actively participated in the Joint FAO/ECE/ILO Committee on Forest Working Techniques and Training of Forest Workers. His fluency in Swedish, Finnish, English and German enabled him to be aware of many new inventions in his field of research and to provide his expertise to foresters, business people and students.

Dr. Appelroth was very active in IUFRO Division 3. In 1982 he established and became the long-time coordinator of IUFRO WP S3.02.03 Nursery operation. The following year, he was co-sponsor/co-organizer of the Seminar on Machines and Techniques for Plant Production (June 1983, the High Tatras, Czechoslovakia) together with the Joint FAO/ECE/ILO Committee on Forest Working Techniques and Training of Forest Workers. Similar meetings were held in other countries, e.g., the USSR (1987).

Dr. Sven-Eric Appelroth passed away in 2011.

Selected research sources:

1. *Tutkimuksia metsänviljelytyöstä I: Kourukuokka, kenttälapio, taimivakka, taimilaukku sekä istutuskoneet Heger ja LMD-1 istutettaessa kuusta peltoon.* Folia Forestalia, 85, 32 S. (with P. Harstela). [Studies on afforestation work 1: The use of the semi-circular hoe, the field spade, plant basket, seedling bag and the planting machines Heger and LMD-1 in planting spruce in the field]. 1970.
2. *Tidbehovet vid manuell plantering av täckrotsplantor efter maskinell markberedning.* Helsingin yliopisto. 136 S. [Time required for manual planting of containerized plants after mechanical soil preparation, Ph.D. thesis. In Swedish]. 1983.
3. *Nine Thousand Years of Forests in Finland.* A paper presented at the IUFRO Symposium "Northern Forest Silviculture and Management" (Lapland, Finland, August 16-22, 1987), 7 p. 1987.

Personal sources:

1. URL: <https://www.geni.com/people/Sven-Eric-Appelroth/6000000048051913148> Retrieved 22.07.2019.
2. Spencer H. A. People and Organizations. *SL Roottrainers Newsletter*, Fall, 19: 7-8. 1982.



KRONFELLNER-KRAUS, Gottfried

Gottfried von Kronfellner-Kraus received the IUFRO Distinguished Service Award in 1986 for his outstanding contribution to the organization of IUFRO Division 1 research on torrent erosion, floods, mudflows, snow damage and avalanches, and their control.

Gottfried von Kronfellner-Kraus was born on 6 July 1926 in Moreara-Enim, Dutch India (now Indonesia). He obtained his Dipl.-Ing. in Forestry (1949) and his Doctorate degree (1970) at *Universität für Bodenkultur Wien* (BOKU – University of Natural Resources and Applied Life Sciences in Vienna). His doctoral study was dedicated to the study of massive, unreinforced barriers. In 1949 he began his professional career at the Villach section of the Austrian Service for Torrent and Avalanche Control and then at the Austrian Federal Forest Research Institute (FBVA, now – BFW, *Bundesforschungs- und Ausbildungszentrums für Wald, Naturgefahren und Landschaft*). In 1966, after the devastating floods and meteorological disasters in Austria in 1965 and 1966, he was appointed as the first Director of the newly established FBVA's Institute for Torrent and Avalanche Control, a position he held until his retirement in 1990.

Dr. Kronfellner-Kraus's research on torrent erosion, floods, mudflows, snow damage and avalanches and their control with natural barriers resulted in numerous research papers, reports, book chapters and books. He proposed a torrentiality factor and a coefficient for its calculation (1984). He was a frequent keynote speaker at national and international scientific meetings, seminars and other scientific symposia. Dr. Kronfellner-Kraus also held high positions in the European Forestry Commission of the UN FAO in Rome. His achievements were recognized with various honours and awards.

Dr. Kronfellner-Kraus was a longstanding IUFRO Officer, working as Coordinator of IUFRO SG S1.04-00. A group that over time has changed its name several times, i.e., Torrent erosion and torrent brook construction (1968–1971), Torrents, snow and avalanches (1972–1981), and Prevention and control of torrent erosion, floods and mudflows, snow damage and avalanches (1982–1986). While holding office, Dr. Kronfellner-Kraus supported the publication of more than a dozen proceedings of various meetings held or organized by this IUFRO unit, including some held jointly with FAO.

Dipl.-Ing. Dr. Gottfried Kronfellner-Kraus passed away on 21 January 2000.

Selected research sources:

1. Über offene Wildbachsperrren. *Mitteilungen der Forstlichen Bundesversuchsanstalt* No. 88. Forstliche Bundesversuchsanstalt, Wien, S. 7–76. [Open torrent control dams]. 1970.
2. *Untersuchungen and Messungen an Wildbachsperrren*. Paper presented at the 15th IUFRO World Congress at Gainesville, FL. March. 63 pp. [Studies and measurements on torrent check dams]. 1971.
3. Extreme Feststofffrachten und Grabenbildungen von Wildbächen. In: *Int'l Symp. Interprevent-1984 – Villach*, Tagungspublikation, B. 2, S. 109–118. [Extreme sedimentation and gullying of torrents]. 1984.
4. Zur Anwendung der Schätzformel für extreme Wildbach-Feststofffrachten im Süden und Osten Österreichs. *Zeitschrift für Wildbach- und Lawinverbauung* Jg. 51: 187–200. [The application of the estimation formula for extreme torrent-solid-matter freight in the south and east of Austria]. 1987.
5. Über die Einschätzung von Wildbächen: Der Dürnbach. *Mitteilungen der Forstlichen Bundesversuchsanstalt* No. 161. Forstliche Bundesversuchsanstalt, Wien. 259 S. [On the Assessment of Torrents Dürnbach]. 1988.

Personal sources:

1. Ruhm F. (1986) Gottfried Kronfellner-Kraus – 60 Jahre. *Holz Kurier* 41, 10 (29): 10. 1986.
2. Ruhm F. (1990) Gottfried Kronfellner-Kraus gestorben. *Österreichische Forstzeitung* 7: 52. 1990.
3. Neumann I. Personal communications (September 2019) at irene.neumann@aon.at



BRAZIER, John David

John David Brazier received the IUFRO Distinguished Service Award in 1986 for his long-term leadership of the research of Division 5, and especially on wood quality.

John Brazier was born on 1 March 1927 in London, United Kingdom. He earned his B.Sc. in Forestry (1947) and B.Sc. (Hons.) in Botany (1948) at the University College of North Wales, Bangor, and in 1981 he obtained his Doctorate of Science (D.Sc.) at the University of Wales. Dr. Brazier spent his entire professional career with the Forest Products Research Laboratory (FPRL), later the Princes Risborough Laboratory, Building Research Establishment, where he began as a Researcher (1948) in the Wood Anatomy section. In 1968 he was promoted to Section Leader and in 1971 appointed the Leader of the combined Anatomy and Timber Mechanics Sections, designated Properties of Materials, from which he retired as Head at the end of February 1987. He also made a notable input into British wood science education starting as an External Examiner (1972) and serving as Chief Examiner of the UK Institute of Wood Science (1974–2010). In 1987, Dr. Brazier was awarded the Imperial Service Order for his contribution to wood science research and education.

Dr. Brazier's research interest was focused on the structure and identification of hardwoods, especially tropical hardwoods such as *Dipterocarpaceae*, improved use of tropical forest resources, comparative and systematic anatomy of timber, relationships between wood structure and tree growth, plywood made from tropical hardwoods, as well as the growth, properties and uses of UK-grown timber, especially Sitka spruce (*Picea sitchensis*), and related areas. He made a significant contribution to the establishment of the U.K. and then the European Plywood Standards. He authored and co-authored over 70 research papers.

Dr. Brazier played a significant role in the Commonwealth Forestry Association (CFA), where he served as Chairman (1982–1985) and Vice-President (1986–2013), as well as being a long-standing member of the Governing Council, Executive Committee and Editorial (Publication) Committee. In addition, he was closely associated with the British Forestry Commission as a member of its Advisory Committees on Research (1980–1987) and Home Grown Timber, serving also as a Chairman of the Technical Sub-Committee (1987–1999). Dr. Brazier was a Fellow of the British Institute of Wood Science (1957), of which he was President in 1988–1990 and Chairman of the Education Committee. He was a member of the Institute of Chartered Foresters (1964, Fellow 1987), where he was twice recognized with the Silvicultural Prize (1973 and 1994) and elected an Honorary Member (1993).

His expertise brought him wide international recognition. He was a member of the IAWA (1954), a Fellow of the IAWS (1979) and an Honorary Fellow of the CFA (1999). He travelled worldwide to deliver presentations at scientific meetings and provide consultancies to many timber institutions, including those in Turkey (1970, 1972), Iran (1972, 1973), Guyana (1978) and Burma (1986, 1988). Dr. Brazier actively participated in IUFRO as Coordinator of unit S5.01 Wood quality (1978–1986).

Dr. John D. Brazier passed away on 24 November 2013 in Bledlow, Buckinghamshire after a long illness.

Selected research sources:

1. Timber Improvement I: A study of the variation in wood characteristics in young Sitka spruce. *Forestry*, 43: 117–138. 1967.
2. Timber Improvement II: The effect of vigour on young growth Sitka spruce. *Forestry*, 43: 135–150. 1970.
3. The effect of forest practices on quality of the harvested crop. *Forestry*, 50: 49–66. 1977.

Personal sources:

1. Dinwoodie J. John D. Brazier 1927–2013. Obituary. *CFA Newsletter*, March 64: 14. 2014.
2. Brazier H. Personal communications (October 2019) at brazier@harlyn.demon.co.uk



HAWKSWORTH, Frank Goode

Frank Goode Hawksworth received the IUFRO Distinguished Service Award in 1986 for his leadership and organization of IUFRO research on dwarf mistletoes.

Frank Hawksworth was born on 30 April 1926 in Fresno, California, USA. He received his B.Sc. in Forestry (1949) from the University of Idaho, an M.Sc. in 1952, and his Ph.D. in 1958 in Forest Pathology from Yale University. He spent his entire professional career – 47 years! – with the U.S. Forest Service’s Rocky Mountain Forest and Range Experiment Station from which he retired in 1990. He continued in a voluntary capacity, working from his office at the Station after retiring.

Dr. Hawksworth has been permanently involved in outreach, consulting over on-the-ground management problems with foresters, scientists and practitioners at all levels of governmental, industrial, university and private practices. During four decades of research, he authored and co-authored over 275 papers, book chapters and reports, the bulk of which were on dwarf mistletoes, which cause a great deal of damage in western North America. He completed a 40-year history of the Western International Forest Disease Work Conference (WIFDWC) and drafts of two books, one of which – *Dwarf mistletoes* – was printed in March 1996, and he worked on it until his last days.

Dr. Hawksworth was a member of the SAF, International Council of Parasitic Seed Plants, Western International Forest Disease Work Conference and other societies. His achievements were recognized with Superior Service and Technology Transfer Awards by the U.S. Department of Agriculture and the Outstanding Forestry Research Award by the Society of American Foresters. As a national authority and internationally known dwarf mistletoe specialist, he was invited as keynote speaker to various congresses and conferences, and other scientific fora and forest pests’ practitioner to professional seminars and workshops. Dr. Hawksworth actively collaborated in IUFRO as a leader of IUFRO Division 2 unit on forest pathology.

Dr. Frank G. Hawksworth, a 35-year resident of Fort Collins, died on 8 January 1993. “He is commemorated by *Arceuthobium hawksworthii* (a recently described species of dwarf mistletoe from Belize), *Phoradendron hawksworthii* (a mistletoe parasite of juniper in western Texas), and *Frankliniella hawksworthii* (a species of thrips associated exclusively with dwarf mistletoes)” (Biology of dwarf mistletoes, p. v]. The Frank Hawksworth Memorial Graduate Student Scholarship was established by Colorado State University for those working in tree disease management or forest ecosystem management.

Selected research sources:

1. *Dwarf mistletoe of ponderosa pine in the Southwest*. Washington: USDA iii, 112 p. 1961.
2. *Glossary of dwarf mistletoe terms*. Environment Canada, Canadian Forestry Service, Pacific Forest Research Centre, Victoria, BC. Inform. Rep. BC-P-02, 42 p. (with J. A. Baranyay and R.B. Smith). 1971.
3. *Biology and classification of dwarf mistletoes (Arceuthobium)*. Agriculture handbook. Washington: USDA FS, U.S. Govt. Print. Off., viii, 234 p. (with D. Wiens). 1972.
4. *Mistletoes on introduced trees of the world*. Washington: USDA FS, U.S. Govt. Print. Off., 49 p. 1974.
5. *Biology of dwarf mistletoes: Proceedings of the symposium* (August 8, 1984, Colorado State University, Fort Collins). F. G. Hawksworth; R. F. Scharpf, eds. Fort Collins, CO: USDA FS, GTR RM, 111, 131 p. 1984.
6. *Dwarf mistletoes: biology, pathology, and systematics*. Agriculture handbook 709. Washington: USDA FS, xiv, 410 p. (with D. Wiens; B. W. Geils, tech. ed. and R. G. Nisley, managing ed.). 1996.

Personal sources:

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2. Hawksworth D. Personal communications (September 2019) at david.l.hawksworth@usda.gov



IN DER GAND, Hansruedi

Hansruedi In der Gand received the IUFRO Distinguished Service Award in 1986 for his outstanding leadership in IUFRO research on snow and avalanches.

Hansruedi In der Gand was born in the Netherlands. In 1945, he obtained his Diploma of Forest Engineer from the *Eidgenössische Technische Hochschule Zürich*, Switzerland (ETHZ, Swiss Federal Institute of Technology in Zurich). In the same year he began his professional career as a Researcher in the Research Group "Snow Cover and Vegetation" at the *Eidgenössisches Institut für Schnee- und Lawinenforschung auf Weissfluhjoch ob Davos* (EISLF, now Swiss Federal Institute for Snow and Avalanche Research, WSL). In 1954 he was appointed as the Head of this Research Group (from 1961 Section III), Deputy Director (1981), and in November 1984 he retired from the Federal Service.

Mr. In der Gand's research interests were in the field of snow cover, primarily in forests, structural and forestry avalanche protection measures, development of temporary timber defense structures and measures against snow gliding, and various wood preservation processes. He was particularly interested in forest avalanche protection, which in the 1960s led him to tackle the problem by afforestation in avalanche areas near the tree line. He authored and co-authored many research publications, scientific and technical reports, including coordinating the editing of the *Winterbericht* (Winter Report) since 1978/1979.

Mr. In der Gand put much of his efforts and passion into the establishment of the experimental site Stillberg/Davos. He has also created an exemplary timber defense structure in a reforestation area in Pusserein/Schiers, which was supplemented by various measures against snow gliding. He transferred his rich experience into practice via numerous courses given to forestry personnel, particularly in the area of wooden protective measures. He was a member of the *International Association of Hydrological Sciences* (IAHS).

For about a quarter of a century, from the 1960s onwards, Mr. In der Gand was an active IUFRO Officeholder in Section 11 Forest Influences and Watershed Management (Division 1) in its WG on Snow and Avalanches.

Selected research sources:

1. *Snow and avalanches during the winter 1945/46*. Mitt. eidg. Inst. Schnee und Lawinenforschung, Germany, 78p. (with M. Schild). 1946.
2. Snow gliding and avalanches. In: Proceedings. Symposium at Davos 1965 – Scientific Aspects of Snow and Ice Avalanches. *IAHS Publication*, 69. Wallingford, U.K., pp. 230-242 (with M. Zupančič). 1965.
3. *Recent Findings on Snow Sliding*. Forest Service, U.S. Department of Agriculture, 18 p. 1969.
4. *Lawinenschutz in der Schweiz*. von F. Castleberg, H. R. in der Gand, F. Pfister, B. Rageth, eds. Bündnerwald Zeitschrift des Bündnerischen Forstvereins und der SELVA, Beiheft Nr. 9, [ii] 222 p., illus. [Avalanche protection in Switzerland]. 1972.
5. Statement of knowledge on snow and avalanches in relationship to forests in Europe. *XVII IUFRO World Congress, Japan 1981*. Proceedings-Referate-Exposes, Division 1, Congress group 4, p. 319-337. 1981.

Personal sources:

Jaccard C. Einleitung. *Schnee und Lawinen in den Schweizer Alpen, Winter 1982/83*. EISLF Winterberichte, No.47: 3. Davos, Switzerland. [Introduction. Snow and avalanches in the Swiss Alps, 132 p.]. 1984.



KELLER, Hans Martin

Hans Martin Keller received the IUFRO Distinguished Service Award in 1986 for his substantial contribution to IUFRO activities on forest hydrology.

Hans Keller was born on 3 August 1936 in *Münsterlingen*, Switzerland. He received a Diploma in Forestry (1960) from the *Eidgenössische Technische Hochschule Zürich* (ETHZ – the Swiss Federal Institute of Technology in Zurich) and began his career in forest hydrology under the supervision of Professors A. Engler and H. Burger at the Swiss Federal Institute for Forest Research (now Swiss Federal Institute for Forest, Snow and Landscape Research, WSL) in Birmensdorf. Hans Keller then received his M.Sc. in Watershed Management (1963) from Colorado State University in Fort Collins, USA, and returned to the Institute. In 1970, Hans Keller earned his Ph.D. back at the ETHZ. His doctoral dissertation was entitled “Stream water chemistry in small partially forested catchments in the Flyschzone of a prealpine valley.”

Hans Keller focused his research on forests and hydrological processes and various components of water-nutrient balances, the role of planted forests in mountain landscapes in water quality and quantity dynamics, simulation of hydrological processes, establishing a robust database for forested catchment hydrology, and many other related fields. He initiated and established a study area in the Alptal to collect data as well as sediment transportation measurements on the Erlenbach torrent in the Alptal. His group then began working on the simulation modelling of hydrological processes and the components of water and nutrient circulation. In 1993, shortly before his death, the results of 25 years of research in the Alptal were presented at a conference.

Hans Keller, a well-known professional, was often invited to give lectures or special courses at the University of Zurich, the Swiss Federal Institute of Technology or Colorado State University in USA, or to present at various conferences and seminars. He expanded his experience in the area of forested catchment hydrology in New Zealand and actively participated in European projects. He was also an active member of the Swiss National Hydrological Commission and the European Reference Basin Network. Hans Keller was the Swiss National Representative for the International Association of Hydrological Sciences (IAHS), Vice President of its Commission on Water Quality, Chairman of its Nominations Panel in Vienna, and from 1988 – an Associate Editor of the IAHS’s *Hydrological Sciences Journal*. Within IUFRO, Hans Keller made his first presentation at the Congress in Germany (1967), later collaborating with various IUFRO units, and was Coordinator of the IUFRO WG on Forest Hydrology. Hans Keller was tragically killed together with his wife and their mountain guide and friend on 30 July 1993 in the Swiss Alps by a slab avalanche, uncommon at that time of year. The rescue workers were unable to help them.

Selected research sources:

1. Factors affecting water quality of small mountain catchments. *J. Hydrol. (NZ)* 9(2): 133–141. 1970.
2. Recession characterization of small mountain basins, derivation of master recession curves and optimization of recession parameters. *IAHS Publication* 138: 243–255 (with L. S. Pereira). 1982.
3. European experiences in long-term forest hydrology research. In: *Forest Hydrology and Ecology at Coweeta*. W. T. Swank and D. A. Crossley, Jr., eds. Springer New York, pp. 407–414. 1988.
4. Suspended sediments in streamwater-indicators of erosion and bed load transport in mountainous basins. *IAHS Publication* 203: 53–61 (with P. Weibel). 1991.

Personal sources:

1. Naef F. (1993) Obituary: Hans M. Keller. *Hydrological Sciences*, December 38(6): 567–568. 1993.
2. Keller M. Personal communications (August–September 2019) at manikeller@hotmail.com



WARREN, William (Bill) G.

William G. Warren received the IUFRO Distinguished Service Award in 1986 for his outstanding contribution to biometrics and statistics research within IUFRO Division 4.

Bill Warren was born on 12 May 1932 in Motueka, New Zealand. He received an M.Sc. in Pure and Applied Mathematics from Auckland University in 1953. Fate decreed that his career would be in the application of statistical methods and he received a Ph.D. at the University of North Carolina, USA, in 1963, including a split minor in Forestry at Duke University. He began his professional career as Biometrician at the New Zealand Forest Research Institute (1954–1967). He was appointed as a Research Statistician for the

Western Forest Products Laboratory, Canadian Forestry Service, Department of the Environment in Vancouver, BC (1967–1983), was an Untenured Professor at the Department of Experimental Statistics, Louisiana State University in Baton Rouge (1983–1987), and a Research Professor for the School of Forestry, Oregon State University in Corvallis (1987–1990). He then switched to marine resources statistics and biometry and worked as a Research Scientist for the Science Branch, Department of Fisheries and Oceans in St. John's, NF, Canada (1990–2007).

Initially Dr. Warren's research lay in mensuration but soon expanded to all branches of forestry and ultimately the full spectrum of ecology and especially natural resources. This diversity provided many challenges which were resolved by his novel application of existing methodologies. His over 100 authored and co-authored research papers, book chapters, scientific and technical reports, edited proceedings of scientific meetings, and invited conference papers are noted for the novel application or modification of existing statistical theory. He served as Assistant Editor of *Canadian Journal of Forestry Research, Biometrics, Journal of Agricultural, Biological and Environmental Statistics, Canadian Statistical Society* and *Canadian Journal of Fisheries and Oceans Research*. He was a member of various national and international professional associations and organizations including the board of directors of the New Zealand Statistical Association (founding editor of the *New Zealand Statistician* subsequently merged with the *Australian Journal of Statistics*), the Statistical Society of Canada (Program Chair, Treasurer) and the Biometrics Society Western North American Region. His contributions and achievements were recognized with several honours and awards including Fellowship of the American Statistical Association and Distinguished Statistical Ecologist – from the International Ecological Society.

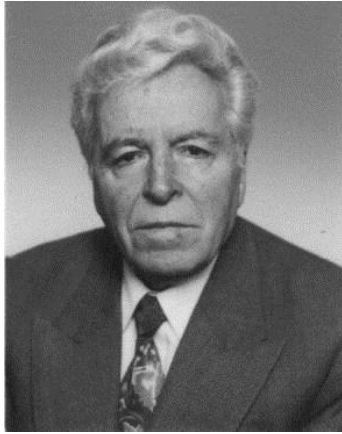
Dr. Warren actively participated in the meetings and work of several IUFRO Divisions, e.g., in Division 2 on effects of breeding on physical and chemical properties of wood, in Division 4 on sampling during forest inventory or use of mathematical statistics in forest research, and in Division 5 – on dimensions of lumber and statistics for forest products research.

Selected research sources:

1. Line intersect sampling: An historical perspective. In: V. J. LaBau and T. Cunia, eds. *State-of-the-art methodology of forest inventory: a symposium proceedings*. Gen. Tech. Rep. PNW-GTR-263. Portland, OR: USDA Forest Service, Pacific Northwest Research Station. 635 p. 1990.
2. *Process Modelling of Forest Growth Responses to Environmental Stress*. R. K. Dixon, R. S. Meldahl, G. A. Ruark and W. G. Warren, eds. Timber Press, Portland, Oregon. 441 p. 1990.
3. *Modelling Longitudinal and Spatially Correlated Data: Methods, Applications, and Future Directions*. T. G. Gregoire, D. R. Brillinger, P. J. Diggle, E. Russek-Cohen, W. G. Warren, R. D. Wolfinger (eds.). Springer-Verlag, New York. 402 p. 1997.

Personal sources:

Warren W. G. Personal communications (October 2019) via his daughters Margaret Warren and Sue Vogl.



CARCEA, Filimon

Filimon Carcea received the IUFRO Distinguished Service Award in 1986 for his long-term outstanding contribution to IUFRO activities especially Division 4.

Filimon Carcea was born on 5 December 1925 in Lopatnic, Republic of Moldova. He received his Diploma of Forestry Engineer (1950) from Polytechnic School of Bucharest, and his Ph.D. in Forestry (1964) from the Polytechnic School of Brasov. He began his career in 1949 (as an Engineer, in 1950) at the newly established Forest Engineering Institute (IPS) where he progressed to Head of Department, Project Manager and then Chief of Division. In 1959 he was appointed Head of the Forest Service in the Ministry of Forestry Economics, a position that allowed him to elaborate official instructions applying forest treatments in all Romanian forests (1966) and which were later (1988 and 2000) taken as a base for technical forestry guides. In 1969, he returned as Technical Director to the *Institutul de Cercetari și Amenajari Silvice* (ICAS – Institute of Forest Research and Development), where he worked until his retirement in 1992.

Dr. Carcea's major interests were in the area of silviculture, forest treatment, functional zoning of forests, and improving the methods of organizing the wood production process. He developed management planning methods in forestry and the original concept of "indicative growth", recognized at that time as a new procedure for establishing allowable cuts through the use of forest management plans. He published his work in more than 80 scientific and technical papers including 21 in foreign languages in journals, proceedings and other international publications. Dr. Carcea was a corresponding (1991) and then full (since 2003) member of the Romanian Academy of Agricultural and Forestry Sciences "*Gheorghe Ionescu Sisesti*" (ASAS).

Dr. Carcea was invited as a national expert by the UN FAO (1994–1998), the European Commission of Forests, the Ministerial Conference on the Protection of Forests in Europe (MCPFE), and many bilateral cooperation activities in Europe (Switzerland, France, Germany, former USSR and Czechoslovakia) and in developing countries (Algeria, Costa Rica, Colombia, Zaire, Equatorial Guinea), and others. He spoke French, Spanish, German, Russian and Italian fluently.

From 1967, Dr. Carcea was active in the IUFRO WG on Forest Management Methods. From 1976 to 1986, he was Coordinator of SG S.4.04.00 Forest Management and Planning (later re-organized into Forest Management and Economics). From 1996, he served in WP 4.04.07 (later renamed 4.04.03 SilvaPlan), and from 2002, he was involved in terminology work resulted in the Romanian version of the Terminology of Forest Management Planning published in 2014 as "IUFRO World Series Volume 9-ro".

Dr. Filimon Carcea passed away in Bucharest on 24 January 2019.

Selected research sources:

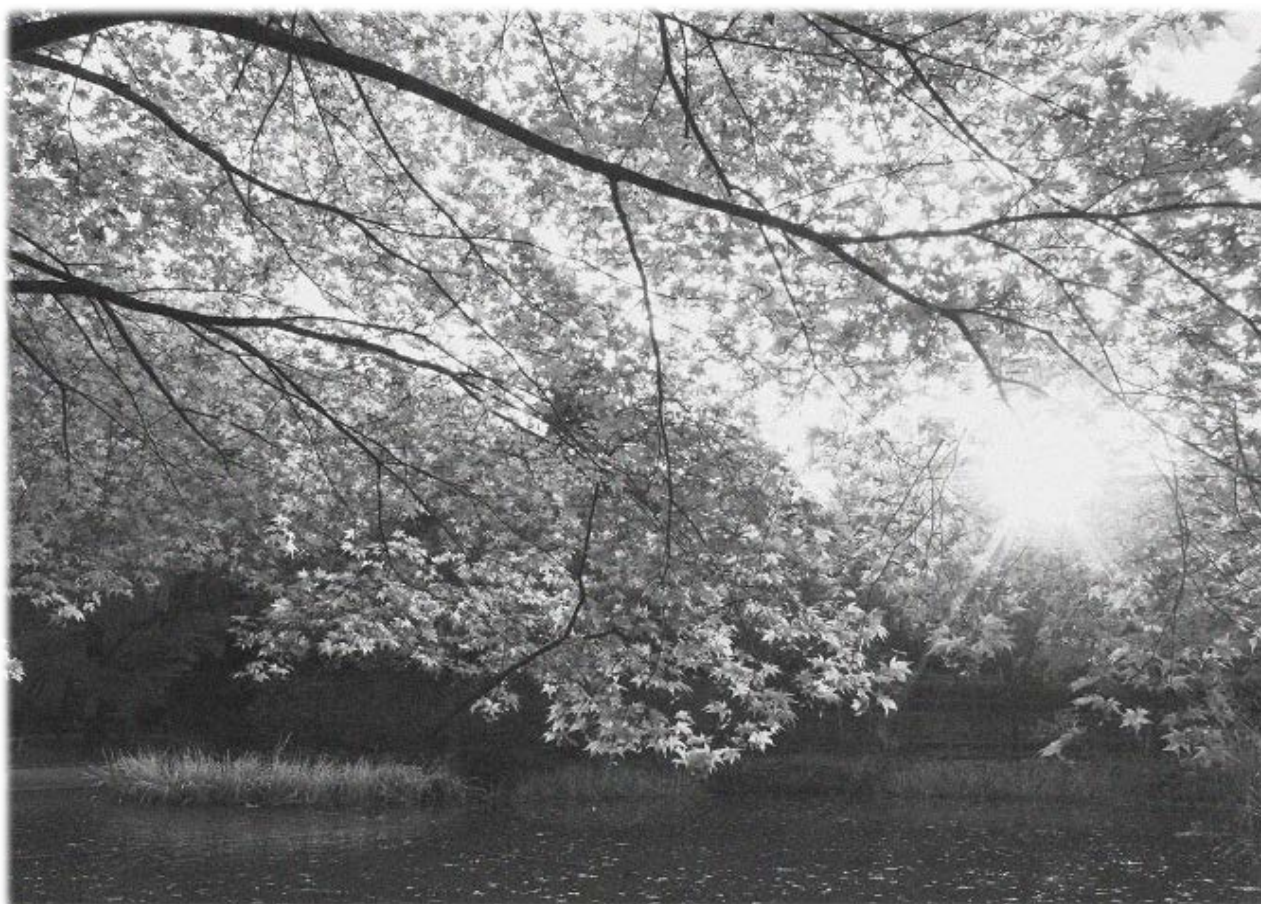
1. Metoda de amenajare a pădurilor. *Editura Agrosilvică*, 114 p. [The method of forest planning]. 1969.
2. *Forest Management in various countries of the World*. F. Carcea, ed. IUFRO, Vienna, 359 p. (IUFRO SG S4.04. Forestry Management and Planning. Available in English, French, or German). 1983.
3. *Determinations of the forests' allowable cut in various countries of the world*. F. Carcea, ed. Bucharest, Romania: ICAS, 268 p. (IUFRO S4.04 Forest Management Planning and Management Economics. In English, French, and German. In Japanese, 190 p.). 1986.

Personal sources:

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2. URL: https://www.iufro.org/download/file/26110/1675/birthday-filimon-carcea-revista-padurilor_pdf Retrieved 05.05.2019.
3. Badea O. Personal communications (June 2019) at obadea@icas.ro

1987 – 1990

<i>Walter G. KAUMAN</i>	<i>France</i>	<i>1987</i>
<i>Bertil THUNELL</i>	<i>Sweden</i>	<i>1987</i>
<i>Ryoichi HANDA</i>	<i>Japan</i>	<i>1987</i>
<i>Stanley Paul GESSEL</i>	<i>USA</i>	<i>1988</i>
<i>Helmuth SCHMIDT-VOGT</i>	<i>Germany</i>	<i>1988</i>
<i>Chris von KRAAYENOORD</i>	<i>New Zealand</i>	<i>1988</i>
<i>Syama P. RAYCHAUDHURI</i>	<i>India</i>	<i>1989</i>
<i>Polona AMBOŽIČ (KOMAC)</i>	<i>Yugoslavia</i>	<i>1990</i>
<i>Jan MATERNA</i>	<i>Czechoslovakia</i>	<i>1990</i>
<i>Brian PAYNE</i>	<i>USA</i>	<i>1990</i>
<i>Lorne F. RILEY</i>	<i>Canada</i>	<i>1990</i>
<i>Oscar SZIKLAI</i>	<i>Canada</i>	<i>1990</i>
<i>Mirko VIDAKOVIČ</i>	<i>Yugoslavia</i>	<i>1990</i>





KAUMAN, Walter G.

Walter G. Kauman received the IUFRO Distinguished Service Award in 1987 for his exceptional provision in the development of Division 5 Forest Products.

Walter Kauman was born in 1923 and educated in Berlin, Germany. In 1947, he emigrated to Australia and worked for the Radio Corporation Ltd. for a year before joining CSIRO in 1948 as a Laboratory Assistant at the drying laboratory in the Division of Forest Products. He took evening Courses in Physics, and in 1952 obtained his Diploma of Applied Science from the Melbourne Technical College and in 1953, a B.Sc. in Physics (First Class Hons.) from the University of Melbourne, being awarded the Dixon Scholarship Prize of excellence. In 1957, he earned his *License Speciale* in Chemical Physics at the Free University in Brussels, Belgium, and Ph.D. in Chemistry being supervised by Professor Ilya Prigogine, Nobel Prize winner (1977). In 1959, Dr. Kauman returned to Australia and was promoted to Senior Research Officer at CSIRO where he then progressed to Chief Research Scientist and Deputy Director of the Division of Building Research. He served as an expert for the FAO and UNIDO in Chile (1962–1964), Paraguay (1970), and Venezuela and Venezuelan Guyana (1974–1978) where he initiated, established and ran R&D projects for national institutions and governmental entities on forest products, wood industries and research, forest management and wood utilization.

In 1978, he settled in France, where he was responsible for research at the Wood and Furniture Technical Center (CTBA) in Paris. He greatly influenced the development of wood science in French universities, the National Research Center (CNRS), and the National Institute on Agricultural Research (INRA). Dr. Kauman focused his research on wood properties, including wood physics and mechanics, wood drying, forest utilization and management. He authored and co-authored about 70 papers in professional and scientific journals and proceedings. He was a member or fellow of various associations, including the IAWS, the Institute of Wood Science, Institute of Foresters of Australia, and different French scientific councils at the Ministry of Research and Technology, the Ministry of Agriculture, the Pulp and Paper Technical Center, and the Tropical Forest Technical Center. In parallel to his research, administrative and public services, Dr. Kauman taught as an Associated Professor at the University Nancy 1 in France (1987–1988), a Professor at three Chilean Universities in Valdivia, Santiago and Concepcion (1988–1991), and at the *Universidad de la Republica* in Montevideo, Uruguay.

Dr. Kauman actively contributed to IUFRO from 1981 as a Leader of P5.01 Properties and Utilization of Tropical Woods, and as Deputy Coordinator of Division 5 Forest Products (1986–1995). In 1992, he took the lead in organizing an All-Division 5 conference in Nancy as well as participating in the drafting of the IUFRO Report “Improved Utilization of Timber Resources in Southeast Asia” at the end of the 1980s and beginning of the 1990s.

Dr. Walter G. Kauman has passed away a few years after his wife Janine, on 11 November 2005 in the south of France, where he lived after his retirement in 1988.

Selected research sources:

1. On the deformation and setting of the wood cell wall. *Holz. Roh. Werkstoff*, 26: 551–555. 1966.
2. Technological development in mechanical wood processing. Chapter 8, pp.198–223. In: M. Kallio, D. P. Dykstra, C. S. Binkley, eds. *The global forest sector: An analytical perspective*. NY: J. Wiley Sons. 1987.
3. Wood Science improves the quality of life (Academy Lecture). *Wood Sci. Technol.*, 24: 1–16. 1990.

Personal sources:

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2. Deglise, X. Personal communications (May 2019) at Xavier.Deglise@lermab.uhp-nancy.fr



THUNELL, Bertil Henry

Bertil Henry Thunell received the IUFRO Distinguished Service Award in 1987 for long-term service to IUFRO and input to the research of Division 5 on wood technology and products.

Bertil Thunell was born on 9 February 1914 in Stockholm, Sweden. He earned his Diploma of Engineer (1937), Ph.D. in Technical Sciences (1943) and habilitation (1948) at *Kungliga Tekniska högskolan* (KTH, the Royal Institute of Technology) in Stockholm. In 1938, he began his career as a Researcher at the Swedish Forest Products Laboratory in Stockholm, where he served as Head of the Wood Technology Department (1944–1969), the Wood Technology Central Laboratory (1960–1965), and then as Research Director at the Swedish Wood Research Institute (1969–1979). Dr. Thunell taught at the KTH, and progressed from Assistant Professor (1938) to Docent (1939–1943) and Professor of Wood Technology (1969–1980). He was a co-founder and Head of the KTH Department of Wood's Mechanical Technology (1944–1979), and from 1980 – a guest Professor.

Dr. Thunell's major research interests were in the field of material properties of wood, wood technology from microscopic observations on the machined surface of wood, properties of wood from sawmilling to final products, and mechanical grading. He was a pioneer in nesting and sawmill development. He published over 100 scientific publications, technical reports, book chapters, books and manuals.

Dr. Thunell was intensively involved in the FAO's World Conferences on Wood Technology, being Vice-Chairman of the first (Geneva, 1949), and a Vice-President of the third (Paris, 1954) and fourth (Madrid, 1958) conferences. Dr. Thunell, as an acting President, was at the founding (1960) of the International Wood Research Society (IWRS, since 1966 – International Academy of Wood Sciences, IAWS), being a Fellow from its establishment. Dr. Thunell was a member of the Swedish Academy of Engineering Sciences. He was part of the foundation years of the Society of Swedish Sawmillers (1943), serving as its secretary, chairman, and honorary chairman. He served as a board member of the T-wood Association (1949), and the Wood Technical Association (1959). He received various honours and awards including the Swedish Order of the North Star (1963), the Wasa Medal (1979), Doctor *honoris causa* at Ludwig Maximilian University in Munich (1970), and honorary memberships in the Society of Finnish Sawmillers and the Norwegian Society of Wood Technology.

Dr. Thunell was active in IUFRO Section 41 as Coordinator of the WG on Mechanical Conversion (1961–1971), including preparation of texts on a history and the "List of publications on bandsaws" (1971) for the IUFRO bibliography. As Deputy Coordinator (1972–1976), he contributed greatly to the development of Division 5 Forest Products. Professor Thunell passed away on 6 September 2000 in Djursholm, Sweden, at the age of 86.

Selected research sources:

1. The Effect of Temperature on the Bending Strength of Swedish Pinewood. *Empire For. J.* 19(2): 309. 1940.
2. *Trä: dess byggnad och felaktigheter*. Stochlolm, 103 p. [Wood: its building and faultiness]. 1945.
3. On the premises for mechanical grading of timber. *Pap. ja Puu* 51(4): 373–377. 1969.
4. Principles and methods to determine lumber quality. Royal Inst. of Tech., Stockholm, 1980.

Personal sources:

1. Håfors B. *Conservation of the wood of the Swedish warship Vasa of A.D. 1628*. 2nd ed. Vasa Museum, Stockholm, 187 p. 2010.
2. Saarman E. Bertil Thunell. Obituary. Manuscript, 1 p. (in Swedish). 2000.
3. Thunell L. H. Personal communications (September–October 2019) at lars@thunell.eu
4. Thunell P. U. Personal communications (October 2019) at per.thunell@telia.com



HANDA, Ryoichi

Ryoichi Handa received the IUFRO Distinguished Service Award in 1987 for promoting IUFRO in Japan and for activities in Division 4.

Ryoichi Handa [半田良一] was born on 1 February 1925 in Kyoto, Japan. In 1947, he graduated from the Department of Forestry, Kyoto University, from which he later earned his Doctor of Agriculture degree (1972), majoring in Forest Policy and Economics. He began his teaching career in 1952 as Kyoto University Lecturer at Faculty of Agriculture and progressed to Associate Professor (1954), and Professor (1964), retiring as Professor Emeritus from Kyoto University in 1988. In 1993–1999, he worked as an invited Professor at Chukyo Gakuin University.

In 1974–1975, the Ministry of Education supported Dr. Handa for a one-year Post Doctoral exchange at the University of Munich, Germany, when he spent about six months travelling through the forests of several European countries, including the United Kingdom, Finland, Sweden, and Switzerland. He visited Western Hemisphere forests in the USA and Canada prior to attending the IUFRO World Congress in Montreal (1990).

Dr. Handa's research interests were mostly related to forest and timber management and policy. His voluminous (about 300 pages) graduation thesis was on the history of timber control in Japan since pre-World War 2. He then expanded his research into the markets for timber and wood products, labour forces, forestry rent theory, forest history, social aspects of forestry, forest macroeconomics, forest administration and governance, and to the function of cultural and environmental forests. He authored and co-authored 13 scientific books and about 80 articles.

Dr. Handa made significant national contributions, serving as a Council Member of the Japanese Forest Economic Society, President of the Central Japan Common Forest Research Society (1982–1988), and President of the Peoples Forest Congress (*Kokumin Shinrin Kaigi*) (2001–2005).

Professor Handa collaborated with IUFRO Division 4 Planning, Economics, Growth and Yield, Management Policy including playing a leading role in organizing IUFRO Division 4 host country meetings at the 17th IUFRO World Congress in Kyoto, Japan (1981). He was Deputy Chair of IUFRO unit S4.05-03 (1981–1986).

Selected research sources:

1. 半田良一 (1961) 木材価格論. 地球出版, 247 頁. [Theory of wood price. Chikyu Publishing, 247 p.]. 1961.
2. 半田良一 (1972) 林業経営. 地球出版, 243 頁. [Forestry Management. Chikyu Publishing, 243 p.]. 1972.
3. On the principles of Japanese forest policy since. *Silva Fennica* 20(4): 331–338. 1986.
4. *Forest Policy in Japan*. Ryoichi Handa, ed. Nippon Ringyo Chosakai, 457 p. + Appendix 67 p. 1988.
5. 半田良一 編著 (1990) 林政学. 文永堂出版, 311 頁. [Forest Policy. Buneido Publishing, 311 p.]. 1990.

Personal sources:

1. 半田良一 私の研究史. 林業経済研究所創立 70 周年記念企画 林業経済 70 (5): 1–14 [Ryoichi Handa. My research history. An interview for the 70th Anniversary of the Forestry Economic Research Institute. *Forestry Economy* 70 (5): 1–14]. 2017. www.foeri.org/pdf/handa.pdf Retrieved 10.04.2019.
2. Williams-Kawamoto S. Personal communications (March–April 2019) at sumirekwphoto@gmail.com
3. Matsushita K. Personal communications (April–May 2019) at matsu@kais.kyoto-u.ac.jp



GESSEL, Stanley (Stan) Paul

Stanley Paul Gessel received the IUFRO Distinguished Service Award in 1988 for his outstanding contribution to IUFRO advancement in soil science.

Stanley Gessel was born on 14 October 1916 in Providence, Utah, USA. He earned his B.Sc. in Range Management (1939) at Utah State Agriculture College in Logan under a W. D. Thompson Memorial Scholarship, and Ph.D. in Soil Sciences (1950) at University of California–Berkeley. After military service as a captain (1942–1945) of the US Army Air Force during World War II, he spent his entire professional career with the College of Forest Resources (CFR) at the University of Washington (UW) in Seattle, WA. He began there as an Instructor in 1948, and then progressed to Assistant Professor (1950), Associate Professor (1955), Professor of Forest Soils (1960), and Professor Emeritus after retirement in 1983. Professor Gessel was also a part-time staff member of the UW CFR in Marshall Islands (1958–1964), where he studied the consequences of nuclear testing. For a long time he served as Associate Dean (1965–1982) and Director of Special Programs (1982–1984) of the UW CFR. In December 1968, he was appointed as Biome Director of the project funded by the US National Science Foundation, within the Coniferous Forests Biome section of the International Biological Program.

Professor Gessel led pioneering research on forest soils, nutrition, nutrient cycling in ecological systems, forest fertilization, and the impact of nuclear testing on soils and their properties. He published numerous scientific papers and reports. He was a critical reviewer at the journal *Quaternary Research*. Professor Gessel consulted for state and private companies on soil, water and forestry problems. He invested much time and energy in the forest sector of Australia. He consulted for the New South Wales (NSW) Forestry Service (from 1986), worked with Bikini and Rongelap Island Rehabilitation for the Lawrence Livermore Laboratory (1986), and was a reviewer of the NSW Regional Forest Agreements (1995). He served as a member of the WB Review of Forestry in Indonesia (1990–1992) and of the Science Committee at Bioforest Limited, Valdivia, Chile (1992–1993).

Professor Gessel was a member of many professional societies, including the American Association for the Advancement of Science, the Soil Science Society of America, the Society of America Foresters, the International Forestry Association, the Tropical Forestry Society and others. He also participated in public life as a member of Lake City Citizens Advisory Group. His accomplishments were recognized with a citation by the Northwest Science Association, as an Honorary Alumnus by the UW Foresters Alumni Association (1976), and as Forester of Year by SAF Washington state section (1985). He actively collaborated with IUFRO, serving as Chair of the Site Group S1.02 on forest site and productivity (1970–1986), and the RG on plantation production (until 1995). He organized many meetings and workshops under the auspice of IUFRO and several side-events and sessions at IUFRO congresses from Munich (1967) to Montreal (1990). Professor Stanley Paul Gessel passed away from heart failure at home in Seattle on 13 May 1995 at the age of 78.

Selected research sources:

1. *IUFRO Symposium on forest site and continuous productivity: Seattle, Washington, August 22–28, 1982.* R. Ballard and S. P. Gessel, tech. eds. Gen. Tech. Rep. PNW-GTR-163. Portland, OR: USDA FS, Pacific Northwest Forest and Range Experiment Station, 404 p. 1983.
2. *Forest Site and Productivity.* S. P. Gessel, ed. Forestry Sciences 20. Nijhoff / Junk publ., Dordrecht, Boston, Lancaster, ix, 270 p., ill. (In collaboration with IUFRO). 1986.

Personal sources:

1. URL: <https://prabook.com/web/person-view.html?profileId=1694676> (Gessel S. P.) Retrieved 27.04.2019.
2. Vogt D. Personal communications (May 2019) at dvogt@uw.edu
3. Gessel S. Personal communications (May 2019) at sgessel51@gmail.com



SCHMIDT-VOGT, Helmut

Helmut Schmidt-Vogt received the IUFRO Distinguished Service Award in 1988 in recognition of his efforts in organization of research within IUFRO Section 23 Silviculture.

Helmut Schmidt-Vogt was born on 8 January 1918 in Burggrub (Stockheim), Bavaria, Germany. After graduation in 1937 from the Humanistic Gymnasium in Augsburg, he performed Labour Service and served in the German Armed Forces, and was four times severely wounded. He studied Forestry from 1941 to 1945 at the *Ludwig-Maximilians Universität* in Munich (LMU) and graduated with a diploma. At LMU he also obtained a doctoral degree in Economics (1950) and habilitated in 1962. In 1945, he began his career as a candidate for the civil service at the Bavarian State Forestry Administration and served at the same time as Acting Head of the Sachsenried and Denklingen forestry offices. In 1947 he passed the Great Forest State Examination (*Staatsexamen*) and until 1948 worked at the Forest Directorate in Augsburg. He then worked in the Department of Silviculture and Forest Taxation at the Bavarian State Ministry of Food, Agriculture and Forestry in Munich (1948–1955) and was head of the forestry office Teisendorf (1956–1964). In 1964 Dr. Schmidt-Vogt was appointed as Professor and Director of the *Waldbau Institut* (Chair of Silviculture) at *Albert-Ludwigs-Universität* in Freiburg. He served in this capacity until his retirement in 1986.

His early work was focused on the development of forest plants as a function of genotype and environment, as well as on the assessment of the quality of forest plants. The results of this work became the basis for the development of European Economic Community standards on forest reproductive material. He authored and co-authored 180 articles in professional journals. His major research interests, however, were spruce trees and forests. In collaboration with many other scientists he prepared a fundamental monograph *Die Fichte* (Spruce). The first volume appeared in 1977, and the second volume was published in three parts between 1986 and 1991.

Dr. Schmidt-Vogt was active in IUFRO as a Leader WG Characteristics of Plants Used for Afforestation in Section 23 Silviculture (1961–1967). He was also leader of the study tour on Silvicultural Practices at the XIX IUFRO Congress in Germany (1967). Dr. Schmidt-Vogt's work was recognized with many honours and awards including membership of the Italian Academy of Forest Sciences in Florence (1976), *Universitas Helsingiensis* medal (1976) and the honorary doctorate of the University of Helsinki (1984), Medal of the Finnish Forest Science Society (1979), Medal of the Institute of Forest Sciences Eberswalde (1982), and Honorary Professorship of the University of Santiago del Estero, Argentina (1989).

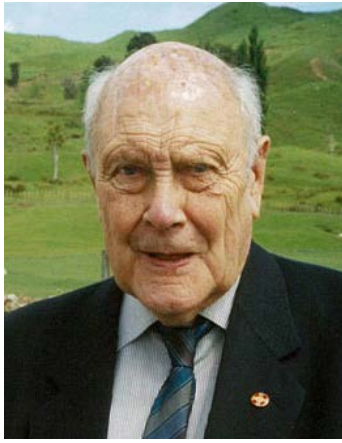
Professor Helmut Schmidt-Vogt passed away on 29 November 2008 in Merzhausen, Germany.

Selected research sources:

1. *Die Gütebeurteilung von Forstpflanzen*. München, Bayerischer Landwirtschaftsverlag, 171 S. [Quality assessment of forest plants]. 1961.
2. *Wachstum und Qualität von Forstpflanzen*. München, Basel, Wien, Bayerischer Landwirtschaftsverlag, 209 S. [Growth and Quality of Forest Plants]. 1966.
3. *Characterization of Plant Material*. H. Schmidt-Vogt, ed. Proceedings of IUFRO WG S1.05-04 Meeting, Freiburg im Br., 23–26 June 1980. Freiburg, Waldbau-Institut, Univ. of Freiburg, 191 p. 1980.
4. *Musik und Wald*. Rombach Verlag KG, 350 S. [Music and Forest]. 2001.

Personal sources:

1. URL: https://de.wikipedia.org/wiki/Helmut_Schmidt-Vogt Retrieved 26.02.2019.
2. Schmidt-Vogt D. Personal communications (June 2019) at dietrich.schmidt-vogt@waldbau.uni-freiburg.de



VAN KRAAYENOORD, Christiaan (Chris) Willem Schmeil

Christiaan Willem Schmeil van Kraayenoord received the IUFRO Distinguished Service Award in 1988 for his long-term contribution to research on poplars within IUFRO Division 2.

Chris van Kraayenoord was born on 18 April 1923 in The Hague, The Netherlands. He obtained an M.Sc. in Forestry at the University of Wageningen (1951) and studied soil erosion in the Mediterranean region. In 1952, he moved to New Zealand, where the Ministry of Works employed him as a Soil Conservator. In 1954 he obtained a Certificate in Soil Conservation from Lincoln College, Canterbury, and was appointed as a Soil Conservator in the Department of Agriculture in Palmerston North. Here he undertook a nation-wide survey of poplars and willows (1956–1958). In 1966 he became a Research Officer in Soil Conservation in the Ministry of Works and Development. From 1970 to 1987 he was the Scientist-in-Charge of the National Plant Materials Centre, Ministry of Works, at Aokautere, Palmerston North. In addition, he was an Honorary Lecturer at Massey University from 1986 to 1987. He retired in 1987.

Mr. van Kraayenoord had many research interests, but he concentrated on sand dune stabilization, soil erosion control, and soil conservation, focusing on the use of poplars and willows. He undertook research on poplar rust and willow pests, such as the willow sawfly. He authored and co-authored some 50 reports and articles in academic journals, and popular farm forestry, tree crop and agricultural science magazines. His knowledge and expertise on poplars meant that Chris van Kraayenoord became widely known in New Zealand as “Mr. Poplar”. This enabled him to establish a National Poplar Commission and he encouraged New Zealand to join the International Poplar Commission (IPC) in 1969. He was a longstanding country representative on the IPC and was a Member of the Executive of the IPC from 1981 to 1988. He established two nurseries including the one at Aokautere where the National Plant Materials Centre was founded in 1970. It later became the National Poplar and Willow Breeding Centre.

Mr. van Kraayenoord was a member of the New Zealand Farm Forestry Association (NZFFA) and a Fellow of the NZ Institute of Agricultural Science (1981). He helped to found the Manawatu Tree Trust (1984), supported its activities until his death, and became the only person to receive its Donald Urquhart Environmental Award (2001). In 2002 he became an Officer of the NZ Order of Merit. Mr. van Kraayenoord was active in IUFRO Division 2 as an Office holder of various research units dealing with poplar research.

Chris van Kraayenoord died on 21 January 2012 in Palmerston North, New Zealand.

Selected research sources:

1. Poplar culture. In: *Proceedings, 23rd Northeast Forest Tree Improvement Conference (August 4–7, 1975, New Brunswick, NJ, USA)*, pp. 128–142. 1976.
2. *Plant materials handbook for soil conservation*. C. W.S. van Kraayenoord, K. M. Pollock and R. L. Hathaway, eds. Wellington, Water & Soil Misc. Publications Nos.: 93, 295 p.; 94, 299 p.; 95, 66 p. 1986.
3. *Introduced forest trees in New Zealand. Recognition, role and seed source*, 15. The willows *Salix* spp. New Zealand Forest Research Institute. Bulletin 124, 32 p. (with B. Slui and F. B. Knowles). 1995.

Personal sources:

1. Lambrechtsen N., van Kraayenoord C. Chris van Kraayenoord – ‘Mr Poplar’ enthusiastic extrovert dedicated to wise land management as a national responsibility. Obituary. *NZ J. of Forestry*, May 57(1): 46–48. 2012.
2. Christa van Kraayenoord. Personal communications (July 2019) at c.vankraayenoord@uq.edu.au



RAYCHAUDHURI, Syama Prasad

Syama Prasad Raychaudhuri received the IUFRO Distinguished Service Award in 1989 for his contribution into organizing IUFRO's research on mycoplasma diseases.

Syama Prasad Raychaudhuri was born on 31 December 1915 in Calcutta, India. He earned all his degrees in Calcutta – B.Sc. (1935) at the Presidency College, M.Sc. in Botany (1937) at the University College of Science and Technology, and Ph.D. (1949) from Calcutta University. He began his professional career in 1941 as an Associate in the Division of Mycology and Plant Pathology at the Indian Agricultural Research Institute (IARI) in New Delhi, where he worked on various positions until his retirement. In addition to his research, Dr. Raychaudhuri was appointed as Professor in Plant Pathology (1961) and Head of the Division of Mycology and Plant Pathology, IARI (1965). He was a Fulbright Scholar at the Rockefeller Institute for Medical Research in New York (1950–1952) and Visiting Professor at Rutgers University, USA (1964 and 1977), Advisor to Haryana Agricultural University, Hissar (1976), Distinguished Professor in Japan (1976) and Canada (1984), and Richard Merton Professor in Germany (1974 and 1978).

Professor Raychaudhuri focused his research in the field of mycology, plant pathology, virus diseases of cereals pulses, fruits, vegetables, plantation crops, ornamentals, seed pathology and tissue culture. He published more than 13 books, 325 papers and guided the research of 73 Ph.D. and M.Sc. students. For a long time, he served as an Editor of *International Journal of Tropical Plant Diseases* and *Review of Tropical Plant Pathology* following their establishment in early 1980s, as well as a member of the advisory boards of *Plant Diseases* (Academic Press) and *Plant Protection* (UK). Professor Raychaudhuri was a Fellow of the Indian Phytopathological Society (President of IPC in 1967), the Indian National Science Academy (INSA), the National Academy of Sciences, India (NASI), the American Phytopathological Society, an Honorary Fellow of the Indian Mycological Society (IMS), a recipient of the Rafi Ahmed Kidwai Award and many other honours. He was the first Treasurer of the International Society of Plant Pathology (ISPP), Chairman of its Citrus Dieback Committee, and Chairman of two International Symposia in Delhi in 1966 and 1972. He was a founder of and President of the Indian Virological Society (IVS). He served as President of the Society for the Advancement of Botany, NASI's Biological Branch, Agricultural Sciences Section of the Indian Science Congress, and the IMC.

Professor Raychaudhuri was a IUFRO Corresponding Member from India, established (1976), ran as a Coordinator of IUFRO unit S2.06.09 Mycoplasma Diseases, and organized two IUFRO International conferences on Mycoplasma Diseases in Bangalore (1977) and Munich, (1978).

Professor S.P. Raychaudhuri passed away on 9 August 2005 at the age of 89 years. In his memory, the Shyama Prasad Raychaudhuri Lifetime Achievement Award of IVS, and Prof. S.P. Raychaudhuri Memorial Lecture Series at the IPS were established.

Selected research sources:

1. *A manual of virus diseases of tropical plants*. Macmillan Co. of India, 299 p. 1977.
2. *Mycoplasma Diseases of Crops: Basic and Applied Aspects*. K. Maramorosch and S. P. Raychaudhuri, eds. Springer-Verlag, 456 p. (1st edition 1988). 2011.
3. *Biotechnology and Plant Protection in Forestry Science*. S. P. Raychaudhuri and K. Maramorosch, eds. Science Pub Inc., 250 p. 1999.

Personal sources:

URL: <http://ipsdis.org/gallery/view/34484> (S. P. Raychaudhuri). Retrieved 20.07.2019.



KOMAC (AMBROŽIČ), Polona

Polona Komac received the IUFRO Distinguished Service Award in 1990 for her excellent work as Administrative Assistant to the IUFRO President's Office and active role in preparation of the Congress in Ljubljana, Yugoslavia (1986).

Polona Komac (ex Ambrožič) was born on 24 August 1953 in Postojna, Slovenia (then Yugoslavia). She received an M.A. in English Language and Literature and Italian Language and Literature from Ljubljana University (1981). Her professional expertise spans over three main areas. In the first, she was a full-time journalist for the magazine *Jana*, and daily *Delo* (1979–1981). In the area of Teaching English As A Foreign Language, she worked as Director of Studies of the English Department, The Ljubljana Centre for Foreign Languages (1988–1989), Founder, CEO and Director of Studies, The P.A.K. Language School, Ljubljana (1990–2000), and Director of the British Council English Studies Resource Centre in Ljubljana (1992–1993). In addition, she was a teacher of English for the 3rd and 4th year students at the Forestry Department (1983–1987) and for the 1st and 2nd year students at the Wood Products Department, Biotechnical Faculty, Ljubljana University (1984–1990). In the area of cultural heritage, Polona Komac served as the Assistant Director Human Resources of the Institute for the Protection of Cultural Heritage of Slovenia (2000–2005). From 2005 until her retirement in 2017, she has served as a Founder and CEO of the Gojmir Anton Kos Foundation, a foundation set up in memory of the great Slovene artist to look after and protect his splendid artistic opus and preserve Slovene cultural heritage.

When Prof. Dr. Dušan Mlinšek was elected IUFRO President and Yugoslavia the host of the 18th IUFRO World Congress (1981), Polona Komac was hired as Administrative Assistant to the IUFRO President (1982–1987) because of her work experience and knowledge of languages. She helped organize and run the President's Office, edit IUFRO News and prepare for the IUFRO World Congress in Yugoslavia. Her love and respect for nature, ability to speak foreign languages and journalistic experience contributed to the outlook and contents of IUFRO News at that time. She was also a contributing factor to the success of the IUFRO Enlarged Executive Board meeting in Ljubljana (1982) and IUFRO World Congress in Ljubljana (1986).

She contributed to the preparation of Brochures 1 and 2 for the 18th IUFRO World Congress, translations, technical and topic co-ordination between Vienna, Washington and Ljubljana (1985–1986), and translated into English over 200 scientific and professional articles for IUFRO, the Biotechnical Faculty, Forestry Department, Wood Products Department, and the Slovene Academy of Science, Ljubljana, as well as over 100 articles for IUFRO and IUFRO News, Vienna (1982–1987). With Dr. Brian Payne, she designed the official IUFRO presentation poster for the 1986 IUFRO World Congress.

Selected research sources:

1. *Timber: an English course book for students of forestry*. Biotehniška fakulteta, Oddelek za gozdarstvo, 199 p. 1985.
2. 18th IUFRO World Congress Report for Unasylva – FAO – A 16 page supplement on the 18th IUFRO World Congress for FAO of the United Nations. *Unasylva* Vol. 39, No. 155, 1ZZZ. 1987.
3. *English–Slovene and Serbo–Croat Dictionary of Everyday Terms*. IUFRO, Ljubljana, 1986.

Personal sources:

Komac P. Personal communications (May 2019) at polona.komac@gmail.com



MATERNA, Jan

Jan Materna received the IUFRO Distinguished Service Award in 1990 for his research into the effects of air pollution on forest ecosystems, coordinating efforts within the IUFRO subject group Air pollution and implementing research results into forest practice as well as setting air pollution standards for the protection of forests.

Jan Materna was born on 23 October 1924 in Prague, Czechoslovakia. He graduated with a Forest Diploma Engineer (1948) and obtained his Ph.D. (1961) from the Forest Faculty of the Czech Technical University in Prague. He began his professional career as a specialist in forest inventory and timber cruising at the Forest Planning and Project Design Unit “*Lesproject*” in Plzeň. He then worked as a Researcher at the Department of Forest Biochemistry (1952) and Department of Forest Environment (1958) of *Výzkumný ústav lesního hospodářství a myslivosti* (VÚLHM, now Forestry and Game Management Research Institute, FGMRI) under the Ministry of Agriculture in Zbraslav.

From 1963 to 1971 Dr. Materna was the FGMRI’s Deputy Director for Research. He was consecutively appointed as Head of the Laboratory of Physiology and Nutrition of Forest Trees (1968), and Head of the Department of Physiology and Radiobiology (1976), Forest Ecology (1980), and Ecological Monitoring (1986–1990). In 1990–1993, he served as a Scientific Officer of Ecological Monitoring. Between 1994 and 2004 he led a group surveying the nutrition of soils and forest stands in the Central Institute for Supervising and testing in Agriculture in Brno (ÚKZUZ Brno).

Dr. Materna’s major research interests were in the field of air pollution impact on forest stands, nutrition of forest trees, forest soils and revitalization measures, forest physiology, and monitoring forest health. During his 40 years of activities in the FGMRI, he authored and co-authored 117 articles in various national and international scientific and professional journals, 31 research reports, 19 contributions to national and international conference proceedings, and 5 books.

Dr. Materna was highly engaged in the international arena. In the 1970s and 1980s, he was leader of the IUFRO research unit S2.09 Air Pollution. In Czechoslovakia, he organized and held several high-level international professional events under the auspice of IUFRO.

Selected research sources:

1. *Direct Effects of Sulfur on Forests in Europe – A Regional Model of Risk*. IIASA Working Paper. WP-87-057. April, xi, 38 p. (with A. Mäkelä and W. Schöpp). 1987.
2. Air pollution and forestry in Czechoslovakia. *Envir. Monitoring and Assessment* 12(3): 227–235. 1989.
3. *First results of the survey of soil surface layers in the forest in ČR (1993–1999)*. ÚKZUZ Brno, 98 p.
4. *SO₂ – pollution and forests decline in the Ore Mountains*. B. Lomský, J. Materna and H. Pfanž, eds. Jíloviště, Czech Republic, FGMRI, 342 p., ill. 2002.
5. *Results of mineral nutrition survey in the Czech Forest*. ÚKZUZ Brno, 125 p. 2003.

Personal sources:

1. Congratulations to Ing. Jan Materna, CSc www.vulhm.cz/sites/File/Informatika/Materna.pdf Retrieved 10.04.2019.
2. Materna J. Personal communications (May 2019) at jan.materna@post.cz



PAYNE, Brian R.

Brian R. Payne received the IUFRO Distinguished Service Award in 1990 for his role as assistant to the IUFRO Vice President's Office, and for helping organize the subject matter program for the World Congress in Ljubljana, Yugoslavia (1986).

Brian Payne was born 7 October 1939, in Portland, Oregon, USA. He received his B.Sc. in Forestry (1961) from the University of California, Berkeley, M.F. in Forestry (1962) with a major in Forest Economics from Duke University, and Ph.D. in Agricultural Economics (1969) from his *alma mater* in Berkeley, California. After receiving his Master's degree, Dr. Payne began his 38-year career with the U.S. Forest Service in Portland, Oregon, undertaking research on the economics of reforestation, tree improvement, timber harvest scheduling, and timber access road scheduling. From 1968 to 1970, he helped initiate a pre-forestry curriculum at Tuskegee Institute in Alabama to open natural resources career opportunities for minority students. The USDA awarded him with its Superior Service award for this in 1971.

Dr. Payne was appointed as Forest Economist and then project leader of a multidisciplinary urban forestry research unit at Amherst, MA (1970–1976). Research included the contribution of trees to residential property values, economic values associated with human enjoyment of nongame birds, affective values of outdoor recreation, and the second-home recreation market in the northeastern U.S. He published some 40 research papers, reports, and educational materials.

In 1977, Dr. Payne shifted his focus from personal research to research administration, becoming program manager of the Pinchot Institute of Environmental Forestry Studies, a consortium of nine universities and three Forest Service research units. From 1979 to 1982, he was seconded to the UNESCO "Man and the Biosphere" Programme in Paris, assisting forestry research in tropical developing countries. As a member of the International Forestry staff in the USFS Office in Washington, DC (1982–1986), Dr. Payne served as assistant to the USFS Deputy Chief for Research R. Buckman in his role as IUFRO Vice President.

Dr. Payne worked with IUFRO's Division Coordinators to help organize the program for the Congress in Ljubljana (1986). He helped secure funding from the UNDP and the WB to establish the IUFRO Special Programme for Developing Countries (IUFRO–SPDC), and he participated in the selection of Oscar Fugalli as its founding coordinator. He continued support to IUFRO President Buckman after 1986, and he helped organize the USFS participation in the Congress in Montreal (1990). From 1993 to 1996, Dr. Payne was seconded to the IUFRO Secretariat in Vienna to serve as the third IUFRO–SPDC Coordinator. He obtained funding to support training courses and participation by disadvantaged and developing country scientists in meetings around the world, including the Congress in Tampere (1995). He completed his Forest Service career in Washington DC as administrator for outdoor recreation, social science, and wilderness research. In 1986, he was elected an SAF Fellow.

Selected research sources:

1. Black foresters needed: a professional concern. *J. of For.*, May 69(5): 295–298 (with D. R. Theoe). 1971.
2. *Accelerated Roadbuilding on the North Umpqua: An Economic Analysis*. U.S. Forest Service Research paper PNW-137. Portland, Oregon, 32 p. 1972.
3. The twenty-nine tree home improvement plan. *Natural History*, November 82(9): 74–75. 1973.

Personal sources:

Payne B.R. Personal communications (May 2019) at bpayne@alum.calberkeley.org



RILEY, Lorne Firth

Lorne Firth Riley received the IUFRO Distinguished Service Award in 1990 for his outstanding contribution to the XIX IUFRO World Congress as COC Chair.

Lorne Riley was born on 24 January 1939 in Toronto, Ontario, Canada. He earned his B.Sc. in Forestry (1962) at the University of Toronto. His first employment following graduation was with *Mo och Domsjö AB* (1962–1963) (since 2000 – Holmen Aktiebolag), in Ångermanland, Sweden. He began his career in Canada in 1963 as a Management Unit Forester with the Ontario Department of Lands and Forests. On moving to the Canadian Forest Service (CFS) in Sault Ste. Marie, Ontario (1968) he progressed from his starting position as Forestry Officer to Head, Liaison and Development (1972), to Head, National Mechanization of Silviculture Program (1975), to Program Director, Environmental Forestry Research (1980). In 1993, he was appointed Coordinator of the Canadian Criteria and Indicators (C&I) Initiative and served as a member of the Canadian team to the Montreal C&I Process (1993–1995). During 1995–2006, he engaged in private practice as an environmental forestry consultant. From 1998, he has served as Executive Director of the Canadian Forestry Accreditation Board. He was a practicing member (Registered Professional Forester, R.P.F.) of the Ontario Professional Foresters Association for some 40 years and continues as a non-practicing Life Member.

Mr. Riley has authored and co-authored numerous research and technical papers on mechanized silviculture, aerial seeding and thinning/spacing research in peer-reviewed print media and given presentations at numerous technical fora, nationally and internationally. Although no longer serving, he has been a member of the editorial board of the *International Journal of Forest Engineering* and *Forestry Abstracts*. Mr. Riley has served in numerous leading positions at the national and provincial levels. He has been a member of the Canadian Institute of Forestry for more than 50 years during which time he served as Annual Meeting Organizing Committee Chair (1975) and as Chair and Director of the CIF's Central Ontario Section. He was Chair of the Canadian Federation of Professional Foresters Associations and was the founding Chair of the Canadian Forestry Accreditation Board. At the provincial level, he contributed to the Ontario Professional Foresters Association as President and Councillor and as Chair of several Committees. He has served as a Chair and Director of the Ontario Professional Forestry Foundation and as a Director of the Ontario Forestry Association. The Ontario Professional Foresters Association has recognized Mr. Riley with its Honoured Professional Forester Award, and the Canadian Institute of Forestry honoured him with a Tree of Life Award.

In 1988, Mr. Riley was appointed Organizing Committee Chair for the XIX IUFRO World Congress (Montreal, Québec, 1990) and then served as Coordinator of IUFRO–SPDC in Vienna, Austria (1991–1993). Besides these, Mr. Riley was involved in the work of IUFRO as a member of IUFRO EEB and Division 3, including as Deputy Coordinator.

Selected research sources:

1. Assessment of site preparation and its effect on aerial seeding success. In: *Canadian Forest Service Symposium Proceedings O–P–3, Mechanization of Silviculture in Northern Ontario*, pp. 18–23. 1975.
2. Some aspects of research methods applied to stand establishment operations in the Province of Ontario, Canada. In: *Operational Methods in the Establishment and Treatment of Stands* (3–8 September 1979, Moscow and Riga, Soviet Union). IUFRO Subject Group S3.02-00. Moscow, pp. 151–168. 1980.

Personal sources:

Riley L. Personal communications (May–June 2019) at lorne.riley@sympatico.ca

SZIKLAI, Oscar



Oscar Sziklai received the IUFRO Distinguished Service Award in 1990 for his long-term service as a leader of the IUFRO unit on Douglas fir improvement.

Oscar Sziklai was born on 30 October 1924 in Repashuta, Hungary. He grew up nearby Eger, and graduated as Forest Engineer from the Sopron Forestry School in 1946. In 1951 he began his teaching career there, becoming the assistant to Professor Gyula Roth, former IUFRO president, specializing in tree breeding and seed technology. In 1956, he moved to Austria, and in 1957 – to British Columbia, Canada. In 1959, he started his postgraduate studies at the Faculty of Forestry, University of British Columbia and obtained his M.Sc. in Forestry (1961) and Ph.D. in Forest Genetics (1964). Dr. Sziklai began his academic career by teaching forest genetics and related courses at the University of British Columbia, became full Professor there (1971), served as Head of the UBC Forest Sciences Department (1982–1985), and retired as UBC Professor Emeritus (1990). He served twice on the UBC Senate (1978–1981 and 1983–1984). He was insistent that forest genetics must be included in the forestry undergraduate curriculum as a core course.

Dr. Sziklai's research interests have concentrated in the field of forest genetics, quantitative genetic variation, allozyme polymorphism, nuclear characteristics, reproductive phenology and tree improvement of different forest tree species, especially Douglas fir. His expertise and research achievements brought him recognition and opportunity to build a wide international network, with projects in many European countries, Egypt and China, which he visited about 20 times. In 1985, he became an Honorary Member of the Chinese Society of Forestry, and in 1990 – Honorary Doctor of Sopron University. He was also active in British Columbia, serving as a lifetime member and chair of several professional associations such as the Canadian Institute of Forestry, the Committee on Forest Tree Breeding in Canada, the Western Forest Tree Seed Council, the Western Forest Genetics Society of Canada, and the Northwest Science Association.

Dr. Oscar Sziklai served in IUFRO in various capacities. He led the working party on Douglas fir improvement (1983–1990) and was an organizer and chair of numerous meetings on the subject. He participated in the IUFRO World Congresses in Ljubljana (1986) and Montreal (1990).

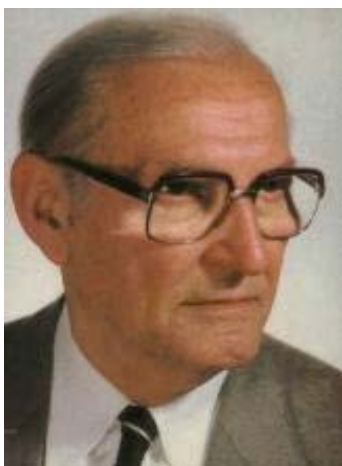
During one of his frequent visits to the country, Dr. Oscar Sziklai passed away suddenly on 18 September 1998 in Sopron, Hungary, at the age of 73.

Selected research sources:

1. A Review of Forest Tree Seed Certification. *The Forestry Chronicle*, 45(6): 378–385 (with B. S. P. Wang). 1969.
2. Intraspecific variation in nuclear characteristics of Douglas-fir. *Advancing Frontiers of Plant Science* 28: 363–378 (with M. H. El-Lakany). 1971.
3. *Erdészeti növénynevelés*. Mezőgazdasági Kiadó, Budapest, 316 p. (with K. Tompa). [Forest Tree Improvement. Agricultural Publisher]. 1981.
4. Forest tending in Hungary. *The Forestry Chronicle* 70(3): 279–281. 1994.

Personal sources:

1. Mátyás C. In memoriam Oscar Sziklai (1924–1998). *Forest Genetics* 6(1): 59. 1999.
2. Mátyás C., Kennedy B. Obituary: Oscar Sziklai (1924–1998). *The Forestry Chronicle* 75(1): 159. 1999.
3. Sziklai S. Personal communications (May 2019) at mars2263@shaw.ca



VIDAKOVIĆ, Mirko

Mirko Vidaković received the IUFRO Distinguished Service Award in 1990 for his outstanding long-term active work and promotion of IUFRO.

Mirko Vidaković was born on 29 October 1924 in Lemeš, Bačka (now Svetozar Miletić) near Sombor, former Yugoslavia. He graduated as a Forestry Engineer (1949) from the University of Zagreb, worked as an Assistant at the Department of Botany (1949–1950) and obtained his Ph.D. in Botany and Dendrology (1953). As a post-doctoral student, he spent 10 months in Denmark and Sweden (1955/1956). He was habilitated (1956), elected an Associate Professor (Docent) in 1957, and Professor of Dendrology and Forest Genetics in 1961. Professor Vidaković served as Head of the Department of Forestry, Genetics and Dendrology (1960–1990), and Dean of the Faculty of Forestry (1972–1973 and 1973–1974). In 1960–1974, he led the Department of Genetics at the Yugoslavian Institute for Genetics of Conifers in Jastrebarsko, and since 1970, he was also the Head of the arboretum in Trsteno, Yugoslavian Academy of Sciences and Arts (JAZU, then Croatian Academy of Sciences and Arts – HAZU). In 1996, he became a co-founder of the first clonal seed orchard of pedunculate oak in Croatia.

Professor Vidaković's research interests were in the field of botany, dendrology, forestry genetics, and tree improvement. He founded and developed forest genetics research at the University of Zagreb, being a long time leader in this field in former Yugoslavia, Europe and overseas. He authored and co-authored 158 scientific publications. From 1970, Professor Vidaković was an Editor of the HAZU magazine *Anali za šumarstvo (Annales forestales)*. In 1981, he became a Member of JAZU (outstanding member in 1969–1980), being elected Chair of its Scientific Council for Agriculture and Forestry. He served as President of the Croatian Genetic Society (1980) and in 1997 became a Member of the Croatian Academy of Forestry.

Professor Vidaković was invited by UNDP and FAO to work in Pakistan (1966–1969), Hungary (1971), and Vietnam (1979, 1983). He lectured in the USA, Canada, England, France, Greece, and Turkey, and made numerous presentations at national and international fora. Nationally, he presented at the Symposium dedicated to 100 years of scientific and organized forestry in Southeast Slavonia (1974), the first congress of the Yugoslavian genetics (1976), the first (1981) and other congresses of Croatian biologists, and many others. Internationally, he presented at the first (1963) and the second (1969) World Consultations on forest genetics and forest tree breeding, a Session of the International Poplar Commission (1971), the World Forestry Congress (1978) and others. From the 1960s, he actively worked in IUFRO Section 22 Forest Plants, and organized the Section's meeting in Zagreb (1965). He participated in three IUFRO World Congresses (1967, 1986, and 1990).

Professor Mirko Vidaković passed away in Zagreb on 15 August 2002 at the age of 77.

Selected research sources:

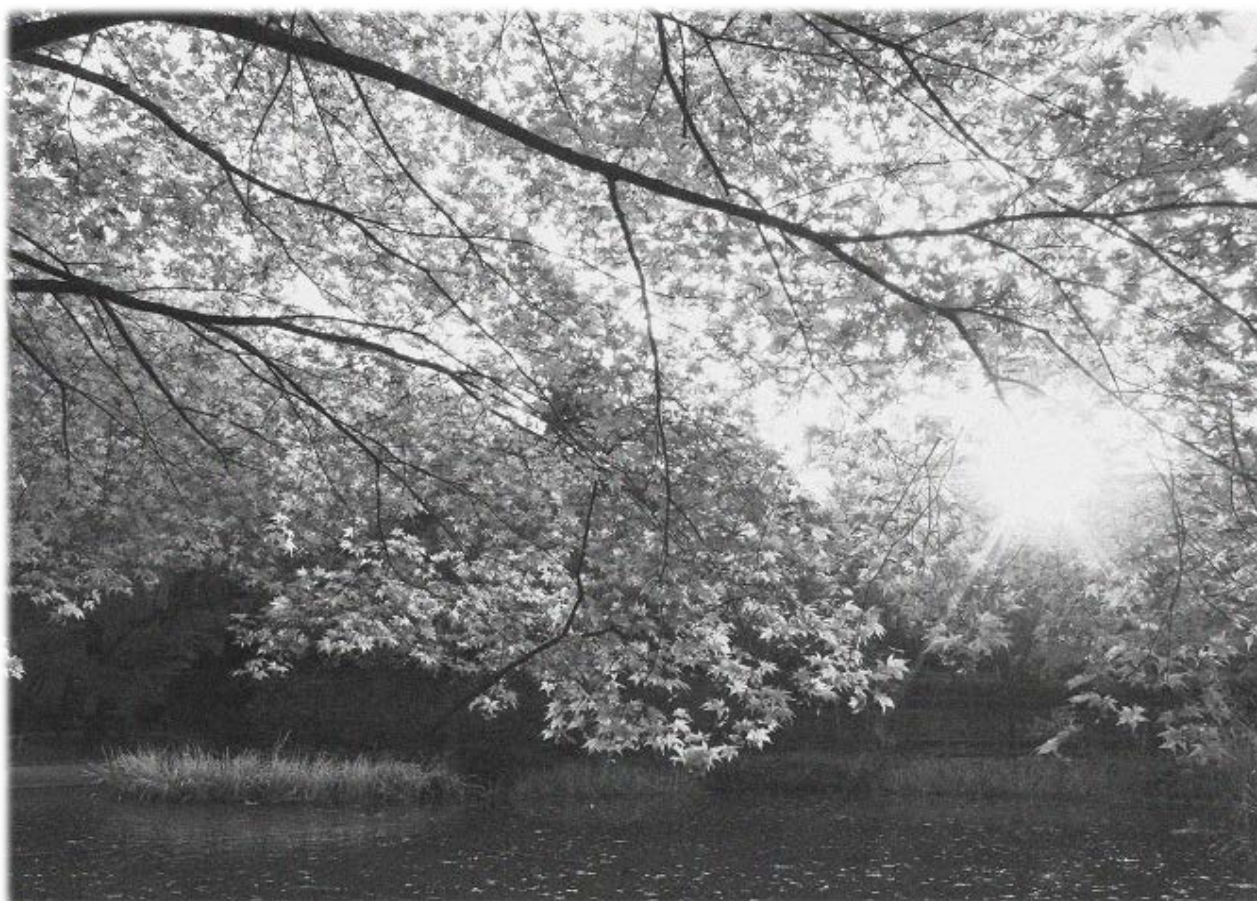
1. *Četinjače: morfologija i varijabilnost*. JAZU, 710 p. [Conifers: Morphology and Variation]. 1982. (English edition. 754 p. 1991.)
2. *Genetika i oplemenjivanje šumskog drveća*. Univ. of Zagreb, 505 p. (with A. Krstinić). [Genetics and Breeding of Forest Trees]. 1985.
3. *Golosjemenjače*. Univ. of Zagreb, 823 p. (with J. Franjić, I.). [Gymnosperms]. 2004.

Personal sources:

1. Kajba D. In memoriam. *Šumarski List* 9–10: 544. 2002.
2. URL: <https://www.sumari.hr/sumari/kart.asp?id=11947> (Vidaković Mirko). Retrieved 14.04.2019.
3. Kajba D. Personal communications (April 2019) at davorin.kajba@zg.htnet.hr Photo.

1991 – 1994

<i>Helge BRYNDUM</i>	<i>Denmark</i>	<i>1991</i>
<i>Hannes MAYER</i>	<i>Austria</i>	<i>1991</i>
<i>Philip G. ADLARD</i>	<i>UK</i>	<i>1992</i>
<i>Werner BALTENSWEILER</i>	<i>Switzerland</i>	<i>1992</i>
<i>Otmar BEIN</i>	<i>Austria</i>	<i>1992</i>
<i>Alan G. BROWN</i>	<i>Australia</i>	<i>1992</i>
<i>Alan M. FLETCHER</i>	<i>UK</i>	<i>1992</i>
<i>Oscar FUGALLI</i>	<i>Italy</i>	<i>1992</i>
<i>Hans-Friedrich JOACHIM</i>	<i>Germany</i>	<i>1992</i>
<i>Aarne NYSSÖNEN</i>	<i>Finland</i>	<i>1992</i>
<i>Heinrich RUBNER</i>	<i>Germany</i>	<i>1992</i>
<i>Lars STRAND</i>	<i>Norway</i>	<i>1992</i>





BRYNDUM, Helge Valdemar

Helge Valdemar Bryndum received the IUFRO Distinguished Service Award in 1991 for his leadership and organization of IUFRO research on Norway spruce thinning experiments.

Helge Bryndum was born on 10 July 1925 in Ullits Sogn/Vesthimmerland, Denmark. He obtained his high school Diploma (1942) and, in 1952, an M.Sc. in Forestry from *Landbohøjskolen* (Royal Veterinary and Agricultural University, now – Faculty of Science, University of Copenhagen).

In 1953, he started his professional career as an Assistant at the College of Land Surveying and was then employed by the Wood Industry Research Institute in Allerød. He was later appointed as a team leader at the Swedish National Forest Inventory, as well as a Scientific Assistant (1954), Acting Head (1958) and Head of the Department of Forest Mensuration (1972) at the Danish Forest Experiment Station, Springforbi. In parallel to his research and administration, from 1968 he served as a Censor at the Forestry Exam at *Landbohøjskolen*.

Mr. Bryndum's research focused on silviculture, studies of hardwood planting and treatment, especially long-term experiments on beech and oak thinning, forest regeneration, forest assessment and other topics. He authored and co-authored numerous scientific papers, book chapters, books, and research and technical reports.

He was Chairman of the Nordic cooperation group for production research (1979–1981) and was team leader for the project on the production possibilities of trees at different planting sites (1981–1985).

He received the Heinrich-Christian-Burckhardt Medal (1987) from the Forestry Faculty of the Georg August University of Göttingen for services to forest science and their practical applications.

Mr. Bryndum was active in IUFRO for a long time, especially in the WG Norway Spruce Thinning Experiments, and served as its Coordinator (1981–1990).

Mr. Helge Bryndum passed away on 6 November 1992 in Denmark.

Selected research sources:

1. Et udhugningsforsøg i ung eg. *Statens Forstlige Forsøgsvæsen*, Danm., København, Vol. 29: 173–243. [A thinning experiment in young oak stands]. 1965.
2. *Hugstforsøg i ung rødgran på leret morænejord*. *Statens Forstlige Forsøgsvæsen*, Danm., København, Vol. 36, 180 p. [Harvesting experiment in young spruce on clay moraine soil]. 1978.
3. *Bøgehugstforsøget i Totterup skov*. *Statens Forstlige Forsøgsvæsen*, Danm., København, Vol. 38, 76 p. [The beech harvesting experiment in Totterup forest]. 1980.
4. *Anlæg af blandskovforsøg med bøg/rødgran*. Sønderborg statskovdistrikt, Nørreskov afd. 50. SFF–Anlægsrapport Nr. 378 – Forsøgsnr. 1273, 10 p. [Planting mixed forests of beech and red spruce]. 1982.
5. Buchendurchforstungsversuche in Dänemark. *Allgem. Forst- und Jagdzeitung* 158(7/8): 115–125. [Beech thinning experiments in Denmark]. 1987.

Personal resources:

1. Bryndum, Helge Valdemar. In: Svend Balslev (red.) 1997: *Danske Forstkandidater 1897–1996*. Danske Forstkandidaters Forening, 255 p., ill. Photo. 1997.
2. Koch N. E. Personal communications (February–August 2019) at nek@trap.dk



MAYER, Hannes (Johann)

Hannes Mayer received the IUFRO Distinguished Service Award in 1991 for his contributions to the organizational advancements of IUFRO Division 1 research on geo-botany, forest ecosystems, and mountain forestry.

Hannes Mayer was born on 25 January 1922 in Altötting/Upper Bavaria, Germany. From 1945, he studied forest sciences at the State Economic Faculty of the University of Munich, where he received a Diploma in Forestry (1949), Doctorate degree (*Dr. oec. publ.*) in State Economics (1951), and was habilitated (1961). In 1949 he began his professional career as Forestry Trainee at the Bavarian State Forestry Administration, and in 1952 he became a Researcher at the *Institut für Waldbau, Bayerische Forschungsanstalt München* (Institute of Silviculture, Bavarian Research Institute in Munich). In 1958/1959 he received a scholarship from the German Research Foundation, after which he was appointed as a Forester at the Bavarian Forestry Office in Sonthofen / Allgäu (1959–1963).

In 1961, Dr. Mayer began teaching as a Lecturer and Conservator (1963–1965) at the Forestry Institute, University of Munich. In 1965 he was invited to be a Professor of Silviculture at the College of Agricultural Sciences, University of Natural Resources and Life Sciences (BOKU) in Vienna, a post that he held until his retirement in 1990. For a quarter of century, he led the BOKU Institute of Silviculture (1965–1990), forming the ecological vision for mountain forestry among an entire generation of Austrian foresters. His wide scope of research enabled him to publish numerous research papers and more than a dozen of books, based on his own research in forests throughout and beyond Europe.

Dr. Mayer was Chairman of the Association for Forest Site and Vegetation Science (1964–1967), a corresponding member of the Italian Academy of Forest Sciences in Florence (1976) and of the Austrian Academy of Sciences in Vienna (1984). His achievements were recognized with several honours and awards including Honorary Doctorate (*Dr.h.c.forest*) by the University of Istanbul, Turkey (1985); Konrad Lorenz Prize for Environmental Protection, Austria (1986); and the Sophie and Karl Binding Award for Nature and Environmental Protection by the Binding Foundation, Liechtenstein (1987), to name just a few. Dr. Mayer was active in IUFRO from 1967, serving as a Coordinator of working groups on Mountain Forestry (1967–1971), Ecosystems (1972–1980), and Primeval Forests (1981–1990).

Professor Hannes (Johann) Mayer passed away on 23 April 2001 in Vienna, Austria.

Selected research sources:

1. *Gebirgswaldbau – Schutzwaldpflege. Ein waldbaulicher Beitrag zur Landschaftsökologie und zum Umweltschutz*. Stuttgart, G. Fischer Verlag, 435 S. [Mountain forestry – protective forest care. A silvicultural contribution to landscape ecology and environmental protection]. 1976. 2nd edition, 1992.
2. *Waldbau: auf soziologisch-ökologischer Grundlage*. 4. Auf., Stuttgart, Gustav Fischer Verlag, 539 S. [Silviculture on sociological-ecological basis (1st edition 1977)]. 1992.
3. *Wälder Europas*. Stuttgart; New York: Fischer, xxxix, 691 S.: ill-s, map. [Forests of Europe]. 1984.
4. *Osttiroler Gebirgswaldbau. Waldbauliche Schlußfolgerungen aus den Hochwasserkatastrophen 1965 und 1966*. Institut für Waldbau, BOKU, vi, 669 S. [East Tyrolean mountain forestry. Silvicultural conclusions from the flood disasters of 1965 and 1966]. 1988.

Personal sources:

1. Schmidt-Vogt H. Professor Hannes Mayer 65 Jahre alt. *Allgemeine Forstzeitschrift (Germany, F.R.)* 42(1–2): 28. [Professor Hannes Mayer 65 years old]. 1987.
2. URL: http://deutsches-jagd-lexikon.de/index.php?title=Mayer,_Hannes Retrieved 04.07.2019.
3. Mayer J. Personal communications (October 2019) at johannes.mayer@umweltbundesamt.at



ADLARD, Philip Gervase

Philip Gervase Adlard received the IUFRO Distinguished Service Award in 1992 in recognition of his substantial contributions to furthering the scientific, technical, and organizational aims of IUFRO.

Philip Adlard was born on 1 October 1926 in Madras, India. After finishing at St. Edwards, Oxford, he spent his National Service in the Royal Navy (1945–1947). He then studied botany, graduated from Exeter College, Oxford University (1952), and worked as a probationer of the Colonial Forest Service in Nyasaland (now Malawi). He devoted much of his energy to the foundation of the Forest Research Institute of Malawi in Chongoni. After graduating in Forestry from the University of Oxford (1957), he continued his professional career as Assistant Conservator of Forests, working in many regions of the country. Mr. Adlard was then appointed as a Scientific Information Officer in the Commonwealth Forestry Bureau of the Commonwealth Forestry Institute (CFI) at Oxford and dedicated a substantial part of his career to abstracting the world's forestry literature for *Forestry Abstracts* and *Forest Products Abstracts*. At the beginning of 1968, he was invited to work in the Computing Section of the Institute where he served until his retirement in mid-1991, including a three-year break when he worked at the Department of Botany, University of Mexico (1979–1982) on the reproduction and growth of natural pine forests.

Mr. Adlard's research interests were in the growth and yield of fast-growing plantation species, the effects of different management regimes and developing an empirical competition model for single trees, as well as determining the relationship between fast-growing species and lasting site productivity. He studied the water uptake of eucalypts in India, made assessments of highland conifers in East Africa and Malawi, established an ample system of permanent sample plots, and shared his knowledge and experience with students during the regular summer courses provided by the Institute.

He authored, co-authored and edited over 100 papers and technical reports. The UN FAO and the UK Overseas Development Administration invited Mr. Adlard as an expert, advisor or consultant to various projects on inventories and assessments of forests and forestry in Belize, Honduras, Malawi, Malaysia, Nigeria, Sudan and other countries. He also served on the General Council and the Editorial Committee of the Commonwealth Forestry Association and in the early 1980s was its Treasurer for a few years. Mr. Adlard was very active in IUFRO, helping to organize WGs and participating in many conferences, workshops and symposia.

Philip Adlard passed away on 28 December 2006 in Cheltenham, Gloucestershire, UK, at the age of 80.

Selected research sources:

1. *Growing stock levels and productivity conclusions from thinning and spacing trials in young Pinus patula stands in southern Tanzania*. Occasional paper #8. Oxford: Commonwealth Forestry Institute. 17 p. 1980.
2. *Biomass Estimation, Nutrient Cycling and Organic Matter Relations in Forest Stands: Annotated Bibliography*. Oxford: Commonwealth Forestry Institute. 148 p. (with J. A. Johnson). 1983.
3. *Growth and Water Use of Forest Plantations*. L. R. Calder, R. L. Hall, P. G. Adlard, eds. J. Wiley&Sons, 381 p. 1992.
4. Myth and Reality in Growth Estimation. *F. Ecol. and Mgmt.* 71: 171–176. 1995.

Personal sources:

1. Wright H., J. Burley and P. Hardcastle. Philip Gervase ADLARD (1926–2006). Obituary. *International Forestry Review* 9(3): 816–817. 2007.
2. Adlard S. Personal communications (April 2019) at sueadlard@rocketmail.com



BALTENSWEILER, Werner

Werner Baltensweiler received the IUFRO Distinguished Service Award in 1992 for his outstanding contributions to IUFRO Division 2 developments and especially for entomology research.

Werner Baltensweiler was born on 28 November 1926 in Mollis, canton of Glarus, Switzerland. From 1946, he studied Forestry at the *Eidgenössische Technische Hochschule* (ETH, Swiss Institute of Technology) in Zürich, and obtained his Forest Engineering degree in 1951. He has participated in forest inventories carried out in the Rocky Mountains and researched the regeneration of lodgepole pine from slash with the Canadian Federal Forest Service in Calgary (1952–1954). He studied the complex of the larch bud moth parasitoids and earned his PhD in Natural Sciences at the ETH's Institute of Entomology (1958), where he lectured on insect ecology from 1958 until his retirement from ETH in 1991. Meanwhile, he continued his fieldwork and publications. In parallel, he managed research on the larch bud moth at the field station at Zuoz, in the Swiss canton of Graubünden (1958–1991).

Dr. Baltensweiler's primary research interest was in a single insect species, the larch budmoth (*Zieraphera diniana*), one of the major defoliators in the European Alps. He also worked on the population dynamics of this pest and its sampling and was a pioneer in the application of statistical techniques to analyze population cycles. He published many research papers in leading scientific journals and actively participated in and played an important role in facilitating and fostering the collaboration of European and North American entomologists as well as establishing good working relations with scientists from the Eastern bloc countries.

Dr. Baltensweiler first participated in a IUFRO WP meeting in Ljubljana (1963), and in 1967 he became a co-founder of IUFRO's first unit focusing on forest insects "Population Dynamics of Forest Insects", in which he has served as a Secretary under the chairmanship of Professor G. Varley from Oxford. He then served as Deputy Leader of WG S2.07.06 (1976–1981) and Leader of SG S2.07.00 (1982–1985). He was Deputy Coordinator of Division 2 Forest Plants and Forest Protection (1986–1990), and Chairman of the IUFRO TF on Air Pollution (1987–1990). At the IUFRO working group meeting in Vienna (2007), Dr. Baltensweiler became the first scientist to receive a George Varley Award for outstanding achievements in forest insect population ecology.

Dr. Werner Baltensweiler passed away on 7 December 2008 in Männedorf, a village by the Lake of Zurich.

Selected research sources:

1. *Zeiraphera griseana* HÜBNER (Lepidoptera: Tortricidae) in the European Alps. A contribution to the problem of cycles. *Can. Entomol.* 96: 792–800. 1964.
2. Dynamics of larch bud moth populations. *Annual Review of Entomology* 22: 79–100 (with G. Benz, P. Bovey and V. Delucchi). 1977.
3. The impact of weather on the life system larch–larch bud moth in the European Alps. In: A. S. Isaev, ed., *The role of insect–plant relationship in the population dynamics of forest pests* (Proc. Symp. IUFRO/MAB, Irkutsk 1981), pp. 73–83. 1983.

Personal sources:

1. Liebhold A. Special Edition: Obituary Werner Baltensweiler, 1926–2008. *Special Newsletter: IUFRO Research Group 7.03.00 Entomology*. 2 p. December 2008.
2. Wermelinger B. Zum Tod von Dr. Werner Baltensweiler. *J. Swiss Ent. Soc.* 82(1–2): I–II. 2009.
3. Baltensweiler A. Personal communications (June 2019) at andri.baltensweiler@wsl.ch



BEIN, Otmar

Otmar Bein received the IUFRO Distinguished Service Award in 1992 for his outstanding contribution to the development of the IUFRO Secretariat.

Otmar Bein was born on 15 April 1924 in Leoben, Styria, Austria. He studied Forestry (1947–1951) and graduated as Dipl.-Ing. (1951) from the *Universität für Bodenkultur* (BOKU, the University of Natural Resources and Life Sciences) in Vienna. In December 1957 he joined the Scientific Services Sector of the *Institut für Forschungsgrundlagen* (Institute for Research Basics) at the *Forstlichen Bundesversuchsanstalt* (FBVA, Federal Forestry Research Institute) in Vienna. In 1964, he was promoted to Head of the FBVA, where he worked until his retirement at the end of 1989. His research interests followed research issues arising at the Institute: biometrics, photogrammetry, databanks and databases, documentation and publication, library provisions and forest history.

Dipl.-Ing. Bein devoted much effort to the introduction of modern working methods, e.g., database maintenance in the office, and the establishment of the national forestry database in Austria, and promoting this concept globally. He authored and co-authored many scientific publications, including book chapters, books, reports, and edited proceedings. Mr. Bein was the first Austrian to be appointed to the Royal Swedish Academy of Agriculture and Forestry.

From an early stage Otmar Bein was involved in international forestry research. Under the Chairmanship of Dr. R. Ender, he was Secretary of the Congress Organizing Committee for the IUFRO Congress in Vienna (1961). His organizational experience and skills in dealing with people and institutions were one of the reasons for his appointment as the first Secretary of IUFRO when in 1973 the Austrian Government was invited to host on a permanent basis the IUFRO Secretariat in Vienna. He served in this position until 1987, being a member of the IUFRO Executive Board, and combining this duty with his job at the Federal Forestry Research Institute in Vienna.

Dipl. Ing. Otmar Bein passed away in 22 March 1998 in Vienna, Austria.

Selected research sources:

1. *Das Schrifttum der Forstlichen Bundesversuchsanstalt 1874–1973*. Mitteilungen der Forstlichen Bundesversuchsanstalt Wien, Heft 107. Wien, Österr. Agrarverl. in Komm, 266 S. [The literature of the Federal Forest Research Station 1874–1973]. 1974.
2. *Das Institut für Forschungsgrundlagen und seine Entstehung*. Mitteilungen der Forstlichen Bundesversuchsanstalt Wien, Heft 106. Wien, pp. 183–191. 1974
3. *Report of the permanent IUFRO Secretariat/XVI IUFRO World Congress*. Congress report = rapport sur le congres = kongressbericht (Oslo, Norway, 20–26 June 1976), pp. 350–351. Ås: Norwegian Forest Research Institute, 493 p. (German, English, French). 1977.
4. *Study tour*. O. Bein and E. Mayer, eds. Executive Board, IUFRO. Wien: Forstl. Bundesversuchsanst. [no date, ca. 1974], 157 p. 1974.

Personal sources:

1. Ruhm F. Zum 60. Geburtstag. Bein. *Allgemeine Forstzeitung*, 7: 214. 1984.
2. URL: https://www.iufro.org/download/file/20517/3753/ar98e_pdf (Otmar Bein. Obituary). Retrieved 10.07.2019.
3. Bein R. Personal communications (August 2019) at rene.bein@gmail.com



BROWN, Alan Gordon

Alan Gordon Brown received the IUFRO Distinguished Service Award in 1992 for his research activities and for promoting IUFRO in Australia and Oceania.

Alan Brown was born on 25 May 1931 in Hillston, Australia. He earned his B.Sc. in Forestry (1951) from the University of Sydney, Diploma in Forestry (Hons.) from the Australian Forestry School, Canberra (1951), and M.Sc. in 1966 from the University of Sydney. After graduation he worked with the New South Wales (NSW) Forestry Commission and the Forestry and Timber Bureau (FTB), Canberra. In 1961–1966 he lectured in silviculture and wood science at the Australian Forestry School, then returning to the new FTB's Forest Research Institute (FRI). Over 25 years he had various appointments at the Commonwealth Scientific and Industrial Research Organisation (CSIRO) in Canberra, including Acting Chief of the Forest Research Division (1980–1981, 1986–1987), Deputy Chief (1988–1990) and Chief of CSIRO Division of Forestry and Forest Products (1991–1992). Following retirement in 1996, he remained an Honorary Research Fellow at CSIRO until 2005.

Mr. Brown's research interests were in forest ecology, forestry, forest and timber management of different tree species such as pine and eucalypts, including those in plantations, wood production, and criteria and indicators for sustainable forest management. He published 130 papers, books and reports, and edited numerous proceedings. For example, in 1999–2011 he edited the proceedings of 12 conferences for the Crawford Fund, and with C.M. Palmberg he compiled the two-volume proceedings of the FAO/IUFRO Third World Consultation on Forest Tree Breeding held in Canberra, 21–26 March 1977.

Alan Brown played an important role in the regional research networks that developed in Australia and adjacent regions as a result of its distance from the IUFRO network concentrated Europe and North America. These operated regionally in the IUFRO mode and contributed much to forestry and forest science in this part of the world. Examples included FORSPA (supported by Asian Development Bank, UNDP and FAO), CIFOR, ACIAR and the Crawford Fund, with the assistance of Australian and New Zealand (Scion) forest services. He had a variety of roles in these networks: as a member of the CIFOR Board of Trustees (1992–1997) during the formative years of the organization, as a member and chairman of the Scientific Advisory Committee of the Hermon Slade Foundation (1998–2004) and of Maxwell Ralph Jacobs Fund Committee IFA (1983–2012), as well as Chairman and Director of the Research Committee for the Standing Committee of the Australian Forestry Council (1987–1991). As a member of IUFRO working groups and of the IUFRO Executive Board (1987–1990) he fostered a visit by the EB to Australia.

Mr. Brown is a Member of the Order of Australia (1998) and N.W. Jolly Medalist (1986), and is an Honorary Member of the IFA (Institute of Foresters of Australia) (2013). Since 1993 he has been a Fellow of the Australian Academy of Technological Science and Engineering (ATSE).

Selected research sources:

1. *Eucalypts for Wood Production*. W.E. Hillis, and A.G. Brown, eds. CSIRO, 434 p. 1978.
2. *Management of Soil, Nutrients and Water in Tropical Plantation Forests*. E.K.S. Nambiar and A.G. Brown, eds. ACIAR, Canberra, Monograph No. 43, 571 p. 1997.
3. *Criteria and Indicators for Sustainable Forest Management*. R.J. Raison, A.G. Brown, and D.W. Flinn, eds. CABI Publishing, Wallingford, xiv + 462 p. 2001.
4. *Domestication of Radiata Pine*. R. D. Burdon, W. J. Libby, A. G. Brown. Springer For. Sci. 83, xxxv, 480 p. 2018.

Personal sources:

Brown A. G. Personal communications (May 2019 and June 2020) at alananderika@grapevine.com.au



FLETCHER, Alan McKay

Alan McKay Fletcher received the IUFRO Distinguished Service Award in 1992 for his outstanding service to the organization of IUFRO surveys and seed collection from identified locations in North America.

Alan Fletcher was born on 25 February 1937 in Aberdeen, Scotland. In 1960 he graduated from Aberdeen University Forestry Department with a B.Sc. (Hons.) in Forestry and earned his PhD in 1963. In 1963, Dr. Fletcher was appointed to the Genetics Branch of the Forestry Commission Research Station at Bush near Edinburgh with responsibility for the breeding of *Picea sitchensis* and *Larix eurolepis*. From 1973 to 1993 he was project leader for clone banks, seed orchards, vegetative propagation and pollination programmes and in the period 1985 to 1993 in addition assumed responsibility for all provenance research programmes. In 1993 he was appointed Head of Tree Improvement Branch with responsibility for the improvement of conifer and broadleaved species. In 1997 he retired from his post as Chief Research Officer North and later that year was awarded an O.B.E. (Order of the British Empire).

Dr. Fletcher research interests have been in the field of forest genetics and tree breeding, seeds origin and provenance studies predominantly of coniferous species. He authored and co-authored more than 50 scientific publications. He represented the UK on the EC Standing Committee on Seed and Propagating Material (1987-1999). He was also Chair of the OECD Scheme for the Movement of Seed and Plants in International Trade and one of a group carrying out a revision of the Scheme to take account of advances in tree breeding (1991-1999) and from 1993-1999 in the revision of the EC Directive on Forest Reproductive Material. In 1987 he was Chairman of the Academy of Finland Evaluation Group on Forest Regeneration Research.

Dr. Fletcher has an impressive record as an IUFRO Officeholder. In 1962 IUFRO Section 22 established a programme of seed collection from NW America. As part of that, Dr. Fletcher (under S2-02-12) made collections on *Picea sitchensis* in 1970 concentrating on obtaining seed from 64 identified locations in Alaska and British Columbia. Dr. Fletcher also undertook collections of *Abies grandis* (S2-02-14) from 58 sites in British Columbia, Washington, Oregon, California and Idaho in 1974–1976, and seed was distributed to 22 Institutes in 17 countries. In 1978, he collected seed from *Abies procera/magnifica* from 22 sites in Washington and Oregon.

Dr. Fletcher was Chair of WP S2-02-14 (1976–1992) and a member of the organizing committee for the joint meetings of the four WPs S2-02-05, S2-02-06, S2-02-12 and S2-02-14 in Vancouver, BC (1978) and Olympia, WA (1990). He edited a publication of the nursery stage results of the *Abies grandis* provenance seed sources (1986). In 1988–1992, by special request from the EC, Dr. Fletcher undertook a second survey of the original IUFRO collection sites, and the results were distributed to the EU Member States in 1992.

Selected research sources:

1. *Douglas fir seed sources. Field inspection. Washington, Oregon and Northern California.* EC, Brussels, Vol. I, 63 p.; Vol. II, 159 p. (with J. C. Bastien and A. Nanson). 1993.
2. *Choice of Sitka spruce seed origins for use in Britain.* FC Bulletin 127. Forestry Commission, Edinburgh, 112 p. (with C. J. A. Samuel and R. Lines). 2007.
3. *Choice of Douglas fir seed origins for use in British forests.* FC Bulletin 129. Forestry Commission, Edinburgh, 55 p. (with C. J. A. Samuel). 2010.

Personal sources:

Fletcher A.M. Personal communications (May 2019) at alanfletcher212@btinternet.com



FUGALLI, Oscar

Oscar Fugalli received the IUFRO Distinguished Service Award in 1992 for his exceptional activities, contributions and professional service rendered to the Union.

Oscar Fugalli was born on 11 March 1922 in Senigallia, Italy. In 1945, he graduated from the Forestry Faculty at the University of Florence, Italy, and obtained an M.Sc. degree at the Forestry College of the New York State University (SUNY), Syracuse, USA (1948). Upon return to Italy, he worked at the State Forestry Corps. In 1951, he began his service as a forester and diplomat at the UN FAO, where he stayed until retiring in 1982 as Chief, Forest Management Branch, Forest Resources Division of the FAO Forestry

Department.

During his years at FAO, Mr. Fugalli was involved in the organization of six World Forestry Congresses, from the third congress in Helsinki (Finland 1949) to the eighth one in Jakarta (Indonesia 1978), where he was appointed Associate Secretary General. In 1968, he was one of the key initiators and active participants in the establishment of the FAO Panel of Experts on Forest Gene Resources. He was also an advisor on forestry economics at the Permanent Interstate Committee for Drought Control in the Sahel (CILSS) as well as Secretary of the Committee of *Sylva Mediterranea*. He also worked with the FAO's Forest Resources Development Service (FORM), the FAO International Poplar Commission (IPC), supported the development of the Tropical Forestry Action Plan (TFAP), and other initiatives. He was a long-standing member of the Commonwealth Forestry Association (CFA). In 1964 the Italian Academy of Forest Sciences awarded him Honorary Membership. Oscar Fugalli's overall service to FAO covered 55 years, more than a half of which he dedicated to enhancing the cooperation between FAO and IUFRO. The major areas were tree improvement, breeding and gene resources. He was actively involved in organizing the FAO/IUFRO First (Stockholm 1963), Second (Washington, DC 1969) and Third (Canberra 1977) World Consultations on Forest Genetics and Tree Breeding. In between these events, he was involved in organizing the FAO/IUFRO Symposium on Internationally Dangerous Forest Diseases and Insects (Oxford 1964) and the World Symposium on Man-Made Forests and their Industrial Importance (Canberra 1967).

In 1983, Oscar Fugalli created the IUFRO Special Programme for Developing Countries (IUFRO–SPDC) and until 1991 he was its first Coordinator. He then continued working for the IUFRO–SPDC Programme on a voluntary basis. He organized a number of regional research planning workshops for Asia (Sri Lanka 1984), Sahelian and North Sudanian region of Africa (Kenya 1986), for Latin America (Peru 1987), and for Eastern and Southern Africa (Malawi 1988). Later, he established the IUFRO Special Programme for Africa. In 1995, IUFRO granted Oscar Fugalli with its highest award – Honorary Membership.

Oscar Fugalli passed away at home in Rome on 15 October 2005 at the age of 83.

Selected research sources:

1. *Tree improvement and silvo-pastoral management in Sahelian and North Sudanian Africa: problems, needs and research proposals*. Vienna, Austria; IUFRO, SPDC. 196 p. (with D. E. Iyamabo, C. Cossalter, and S.L. Krugman; undated). 1988.
2. *IUFRO Special Programme for Developing Countries, July 1983 – December 1990*. Report for the 19th IUFRO World Congress, Montreal, Canada, August 1990. Vienna, IUFRO, SPDC. Typescript. 13 p. 1990.
3. *History of the International Poplar Commission (IPC)*. FAO UN, Rome. 11 p. (with M.Viart). 1998.

Personal sources:

1. Oscar Fugalli. In: Teplyakov V. *Honorary Members of IUFRO: 1953–2017*. Vienna, IUFRO, p. 72–73. 2018.
2. Fugalli F. Personal communications (March 2019) at francesca.fugalli@alice.it
3. Fugalli G. Personal communications (March 2019) at gualbertofugalli@gmail.com



JOACHIM, Hans-Friedrich

Hans-Friedrich Joachim received the IUFRO Distinguished Service Award in 1992 for his outstanding contribution in IUFRO activities, in particular the IUFRO Centennial Meeting.

Hans-Friedrich Joachim was born on 8 March 1925 in Halberstadt, Germany. After working at the Forestry Office Thale, in 1946 he entered *Humboldt-Universität zu Berlin*, obtained his Forest Diploma (1950) and began his research career at the *Eberswalder Forschungsanstalt für Forst- und Holzwirtschaft* (Eberswalde Research Institute for Forestry and Timber Industry) as an Assistant and Senior Researcher. In 1953 he obtained his Ph.D. and became a leader of the ecological poplar research unit in Eberswalde. In 1961 he became head of the Poplar Research Department of the Tharandt Institute of Forestry at the Academy of Agricultural Sciences in Graupa until its abolishment in 1971. He habilitated in 1964 at the Tharandt Forestry Faculty of Dresden Technical University. Dr. Joachim also lectured at the Eberswalde Forestry Academy (now *Hochschule für nachhaltige Entwicklung Eberswalde*). In 1990 he became Professor and a Commissioner of the Federal Republic of Germany in charge of preparations for the IUFRO Centennial Congress.

At the beginning of the 1950s, Dr. Joachim laid the foundation for an ecologically oriented poplar industry, which was later introduced to the forestry sector with a substantial expansion of its tasks and goals. He also made equally important contributions to the study of the effects of trees in protective plantations which, after the removal of the poplars, guaranteed the long-term diverse ecological effects on the land as well as their importance for landscape care and timber cultivation. He authored and co-authored more than 125 scientific papers, book chapters, books and reports. In addition to his research, Dr. Joachim has always paid much attention to the practical implementation of scientific findings. He looked at ways to maintain cleared agricultural landscapes as functioning ecosystems by means of protective plants, biotope networks, enrichment of beehive plants and riverbank protection. Dr. Joachim has served as a member of several professional societies and organizations. In recognition of his contributions, in October 1990, a symposium “Forestry industry is an important element of ecological landscape management” was held at the Eberswalde Research Institute for Forestry and Timber Management. Dr. Joachim was elected as a Member of the IUFRO Board (1991–1995) and made a great contribution to the IUFRO Centennial Meeting 1992 in Eberswalde, and in addition edited the Congress report.

Dr. Hans-Friedrich Joachim passed away on 6 September 2020 and was buried in the Stahnsdorf southwestern cemetery.

Selected research sources:

1. *Pappelanbau außerhalb des Waldes*. Berlin, Deutscher Bauernverlag, 31 S. [Poplar Cultivation Outside the Forest]. 1953.
2. *Flurholzanbau – Schutzpflanzungen*. VEB Dt. Landwirtschaftsverl, 170 S. (with A. Krummsdorf and H. Göritz). [The Corridor Forest Construction – Protective Plantings]. 1961.
3. *Untersuchungen über den Einfluß von Witterung und Klima auf Schäden und Krankheiten der Pappel*. Dresden, Technical University, 236 S. [Studies on the Influence of Weather and Climate on Damage and Diseases of Poplar]. 1964.
4. *IUFRO Centennial: Centennial meeting report*. H.-F. Joachim, ed. Berlin–Eberswalde, Germany, 30 August – 12 September 1992. IUFRO, 543 p. (in English, German, French, Spanish). 1993.

Personal sources:

1. Schrödl G. Professor Dr. Hans-Friedrich Joachim 65 Jahre. *Der Wald Berlin* 41(1): 30. 1991.
2. Bergmann J.-H. Prof. Dr. habil. Hans-Friedrich Joachim 70 Jahre. *Beiträge für Forstwirtschaft und Landschaftsökologie* 29(2): 95. 1995.
3. Joachim H.-F. Personal communications (June 2019).



NYYSÖNEN, Aarne Olavi

Aarne Olavi Nyysönen received the IUFRO Distinguished Service Award in 1992 for his longstanding inputs to the advancement of IUFRO Division 4.

Aarne Nyysönen was born on 9 August 1921 in Karttula, Finland. He graduated from Kuopio Lyceum (1944) and obtained his Postgraduate Diploma (B.Sc.) in Agriculture and Forestry (1948), and a Licentiate and Dr.Sc. degrees in Forestry (1954) from the University of Helsinki. In 1948, he began his career as a Research Assistant at the Finnish Forest Research Institute (METLA, in which he served as Professor in 1957–1959), an assistant to the Academy of Finland and as assistant to Academician Yrjö Ilvessalo (1948–1956). He has served as Professor of Forest Science at the University of Helsinki (1956–1984), where he was Deputy Dean (1963–1969) and Dean (1969–1972) of the Faculty of Agriculture and Forestry. He then was appointed as Director General of METLA (1984–1988), as an Associate Professor at the University of Helsinki (1988–2000) and from January 2001 to November 2005 was located in Viikki, a township located 8 km north of Helsinki where forest education was moved from Helsinki.

Professor Nyysönen was a major player in Finland's forest policy from the 1950s onwards. His research interests were in forest growth, yield and use, forest mensuration and inventory, forest management, planning and policy, forest research and education. He published numerous scientific articles, research reports, and practical manuals. He became a member of the Finnish Academy of Sciences in 1973 and was its Secretary-General (1984–1994). He also played a significant role as an international forest consultant and had numerous domestic and international tasks in the organizations and committees in the fields of his professional interests. He established good relationships in forestry between Finland and countries in Asia, Africa and the Americas. He consulted to the UN FAO on forest resources assessment (FRA) including the organization and chairing of allied meetings – the Kotka Expert Consultations on the Global FRA (1987, 1993, and 1996). He served as a member (1974–1984) and Chair of the FAO Committee on Forestry Education (1976–1980).

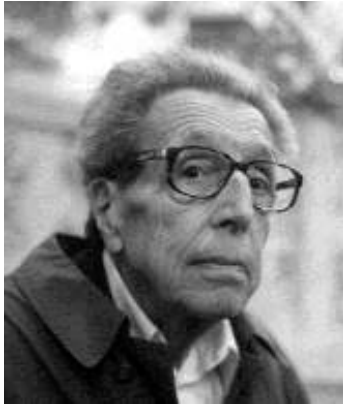
Professor Nyysönen received numerous recognitions nationally and internationally. He was elected an Honorary Member of the Finnish Forest Association (1992), received among other honours *Metsämiesten Säätiö* (The Foresters' Foundation) Recognition Award (1983), the Cajander silver medal, the Golden medal of the *Metsähallitus* (Finnish Forest Administration), the Golden medal of Tapio and the Cotta medal of Tharandt, Germany. Universities in Uppsala (SLU, 1979) and Joensuu (1989) named him an Honorary Doctor. He was a founding and honorary member of the Mexican Academy of Forest Sciences. Professor Nyysönen was vigorously involved in IUFRO activities from the 1950s until the IUFRO World Congress in Tampere (1995). He was the Finnish representative on the IUFRO International Council (1967–1986), Chair of IUFRO unit on aerial photography (1961–1967), a member of other units, and Deputy Coordinator of Division 4 (1981–1986). Professor Aarne Olavi Nyysönen passed away on 10 August 2006, in Sonkajärvi at the age of 85.

Selected research sources:

1. *National forest inventories in the Nordic countries. Forest resource inventory and monitoring and remote sensing technology.* IUFRO Centennial Meeting. Japan Soc. For. Plan. Press, p. 28–35. 1992.
2. *Yearbook 1987–1988: Finnish Academy of Sciences.* Aarne Nyysönen, ed. Helsinki: Akatemia.
3. Forest research in Finland. *Forestry* 70(4): 367–374. 1997.

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1. *Telluksen Taksattori: Ylijohtaja, Professori Aarne Nyysönen.* R. Haapanen, T. Hujala & S. Poso, eds. Metsävarojen käytön laitoksen julkaisuja 42, Taksattoriklubi, 2. uudistettu painos, 146 s. [Tellus of Mensurationist: Director General, Professor A. Nyysönen, Publications. 2nd ed., 2008. 146 p.]. 2008.
2. Nyysönen M. Personal communications (August 2019) at m.o.nyysonen@gmail.com



RUBNER, Heinrich Konrad

Heinrich Konrad Rubner received the IUFRO Distinguished Service Award in 1992 for his long-term contributions to the advancement of IUFRO on forest history.

Heinrich Rubner was born on 2 November 1925 in Grafrath/Oberbayern, Germany. As a son of the forestry scientist and later Ministerial Director Konrad Rubner (1886–1974), Heinrich followed his father and studied history, geography and German studies at the Ludwig-Maximilians-University (LMU) Munich from which he graduated (1952), received his Ph.D. in geography (1955), habilitated (1962), and then worked as a Lecturer in Forest History (1963–1969). In 1969, Dr. Rubner moved to the Institute of History at the University of Regensburg, where he worked as Professor in Economic and Social History until his retirement in 1991. After his retirement, Dr. Rubner led several research projects.

Dr. Rubner's early research focused on the distribution of hornbeam in Central and Western Europe and with forest management in Lower Franconia. Later, his research interests were in European forestry, hunting and environmental history, which resulted in the closure of many research gaps in this area. His habilitation thesis was on the forest constitution of Medieval France (*Untersuchungen zur Forstverfassung des mittelalterlichen Frankreichs*), then about forest history in the age of the Industrial Revolution (*Forstgeschichte im Zeitalter der industriellen Revolution*, 1967). His most important book concerned German forest history during 1933–1945 (*Deutsche Forstgeschichte 1933–1945. Forstwirtschaft, Jagd und Umwelt im NS-Staat*, 1985). After his retirement, Dr. Rubner continued his research in various projects, dealing with the forest history of Saxony and others, including a collection of biographies of 100 prominent foresters of Bavaria from 1875 to 1970 (1994). He also published over 50 papers in various journals, conference proceedings and other sources.

Dr. Rubner was recognized with a number of awards, such as election as a Fellow of the Forest History Society (FHS) (1985), a member of the *Academie d'Agriculture Francaise* (1987), member of the advisory board for the Görres Society (2006), and as a recipient of Heinrich Cotta silver medal (1991) by the Technical University of Dresden, where the archive of his manuscripts is stored. Dr. Rubner was linked to IUFRO from the mid-1960s, serving as a Deputy Leader of IUFRO SG S6.07-00 Forest and Forest History (1979–1995). He received his IUFRO DSA on the occasion of the 100th Anniversary of IUFRO in Berlin in 1992.

Professor Heinrich Rubner passed away in Munich on 15 October 2017.

Selected research sources:

1. *Forstgeschichte im Zeitalter der industriellen Revolution*. Schriften zur Wirtschafts- und Sozialgeschichte. Band 8. Berlin, 1967.
2. *Deutsche Forstgeschichte 1933–1945. Forstwirtschaft, Jagd und Umwelt im NS-Staat*. Scripta Mercaturae Verlag, 1985, 264 S. [German Forest History 1933–1945. Forestry, Hunting and Environment in the NS State]. (2 ed., extended, Winkel Stiftung Verlag, 1997. 401 S.).
3. Greek Thought and Forest Science. *Environmental Review* 9(4): 277–306. 1985.
4. Forstgeschichte 1968–1973. *VSWG: Vierteljahrschrift für Sozial- und Wirtschaftsgeschichte* 62 (2): 243–257. [Forest History 1968–1973]. 1975.
5. *Hundert bedeutende Forstleute Bayerns (1875–1970)*. Mitteilungen aus der Staatsforstverwaltung Bayerns, Heft 47. München, 334 S. [One Hundred Prominent Foresters of Bavaria (1875–1970)]. 1994.

Personal sources:

1. URL: https://www.forstpraxis.de/wienhaus_kurth_nachruf_rubner_sl/ Retrieved 13.06.2019.
2. Rubner J. Personal communications (June 2019) at jeanne.rubner@br.de



STRAND, Lars Ketil

Lars Ketil Strand received the IUFRO Distinguished Service Award in 1992 for his longstanding inputs to the advancement of Division 6 and IUFRO.

Lars Strand was born on 11 May 1924 in Kristiania (now Oslo), Norway. From 1942, he studied forestry at Norway's practical forestry state school at Osen and The National Forest School, Kongsberg. He then graduated with a Diploma in Forestry (1948) and obtained his Dr. Sc. in Agriculture (1959) from the *Norges Landbrukshøgskole* (NLH, Norwegian College of Agriculture – Norwegian University of Life Sciences). In 1948, he began his career at *Norsk Hydro* undertaking research on forest growth. He was Graduate Fellow at NLH (1949–1952), and then a Research Assistant, Amanuensis and Associate

Professor at the NLH Institute of Forest Management (1952–1964) and delivered lectures in various disciplines including mathematical statistics, forest management, aerial photogrammetry, and forest economics. In 1965, he was appointed as a Research Leader at *Norsk institutt for skogforskning* (the Norwegian Forest Research Institute – NFRI, now NIBIO – Norwegian Institute of Bioeconomy Research) in Ås. He then became a Professor of Mathematics and Statistics at the Norwegian College of Agriculture (1968–1990) and served as its dean (1971–1977).

Dr. Strand has focused his research interests in the field of forest mensuration, growth and yield, biometry, statistics, and statistical methods, forest inventory and management, and other relevant disciplines. Since 1952, he was mathematical consultant for the National Forest Assessment. He has authored and co-authored numerous scientific and technical papers, book chapters and books, reports, and edited several scientific conference proceedings. Dr. Strand has participated in many scientific meetings in European and Asian countries. He has served as a member of a number of national and international societies and committees such as the Norwegian Forestry Association, the UN FAO, the Biometric Society, and on the editorial boards of scientific journals. Dr. Strand has been recognized with a number of honours and awards, including an honorary degree from the University of Helsinki.

Dr. Strand was introduced to IUFRO when he participated in the Congresses in Rome (1953) and Vienna (1961). Starting in the early 1970s, Dr. Strand served in IUFRO in various positions. He has served as Deputy Coordinator (1976–1980) and, for two terms, Coordinator (1981–1990) of IUFRO Division 6 General Subjects, being also a member of the IUFRO Executive Board and a member (1981–1986) and Vice-Chair (1986–1990) of the Honours and Awards Committee. In 1979, Professor *Strand* and Dr. O.N. Blatchford approached IUFRO to establish a Working Group that in 1980 undertook a global survey of the use of the Oxford Decimal Classification. He received his DSA on the occasion of the 75th anniversary of the Norwegian FRI.

Selected research sources:

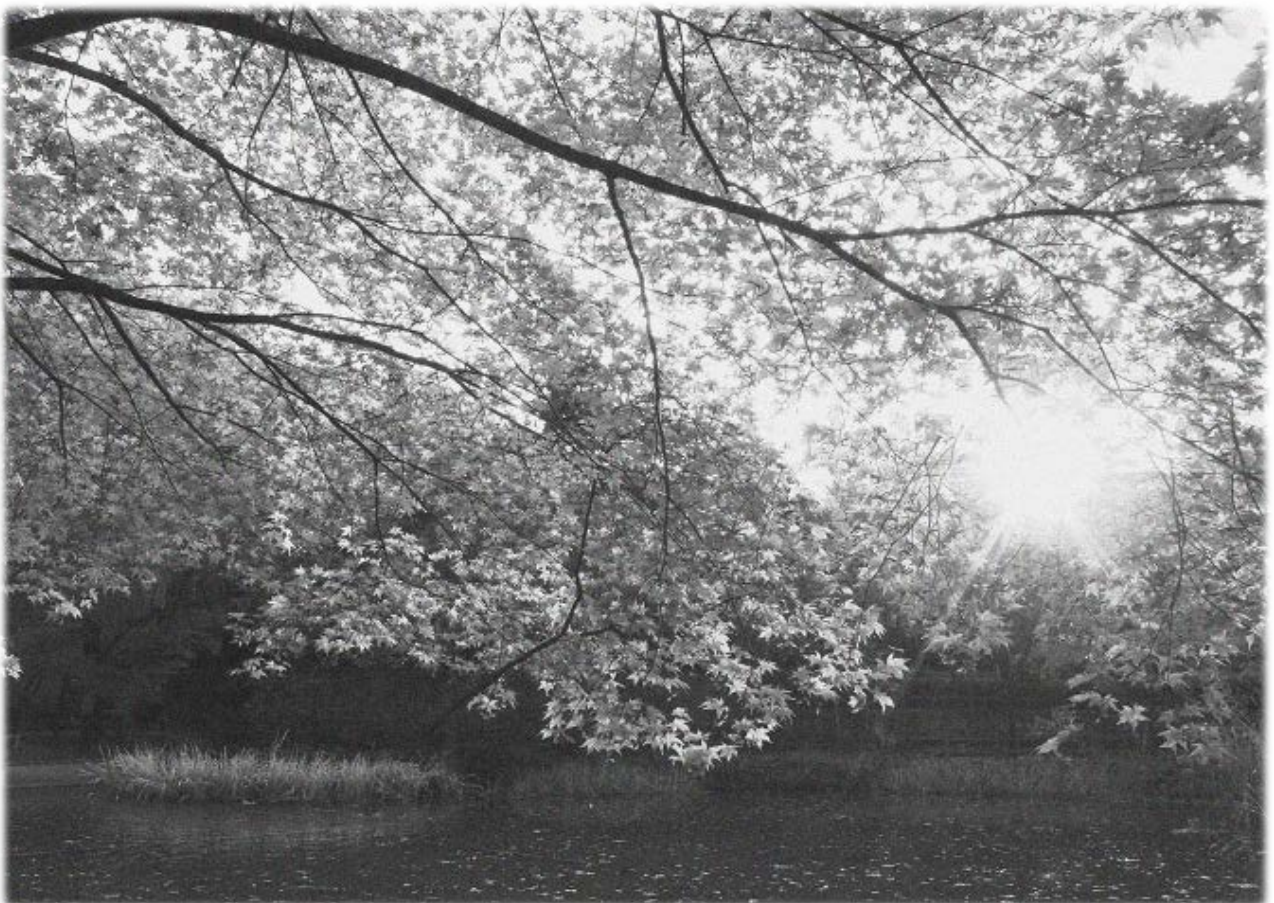
1. *18th IUFRO World Congress*. E. Donaubauer, L. Strand, M. Bol, R. Hermann, R. Young, eds. Congress Report. Ljubljana, Yugoslavia, 7–21 September 1986. IUFRO COC, 683 p. 1986.
2. *Monitoring the environmental quality of Nordic forests*. Report of the MIKOS project. L. Strand, ed. Nordic Council of Ministers. NORD, 1997:14. Copenhagen, 77 p. 1997.
3. Crown density assessments, control surveys and reproducibility. *Environmental Monitoring and Assessment* 56: 75–86 (with S. Solberg). 1999.

Personal sources:

1. URL: https://snl.no/Lars_Ketil_Strand Retrieved 12.06.2019.
2. Solberg S. Personal communications (June–August 2019) at Svein.Solberg@nibio.no
3. Strand L. V. Personal communications (July–August 2019) at lvs@brekkestrand.no

1995

<i>Harold BURKHART</i>	<i>USA</i>	<i>1995</i>
<i>Thomas J. CORCORAN</i>	<i>USA</i>	<i>1995</i>
<i>Lyubomir DIMITRI</i>	<i>Germany</i>	<i>1995</i>
<i>George Z. GERTNER</i>	<i>USA</i>	<i>1995</i>
<i>Othmar GRIESS</i>	<i>Austria</i>	<i>1995</i>
<i>H. Gyde LUND</i>	<i>USA</i>	<i>1995</i>
<i>Kurth L. PERTTU</i>	<i>Sweden</i>	<i>1995</i>
<i>Adolf PRIESOL</i>	<i>Slovakia</i>	<i>1995</i>
<i>Florian SCHOLZ</i>	<i>Germany</i>	<i>1995</i>
<i>Risto SEPPÄLÄ</i>	<i>Finland</i>	<i>1995</i>
<i>Gustaf SIRÉN</i>	<i>Sweden</i>	<i>1995</i>





BURKHART, Harold Eugene

Harold Eugene Burkhart received the IUFRO Distinguished Service Award in 1995 for serving in leadership positions and organizing scientific meetings.

Harold Burkhart was born on 29 February 1944 in Wellington, Kansas, USA. He earned his B.Sc. in Forestry at Oklahoma State University (1965), and M.Sc. in Biometrics (1967) and Ph.D. (1969) degrees at the University of Georgia. Dr. Burkhart spent most of his professional career at *Virginia Polytechnic Institute and State University* in Blacksburg where he progressed from an Assistant Professor (1969) to Associate Professor (1973–1978), Professor (1978–1981), and Thomas M. Brooks and University Distinguished Professor (1999) in the Department of Forest Resources and Environmental Conservation, and where also served as Head of the Department (1995–2008).

Professor Burkhart has authored and co-authored two textbooks and over 250 research papers published in peer-reviewed journals, research bulletins, book chapters, and proceedings papers in the area of modeling of forest stand dynamics, growth and yield, and applying quantitative analysis techniques to forestry problems. He has supervised 65 graduate students, 14 postdoctoral fellows, and 7 visiting faculty members. In 1979, Dr. Burkhart founded an industry-university cooperative research program at Virginia Tech called the Forest Modeling Research Cooperative that is still operating today and. The Cooperative is aimed at developing improved models for predicting tree growth and stand development. He was a Senior Research Fellow (1976–1977) at the Forest Research Institute in Rotorua, New Zealand. Dr. Burkhart has served in a number of advisory and editorial boards, e.g., editor of *Forest Science* (1986) and has served on the advisory boards of several journals.

Professor Harold Burkhart is one of 14 University Distinguished Professors at *Virginia Polytechnic Institute and State University*. He is a Fellow in the SAF and the AAAS, and holds professional memberships in the Biometric Society, AFA, Sigma Xi, Phi Kappa Phi, and Xi Sigma Pi. His contributions to forestry research and education have earned him the Virginia Academy of Science J. Shelton Horsley Research Award (1983), Outstanding Faculty award by the State Council for Higher Education in Virginia (1988), the SAF Barrington Moore Memorial Award (1991), and the Distinguished Agriculture Alumnus award from Oklahoma State University (1993). He became Virginia's Outstanding Scientist of 2013, and the Forest Landowners Association Forest Champion of the Year (2013).

From the 1980s, Professor Burkhart served IUFRO in several leadership positions with its research groups and Division IV where he was Deputy Coordinator and a member of IUFRO's Executive Board (1996–2000). He has organized many scientific meetings and edited numerous proceedings for the organization. He is the recipient of two prestigious IUFRO's honours: Scientific Achievement Award (1981) and World Congress Host Country Scientific Achievement Award (2014). In October 28–30, 2018, a joint SOMENS/NEMO/IUFRO 4.01 Conference was held at Virginia Tech campus to honour and appreciate Harold Burkhart for his mentoring influence and many contributions to forest biometrics.

Research sources:

1. *Forest Measurements*. 5th ed. New York, McGraw-Hill, 456 p. (with T. E. Avery). 2002.
2. *Modeling Forest Trees and Stands*. Springer-Verlag, 471 p., 85 b/w ill. (with M. Tomé). 2012.

Personal sources:

1. Harold E. Burkhart receives international award for sustainable forest management models. <https://vtnews.vt.edu/articles/2014/09/091114-cnre-burkhartiufroaward.html> Retrieved 18.12.2018.
2. Burkhart H.E. Personal communications (May 2019) at burkhart@vt.edu



CORCORAN, Thomas (Tom) Joseph, Jr.

Thomas Joseph Corcoran Jr. received the IUFRO Distinguished Service Award in 1995 for his long-term service and contributions to advancing IUFRO Division 3.

Tom Corcoran was born on 9 October 1933 in St. Paul, Minnesota, USA. He earned his B.Sc. in Forestry (1955) at Michigan Technological University in Houghton, his M.Sc. (1960) and Ph.D. (1962) in Forest Economics at Purdue University in West Lafayette, Indiana. Prior to his 35-year professional career at the Forestry Faculty of the University of Maine at Orono, he has served as first lieutenant in the U.S. Army Artillery and then as an Engineer with the Bell Telephone System. At the University, Dr. Corcoran served as Assistant

Professor and Associate Director of the School of Forest Resources (1965–1971) and became one of the youngest full Professors of the University (1968). In 1969–1970, he was Senior Fulbright Research Scholar at the University of Helsinki, Finland, and undertook research and training at universities in Norway, the Netherlands, Luxembourg, Ireland, Spain, and New Zealand. He formed and led the Forest Engineering Program (1972–1996) and chaired the Department of Forest Management (1988–1995). He trained 55 Masters and Doctorate students from 24 universities worldwide.

Dr. Corcoran's research interests covered a wide range of forestry and timber industry disciplines including timberland assessment, land survey, forest engineering, and forest resources management, production analysis in forestry, planning and control of forest, operations research, and forestry economics. He was a Registered Surveyor in Maine and the second person to be licensed in Maine as a Professional Forester. He authored and co-authored more than 200 scientific papers, book chapters and books as well as edited proceedings of conferences, seminars and workshops. He created and during eight years served as Editor of the *Maine Forest Review* and served as a member of the editorial board of the *Journal of Forestry* (1991–1994). Dr. Corcoran was a long-standing (since 1962) member of the SAF and in 1985 was elected a Fellow. He was a member of the New England SAF (NESAF), in which he was Forest Technology Coordinator, and served on the Council on Forest Engineering (COFE), chairing its New England Region (1965–1993) and the national organization (1994). He was also associated with the ASAE, AERE, APA, and CPPA, the Society of Computer Simulation as well as the Society of Irish Foresters and the *Societa Forestalis Fenniae*.

Dr. Corcoran was a longstanding collaborator in IUFRO. From 1971, he participated in many IUFRO Congresses, served as chair of IUFRO S3.04 Operational planning and control; work study (1981–1990), and edited several proceedings of IUFRO meetings on this subject area. Dr. Corcoran received the Scientific Merit Medal at the University of Zvolen, Czechoslovakia (1982), an Honorary Doctorate of Science from the University of Helsinki (1990), and was a COFE Honoree (1996).

Professor Thomas J. Corcoran, Jr. died in Orono, ME on 25 January 1996 at the age of 62. The same year, his wife Myrna J. Corcoran established the Thomas J. Corcoran Memorial Scholarship to be given to an undergraduate student at the University of Maine annually.

Selected Research sources:

1. *COFE/IUFRO 1984*. T. J. Corcoran and D. R. Gill, eds. SAF Publ. 84-13. Orono, ME, 367 p. 1984.
2. *IUFRO XIX World Congress Proceedings Subject Area S3:04, 5–11 August 1990, Montreal PQ, Canada*. T. J. Corcoran, P. Linehan, and S. Liu, eds. Maine Agric. Exp. Sta. Misc. Report No. 354, 296 p. 1991.
3. An expert system for timber harvesting decision making on industrial forest lands. *Forest Products Journal* 44(6): 65–70 (with P. Linehan). 1994.

Personal sources:

1. Thomas J. Corcoran, Jr. 1933 – 1996. In Memoriam. *News Quarterly*. New England SAF 57(2): 4. 1996.
2. Corcoran B. J. Personal communications (May 2019) at csb88@live.com



DIMITRI, Lyubomir

Lyubomir Dimitri received the IUFRO Distinguished Service Award in 1995 for his long-term leadership in IUFRO Unit on root and butt rot.

Lyubomir Dimitri was born into a Bulgarian family on 16 January 1934 in the village of Lórév on Csepel Island, Hungary. In 1952, he began his professional education at the Forestry Faculty of the Polytechnic University in Sopron. He continued his forestry education at the University of Göttingen in Hannover Munden, Germany from which he graduated as Forestry Engineer (1959). He began his professional career at the University's Institute of Silvicultural Engineering and then at the Institute for Forest Plant Diseases of the Federal Biological Research Center for Agriculture and Forestry (BBA). He passed the Great State Examination (1962), obtained his Dr. Sci. degree in Forestry (1965), received his habilitation (1979) and was appointed as Associate Professor (1986) at the University of Göttingen.

In 1965, Dr. Dimitri passed the Great State Examination for the higher forest service in the state of Hesse, and was appointed as a research assistant at the Waldbau Institute (1965–1967) in Hannover Münden, and then at the *Institute for Forest Tree Breeding* of the *Hessian* Research Station (1968–1973). In 1973, he was appointed Head of the Forestry Institute, later Forest Management and Scientific Production, and in 1990 – Head of Department of Forest Protection at the Hessian State Institute for Forest Management, Forest Research and Forest Ecology in Hannover Munden.

Dr. Dimitri was a recognized expert on forest protection and tree disease. Various organizations and countries invited him for consultations and project elaboration. He published numerous scientific papers, many of which were trail-blazing.

Dr. Dimitri was active in IUFRO Division 2 Forest Plants and Forest Protection. From 1978 he headed the IUFRO unit on root and butt rot, and from 1986 – on forest plant diseases. He was committed to the networking of science and practice and the rapid transfer of research results into forestry. He also built bridges between scientists in Western and Eastern Europe. On reaching the statutory age, he retired in April 1996.

He spent the following years both in Lórév, Hungary, and Hannover Munden, where he passed away on 23 October 2009.

Selected research sources:

5. Untersuchungen über den Einfluß des Wassergehaltes, der Rindendicke und der Darrdichte auf die Wärmeleitung der Buchenrinde. *Holz als Roh- und Werkstoff* 26(3): 95–100. [Studies on the influence of the water content, the bark thickness and the density of the wood on the heat conduction of the beech bark]. 1968.
6. *Proceedings of the 5th International Conference on Problems of Root and Butt Rot: Kassel, Germany, August 7–12, 1978*. L. Dimitri, ed. Hessische Forstliche Versuchsanstalt, Hann. Münden, 355 p. 1980.
7. *Untersuchungen über die Widerstandsfähigkeit der Fichte (Picea abies Karst.) gegenüber dem Wurzelschwamm Fomes annosus (Fr.) Cooke*. FOR/SCHR–Schriftenreihen, B. 66. Frankfurt, Sauerländer, 126 S. [Studies on the resistance of the spruce (*Picea abies* Karst.) to the root sponge *Fomes annosus* (Fr.) Cooke]. 1980.

Personal sources:

1. Bressemer U. Prof. Dr. Dimitri. *Leute* 10.04.2010 <https://www.forstpraxis.de/prof-dr-dimitri/> Retrieved 05.03.2019.
2. Wulf, A. Prof. Dr. Lyubomir Dimitri im Ruhestand. *Nachricht. Deut. Pflanzenschutzd.* 49: 183–184. 1997.
3. Dimitri S. Personal communications (April–June 2019) at sabine.dimitri@gmx.de



GERTNER, George Zdzislaw

George Zdzislaw Gertner received the IUFRO Distinguished Service Award in 1995 for his outstanding service in organizing conferences and sessions during and between IUFRO Congresses.

George Gertner was born on 4 April 1952 in Chicago, Illinois, USA. He earned his B.Sc. (Hons.) in Forest Biometrics (1974) at the University of Illinois, Urbana-Champaign, M.Sc. in Biometrics (1976) at the University of Wisconsin, Madison, and Ph.D. in Biometrics (1979) at the University of Washington, Seattle. From 1974 and during his study at the universities, he worked as a Research Assistant and Teaching Assistant, and then progressed from Assistant Professor (1979) to Associate Professor (1986) and Professor of Biometrics (1992–1995) at the Department of Forestry, University of Illinois. At the University, Dr. Gertner has also served as Director of the University's Program for Quantitative Analysis of Natural Resources in the Department of Natural Resources and Environmental Sciences (1995–2009) and Professor of Biometrics, Department of Statistics (1996–2009), and since 2009 to present – Professor of Biometrics, Emeritus, at the University of Illinois. In 1994–1995 Dr. Gertner was a guest Professor at Freiburg University under a German National Science Foundation Fellowship.

Dr. Gertner's primary area of research has been to develop a comprehensive framework to statistically identify, control and manage errors and uncertainties in non-spatial and geospatial natural resource modeling systems. He has authored and co-authored over 100 scientific papers in peer-reviewed journals as well as several book chapters and numerous reports and edited proceedings of scientific conferences. Since 1993, he has served as a member of Editorial Boards of *Acta Forestalia Fennica* and *Silva Fennica*, Associate Editor of *Forest Science* (1992–1995; 2001–2004), *Forest and Landscape Research – A Northern European Journal on Integrated Research* (Denmark, 1993–1997), and *Forest Biometry, Modelling and Information Sciences* (2001 to present).

Professor Gertner is a member of the ASA, AAAS, IEEE, SAF, American Society of Photogrammetry and Remote Sensing, Biometrics Society, Geoscience and Remote Sensing Society, Gamma Sigma Delta Honor Society of Agriculture, and others. His research and service achievements were recognized by the University of Illinois Department of Forestry with an Outstanding Researcher Award (1991) and teaching awards (1989, 1993), and by the Society of American Foresters with the SAF Distinguished Service Award (1995) and SAF Distinguished Research Award (2003). He also received a research fellowship from the Swiss Federal Institute for Forest, Snow and Landscape Research in Birmensdorf (1990).

Professor Gertner was an active IUFRO Officer serving as Leader of SG 4.11 Statistical Methods, Mathematics and Computers (1986–1995) and of WP 4.11.01 Statistical Methods (1996 to present). In 1987–1995, during and between IUFRO Congresses, he organized and co-organized 10 conferences and sessions in the USA, Germany, Austria, Canada, the U.K., Greece, Denmark, and Finland, and published their edited proceedings.

Selected research sources:

1. A quality assessment of a Weibull based growth projection system. *For. Ecol. and Mgmt.* 71: 235–250 (with X. Cao and H. Zhu). 1995.
2. The impact of interactions in spatial simulation of the dynamics of urban sprawl. *Landscape and Urban Planning* 73(4): 294–306 (with S. Fang, Zhanli Sun, and A. Anderson). 2005.
3. Uncertainty in forest landscape response to global climatic change. *Global Change Biology* 15: 116–131 (with C. Xu and R. M. Scheller). 2008.

Personal sources:

Gertner G.Z. Personal communications (May 2019) at gertner@illinois.edu



GRIESS, Othmar

Othmar Griess received the IUFRO Distinguished Service Award in 1995 for his contribution to the organization of Division 4 research on forest management and planning, managerial economics, and forest terminology.

Othmar Griess was born on 5 June 1929 in Vienna, Austria. He studied forestry, graduated as *Dipl. Ing. nat. techn.* (1954), completed his dissertation at the *Universität für Bodenkultur* (BOKU, the University of Natural Resources and Life Sciences) in Vienna, and obtained his Doctorate in Management Planning (2001) from the BOKU. In 1955 he was appointed to the Styria State Department of Agriculture and Forestry in Graz and was soon commissioned with the management of the mining and steelmaking district of Mürzzuschlag in Styria. Since 1963 until his retirement in 1992, he headed the Department of Forest Management and Forestry Economics in the State Department in Graz.

Dr. Griess has focused his research efforts on innovation in forest management, electronic data processing, and the use of orthophotographs that he designed. He calculated and published new timber yield charts and new variability charts. He authored and co-authored research papers, reports, book chapters and manuals. He has served as a member of various national and international professional and public societies. He was Head of the Technical Committee for Forest Management at the Austrian Forestry Association, and Managing Director of the *STUGES* (Study Society of Austrian Forest Owners) in Vienna. He contributed to the modernization of the inventory technology with new yield tables and the appraisal system with new sorting boards. As an expert, he was also involved in national and international social and economic projects.

Dr. Griess began his international activities at scientific conferences in 1966. He has an extensive record of long-term service for IUFRO in various positions, starting as Leader of IUFRO SG 4.04.00 Forest Management planning and business economy (1983–1995), continuing as Coordinator of WP 4.04.07 Terminology of forest management planning (1996–2010) and since 2010 – Deputy Coordinator of former 4.04.07 that was renamed to 4.04.03 *SilvaPlan*: Terminology of forest management planning. His intensive work on explaining and defining technical terms has resulted in the IUFRO World Series Vol. 9-de (1998) and in an online terminology database on forest management.

Selected research sources:

4. *Sortentafeln für Fichte*. Wien: Österr. Agrarverl., 151 S. (with H. Sterba). [Sorting boards of spruce]. 1983.
5. Structure and use of a forest management information system. In: *IUFRO S4.04.00 Proceedings: Symposium on The application of information technology in forest management planning, Sept. 3–7, 1991, University College Dublin, Ireland*, pp. 4–16. 1991.
6. The forest enterprise and the principle of sustained yield (Abstract). *IUFRO Centennial meeting [1892–1992], Eberswalde/Berlin, Germany, 31 Aug–4 Sep 1992*. Proceedings. Wien, Austria, p. 520. 1992.
7. *Terminologie der Forsteinrichtung Begriffe und Definitionen in deutscher Sprache – Entsprechungen in Englisch, Französisch, Spanisch, Italienisch, Portugiesisch, Ungarisch und Japanisch*. O. Griess, H. Kurth, IUFRO 4.04.07. *SilvaPlan* und *SilvaVoc*. Wien, 176 p. (IUFRO World Series Vol. 9-de) [Terminology of Forest Management Planning: Terms and Definitions in German]. 1998.
8. *Die Allmähliche Strukturveränderung und der Nachhaltigkeitskoeffizient*, the Theory of Controlling the Sustainability of the Crop during the Transition from the Clearcutting system to Highly Structured Forests. Dissertation, Vienna University of Natural Resources and Life Sciences. 2000.

Personal sources:

Griess O. Personal communications (July 2019) at othmar.griess@a1.net



LUND, Herluf Gyde III

Herluf Gyde Lund III received the IUFRO Distinguished Service Award in 1995 for his leadership in the fields of forest inventory and monitoring.

Gyde Lund was born on 8 January 1939, USA. He earned his B.Sc. in Forest Management at Utah State University (USU) in Logan, UT (1961) and M.Sc. in Forest Fire Sciences at University of Washington in Seattle, WA (1970). He spent his entire career with the USDA Forest Service, starting in 1957 as a forest technician, and since 1961 – Practicing and Research Forester of the USDA Forest Service and the USDI Bureau of Land Management. He retired from his governmental position in 1997. Currently he is an on-call forest consultant. His latest work has been with the Environmental Pulse Institute (EPI) working on a series of State of the Environment reports for several African and Asian nations.

Gyde Lund's major research interests have been in the field of resource inventory, remote sensing, monitoring, assessment of information needs, and terminology. He has authored and coauthored nearly 200 publications, mostly dealing with these aspects. He is the author of the most comprehensive compendium of international, national and local definitions of "forest" collected from all over the world. In his professional capacity, he has worked with and visited over 30 countries and on all continents.

Mr. Gyde Lund has served in numerous working groups and steering committees working on further development of remote sensing, spatial accuracy, international guidelines for forest monitoring, and harmonization of forest definitions, to name just a few. He is a member of Xi Sigma Pi and Phi Kappa Phi honorary fraternities and received the USU's Lifetime Achievement Award in 2000.

Starting in 1978, Mr. Lund has had an extensive record of IUFRO Activities and valuable publications. He has served as Co-chairman of IUFRO SG S4.02.02 Resource Inventories in Temperate Zones (1979–1986), Leader of SG S4.02 Forest Resource Inventories and Monitoring (1987–1996), and offices in different IUFRO units and projects as well being a IUFRO representative to several international organizations, societies and meetings, including FAO, UNEP, IPCC, EFI, SAF and others (1996–2003). Since 1975, Gyde Lund has produced monthly or weekly Resource Inventory and Monitoring Newsletters that reach nearly 2,300 addresses worldwide. He participated in several IUFRO projects, designing the strategic directions of the Union's advancement in global forest multi-resources and multi-purpose monitoring and inventory. Amongst many other such activities, he arranged a panel on Global Forest Assessments Beyond 2001 at the IUFRO World Congress (1995).

Selected research sources (as lead author or co-editor):

1. *Land and Resource Evaluation for National Planning in the Tropics. Proceedings of the International Conference and Workshop.* Gen. Tech. Report WO-39. Washington, DC: USDA FS, 524 p. 1987.
2. *Global Natural Resource Monitoring and Assessments: Preparing for the 21st Century.* Proceedings, Venice, Italy, September 24–30, 1989. American Society for Remote Sensing and Photogrammetry, Bethesda, Maryland, USA. In 3 volumes, 1495 p. 1990.
3. *IUFRO International Guidelines for Forest Monitoring.* IUFRO World Series Vol.5. Vienna, Austria, 102 p. 1994.
4. *IUFRO Guidelines for Designing Multipurpose Resource Inventories.* IUFRO World Series Vol. 8. Vienna, Austria, 216 p. 1998.

Personal sources:

Lund H.G. Personal communications (April 2019) at gyde@comcast.net



PERTTU, Kurth Lennart

Kurth Lennart Perttu received the IUFRO Distinguished Service Award in 1995 for his long-term leadership in IUFRO units on renewable energy sources based on biomass.

Kurth Perttu was born on 19 March 1937 in Tärendö, Sweden. He graduated (1964) and received a Licentiate of Philosophy (1969) from Uppsala University and a Ph.D. in Ecology and Biogeophysics (1982) from the Swedish University of Agricultural Sciences (SLU). He began his research career in a large climate project (1964–1968) and then became the leader of several significant projects involving both biological and meteorological aspects. In 1983, Dr. Perttu was appointed Associate Professor; in 2000 he became Professor in Forest Ecology with Emphasis on Biogeophysics, and served at the Department of Short Rotation Forestry until his retirement in 2002.

During the 1980s, Dr. Perttu focused his research on short rotation coppice (willows, poplars and alders), aiming to find scientific and economic reasons to substitute fossil fuels with renewable energy sources based on biomass. The research covered all relevant fields of biology, climatology, ecology, genetics, hydrology, meteorology, soil science and adequate practices, e.g., establishment, management and harvest of crops, and economics – market and social economy calculations.

During the 1990s, Dr. Perttu concentrated on applying willows as vegetation filters for the treatment of municipal wastewaters, municipal sludges and landfill leachates. In these and related areas, he has published 2 theses, 27 reviewed papers, 31 voluntary and invited conference papers, 44 University reports and 27 popular scientific papers as well as edited and co-edited 15 publications including 3 as guest editor of special editions of international journals. The short rotation coppice research has resulted in 10 PhD-theses, hundreds of scientific papers, and guidelines for farmers and users.

Dr. Perttu has been a member of WMO, IEA (bioenergy), IUFRO, FAO–IPC and made a significant input at the international level as a leader of three International Energy Agency (IEA) projects and a partner of four EU projects, as a member of a World Meteorological Organisation (WMO) working group on Forest Meteorology and the Forest-Atmosphere Interaction, as well as serving on various steering committees. He inspired a new working party (WP6) of the FAO–IPC and led it in 2004–2008.

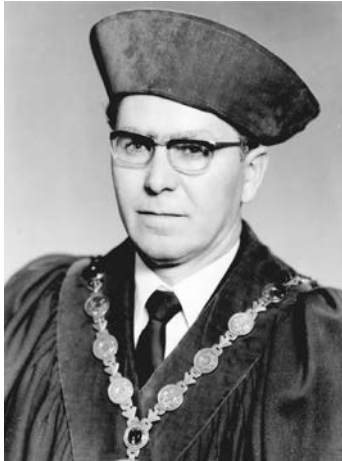
Dr. Perttu served IUFRO as Deputy Coordinator and Coordinator of IUFRO unit S1.03-03 Global perspective on environmental influences (1977–1995), and organized and co-organized several international scientific symposia on topics in areas of his responsibility.

Selected research sources:

1. *Modelling of energy forestry. Growth, water relations and economics*. K. L. Perttu and P. J. Kowalik, eds. Simulation Monographs 30, Pudoc, Wageningen, 199 p. (Also published by International Book Distributors, Booksellers & Publishers, Dehra Dun, India). 1989.
2. IUFRO Centennial Issue Papers presented on global climate change and applied forest hydrology at the IUFRO Conference Berlin, Sept. 1992. K. L. Perttu, guest ed. *Agric. & F. Meteor.* 72(1–2): 1–166. 1994.
3. Ecological, biological balances and conservation. *Biomass & Bioenergy* 9(1–5): 107–116. 1995.
4. Environmental justification for short-rotation forestry in Sweden. *Biomass & Bioenergy* 15(1): 1–6. 1998.

Personal sources:

Perttu K. L. Personal communications (June 2019) at kurth2.perttu@hotmail.com



PRIESOL, Adolf

Adolf Priesol received the IUFRO Distinguished Service Award in 1995 for his long-term contribution to activities within Division 4.

Adolf Priesol was born on 20 September 1926 in Bystrá, in the district of Banská Bystrica, Czechoslovakia. He began his career as a Forest Trainee at the Forest District in Štiavnička (1941–1942). He then graduated as a Forestry Engineer from the State Higher Forestry School in Banská Štiavnica (1946), obtained his B.Sc. from the University of Agriculture in Brno (1947–1951), M.Sc. (1955) and Ph.D. (1958) in Forestry, and Habilitation (1960) from VŠLD – University of Forestry and Wood Technology (now Technical University, TUZVO – *Technická Univerzita vo Zvolene*) in Zvolen. Adolf Priesol worked as a forest trainee at the State Forests Directorate Revúca (1946–1947), a Forest Assistant (1951–1952) and Senior Engineer at the Forest Enterprise (1960–1962) of the University, where he also served as an Assistant (1955), Associate (1960), Adjunct (1969), full Professor (1975), and Professor Emeritus (2003). He greatly contributed to all his positions, working as Head of the Department of Forest Management (1961–1980), Dean of the Faculty of Forestry (1962–1964 and 1966–1971), and Rector of the school (1971–1990). His involvement in the building of a new Technical University in Zvolen (operated since 1984) is well known. Even after retirement in 1991, he continued working at the TUZVO externally.

Professor Priesol focused on a wide field of biometry, forest management and planning, tree mensuration and forest inventory methods, methods of estimation and management of quality of timber, logging and stand regeneration, and forests damaged by emissions. He authored and co-authored over 200 publications including over 120 scientific and technical articles, 11 books, 5 university textbooks, and many reports, translations, and reviews. Most of his research has found direct application in forestry practice. As a Corresponding Member of the Czechoslovak Academy of Sciences (ČSAV) and Academician of the Slovak Academy of Sciences (SAV), he served on numerous research advisory boards and other boards, including the Scientific Council he chaired at the Ministry of Forestry and Water Management. He initiated the establishment of a Committee for Forestry Science and contributed to the establishment of the SAV's Institute of Forest Ecology in Zvolen.

Professor Priesol actively collaborated in IUFRO, as Chairman of the unit S4.04.02 (1976–1980), as a country representative on the IUFRO International Council, and as organizer of several meetings under the auspices of the Union. Professor Priesol made many original contributions at scientific events, and lectured in many European countries and abroad, e.g., in Canada, Cuba, and Japan. His achievements were recognized locally, e.g., by City of Zvolen Lifetime Achievement Award, nationally, e.g., as *Zásluhy o výstavbu* (Merit for Construction), *Rád práce* (Excellence in Work), *Zaslúžilý učiteľ* (Merit Teacher), and internationally, e.g., by awarding him the title “doctor honoris causa” at the *Akademia Rolnicza* in Poznan (1989).

Academician, Professor Emeritus Adolf Priesol died on 4 May 2005 in Bratislava at the age of 78.

Selected research sources:

1. *Základy kontroly produkcie v rámci hospodárskej úpravy lesov*. Bratislava, Vydavateľstvo Slovenskej akadémie vied, 131 p. [Fundamentals of Production Control in the Forest Management System]. 1961.
2. *Stromové rozstupy*. Bratislava, Veda, 182 p. (2d ed., 1983) [Tree Spacing]. 1978.

Personal sources:

3. URL: <https://www.tuzvo.sk/en/former-rectors> (Adolf Priesol). Retrieved 12.04.2019.
4. URL: www.nlcsk.sk/files/3208.pdf (by Štefan Šmelko). Retrieved 12.04.2019.
5. Paule L. Personal communications (May 2019) at paule@tuzvo.sk

SCHOLZ, Florian



Florian Scholz received the IUFRO Distinguished Service Award in 1995 for his contributions to the organization of genetic research within IUFRO and especially Division 7.

Florian Scholz was born on 11 April 1942 in Berlin, but he grew up near Göttingen and Lesum (near Bremen). From 1963 to 1971 he studied Wood Science and Biology, and obtained his M.Sc. degree (1971) at the University of Hamburg. In 1971, he began his professional career as a Researcher at the Institute for Forest Genetics and Forest Tree Breeding of the Federal Research Centre for Forestry and Forest Products (BFH, now Thünen-Institut) in Grosshansdorf near Hamburg. He then obtained his Doctorate degree (1975) from this Institute, in which he was appointed Director and Professor (1994). In addition, for a long time Dr. Scholz served as Head of the Department of Ecological Genetics there and delivered lectures on Forest Genetics and Ecological Genetics at the University of Hamburg and the *Eidgenössische Technische Hochschule Zürich (ETH, Swiss Federal Institute of Technology in Zurich)*, Switzerland. His research and teaching gave substantial impulses to the discipline “Ecological Genetics” in Germany and Europe. Several of his students are now in senior positions at research institutes and universities.

Dr. Scholz’s research interests were in the field of stress resistance of tree species predominantly pines, the relations between tree physiology and genetics, and the impact of air pollution, climate change, and forestry on the genetic diversity of forests. In these and other related fields, he authored and co-authored more than 100 scientific papers, chapters, books and reports. Dr. Scholz helped build the global scientific community through participation in numerous national and international meetings and research projects including his membership in many professional societies and organizations. He served as a member of the Scientific Committees of EUFORGEN and other networks. He was also a member of the editorial boards of several scientific journals. A number of honours and awards have recognized his achievements.

Dr. Scholz was active in IUFRO for over 30 years. He was the founder and Coordinator of the WP Genetic Aspects of Air Pollution that is currently 7.01.04 (1976–2000) and was Deputy Coordinator of RG 7.01.00 Impacts of Air Pollution and Climate Change on Forest Ecosystems (2001–2006). He was co-editor of the book “Genetic Effects of Air Pollutants in Forest Tree Populations” (1989) that was mainly based on the work of his IUFRO unit and a conference organized in his Institute in August 1987.

Professor Dr. Florian Scholz passed away suddenly on 22 November 2006 in Essaouira, Marocco at the age of 64.

Selected research sources:

1. *Genetic Effects of Air Pollutants in Forest Tree Populations*. F. Scholz, H. R. Gregorius and D. Rudin, eds. Springer-Verlag, viii, 201 p. 1989.
2. Zur Erhaltung genetischer Variation in Waldbaumpopulationen. *Forstwissenschaftliches Centralblatt vereinigt mit Tharandter forstliches Jahrbuch* 108(1): 204–211 (with Th. Geburek and B. R. Stephan). [Conservation of genetic variation in forest tree populations]. 1989.

Personal sources:

1. Degen B. and H.R. Gregorius. Professor a.D. Dr. Florian Scholz gestorben. *AFZ, der Wald* 62(2): 93. 2007.
2. Karnosky D. and G. Müller-Starck. Obituary. *IUFRO News* 36(1): 3. 2007.
3. Degen B. Personal communications (April 2019) at bernd.degen@thuenen.de
4. Scholz G. Personal communications (July 2019) at scholzlabenz@gmx.net



SEPPÄLÄ, Risto Juhani

Risto Juhani Seppälä received the IUFRO Distinguished Service Award in 1995 for his outstanding leadership as Chair of the IUFRO World Congress Organizing Committee.

Risto Seppälä was born on 20 September 1943 in Kouvola, Finland. He obtained his M.Sc. (1967), Licentiate (1969), and Ph.D. degrees in Social Sciences (statistics) (1971) from the University of Helsinki. In 1971–1972, he gained international experience within the post-doctoral program at the University of California–Berkeley, CA, USA. Dr. Seppälä began his career as a mathematician at the Finnish Forest Research Institute (*Metla*), working there from 1966 to 1972. In 1973, as a senior researcher, he moved for a while to the Academy of Finland, where he worked until 1975. From 1974, he has been an Adjunct Professor of Statistics at the University of Helsinki. Professor Seppälä has also been a Visiting Professor in the USA (1979–1980, 1989–1990) and the United Kingdom (1980).

In 1976, until his retirement in 2011, he worked at *Metla* as a Professor, being twice appointed as Research Director (1987–1988 and 1991–1994) and served as a chair of the Scientific Advisory Board (2000–2005). In 1976, he was elected as Head of the Department of Mathematics, and in 1986 an Academy Professor of the Academy of Finland. Starting with statistical methods, his research interests have from the mid-1970s focused on the long-term strategic problems of the forest sector and modelling, and systems analysis in general. He is one of the pioneers of future studies of the forest sector. In 1991, Professor Seppälä became a leader of a project aimed at establishing the European Forest Institute (EFI, est. 1993), and he served on the first Advisory Board (1994–2000) of EFI. He founded (1980) and led the first Forest Sector Project at the International Institute for Applied Systems Analysis (IIASA, Austria), where he also worked in the IIASA's Finnish Committee (1982–1997), heading it for 7 years, serving as a member of IIASA's Governing Council (1990–1998) and for several years – Chairman of the Finance Committee.

Professor Seppälä has many memberships and presidencies of national and foreign organizations, societies, councils, and editorial boards, including his membership in the Finnish Academy of Sciences and Letters (2001). Several national and international institutions have recognized his contributions to forest research development and teaching by rewarding him with honours. He holds honorary professorship and doctorates from the University of Helsinki (2002), Moscow State Forest University (2002), and Chinese Academy of Forestry (2004). He is the Commander of the Order of the Lion of Finland (2010).

From 1981, Professor Seppälä was active in IUFRO, being appointed as Coordinator of PG P4.10-00 Analysis of World Trade in Forest Products, and later serving Chair of the 20th IUFRO World Congress Organizing Committee (1995) in Tampere, where he was elected Vice President–Programmes (1996–2000), then IUFRO President (2001–2005). Professor Risto Seppälä was awarded with IUFRO Honorary Membership (2010).

Selected research sources:

1. *Systems Analysis in Forestry and Forest Industries*. TIMS Studies in the Management Sciences, Vol. 21, 487 p. (with Å. Andersson, M. Kallio and A. Morgan). 1986.
2. *The Finnish Forest Cluster at a Cross Road* (editor). Wood Wisdom, 138 p. 2000.
3. *Adaptation of Forests and People to Climate Change. A Global Assessment Report*. R. Seppälä, A. Buck and P. Katila, eds. IUFRO World Series, Vol. 22, 224 p. 2009.

Personal sources:

1. Seppälä, Risto Juhani. In: Teplyakov V. *Honorary Members of IUFRO: 1953–2017*. Vienna, pp. 90–91, 2018.
2. *Seppälä R.* Personal communications (April 2019) at ristojseppala@gmail.com



SIRÉN, Gustaf Emil

Gustaf Emil Sirén received the IUFRO Distinguished Service Award in 1995 for his active commitment to IUFRO and his long-term work as IUFRO officeholder.

Gustaf Sirén was born on 23 February 1920 in Nastola, Tavastia, Finland. He grew up in a family of five brothers and six sisters. As a war veteran, he earned his degrees at the University of Helsinki: M.Sc. Forestry (1947), the Licentiate (1952) and Doctorate in Agronomy and Forestry (1956). In 1957, Dr. Sirén was appointed as a Research Specialist of the Finnish Forest Research Institute (Metla) in Helsinki, and, *inter alia*, he ran "Operation Forest Border" a pine planting project in Lapland that had the help of dozens of scouts from Helsinki. From 1964 until his retirement in 1985, Dr. Sirén served as a Professor of Forest Regeneration at the then Stockholm School of Forestry and from 1978 he was an Extraordinary Professor of Energy Forestry at the Swedish University of Agricultural Sciences (SLU). In parallel, he worked as an Extraordinary Professor of Forestry (1966–1973) at the University of Helsinki, for a number of years dividing his time between Finland and Sweden.

Professor Sirén started his research career in Finland on root systems development, dendroclimatology, and forest dynamics, starting his pioneering Nordic forest research in the field of forest regeneration and more intensive forest management in northern Finland. In Sweden, he has focused on mechanized regeneration technology and rationalization of forestry and forest management, and later was involved in the research on fast-growing deciduous species and energy forestry (bio-fuels) that began at the SLU's in 1976 during the oil crisis. After his retirement, Professor Sirén returned to his original research on the forest border and on intensive forestry in northern Finland. His concentration on fast-growing forests resulted in the continued production of wood and expansion of nature conservation areas in the 2000s. He authored and co-authored many scientific papers, book chapters, books and reports on these issues, including the famous article of 1977 – Can we grow our energy? (*Kan vi odla vår energi?*).

Professor Sirén was internationally recognized from the beginning of his professional career as an expert of the UN FAO and the International Energy Agency (IEA), which aims to develop and improve energy cooperation between different countries. He was a member of scientific academies in Finland and Mexico, and in 1965 was elected as a foreign member in the Forest Division of the Royal Swedish Academy of Agriculture and Forestry (KSLA). Professor Sirén was a longstanding and active IUFRO officeholder. In 1981, he started and led IUFRO unit P1.09-00 Integrated Research in Biomass for Energy. He organized several international workshops and seminars on this issue and edited their proceedings.

Professor emeritus, Dr. Gustaf E. Sirén passed away in Stockholm on 11 May 2008 at the age of 88.

Selected research sources:

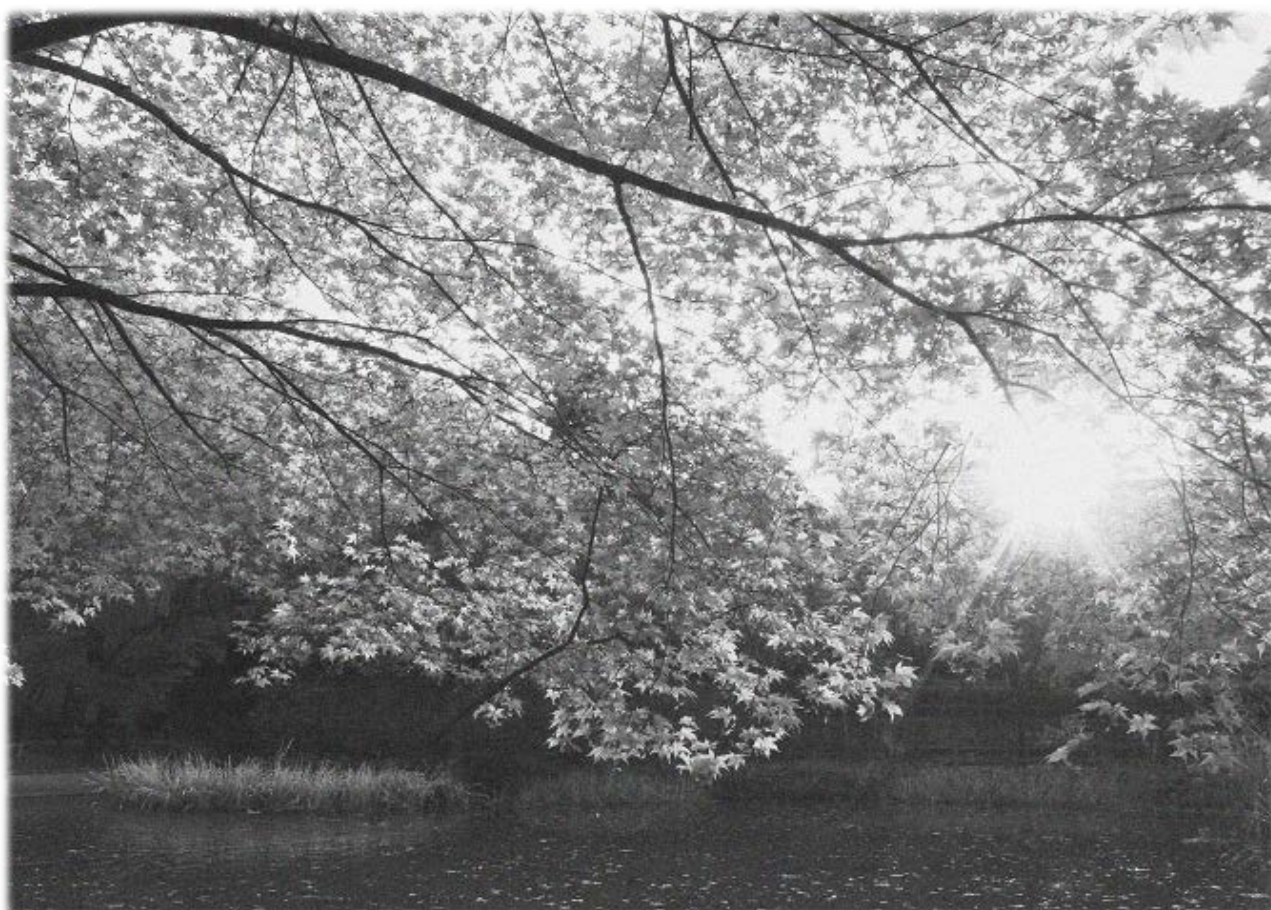
1. The development of spruce forest on raw humus sites in Northern Finland and its ecology. *Acta Forestalia Fennica* 62(4): 1–226. 1955.
2. *Energiskogsodling*. Stockholm, Nämnden för energiproduktionsforskning, 255 p. [Energy forestry]. 1983.
3. *Forest energy and the fuelwood crisis*. G. Sirén and C. P. Mitchell, eds. Proc. IUFRO PG P1.09.00 meeting in Uppsala, Sweden, June 8–9, 1984. SLU, 41, vi + 138 p. 1985.

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1. Nordansjö I. Gustaf Sirén. *Småskrifter* nr 9. Kungl. Skogs- och Lantbruksakademiens minnesord över ledamöter avlidna 2007–2008. Stockholm, p. 68–69. (photo). 2009.
2. Sirén S. Personal communications (August 2019) at samuelsiren@telia.com

1996 – 1999

<i>Maciej GIERTYCH</i>	<i>Poland</i>	<i>1996</i>
<i>H. Fred KAISER</i>	<i>USA</i>	<i>1996</i>
<i>Garth NIKLES</i>	<i>Australia</i>	<i>1996</i>
<i>Per Olov NILSSON</i>	<i>Sweden</i>	<i>1996</i>
<i>Ryszard SIWECKI</i>	<i>Poland</i>	<i>1996</i>
<i>Amantino de FREITAS</i>	<i>Brazil</i>	<i>1997</i>
<i>Robert A. PLUMPTRE</i>	<i>UK</i>	<i>1997</i>
<i>Helmut BRANDL</i>	<i>Germany</i>	<i>1998</i>
<i>Jiro KIKKAWA</i>	<i>Japan</i>	<i>1998</i>
<i>Csaba MÀTYÁS</i>	<i>Hungary</i>	<i>1998</i>
<i>Harold K. STEEN</i>	<i>USA</i>	<i>1998</i>
<i>Simeun TOMANIĆ</i>	<i>Croatia</i>	<i>1998</i>





GIERTYCH, Maciej Marian

Maciej Marian Giertych received the IUFRO Distinguished Service Award in 1996 for his activity as chairman of the working party on growth processes in trees and leader of the physiology subject group.

Maciej Giertych was born on 24 March 1936 in Warsaw, Poland. He was exiled in 1945–1962 in the British zone of post-war Germany and then in the United Kingdom, obtaining a B.A. and M.A. in Forestry at Oxford University (1954) and then his Ph.D. in Tree Physiology at the University of Toronto (1962). After returning to Poland in 1962, he was appointed a Researcher at the Institute of Dendrology, Polish Academy of Sciences, Kórnik (near Poznań). He habilitated in tree genetics (1970), became an Associate Professor in 1981 and a Full Professor in 1989. He also lectured on population genetics at the N. Copernicus University in Toruń (1976–1993) and on forest genetics at forestry engineers' refresher courses organized by the Faculties of Forestry in Poznań, Kraków and Warsaw.

Dr. Giertych's major area of research is in the population genetics of forest trees. He has authored and co-authored more than 200 scientific publications as well as a number of publications and a film about evolution. From 1967 to 2007, Dr. Giertych was a member of the Forest Sciences Committee of the Polish Academy of Sciences. He was a member (1984–2001) then Vice-Chair (1993–2000) of the Forestry Council at the Minister of Environmental Protection of Poland. He served as a member of scientific councils of the Institute of Dendrology PAS (1962–2018), Forest Research Institute in Warsaw (1997–2002), Forest Gene Bank in Kostrzyca (since 1996) and Arboretum in Syców (since 1995). In 1998–2001, he was the delegate of the Institute of Dendrology to the European Forestry Institute (EFI). He was a member of the editorial board of *Arboretum Kórnickie* (now *Dendrobiology* 1970–1999), *Silvae Genetica* (Germany 1973–2001), and *Annales des Sciences Forestieres* (now *Annals of Forest Science*, France 1990–2001). He is also an Honorary Member of the Daylight Origins Society (United Kingdom) and of the Polskie Towarzystwo Leśne (Polish Forestry Association).

Dr. Giertych was involved in political life of Poland, serving as a member and Vice-Chair of the Primate Council (1986–1990) and a member of the Consultative Council of the Chair of the Council of State (1986–1989). In 1990–2002, he served as Chair of the National Party Council. Elected from the League of Polish Families (LPR), he became a member of the Sejm (Polish Parliament) where he served as Deputy Chair of the Committee on Environmental Protection, Natural Resources and Forestry (2001–2004). In 2004–2009, Dr. Giertych was a Member of the European Parliament. He has been President of the LPR Congress since 2012. From 1967, Dr. Maciej Giertych was active in IUFRO serving as Chair of the WG S2.02.11 Dormancy in Trees (1967–1975), and Deputy Leader and Leader of the SG S2.02 Tree Physiology (1976–1990). Acting in the SG S2.03 Genetics, he edited an international textbook on *Genetics of Scots Pine* (Elsevier 1991). In 1985–1995, he was the Polish representative on the IUFRO International Council. He participated in eight IUFRO Congresses from Munich (1967) to Kuala Lumpur (2000), including the IUFRO Centennial Congress (1992).

Selected research sources:

1. Endogenous growth regulators in trees. *Botanical Review* 30(2): 292–311. 1964.
2. Summary results of the IUFRO 1938 Norway spruce (*Picea abies* (L.) Karst.) provenance experiment. Height growth. *Silvae Genetica* 25(5–6): 154–164. 1976.
3. Height growth variation in a comprehensive Eurasian provenance experiment of (*Pinus sylvestris* L.). *Silvae Genetica* 46(6): 332–349 (with A. M. Shutyaev). 1997.

Personal sources:

1. URL: https://en.wikipedia.org/wiki/Maciej_Giertych Retrieved 20.03.2019.
2. Giertych, Maciej M. Personal communications (March 2019) at giertychmaciej@gmail.com



KAISER, Harold Fred

Harold Fred Kaiser received the IUFRO Distinguished Service Award in 1996 for organization of work and leadership as Division Coordinator.

Fred Kaiser was born on 2 June 1939 in Chicago, Illinois, USA. After finishing Lane Technical High School in Chicago, Illinois, USA in 1957, Fred went to work for the U.S. Forest Service in northern Idaho, USA where he became interested in pursuing a professional forest management career. He then consecutively obtained his B.Sc. in Economics (1961), B.Sc. in Forestry (1964) and M.Sc. in Forestry (1965) from Iowa State University in Ames, and then his Ph.D. in Forest Economics (1968) from Michigan State University in East Lansing.

In 1968 Dr. Kaiser began his professional forestry career as Research Forester at the U.S. Forest Service Office in New Orleans, Louisiana where he conducted forest economic research on southern forest management and then in Lincoln, Nebraska where he conducted research on the management of the Nation's forest and range. He then moved to the USFS Headquarters in Washington, D.C. where he was appointed as an Economist for the Resources Program Assessment Staff (1974) and progressed to the Director of Policy Analysis (1982) and Director of the Forest Resources and Economics Research (1984), where he led research programs for forest products, forest inventory, economics, social and urban forestry and many other responsibilities until his retirement from his governmental position in 2005.

Since then Dr. Kaiser has conducted Certification Audits for the Forest Stewardship Council (FSC) and Sustainable Forestry Initiative (SFI) for their Sustainable Forest Conservation Programs in the eastern United States, and collaborates with George Mason University on climate change, sustainable forestry and wildlife management. His research resulted in over 80 research papers, book chapters and reports that suggested ways to improve forest, range and recreation management.

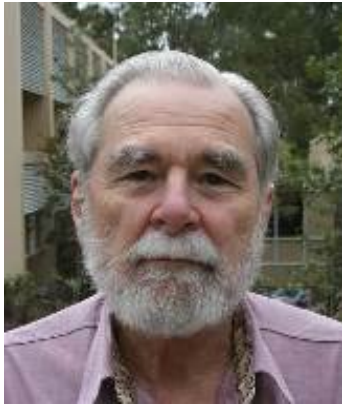
Dr. Kaiser began his active collaboration with IUFRO in 1974 by presenting papers for the WG 6:11.03. He then participated in several IUFRO Congresses, and served as Coordinator of Division 4 Planning, Economics, Growth and Yield Management and Policy (1987–1990), Division 6 Social, Economic, Information, and Policy Sciences (1991–1995) and member of the IUFRO Board (1987–1995). Dr. Kaiser organized or co-organized numerous IUFRO meetings including a milestone Divisional Meeting on climate change in Venice, Italy (1991). He organized many meetings and edited their proceedings with IUFRO Division 4.

Selected research sources:

1. *Input–Output analysis on the southern forest economy*. USDA FS Res. Paper SO 43, 22 p. 1969.
2. *Structure and change in southern forest economy*. USDA FS Res. Paper SO 71, 19 p. (with G. Dutrow). 1971.
3. *Forest-range environmental production analytical system*. USDA Handbook No. 430. 1972.
4. *Research Today for Tomorrow's Forests: Proceedings for outdoor recreation economics*. E. Gundermann, H. F. Kaiser, comp. 17th IUFRO World Congress, Kyoto, Japan, 6–12 September 1981, 157 p. 1981.
5. *Proceedings of the 18th IUFRO World Congress for Economic Value Analysis of Multiple Use Forestry*. H. F. Kaiser, P. J. Brown, comp. IUFRO Work Project 4.08.00 and Section 6.01.00. OSU, Corvallis, OR, USA, v, 281 p. 1987.

Personal sources:

Kaiser H. F. Personal communications (May 2019) at hfredkaiser@yahoo.com



NIKLES, Donald Garth

Garth Donald Nikles received the IUFRO Distinguished Service Award in 1996 for his co-founding and longstanding co-leadership, with Dr. Jeff Burley, of the first IUFRO Working Party focused completely on the tropics. It was established in 1972 following the 15th IUFRO Congress (USA, 1971).

Garth Nikles was born on 17 February 1933 in Warwick, Queensland, Australia. He earned his B.For.Sc. (University of Queensland, 1955), Dip.For. (Australian Forestry School, Canberra, Australia, 1955) and Ph.D. in Tree Breeding (North Carolina State University, Raleigh, 1966). In 1955 he began his 45-year, pre-retirement professional career as Assistant Silviculturist, Queensland Department of Forestry. Garth was appointed Officer in Charge, Tree Breeding (1958) located at Beerwah, Queensland and, following conspicuous achievements in genetic improvement of plantation species, as a Senior Principal Research Scientist (Tree Breeding) in the Department's Forest Research Institute (QFRI) at Indooroopilly, Queensland. After retirement in 2000 and until the present, Garth expanded his activities in Tree Improvement as an Associate then Volunteer in the Queensland Department of Agriculture and Fisheries (DAF), Horticulture and Forestry Science.

Dr. Nikles and his teams have undertaken research and development in forest tree genetic improvement with hoop pine (*Araucaria cunninghamii*), a number of tropical pines and hybrids (especially *Pinus elliotii*, *P. caribaea* and their F1 and F2 hybrids), several *Acacia*, *Eucalyptus* and *Corymbia* species and hybrids, teak (*Tectona grandis*) and African mahogany (*Khaya senegalensis*). He has undertaken many consultancies and given training courses both in Australia and overseas. He has authored or co-authored many conference or scientific papers and book chapters, and edited numerous conference and journal papers. He has led or co-authored improvement strategies and implementation plans for several tree species.

Dr. Nikles has been a Keynote Speaker at several national and international conferences. He co-supervised several successful Ph.D. students. He was a member of the Institute of Foresters of Australia (receiving its Jolly Medal in 1983) and on the editorial board of *Bois & forêts des tropiques* since 2010. Dr. Nikles has received many awards since 1950 for his early academic promise and later dedication to tree improvement, including a Ford Foundation Fellowship and a Fulbright Scholarship (1963), Rockefeller Foundation Travel Grant (1964–1965), IUFRO DSA (1996), Public Service Medal, Australia (1999), CFA Asia-Pacific Regional Medal (1999), and a shared IUFRO World Congress Host Country Scientific Award (2005).

Selected research sources:

1. *Tropical provenance and progeny research and international cooperation*. J. Burley, and D. G. Nikles, eds. Proc. of a joint meeting of IUFRO WPs S2.02.08 and S2.03.01, held in Nairobi, Kenya, October 1973. Oxford, U.K.; Commonwealth Forestry Institute, 613 p. 1973.
2. *Tree improvement for sustainable tropical forestry*. M. J. Dieters, A. C. Matheson, D. G. Nikles, C. E. Harwood and S. M. Walker, eds. Proc. of QFRI–IUFRO Conference, Caloundra, Queensland, Australia, 27 Oct.–1 Nov. 1996. Queensland FRI, Gympie. Vol. 1, pp. 1–271, Vol. 2, pp. 272–536. 1996.
3. Nikles, DG *et al.* 2016, pp. 169–188. In: J. Meadows, S. Harrison, and J. Herbohn, eds. 2016. *Small-scale and Community Forestry and the Changing Nature of Forest Landscapes*. Proc., IUFRO RG 3.08 Small-scale Forestry Conference held on the Sunshine Coast, Queensland, Australia, 11–15 Oct. 2015, 214 p. 2015.

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1. IUFRO World Congress Host Country Scientific Award 2005. *IUFRO News, Special Awards Issue*, 34: 6. 2005.
2. Nikles D. G. Personal communications (May 2019) at Garth.Nikles@daf.qld.gov.au



NILSSON, Per Olov

Per Olov Nilsson received the IUFRO Distinguished Service Award in 1996 for his contribution to IUFRO research on forest technology and bioenergy and as Coordinator of Division 3.

Per Olov Nilsson was born on 30 April 1936 in Bromma (Stockholm), Sweden. After receiving his high school certificate 1955, and military training, he fulfilled the forestry practice required for the Master of Forestry exam he obtained from *Skogshögskolan* (The Royal College of Forestry) in 1963. That same year he began his professional career as a researcher at *Skogshögskolan* and reached the Licentiate degree by studying how root rot spreads after mechanical damage to Norway spruce roots, a problem that increased when tractors replaced horses in the forest. When he was a Researcher at *Forskningsstiftelsen Skogsarbeten* (the Forestry Research Institute of Sweden), he focused on mechanization of thinning. In 1972, Per Olov Nilsson was appointed as a Professor of Forest Operations, Engineering and Management at *Skogshögskolan*. In 1987, he became an SLU Professor in Forestry Energy System, a position he held until his retirement in 2001 as Professor Emeritus, but he remained active after stepping down from his position at SLU.

The World oil crisis of 1973 was a turning point in his career that shifted his interest mostly to research on forests as a source of energy, and he started leading projects on whole-tree harvesting with the aim of using woody biomass including treetops, branches and stumps. He built a wide network of experts and Swedish high-level politicians and elaborated numerous successful research and development projects on improved biomass utilization and use of solar energy. He authored, co-authored and edited numerous research and technical publications including reviews about the Swedish energy system in 1984 and others. Dr. Nilsson was a member of the *Akademien för de friska källorna* (the Academy of the Fresh Water Sources). He served as a Chairman of the IEA Forestry Energy Harvesting Programme.

Per Olov Nilsson was a long-standing IUFRO Officer. After the 1976 Congress in Oslo (1976), he served as WP Leader in Division 3 – WLS 3.01.01 Harvesting machines (1977-1981) and SG Leader SLS3.01.00 Tree harvesting (1982-1986), and as Coordinator of IUFRO Division 3 Forest Operation and Techniques (1987-1995). He contributed in an exceptional way to forest energy research and exchange of information between scientists all over the world. He was co-organizer of many national and international conferences, seminars and workshops, such as Joint IEA/IUFRO Forestry Energy Workshops (1980, 1985), Harvesting and utilization of wood for energy purposes (1981) and many other.

Dr. Per Olov Nilsson passed away on 23 March 2016 in Hedemora, Sweden, just before his 80th birthday.

Selected research sources:

1. *Översiktlig beräkning av tillgänglig mängd skogsavfall*. PHU Rapport 46, 36 p. (with B.-O. Danielsson). [Survey of availability of forest residues]. 1977.
2. *Research in Forestry for Energy*. C. P. Mitchell, P. O. Nilsson & L. Zsuffa, eds. Proc. of the joint IEA/Forestry Energy Progr. and FAO/Coop. Network on Rural Energy. Rungstedgaard, Denmark, 28-30.10.1985. Vol. I, 243 p.; Vol. II, 215 p. Sveriges Lantbruksuniversitet, Inst. Skogsteknik. Rapporter och Uppsatser 49, 1986.
3. *Biomassaflöden i svensk skogsnäring 2004*. Skogsstyrelsen, rapport 23, 22 p. [Biomass Flows in Swedish Forestry 2004]. 2006.

Personal sources:

1. Kardell L., Lönner G. and Ager B. Per Olov Nilsson. *Dagens Nyheter*, 2016-06-23. <https://www.dn.se/arkiv/familj/per-olov-nilsson/> Retrieved 24.01.2020.
2. Nilsson A.-H. Personal communications (January 2020) via Prof. Björn Hånell at Bjorn.Hanell@slu.se



SIWECKI, Ryszard

Ryszard Siwecki received the IUFRO Distinguished Service Award in 1996 for his long-term activity as Working Party chairman and Deputy Coordinator of Division 2.

Ryszard Siwecki was born on 24 March 1939 in Radomsko, Poland. He studied Forestry and specialized in Forest Protection at the University of Agriculture in Poznań (1953–1961). Simultaneously, he studied Urban Planning and Spatial Planning at the Poznan University of Technology (1954–1962). He obtained a Ph.D. in Forest Sciences from the University of Agriculture in Poznań (1969) and habilitated at the Institute of Applied Biology at the Poznań Agricultural Academy (1976). In 1977, he was appointed as an Associate Professor at the Institute of Dendrology of the Polish Academy of Sciences (ID PAS) where he also served as Deputy Director for Science (1980–1982), and was promoted to Full Professor (1994). From the fall of 1961, he worked as an Assistant at the ID PAS Arboretum and Acclimatization Laboratory of Trees and Shrubs, advancing his knowledge in phytopathology. In 1965, he established a Laboratory on Phytopathology.

Dr. Siwecki authored and co-authored about 250 scientific papers, book chapters and reports on the health condition of trees, methods of their protection, care and treatment that were published in national and foreign journals and by publishing houses. He was a member of the Scientific and Technical Council of the Minister for Forestry and Wood Industry of Poland (1982–1985). He was also a Chair of the Section of Woody Plant Diseases at the Polish Phytopathological Society. At an international level, Dr. Siwecki was a member of the UNESCO Man and the Biosphere National Committee for Poland. Dr. Siwecki was active in IUFRO for a long time. He participated in a number of IUFRO Congresses, served as IUFRO Working Party S2.06.06 Vascular Wilt Disease, and as Deputy Coordinator of Division 2 (1990–1995). He was one of key co-organizers of several IUFRO meetings in Poland as well as the XXVIII meeting of the IUFRO Executive Board that was held on 27–28 August 1992 in Puszczykowo and in Kórnik.

Professor Ryszard Siwecki passed away on 5 December 2002 in Rogów. Until his last days, he was involved in the social life of Kórnik including as a Vice-Chair of the City's Council (1983–1986). The City Council passed a resolution on 27 March 2013 naming a street in the town of Kórnik after him. On 29 December 2003, a natural monument to Professor Ryszard Siwecki, the Hornbeam Walk became a protected area in Kołobrzeg by Resolution of the Town Council.

Selected research sources:

1. *Scots Pine Diseases*. Proc. of an Intern-I Symp., Kornik, Poland, 16–20 May 1989. Joint meeting: 7th European Colloquium of Forest Pathologists and the members of two IUFRO WPs S2.05.04 and S2.06.02. T. Kurkela and R. Siwecki, eds. Bull. of the Finnish For. Res. Institute, 360. 218 p. 1990.
2. *Oak Decline in Europe*. Proceedings of an International Symposium, Kornik, Poland, 15–18 May 1990. Under the auspices of the IUFRO Working Party S2.06.06 Vascular Wilt Disease. R. Siwecki and W. Liese, eds. Polish Academy of Sciences, Institute of Dendrology, Kornik, Poland, 360 p. 1991.
3. *Reakcje biologiczne drzew na zanieczyszczenia przemysłowe: III Krajowe Sympozjum Kórnik, 23–26 maja 1994*. Materiały. T.1. R. Siwecki, red. [Biological reaction of trees to industrial pollution: III National Symposium. Kórnik, 23–26 May 1994. Vol. 1. R. Siwecki, ed.] Poznań, 347 p. 1996.

Personal sources:

1. URL: https://pl.wikipedia.org/wiki/Ryszard_Siwecki Retrieved 20.03.2019.
2. Ratajczak M. Wspomnienie o Profesorze Ryszardzie Siweckim (1939–2002). *Kórniczanin*, 9 listopada 2012, 19(396): 11–12. [Remembrance about Professor Ryszard Siwecki (1939–2002)]. Photo. 2012.
3. Giertych M. Personal communication (March 2019) at giertychmaciej@gmail.com



de FREITAS, Amantino Ramos

Amantino Ramos de Freitas received the IUFRO Distinguished Service Award in 1997 for his outstanding promotion of IUFRO in developing countries.

Amantino Ramos de Freitas was born on 28 September 1940 in Itapeva, SP, Brazil. He earned a B.Sc. degree in Civil Engineering at *Escola Politécnica da Universidade de São Paulo* (1963), an M.Sc. in Forestry at the University of Washington, Seattle, USA, (1966) under a Fulbright scholarship, and a Ph.D. in Civil Engineering at Virginia Tech, Blacksburg, USA, (1978) under a Brazilian National Research Council (CNPq) grant. He began his professional career as an assistant engineer at the Wood Preservation Section of the State Institute for Technological Research – IPT's Wood Division, São Paulo, (1964) and then served in various senior positions, including President of the Brazilian Wood Preservers' Association – ABPM (1972–1973, 1975–1976, 1990–1992), Director of the Division of Forest Products, Textiles and Leather (1976–1996) at the IPT, São Paulo, Founding Member and Director of the Fernand Braudel World Economy Institute (1987–1989), President, Brazilian Society for Silviculture (1988–1991, 2012–present), President, CPTI Technology & Development (1996–2004), and Director of the Brazilian Federation of Work Cooperatives – CEBRACOOP (1999–2002), amongst others.

Dr. de Freitas has also served in technical and professional associations, such as the Forest Stewardship Council – FSC, Bonn, where he was a founding member and elected to the first board, and was a founding member of the *Conselho Brasileiro de Manejo Florestal* – FSC/Brazil. He is a member of various organizations, including the Forest Products Society (since 1966), USA, and of the International Academy of Wood Science, IAWS, Hamburg, and holds an honorary membership in the Brazilian Wood Preservers' Association, São Paulo, and in the Brazilian Association of Mechanically Processed Wood – ABIMCI, Curitiba. He provided consultancy to various national and international bodies including the Brazilian Ministry for the Environment, International Paper Brazil, World Bank, ITTO, FAO/UNIDO, Rainforest Alliance, Tropical Forest Trust and many others.

Dr. de Freitas has authored and co-authored about 70 papers on wood utilization and silviculture. He has been invited to make keynote speeches and presentations at national and international scientific congresses, conferences, and other symposia held in the Americas, Europe and Asia. He has been the organizer and co-organizer of about 20 international congresses, including the XVI IRG Annual Meeting (1985) in Guarujá, Brazil.

Dr. de Freitas served as Coordinator of Division 5 Forest Products (1991–1995) and organized several major Divisional meetings including the All-IUFRO Division 5 Conference in São Paulo, Brazil, (1988) and in Nancy, France (1992). He was a guest speaker at the *I Congreso Latinoamericano de IUFRO* in Valdivia, Chile (1998).

Selected research sources:

1. *Probabilistic approach in the design of wood structures in Brazil based on the variability of 23 species*. Ph.D. thesis. Virginia Tech, Bulletin No. 159, 80 p. 1978.
2. *Improved utilization of timber resources in South America: a programme for action*. A. R. de Freitas, W. G. Kauman, and R. L. Youngs, comps. Paris, France; Centre Technique du Bois et de l'Ameublement, IUFRO PG P 5.01 Properties and Utilization of Tropical Woods, 161 p. 1986.
3. Strengthening of forestry research in Brazil. In: *Proceedings of the Meeting of Experts on Forestry Research*. Rome, October 12–14, 1992. FAO Forestry Paper 110, pp. 57–59. 1992.

Personal sources:

de Freitas A. R. Personal communications (May 2019) at amantino@aol.com



PLUMPTRE, Robert Aubrey

Robert Aubrey Plumptre received the IUFRO Distinguished Service Award in 1997 for research and Divisional development on tropical timber properties and use.

Robert Plumptre was born on 23 November 1931 in Rajkot, India. He received his B.A. in Forestry (1954) and M.Sc. on the structure and properties of tropical timbers (1972) from the University of Oxford, U.K. After military service, he began his forestry career with the Uganda Forest Department, Entebbe, as a Forest Officer (1957–1963) and then as Forest Utilization Officer (1963–1971).

In 1971 he moved to the United Kingdom, where he was appointed as a Senior Research Officer at the Oxford Forestry Institute (OFI), University of Oxford, where he worked for 25 years until his retirement in 1996.

After retirement, Mr. Plumptre led an active public life as Director of two charitable organizations – Food for the Hungry UK (1992–2009) and Action for Peoples in Conflict International in the UK Ltd. (1997–2006), both located in Abingdon, Oxon, U.K.

Mr. Plumptre's research interests have been in the field of forest ecology and the role of silvicultural techniques including methods of thinning on wood quality, anatomy, mechanical properties and utilization of the wood of tropical tree species. He pioneered research on the use of solar power to dry sawnwood from 18% to 12% to prevent warping in furniture making. He built commercial solar dryers in Cumnor and Eynsham near Oxford in addition to Ghana.

Mr. Plumptre has authored and co-authored more than 100 research papers, book chapters, books and other publications in scientific and professional journals, including *Commonwealth Forestry Review and International Wood Products Journal* as well as in the series *Tropical Forestry Papers* (TFP) published by the Commonwealth Forestry Institute (CFI).

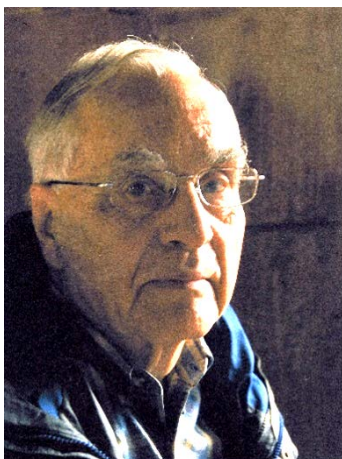
Mr. Plumptre has been a Fellow of the U.K. Institute of Wood Science (now Wood Technology Society) and a member of the Commonwealth Forestry Association. He actively participated in the World Forestry Congress in Jakarta (1978). In IUFRO he supported the creation and activities of a number of Working Groups in Division 5.

Selected research sources:

1. Pruning of fast growing pines for wood uniformity: can you have your cake and eat it? *Com. For. Review*, 1979, 58: 181–189.
2. *Pinus caribaea. Vol. II: Wood Properties*. TFP No. 17. CFI, University of Oxford, UK, 164 p. 1984.
3. *The Uganda Timber Users' Handbook*. Commonwealth Secretariat, 136 p. (with P. W. Kityo). 1997.
4. Witness to history: A history of forestry at Oxford University. *British Scholar* 1(2): 236–61 (with J. Burley, R. A. Mills, P. S. Savill, P. J. Wood and H. L. Wright). 2009.

Personal sources:

1. URL: https://prabook.com/web/robert_aubrey.plumptre/3495673 Retrieved 06.05.2019.
2. Plumptre R. A. Personal communications (May 2019).



BRANDL, Helmut

Helmut Brandl received the IUFRO Distinguished Service Award in 1998 for his outstanding and long-lasting input into IUFRO activities, especially on small-scale forestry and forest history.

Helmut Brandl was born on 28 September 1937 in Nürnberg, Germany. After finishing High School Stuttgart (1957) and substitute military service dealing with childcare (1957–1958), he studied Forest Science at the University of Freiburg and University of Munich (1958–1962), earned his Dipl.-Ing. in Forestry (1962) with excellence, and in 1970 obtained his Ph.D. (*Summa cum laude*) and habilitation (1977) from Albert Ludwig University of Freiburg. Helmut Brandl began his professional career as a Forest Referent at the Baden-Württemberg State Forest Administration (1962–1965). In 1965, he passed the Great Forest State Examination in Baden-Württemberg and proceeded as a Researcher (1969–1976) and from 1983 as a Head of the Department of Forest Economics at the *Forstliche Versuchs- und Forschungsanstalt Baden-Württemberg* (Forest Research Institute, FVA Ba-Wü) in Freiburg until his retirement in 2002. From 1977 to 1982, Dr. Brandl also served as a Head of the State Forestry Office Neckargemünd, Baden-Württemberg. After habilitation, Dr. Brandl delivered lectures on Forest History and Forestry Business Management at the Albert Ludwig University and in 1986 became a Professor.

Dr. Brandl's major research interests were focused in the field of general forestry, afforestation, forest recreation, forestry economics, forest management and policy, and many other areas. He made a special contribution to forest history and the development of small-scale forestry. In these and related areas he published 107 scientific articles, book chapters, books, edited proceedings and other papers. He has served as an editor of the proceedings of IUFRO meetings and as a member of the editorial board of the *Mitteilungen der Forstlichen Versuchs- und Forschungsanstalt Freiburg* (Communications of the Forest Research Institute Freiburg). Professor Brandl was a member of several professional societies including *Deutscher Forstwirtschaftsrat* (German Forestry Council).

Professor Brandl founded and became the first Coordinator of IUFRO PG 3.04.00 (1986–1995) and then RG 3.08.00 Small-scale forestry (1996–2000). Between 1988 and 2005, some 16 meetings of the Group were held in 11 countries with over a thousand participants representing 56 countries from all continents. A new journal *Small-scale Forestry Economics, Management and Policy* (now *Small-scale Forestry*) attributed to this Group was established (2002), and the first issue was dedicated to the contribution of Professor Brandl in this area of research. The Brandl Award was established and first given by IUFRO in 2008.

Selected research sources:

1. Der Stadtwald von Freiburg – eine forst- und wirtschaftsgeschichtliche Untersuchung über die Beziehungen zwischen Waldnutzung und wirtschaftlicher Entwicklung der Stadt Freiburg vom Mittelalter bis zur Gegenwart. Freiburg: Dissertation Universität Freiburg i. Br., Wagner, 259 S. [The city forest of Freiburg – a forest and economic historical investigation over the relations between forest use and economic development of the city of Freiburg from the Middle Ages to the present]. 1970.
2. Die Bedeutung der Holznutzung für den CO₂ Haushalt. *Allgemeine Forstzeitschrift*, 51: 573–576. [The importance of using wood for the CO₂ budget]. 1996.
3. The Small-scale Forestry Group 1986–2006: an overview on the group activities during the last 20 years. *Small-scale Forestry*, March, 6(1): 1–18. 2007.
4. Experiences in collecting data on farm forest enterprises over more than three decades. *Small-scale Forestry*, June, 10(2): 135–147. 2011.

Personal sources:

Brandl H. Personal communications (November 2019) at brandl-freiburg@gmx.de



KIKKAWA, Jiro

Jiro Kikkawa received the IUFRO Distinguished Service Award in 1998 for his significant input to IUFRO in the field of ornithology research in Australia and Oceania.

Jiro Kikkawa [橘川 次郎] was born on 15 December 1929 in Yokohama City, Japan. He earned his B.Sc. in Marine Biology at Tokyo University of Fisheries (1950) and D.Sc. in Zoology at Kyoto University (1961). He began his career as a Technical Officer in the Japan Ministry of Agriculture and Forestry (1950–1953), undertook postgraduate study at Kyoto University (1954) and University of Oxford, UK (1955–1957) on a British Council Scholarship. His teaching career began at the University of Otago, Dunedin, Otago, New Zealand (1958–1961). He then moved to Australia, where he was a Temporary Lecturer at the University of New England, Armidale (1961–1964), Senior Lecturer in Zoology at the University of Queensland (1965–1979), progressed to Professor and Head of Department of Zoology (1980–1988) and retired as the UQ Emeritus Professor. Dr. Kikkawa's primary research interests were in ornithology, especially in the behavioral ecology of Silvereyes and other species of *Zosterops* on the offshore islands of the Great Barrier Reef. He was also well-known for his research on the biogeography of Australian rainforest birds. He authored and co-authored more than 150 published scientific papers and books' reviews; he also translated and edited several books and proceedings of scientific meetings.

In 1961, Dr. Kikkawa joined the Royal Australasian Ornithologists Union (RAOU), served as a member of its Taxonomic Committee and the editorial board of the RAOU journal *Emu*. He was the First Director of the CRC for Tropical Forest Ecology, north Queensland, a founding member of Queensland Ornithological Society (Birds Queensland), its President (1972–1975) and an Honorary Life Member as well as a President of Ecological Society of Australia (1974–1976). For his exceptional work on birds and bird community conservation in Australasia and Oceania, Professor Kikkawa was awarded with a Gold Medal, Ecological Society of Australia (1986), Order of Australia Medal (1999), D.L. Serventy Medal by Birds Australia (1999), and the 18th Yamashina Yoshimaro Award by Yamashina Institute for Ornithology (2014).

Dr. Kikkawa was active in IUFRO and participated in many IUFRO Congresses, starting from 1967 in Munich, Germany. He served as Deputy Coordinator of IUFRO Division 1 Forest Environment and Silviculture (1991–1995), organized several IUFRO meetings in Australia including a IUFRO–SPDC fundraising meeting, and chaired the BioREFOR–1997 organizing committee, editing its proceedings (1985, 1997). He has also represented IUFRO at various meetings including the 18th Session of the IUCN GA (1990) and others.

Professor Jiro Kikkawa passed away on 30 May 2016 in Brisbane at the age of 86. To honour his memory, Birds Queensland established the Jiro Kikkawa Research Award to recognize research that best supports and advances bird conservation. The Award was delivered in 2018 for the first time.

Selected research sources:

1. *The behaviour of animals*. Taplinger Pub. Co., New York. 223 p. (with M. J. Thorne). 1972.
2. Ecological association of birds and vegetation structure in wet tropical forests of Australia. *Austral Ecology*, December, 7(4): 325–345. 1982.
3. *Conservation Biology in Australia and Oceania*. C. Moritz and J. Kikkawa, eds. Chipping Norton, Surrey Beatty & Sons, 403 p. 1993.

Personal sources:

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2. Kazuhiro Eguchi. Personal communication (May–June 2019) at silasinkengesak16@gmail.com
3. Kikkawa N. Personal communications (May–June 2019) at kikkawa.naoko@gmail.com



MÁTYÁS, Csaba

Csaba Mátyás received the IUFRO Distinguished Service Award in 1998 for his pioneering work in ecological genetics of forest trees.

Csaba Mátyás was born on 15 July 1943 in Marosvásárhely, Hungary (now Târgu Mureș, Romania). He graduated in Forest Engineering in 1967 at the University of Technology, Dresden, Germany. In 1987, he received Dr. Sci. agr. degree from the Hungarian Academy of Sciences and was elected corresponding (2004), and full member (2010) of the Academy. He was an invited scientist at the University of Toronto, Canada (1984–1985), and Fulbright Professor at the Institute of Forest Genetics, Placerville, USA (1994–1995).

Csaba Mátyás began his scientific career in 1967 in the Hungarian Forest Research Institute (ERTI) as research fellow and head of the Forest Tree Seed Laboratory in Sárvár. In 1975 he took over the Kámon Arboretum for conifer breeding in Szombathely. In 1987, Dr. Mátyás was appointed as professor at Sopron University and served as head of the Institute of Plant Sciences and as vice rector for scientific affairs. In 1997, he founded the Institute of Environmental and Earth Sciences and in 2008 the Earth Science Center for Southeast Europe of NEESPI. Since 2013, he has been active as professor emeritus.

Dr. Mátyás' research interests are in the field of population and conservation genetics of forest trees, with a focus on the response of forest tree populations to changing climate and the limits to their potential to adapt. He played a decisive role in founding the Europe-wide conservation network of forest genetic resources (EUFORGEN). His approach of analyzing provenance tests to project effects of climate change on forest trees has been applied worldwide. He has published over 300 scientific and technical papers and books.

Starting in 1976, Dr. Mátyás served IUFRO as Subject Group leader, then Deputy Coordinator for Genetics in Division 2 (2000–2005). He organized the 4th World Consultation on Forest Genetics under the auspices of IUFRO and FAO in Beijing, China, in 1988.

Dr. Mátyás has been a member of numerous scientific committees in the field of forest genetics and conservation. In Hungary he served as member and chair of the Committee of Forestry Science, and of Plant Genetic Resources Conservation. He was founding editor of *Acta Silvatica & Lignaria Hungarica* and editorial board member of *Silvae Genetica*, *Forest Genetics*, *Annals of Forest Sciences* and other journals. Dr. Mátyás received in 2013 the Cross of Merit from the Hungarian Government for his scientific and educational activities.

Selected research sources:

1. *Genetics of Scots Pine*. Giertych, M. and C. Mátyás, eds., Vol.3. Elsevier Science, 280 p. 1991.
2. *Perspectives of Forest Genetics and Tree Breeding in a Changing World*. C. Mátyás, ed., IUFRO World Series, Vol. 6. IUFRO, Vienna, 158 p. 1997.
3. *Forest Genetics and Sustainability*. C. Mátyás, ed., Kluwer Acad. Publ., Dordrecht, 290 p. 1999.
4. *Erdészeti – természetvédelmi genetika*. C. Mátyás, Budapest, Mezőgazda Könyvkiadó Kft, 442 p. [Forest and conservation genetics]. 2002.
5. *Forests and Climate Change in Eastern Europe and Central Asia*. C. Mátyás, ed. FAO Forests and Climate Change Working Paper, Vol. 8, FAO, Rome, 189 p. 2010.

Personal sources:

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2. Mátyás C. Personal communications (April 2019).



STEEN, Harold (Pete) Karl

Harold Karl Steen received the IUFRO Distinguished Service Award in 1998 for his long and outstanding leadership of IUFRO's work in Forest History in Division 6.

Harold Steen was born on 12 May 1935, at Vashon, Washington, USA. He obtained all his degrees from the University of Washington in Seattle: B.Sc. (1957) in Forestry with major in Forest Management, M.F. (1962) in Forestry with major in Mensuration and Statistical Analysis and Ph.D. (1969) in Forestry with major in History of Conservation. He spent most of his professional career with the USDA Forest Service, first as a Forester at North Bend Washington (1957–1958), and then as Research Forester at the U.S. Forest and Range Experiment Station, Portland, Oregon (1962–1965) dealing mostly with field work in general forestry and forest fire research. After gaining his Ph.D. he moved to Durham, North Carolina, where in 1969 he began his 28-year long service at the Forest History Society, Inc. (FHS). He was appointed consecutively as Assistant Director (1969–1973), Associate Director for Research and Library Services (1973–1977), Acting Executive Director (1977–1978), and Executive Director/President (1978–1997). He also taught at the University of California, Santa Cruz, University of North Carolina, Duke University, and New Mexico State University.

Dr. Steen's major research interest has been in the history of forestry and related areas including forest management, forest policy and administration, forest sector development, biographies, forest research and conservation, wildlife and other topics. In parallel with his administrative duties, he edited the *Journal of Forest History* (1969–1972), as well as served as a member of numerous editorial and advisory boards of scientific journals, e.g., *Environmental Review* (1976–1986), *Journal of Environmental Education* (1973–1981), and various organizations including U.S. Department of Justice, Pinchot Institute of Conservation (1998–2004), Sierra Club History Committee (1976–1990), and societies, e.g., Society of American Foresters, where he has served as a Chair of various units on forest history since 1974.

As a Principal Investigator Dr. Steen worked on the projects resulting in milestone publications such as *The U.S. Forest Service: A History* (1st ed., 1976; 4th ed., 2004), *The Encyclopedia of American Forest and Conservation History* (1983) and *This Well Wooded Land* (1985). He authored, co-authored and edited more than 90 scientific papers, books, book chapters and book reviews, interviews, proceedings and reports. His achievements were recognized with a Distinguished Service Award by the American Forestry Association (1995), Distinguished Achievement Award, by the University of Washington College of Forest Resources Alumni Association (1996), Certificate of Appreciation by the USDA FS (1999), Special Commendation by U.S. Dept. of Justice (1999), and the SAF's Sir William Schlich Memorial Award (2000), to name just a few. Dr. Steen has been a longstanding IUFRO Officer serving as Deputy Coordinator of IUFRO Section on Forest History (1980–1986) and then Section Coordinator S6.07-00 Forest History (1986–1995). He participated and organized various meetings on forest history at IUFRO Congresses and national and international events.

Selected research sources:

1. *History of Forestry in America: An Overview*. U.S. Forest Service, 84 p. 1971.
2. *History of Sustained-Yield Forestry*. A Symposium: Western Forestry Center, Portland, OR, 18–19 Oct. 1983. H. K. Steen, gen. ed.; coordinated by the FHS for the IUFRO S6.07. Santa Cruz, CA. xviii, 470 p. 1984.
3. *The Origins of the National Forests: A Centennial Symposium*. H. K. Steen, ed. Durham, N.C.: FHS, 344 p. 1992.
4. *The Chiefs Remember: the Forest Service, 1952–2001*. Durham, N.C.: FHS, xv, 156 p. 2004.

Personal sources:

Steen H.K. Personal communications (May 2019) at psteen88001@gmail.com

TOMANIĆ, Simeun



Simeun Tomanić received the IUFRO Distinguished Service Award in 1998 for promotion of IUFRO's goals and contributions to forestry science at the national, regional and global level.

Simeun Tomanić was born on 1 February 1934 in Kožuhe, Yugoslavia. After finishing high school, he was a school teacher in Banja Luka (1953–1954), was on military service (1954–1955) and worked on breeding and protection of forests at the Forestry Directorate in Drvar (1955–1957). In 1962, he graduated, obtained his Ph.D. (1974) from the Forest Faculty, University of Zagreb and progressed from an Assistant (1962) to Associate Professor (1979) and Professor (1986) of the Department of Forestry Production Organization, being several times elected its Head. He spent a year as a visiting scholar at the Norwegian Forestry Research Institute in Vollebakk under supervision of Prof. Dr. Ivar Samset (1966–1967). Since 1995, Dr. Tomanić served as Head of the Institute for Organization and Economics of Forestry, University of Zagreb, until his retirement in 1999.

Dr. Tomanić began his research in 1962, with his major scientific interests being in the field of forestry works and techniques, organization, management and economics of forestry, occupational safety and sociology in the forestry sector. He authored and co-authored 84 scientific and 44 professional publications in Croatian, English, German and Russian. Dr. Tomanić was a member of many of the University of Zagreb's boards and committees, as well as many Croatian societies, including the Forestry Society, Ergonomic Society, Society for Promotion of Protection of People in Working and Living Environment, as well as being an outstanding member of the Croatian Academy of Forestry. From 1981 to 1984 he was Yugoslavia's delegate to the Joint FAO/ECE/ILO Committee of Forest Working Techniques and Training of Forest Workers. From 1989, he was an Editorial Board member of the *International Journal of Forest Engineering*, Canada.

Dr. Tomanić was active in IUFRO Division 3 for a long time. He attended five IUFRO World Congresses (Oslo 1976, Kyoto 1981, Ljubljana 1986, Montreal 1990, and Tampere 1995) and 19 study tours in 27 countries in Europe, Asia and America. He was directly involved in the preparations, organization and performance of the XVIII the IUFRO World Congress in Ljubljana. In addition, he was a speaker at the Division 3 plenary session, chair of the interdisciplinary scientific discussion, head of a 7-day post-congressional scientific excursion, and the author of several papers written in Croatian and English for the Congress. He served as Deputy Head (1981–1985), Head (1986–1990) of WG S3.04.01 Planning and control of forest works and Coordinator of IUFRO Unit S3.04 Planning and control of forest works, study work and payment of work in forestry (1991–1995). He was also a Member of the IUFRO International Council (1991–1995).

Professor Simeun Tomanić passed away on 9 October 2003 in Zagreb at the age of 69.

Selected research sources:

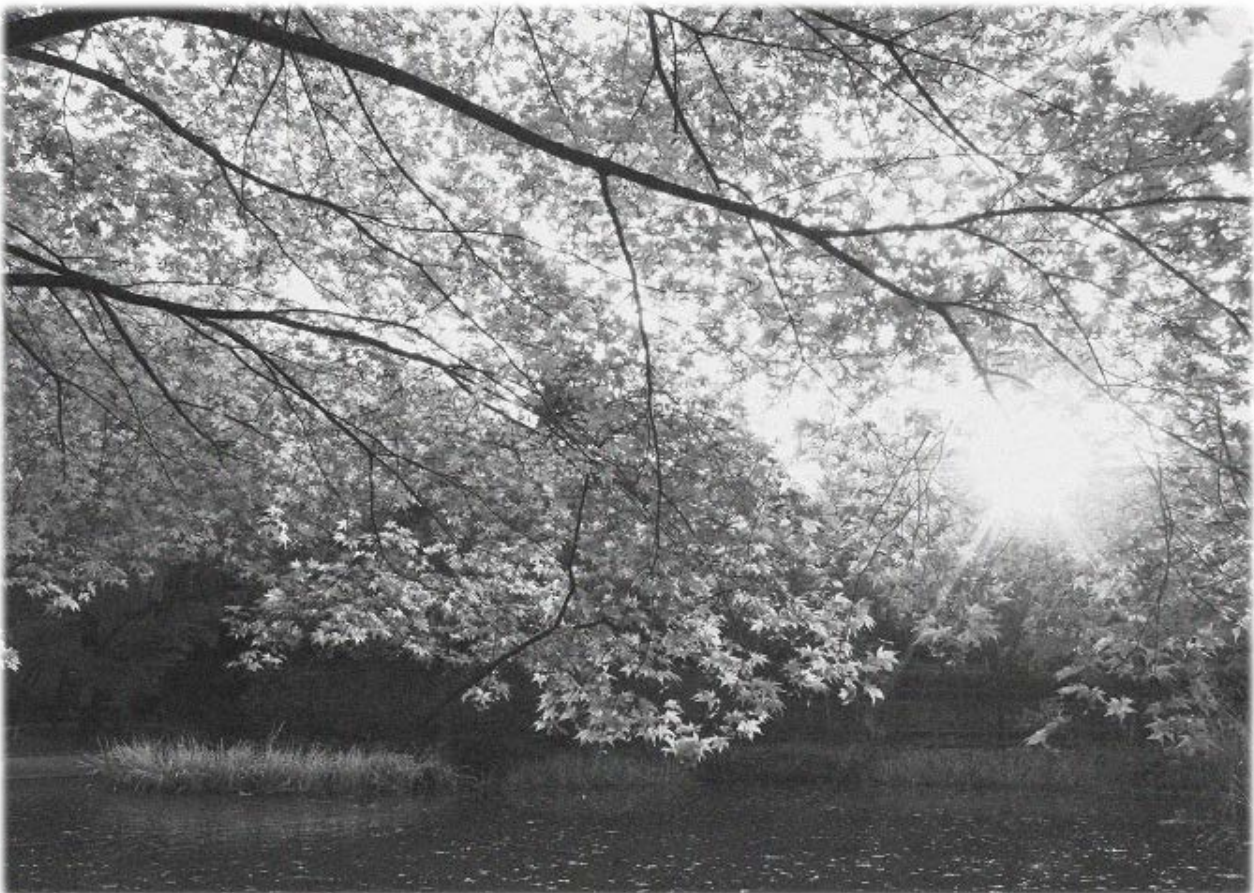
1. *Zajednička metoda mjerenja proizvodnosti rada*. Opće udruženje šumarstva, prerade drva i prometa SR Hrvatske, Zagreb, 43 S. (with M. Figurić). [A common method of measuring labor productivity / General Association of Forestry, Wood Processing and Transport. SR Croatia, Zagreb, 1983]. 1983.
2. Status of Forest Engineering and Management in the Forestry of Yugoslavia. *Proceedings of IUFRO Subject Area 3:04:00*. University College, Dept. of Forestry, Dublin, pp. 67–71. 1985.
3. Twenty Years of Forest Work Study in Yugoslavia. *IUFRO Symposium on the Measurement of Productivity in Forest Operations*, Thessaloniki, pp.41–54. 1988.

Personal sources:

1. URL: <https://www.sumari.hr/sumari/kart.asp?id=11758> (Tomanić S.) Retrieved 14.04.2019.
2. Tomanić C. Personal communications (April 2019) at cveta.tomanic@gmail.com

2000

<i>Ulrich AMMER</i>	<i>Germany</i>	<i>2000</i>
<i>Elias APUD</i>	<i>Chile</i>	<i>2000</i>
<i>Robin CROMER</i>	<i>Australia</i>	<i>2000</i>
<i>Walter EDER</i>	<i>Germany</i>	<i>2000</i>
<i>David G. EDWARDS</i>	<i>Canada</i>	<i>2000</i>
<i>Stephen B. HORSLEY</i>	<i>USA</i>	<i>2000</i>
<i>Hans JÖBSTL</i>	<i>Austria</i>	<i>2000</i>
<i>Fujio KOBAYASHI</i>	<i>Japan</i>	<i>2000</i>
<i>Veikko KOSKI</i>	<i>Finland</i>	<i>2000</i>
<i>F. Thomas LEDIG</i>	<i>USA</i>	<i>2000</i>
<i>Maurizio MERLO</i>	<i>Italy</i>	<i>2000</i>
<i>Abdul Rahim NIK</i>	<i>Malaysia</i>	<i>2000</i>
<i>Risto PÄIVINEN</i>	<i>Finland</i>	<i>2000</i>
<i>Martin PRICE</i>	<i>UK</i>	<i>2000</i>
<i>Jarmo SAARIKKO</i>	<i>Finland</i>	<i>2000</i>
<i>Walter SCHÖNENBERGER</i>	<i>Switzerland</i>	<i>2000</i>
<i>Robert SZARO</i>	<i>USA</i>	<i>2000</i>
<i>David WHITEHEAD</i>	<i>New Zealand</i>	<i>2000</i>





AMMER, Ulrich

Ulrich Ammer received the IUFRO Distinguished Service Award in 2000 for creating and managing IUFRO student excursion and chairmanship for forest recreation.

Ulrich Ammer was born on 28 January 1934 in Reutlingen, Germany. From 1953 he studied at the *Albert Ludwig University of Freiburg and graduated as a Dipl.-Ing. in Forestry (1957)*. After the practical training periods (1957–1960) and passing the State Forestry Examination, he began research at the Institute for Forest Botany, Ludwig-Maximilian University of Munich (1961–1963), from which he obtained his Ph.D. in *oecologiae publicae with suma cum laude (1963)*, and habilitated in Forest Sciences at the Faculty of Mathematics and Natural Sciences of the University of Freiburg (1969).

In 1963 Dr. Ammer began his career as a consultant for state development, landscape and recreation planning at the Baden-Württemberg *Landesforstverwaltung* (State Forestry Administration) Tübingen and worked in the Baden-Württemberg Ministry for Nutrition, Agriculture, Wine-growing and Forests in Stuttgart (1965–1970). He then was Director of the Forestry Department in Reutlingen (1970–1976) serving also as the Nature Conservation Officer for the County of Reutlingen. In 1976 the *Ludwig-Maximilians-Universität* appointed him Chair of the Department of Landscape Engineering (since 1992 – Institute for Land Use Planning and Nature Conservation). He was also appointed as Dean of the Faculty of Forest Sciences (1983–1985, 1993–1995) at the Ludwig-Maximilians-University in Munich. He also headed the Department of Land Use Planning and Nature Conservation at the Weihenstephan Science Center (1992–1999).

Dr. Ammer's research has focused on forest recreation and tourism, the contribution of forest management to nature conservation, biological engineering to stabilize the protection function of forests in the Alpine Region and remote sensing and landscape planning. He has authored and co-authored 257 scientific papers, book chapters and books. Prof. Ammer served as a member of the German Council for Landscape Management (from 1978), the Board of Trustees of the Bavarian Nature Conservation Fund (from 1988), the Supreme Conservation Advisory Council in Bavaria (from 1994), the German Forestry Association (1961), *Schutzgemeinschaft Deutscher Wald* – German Society of Forest Protection (2000–2013), Chairman of the Scientific Board of the Academy for Rural Development (since 1991), and others. Prof. Ammer was recognized with the Order of Merit of the Federal Republic of Germany, Cross of Merit 1st Class, Bavarian State Medal for Special Services to the Environment, and Honorary Doctorate of the University of Freiburg. In 1981–2000, Dr. Ammer served as Leader of IUFRO Division 6 unit S6.01-02 Planning and management and S6.01-00 on Forest recreation, landscape and nature conservation.

Selected research sources:

3. *Freizeit und Natur – Probleme und Lösungsmöglichkeiten einer ökologisch verträglichen Freizeitnutzung*. Pareys studentexte 72. Parey, 228 S. (with U. Pröbstl). [Leisure and Nature – Problems and solutions for ecologically compatible leisure]. 1991.
4. Konzepte der Landnutzung. *Forstwissenschaftliches Centralblatt* 114: 107–125 (with R. Detsch and U. Schultz). [Concepts of Land Use]. 1995.
5. Vergleichende Waldökologische Untersuchungen in Naturwaldreservaten und Wirtschaftswäldern unterschiedlicher naturnähe in Mittelschwaben – Schlussfolgerungen für die forstliche Praxis. *Berichte aus der bayerischen Landesanstalt für Wald und Forstwirtschaft* 33: 50–60. [Comparative forest ecological investigations in natural forest reserves and commercial forests of different naturalness in central Swabia – conclusions for the forestry practice]. 2001.

Personal sources:

1. Ammer U. Personal communications (June 2019) at Ulrich.Ammer@lrz.tu-muenchen.de
2. Ammer M. Personal communications (June 2019) at Markus.Ammer@t-online.de



APUD Simón, Elías Salvador

Elías Salvador Apud Simón received the IUFRO Distinguished Service Award in 2000 for his contribution to the international development of Forest Ergonomics.

Elias Apud S. was born on 12 September 1942 in Santiago, Chile. He earned his Diploma in Ergonomics (1971) at the *Arbetsmedicinska Institutet* (Institute of Occupational Medicine) in Stockholm, Sweden, and M.Sc. (1976) and Ph.D. (1983) in Ergonomics at the University of Loughborough, UK. He began his professional career as a Work Physiologist at the Institute of Occupational Health. His teaching service began in 1972 as a lecturer at the University of Concepción (in Chile) where he progressed to full Professor (1985) and Head of the Department of Ergonomics in the Faculty of Biological Sciences. He introduced courses for undergraduate students of Forest and Industrial Engineering, and for students of different Health disciplines.

Dr. Apud's research interests have been in the field of Ergonomics, specifically in the study of human physiology of work and adaptation to heavy physical work, anthropometry and biomechanics, ergonomics and sustainability, and living conditions in forest camps. Over the last 25 years, he has searched for appropriate technologies to compare the efficiency of work with reasonable physical effort. He has authored and co-authored more than 100 papers and he has given about 150 scientific presentations nationally and internationally, including many international articles and several publications for ILO, as well as a chapter in the three-volume Encyclopedia of Occupational Health and Safety.

Over the last forty years, Dr. Apud promoted Ergonomics in the form of talks, short courses and seminars for different groups of people, ranging from workers to CEOs. In addition, he was an active member of a group promoting Ergonomics in developing countries, leading and lecturing in the six-week courses on Introduction to Ergonomics at the Wageningen University, the Netherlands (1980–1990s). He also taught forestry and agricultural professionals in Asia, Africa and Latin America, as well as acting as an external consultant to the ILO, FAO and the Swedish International Development Agency (SIDA). At present, he is Director of the International MSc in Ergonomics at the University of Concepcion. He collaborates with many Universities, including *Tecnologica Nacional* and Buenos Aires in Argentina, *Cayetano Heredia* in Perú, *Gualajara* in Mexico and *SEK* in Ecuador.

Dr. Apud is a member of the Chilean Society of Physiological Sciences and of the Chilean Ergonomics Society. He has been recognized by the Chilean Society of Sports Medicine (1968, 1969, 1986), by the Medical Society of Santiago (1973), the City of Concepción (1995), the Latin American Safety and Health Association (2005), the Latin American Union of Ergonomics (2007), the International Ergonomics Association (2009). by the Chilean Society of Ergonomics with the *Georg Bialorskorsky* prize (2009), the Chilean Wood Corporation with *Condor de los Vientos* award (2015), and by the Human Factor Ergonomics Society of the USA with the *Hal Hendrick Award* (2017). He was honored also with the *John Bloomfield–1990* award (1991). Dr. Apud has served as Coordinator of IUFRO unit 3.07.01 Physical Work Environment from 1982 to 2000.

Selected research sources:

1. *Guide-lines on Ergonomic Study in Forestry*. Prepared for research workers in developing countries. E. Apud, L. Bostrand, I.D. Mobbs and B. Strehlke, eds. Int'l Labour Office (ILO), Geneva, 241 p. 1989.
2. *Manual de Ergonomía Forestal*. FONDEF, Concepción, Chile, 493 p. (with M. Gutierrez, S. Lagos, F. Maureira, F. Meyer, and J. Espinoza). [Manual of Forest Ergonomics]. 1999.

Personal sources:

Apud E. Personal communications (June 2019) at eapud@udec.cl



CROMER, Robin Neil

Robin Neil Cromer received the IUFRO Distinguished Service Award in 2000 for his contribution to IUFRO in many different capacities.

Robin Cromer was born on 19 May 1940 in Sydney, Australia. He earned his B.Sc. in Forestry (1959) at the University of New England (1959), Dip.For. with Dist. (1961) at the Australian Forestry School in Canberra, M.Sc. in Forestry (1969), external, at the University of Melbourne, and M. Forest Resources (1974) at the University of Washington, Seattle, USA.

Mr. Cromer spent most of his career with CSIRO, starting as an Experimental Scientist at the Division of Plant Industry (1962–1964). He then spent 12 years in private enterprise as Senior Research Forester at APM Forests Pty. Ltd. (1964–1976). Appointed Senior Research Scientist (1980) at CSIRO Division of Forest Research (1976–1981) in Gippsland, Victoria, he transferred to the (renamed) CSIRO Division of Forestry in Canberra, where he was then appointed as Principal Research Scientist (1985) and as Principal Research Scientist and Program Manager at CSIRO Division of Forestry in Hobart (1992–1997). He also spent a year overseas studying for a Master of Forest Resources at the University of Washington, Seattle, USA.

Mr. Cromer's research interests have been in the field of alpine ecology, increasing yield of conifer plantations, and irrigation of *Pinus radiata* with wastewater. He has also studied the nutrition, physiology and increasing productivity of eucalypt plantations. He led the Sub-tropical Eucalypt Plantation Program (1987–1990) supported by Shell as well as the Hardwood Plantations Program. He has been invited to write chapters for books on the establishment and nutrition of plantations in Australia (1978, 1990) and overseas (1989) and a major review of current knowledge of the genus *Eucalyptus* (1997). He has published over 100 scientific papers, book chapters, books and reports.

Mr. Cromer was an active member of the Institute of Foresters of Australia.

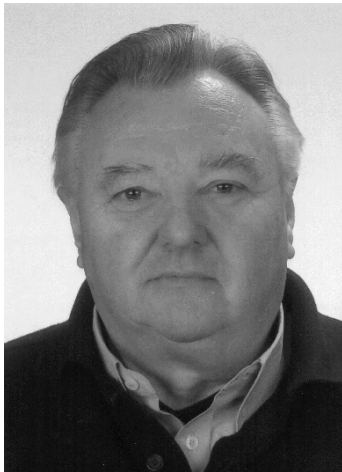
Mr. Cromer has been an active IUFRO Officer. He established and led IUFRO WP P2.02-01 Eucalypts (1979–1990), served as Deputy Chair PG P2.02-00 Plantation forestry with fast-growing trees (1991–1995) and was Coordinator of IUFRO unit 2.08.00 Hardwood improvement, culture and genetic resources (1996–2000). He organized and chaired several major successful international conferences for IUFRO including IUFRO symposia on Genetic Improvement and Production of Fast-growing Tree Species (Brazil, 1980), on Frost Resistant Eucalypts (France, 1983), and on Management of Water and Nutrient Relations to Increase Forest Growth (Australia, 1987) to name just a few.

Selected research sources:

1. Stand establishment. In: W. E. Hillis and A. G. Brown, eds. *Eucalypts for Wood Production*. CSIRO, Melbourne, pp. 81–135 (with K. W. Cremer and R. G. Florence). 1978.
2. Fertilizing. In: K. W. Cremer, ed. *Trees for Rural Australia*. Inkata Press, pp. 154–160. 1990.
3. Response of *Eucalyptus deglupta* to phosphate fertilizer. *J. Trop. For. Sci.* 5(1): 74–89 (with K. C. Tan, E. R. Williams and W. H. M. Rawlins). 1993.
4. The Eucalypts. In: F. T. Last, ed. *Tree Crop Ecosystems*, Vol. 19 of *Ecosystems of the World*, Elsevier, Amsterdam, 492 p. (with K. G. Eldridge). 2001.

Personal sources:

Cromer R. N. Personal communications (May 2019) at robinandjill@bigblue.net.au



EDER, Walter

Walter Eder received the IUFRO Distinguished Service Award in 2000 for his leadership of IUFRO Working Party 1.05-16 Ecology and Silviculture of European Silver Fir.

Walter Eder was born on 12 January 1942 in Zweibrücken, Rhineland-Palatinate, Germany. After finishing the old-linguistic Herzog-Wolfgang gymnasium in Zweibrücken, he became a candidate for the higher forestry service in the State Forestry Administration of Rhineland-Palatinate, with a practical year at the Forestry Office Hinterweidenthal-Ost in the Palatinate Forest. From 1962, he studied forest sciences at the Universities of Freiburg im Breisgau and Göttingen, and in 1966, he obtained his Diploma of Forestry Management. After a 3-year trainee period at the State Forestry Administration of Rhineland-Palatinate and the 2nd State Examination, in 1969 he was transferred as a Research Assistant to the Ministry of Agriculture, Viticulture and Forestry of the State of Rhineland-Palatinate in Mainz. In parallel, he enrolled at the University of Göttingen (1976), and obtained his Ph.D. in Forestry Administration (1980).

In December 1979, Dr. Eder was appointed as a Director of the Kirchheimbolanden Forestry District, where he served until June 1985. As Director, he was appointed Head of Division of the Department of Silviculture, Forest Management and Experimentation and returned to the aforementioned Ministry, where he remained as Ministerial Council until his retirement from the state service in February 2004. During this period one of his key achievements was establishing the Forest Research Institute of Rhineland-Palatinate, which later was renamed to Research Institute of Forest Ecology and Forestry, as well as introducing ecological and natural silviculture, and the establishment of approximately 500 silvicultural experimental forest areas and the creation of new stand productivity sections of forest management planning.

Dr. Eder's major research interests are in the field of forest ecology and silviculture, especially in growing and treating forest stands to increase their productivity. He produced 72 publications and lectures. Dr. Eder was chairman of the Silviculture Section, German Association of Forestry Research Institutes for 7 years (1990–1997). He was awarded the Medal of Merit for Scientific Cooperation of the Sofia Forestry University, Bulgaria (1994) and the Medal of Merit of the State of Rhineland-Palatinate (2010).

Dr. Eder was elected as Coordinator of IUFRO WP 1.05-16 Ecology and Silviculture of European Silver Fir in 1990 at the 6th Symposium of this Working Party in Zagreb, Croatia. He has been in contact with forest scientists, research institutes and universities in Germany and all over Europe, as well as in the USA, allowing him together with the local authorities to organize five consecutive Symposia (from the 7th to the 11th). They were held in Altensteig, Germany (1994), Jundola, Bulgaria (1996), Skopje, Macedonia (2000), Trippstadt, Germany (2002), and Poiana Brasov, Romania (2005), although he had officially ended his chairmanship at the 10th Symposium 2002.

Selected research sources (first author, publications in German):

1. Selected results from seven IUFRO symposia and conclusion for the preservation and promotion of Silver fir in Central Europe. Silver fir Symposium Schwarzburg, Thuringia. *Landesanstalt fuer Wald und Forstwirtschaft, Issue 11*. 1996.
2. Results of Silver fir (*Abies alba*, Mill.) Provenance in IUFRO test in Osburg (Germany). *Proceedings of the 10th Silver fir Symposium, Trippstadt* (with W. D. Maurer and P. H. Dong). 2003.
3. Stand produktivity panels for the forest management. *Mitt. from the FAWF* (with P. H. Dong). 2003.

Personal sources:

Eder W. Personal communications (October 2019) at dr.eder.walter@web.de



EDWARDS, David George W.

David George W. Edwards received the IUFRO Distinguished Service Award in 2000 for his outstanding and tireless movement within IUFRO and the international community of forestry research.

George Edwards was born in February 1937 in Bloxwich, England. He earned his B.Sc. in Forestry at the University of Aberdeen, Scotland (1959), and M.Sc. (1963) and Ph.D. (1969) in Forestry at the University of Washington, USA. In 1968, he began his career as a Research Scientist at the Pacific Forestry Centre, Victoria, B.C., Canada, where he worked until retirement in 1996. After retiring from the Canadian Forest Service, he became the proprietor of FTB Forest Tree Beginnings,

Dr. Edwards's primary research interests were in the field of germination, genetic control, seeds and cone prediction, collection and processing, seed physiology and storage. He authored and co-authored many research papers, book chapters and books as well as compiled and edited numerous manuals, directories and proceedings. He was active in various international and national professional societies, including International Seed Testing Association, being for over 30 years a member of its Forest Tree and Shrub Seed Committee and a Chair of the WG Germination of temperate species seed (1980–1983) as well as several other associations. He was an Adjunct Professor in the Department of Forest Sciences of the University of British Columbia. He served as Official representative of the Canadian Designated Authority for the scheme for certification of forest reproductive materials moving in international trade at the OECD (1983–1989).

Dr. Edwards is a long-term contributor in the IUFRO seed research initiative since the mid-1970s when he compiled and edited *World Directory of Tree Seed Workers* (1976) published by the Canadian Forestry Service, Victoria, B.C., on behalf of IUFRO Working Party S2.01.06 Seed Problems. In 1992, he was awarded the Distinguished Leadership Award, Extraordinary Service to Forest Tree Seed Science, American Biographical Institute. He then served as a Project Group P2.04.00 Leader (1991–1995) and Coordinator of Research Group 2.09.00 Seed Physiology and Technology (1996–2000). He put a lot of time into publishing the PG Newsletter "Seed Problems". Since 1991, he organized and was a leader of many successful international Symposia in Victoria, BC, Canada, in Thailand, Burkina Faso, India and Dominican Republic. He has also contributed to the organization of IUFRO 2000 in Malaysia.

Selected research sources:

1. *World Directory of Tree Seed Workers*. D. G. W. Edwards, comp. and ed. Canadian FS/CND. x, 133 p. 1976.
2. *Methods and Procedures for Testing Tree Seeds in Canada*. Canadian Forestry Service, Government of Canada, 65 p. 1987.
3. *Dormancy and Barriers to Germination*. D. G. W. Edwards, comp. and ed. Proc. Intl. Symp. IUFRO Project Group P2.04-00 (Seed Problems). Victoria, BC, Canada, April 23–26, 1991. Forestry Canada, Pacific Forestry Centre, Victoria, BC. 153 p. 1993.
4. *Seed and Nursery Technology of Forest Trees*. D. G. W. Edwards, S. C. Naithani, eds. New Age Intl. Publishers. New Delhi. x, 318 p. 1999.
5. Genetic variation in germination attributes and response to seed accelerated aging in western hemlock. *Seed Technology*, 26 (1): 38–50 (with Y. A. El-Kassaby and A. Benowicz). 2004.

Personal sources:

1. Edwards D. G. W. Personal communications (September–December 2019 and June 2020) at de4757@telus.net
2. Edwards, Ewan. Personal communication (June 2020) at e@skwayr.com



HORSLEY, Stephen Braithwaite

Stephen Briathwaite Horsley received the IUFRO Distinguished Service Award in 2000 for his long-term service and contributions to further advancing of IUFRO Division 2.

Stephen Horsley was born on 4 March 1943 in Camden, New Jersey, USA. He earned his B.Sc. in Forestry (1965) at School of Forest Resources, Pennsylvania State University, and respectively, M.Sc. (1968) and Ph.D. in Plant Physiology (1970) at the Department of Forestry and Wildlife Management, University of Massachusetts at Amherst. Since 1972, Dr. Horsley has worked as a Research Plant Physiologist at the USDA FS Northeastern Research Station's laboratory (since 1973 in Warren, PA), until his retirement in 2007 as Research Plant Physiologist Emeritus. In parallel to his duties at the Station, he holds Adjunct Professor positions at the School of Forest Resources at Penn State and at the SUNY College of Environmental Science and Forestry.

Dr. Horsley research interests have been in the field of forest regeneration, including plant–plant and herbivore–plant interference relationships, methods of vegetation management, forest soils, deer management, and, generally, ecological history of the Allegheny Plateau in Pennsylvania. Most recently, as a member of a collaborative team, he studied sugar maple ecology and health, and the factors causing sugar maple decline in Pennsylvania. He authored and co-authored 50 scientific articles, book chapters, books and reports as well as outreach papers. Dr. Horsley is a member of Ecological Society of America and Society of American Foresters, in which he has served as national chairman of the Physiology Working Group. He was as an Associate Editor of *Forest Science* and of the *Canadian Journal of Forest Research*. He has been recognized with several honours and awards including the Barrington Moore Memorial Award by the Society of American Foresters (2006) and Scientist Emeritus by USDA Forest Service, Northern Research Station (2007).

Dr. Horsley has long-term collaboration with IUFRO. Led by him, WP 8 World Directory of Tree Physiology Workers (Division 2 Subject Group on Physiology) prepared over 200 pages *International Directory of Woody Plant Physiologists*, which he edited with C.A. Weldon and published in December 1989. He also served as Coordinator of various units in IUFRO Division 2 Physiology, Genetics and Protection (1991–2005).

Selected research sources:

1. Control of understory vegetation in Allegheny hardwood stands with Oust. *North. J. Appl. For.* 5(4): 261–262. 1988.
2. Mechanisms of interference between hayscented fern and black cherry. *Can. J. For. Res.* 23: 2059–2069. 1993.
3. *Sugar maple ecology and health: Proceedings of an international symposium*. Horsley, S. B., Long, R. P. eds. USDA For. Serv. Gen. Tech. Rep. NE–261, 120 p. 1999.
4. *Managing white-tailed deer in forest habitat from an ecosystem perspective: Pennsylvania case study*. Report by the Deer Management Forum for Audubon Pennsylvania and Pennsylvania Habitat Alliance, Harrisburg, xix + 340pp. (Multi-authored publication). 2005.
5. Linking environmental gradients, species composition, and vegetation indicators of sugar maple health in the northeastern United States. *Can. J. For. Res.* 38(7): 1761–1774 (with S. W. Bailey, T. E. Ristau, R. P. Long, R. A. Hallett). 2008.

Personal sources:

1. URL: <https://www.fs.fed.us/ne/warren/aboutus/horsley.htm> Retrieved 09.05.2019.
2. Horsley S. B. Personal communications (May 2019) at shorsley@fs.fed.us



JÖBSTL, Hans

Hans Jöbstl received the IUFRO Distinguished Service Award in 2000 for his outstanding long-term leadership and input to IUFRO research on managerial economics, and managerial, social and environmental accounting in forestry.

Hans Jöbstl was born on 13 June 1944 in Limberg/Carinthia, Austria. After finishing St. Paul Stiftsgymnasium (1962) and military service (1963), he attended the Universität für Bodenkultur (BOKU, University of Natural Resources and Life Sciences) in Vienna and became Dipl. Ing. in Forestry (1968) and in parallel he attended courses at the Viennese University of Commerce. He obtained his D.Sc. in Business Economics from BOKU in 1973, passed the Civil Service Examination for Forestry Degree Graduates at the Ministry for Agriculture and Forestry (1974), and Habilitation in Managerial Economics in Forestry and Timber Industry (1977). He began his career as an Assistant Professor (1968) and progressed to Associate Professor (1977) and Professor for Managerial Economics of the Forest Sector (1979) at BOKU's Institute of Forest Economics and Forest Politics. From 1980, Professor Jöbstl served as Head of the Division for Accounting and Forest Marketing until his retirement in 2010. In the 1990s, he was also a Senior Lecturer at the University of Trento, Italy, and delivered several guest-lectures at foreign universities, e.g., Czech Republic, Germany, Hungary, and Ukraine. He served as a consultant to forest enterprises, government and associations.

Dr. Jöbstl has focused his research in the fields of financial and managerial accounting, planning models, forest trade and marketing, business administration, management planning, and taxation, forest assets valuation, and the conception and implementation of the Forest Management Class Simulation Model (FOBSI) as well as cost accounting systems for forest holdings. He pioneered the adaptation of new modelling and O.R. techniques and other results of his research findings into forestry practice and was active in introducing/developing and holding courses on Accounting for students and forest professionals (managers and owners). He supervised over 35 research projects nationally, and participated in several EU-projects. He has authored and co-authored more than 200 scientific publications including 18 books, and made numerous presentations at scientific congresses, symposia, seminars and other meetings.

Dr. Jöbstl has been a member of several professional societies and organizations. He has actively collaborated in IUFRO since 1973, and for a long time held leading positions as Co-Chairman (1985–1989) and Chairman (1989–1995 and 2003–2006) of IUFRO WP Managerial Economics in Forestry. In 1995, he founded the interdivisionally designed IUFRO RG Managerial, Social and Environmental Accounting and took leadership as its Coordinator for the next 15 years. During 1985–2010, under his leadership, the Groups organized 30 scientific and practical meetings in many – mostly European - countries and built East-West contacts within the Union.

Selected research sources:

1. *Ein Modell des Forstbetriebes. Neue Ansätze und Techniken für die lang- und mittelfristige Planung.* Österr. Agrarverlag, Wien, 208 S. [New Approaches and Techniques for Long- and Medium-term Planning of Forest Holdings]. 1973.
2. *Managerial Economics in Forestry – Reader.* Österr. Agrarverlag, Vienna, 118 p. 1995.
3. *Waldvermögensbewertung – Forstliche Erfolgsrechnung.* H. Jöbstl, ed. Proc. IUFRO Workshop in Salzburg, 11–12.06.1999. BOKU, 178 p. [Forest Asset Valuation–Forestry Performance Accounting]. 2000.
4. *Kosten- und Leistungsrechnung in Forstbetrieben. Betriebsabrechnung für die Praxis.* 3. Auflage, Österr. Agrarverlag, Wien, 212 S. [Cost and Performance Accounting in Forest Estates. 3th revised edition]. 2000

Personal sources:

Jöbstl H. Personal communications (May–June 2019) at hans.joebstl@boku.ac.at



KOBAYASHI, Fujio

Fujio Kobayashi received the IUFRO Distinguished Service Award in 2000 for promoting and enhancing IUFRO presence in Asia-Pacific region.

Fujio Kobayashi [小林 富士雄]⁴² was born on 1 April 1932 in Nagano prefecture, Japan. He graduated from the University of Tokyo (1957) and he began working at the Forestry and Forest Products Research Institute (FFPRI) in Tsukuba/Ibaraki, Japan, where he spent 34 years of his professional career. In 1979, he obtained his Ph.D. in Agriculture from Department of Forestry, Faculty of Agriculture at the University of Tokyo. In 1976, he was appointed as Director of the Division of Insect Research, and then he has steadily progressed to Director General of the FFPRI's Kansai Research Center (1985), Director of the Department of Research Coordination (1986), Deputy Director General (1988), and 6 months later in the same years – Director General (1988). In 1991, Dr. Kobayashi retired but remained active as President of the Japanese Forest Society (1990–1992), as Consultant at the Japan Forest Technology Association (1991–2005), and President (2001–2008) and then President Emeritus (since 2007) of the Japan Forestry Association. He then served as President of the Japanese Forest Road Safety Association (2009–2013), and the Forest Chemicals Association of Japan (2009–2012).

Dr. Kobayashi is a dedicated entomologist who has greatly contributed to the systematization of destructive forest insects, to the control of pine wilt disease insects and the development of preventative methods and to wood-injuring insects in Japanese cedar and cypress plantations. Lately his interest has shifted to learning about world culture and history, and to the introduction of forest management into education in foreign countries. He has authored and co-authored more than 100 publications including several books in Japanese.

Dr. Kobayashi has been an active collaborator in IUFRO Division 2 as well as supporting fundraising for IUFRO–SPDC. He worked with the FAO and the World Bank at the 1981 Kyoto Congress to promote forest research in developing countries, as well as later in 1990. He was involved with FORSPA at the FAO Forestry meeting in Bangkok, Thailand (August 1989), that later produced APAFRI as an Asian Chapter of IUFRO. He chaired the organizing committees of several national and international meetings held under the auspices of IUFRO, including Bio–Refor (Biotechnology Assisted Reforestation) in 1991.

Dr. Fujio Kobayashi passed away on 5 December 2020 in Tokyo after a long illness.

Selected research sources:

1. The Japanese pine sawyer beetle as the vector of pine wilt disease. *Ann. Rev. Entomol.* 29: 115–135 (with A. Yamane, T. Ikeda). 1984.
2. The Japanese Pine Sawyer. Chapter 21, p. 431–454. In: Berryman A. A., ed. *Dynamics of Forest Insect Populations. Population Ecology (Theory and Application)*. Springer, Boston, MA. 1988.
3. Bio–Refor International Meeting "Rehabilitation of Degraded Tropical Forest Land". *熱帯林業 [Tropical Forestry]* 25: 60–71 (with K. Suzuki and T. Mori). (In Japanese). 1992.
4. チェコとその林業をめぐる話題—分離独立, 民営化, 森林管理, そして森林衰退 [Topics on the Czech Republic and its forestry: Separating independence, privatization, forest management, and forest decline]. *J. of the Japanese Forest Society* 15: 48–54. (in Japanese). 1995.

Personal sources:

1. Sumire Williams-Kawamoto. Personal communications (May 2019) at iufro-j@ffpri.affrc.go.jp
2. Kobayashi F. Personal communications (May–June 2019) by letters and phones.

⁴² Kobayashi - 小林 - small forest.



KOSKI, Veikko

Veikko Koski received the IUFRO Distinguished Service Award in 2000 for his long-term service and contributions to the advancement of IUFRO Division 2.

Veikko Koski was born on 21 April 1937 in Helsinki, Finland. He obtained his B.Sc. (1960) and M.Sc. (1961) in Biology with a major in Genetics from the University of Helsinki, and Ph.D. in Genetics (1970) from the University of Helsinki. He spent almost his entire professional career at the Finnish Forest Research Institute (Metla), where he started as a Research Assistant (1959), and progressed to Researcher (1962) at Metla, and Professor of Forest Genetics (1990). In 2000 Dr. Koski retired after 41 years at Metla. In parallel, Dr. Koski taught at the University of Helsinki (1972–2004) and the University of Joensuu (1984–2004) as Special lecturer (Docent).

Dr. Koski's research was focused on the genetic system of forest tree species, and the biological basis of tree breeding. His scope extended from cytology to population and quantitative genetics, provenance studies, influence of growing environment of species of different origin, *in situ* conservation of forest gene resources, genetic diversity of Norway spruce, and tree physiology. He authored and co-authored more than 100 research and technical papers and reports, book chapters and books.

Dr. Koski has been involved in many international research projects and programs including the European Forest Genetic Resources Programme (EFORGEN), UN FAO, and International Panel on Climate Change (IPCC). He was a chair of the IPGRI's *Picea abies* Network. His connections and co-operation among Nordic countries was significant. A contract for scientific and technical co-operation with the former USSR provided an opportunity to become acquainted with the extensive boreal forest, which widened his understanding of geographical variability.

Dr. Koski served as Coordinator of IUFRO WP S2.04.02 Breeding theory and progeny testing (1991–1995), Deputy Coordinator of IUFRO SG 2.04.00 Genetics (1996–2000) and Task Force "Management and Conservation of Forest Gene Resources" (1996–2000) that resulted in the assessment of the global state of research on the diversity of forest tree genetics. Dr. Koski actively participated in the IUFRO Congress in Tampere also as a leader of the 5-day study tour #7 – Genetic resources and forest regeneration material. During his term at IUFRO, he organized and co-organized many research meetings, seminars and workshops.

Selected research sources

1. A Study on Pollen Dispersal as a Mechanism of Gene Flow in Conifers. *Commun. Inst. For. Fenn.* 70.4: 1–78. 1970.
2. Tuloksia monivuotisista kukinnan ja siemensadon määrän mittauksista metsäpuilla. *Folia Forestalia* 364: 1–60 (with R. Tallqvist). [Results of Long-Time Measurements of the Quantity of the Flowering and Seed Crop of Forest Trees]. 1978.
3. On self-pollination, genetic load, and subsequent in breeding in some conifers. *Commun. Inst. For. Fenn.* 78, 1–42. 1973.
4. Quantified standards for regional clonal seed orchards. In: *Forest Genetic Resources Information 11*. FAO UN, Rome. <http://www.fao.org/3/p8760e/P8760E04.htm#ch4> 1982. Retrieved 25.06.2019.
5. Timing of growth cessation in relation to the variations in the growing season. In: P. M. A. Tigerstedt, P. Puttonen and V. Koski, eds. *Crop Physiology of Forest Trees*. Helsinki Univ. Press, pp. 167–193. 1985.
6. Genetic Systems of Forest Trees. In: *Genetics and Genetic Resources*. Elsevier, pp. 175–182. 2004.

Personal sources:

Koski V. Personal communications (July 2019) at: koskiveikko7@gmail.com



LEDIG, F. Thomas (Tom)

F. Thomas Ledig received the IUFRO Distinguished Service Award in 2000 in recognition of his outstanding contribution to the publication of the World Directory of Forest Geneticists and Tree Breeders.

Tom Ledig was born on 13 August 1938 in Dover, New Jersey, USA. He received his B.Sc. in Plant Science (1962) from Rutgers University, and his M.Sc. in Genetics (1965) and Ph.D. in Genetics (1967) both from North Carolina State University. He was a member of faculty at Yale University's School of Forestry and Environmental Studies (F&ES) from 1967–1981, working his way up to becoming a full professor and member of the F&ES Board of Permanent Officers. In 1979, Dr. Ledig was appointed Director of the Institute of Forest Genetics, USDA Forest Service, Pacific Southwest Research Station, Berkeley and Placerville, CA, where he served until his retirement as Senior Scientist in 2008. Meanwhile, he continued his research and teaching as an Adjunct Professor at the University of California–Davis.

Dr. Ledig's research interests were in the areas of tree physiology, forest ecology, conservation biology, genetic diversity, provenance trials, and the effect of climate change on conifer species. He authored and co-authored over 135 scientific publications in these fields. As a high level expert on forest genetics and conservation, Dr. Ledig was invited by international organizations and national agencies to conduct research, advise, and identify best management practices throughout the USA as well as in Australia, Belgium, Canada, France, Hungary, India, Italy, Kenya, Korea, Luxembourg, Mexico, Morocco, Portugal, Scotland, Spain, Sweden, Turkey, and Vietnam. He served for many years as Secretary of the Forest Genetic Resources Working Group of the FAO's North American Forest Commission (NAFC).

Dr. Ledig received many honors and awards for his research, education, administration, and international service. Among them were the Society of American Foresters, Barrington Moore Memorial Award for outstanding achievement in biological research (1992), Fellowship in the AAAS (2002), a special award from *La Universidad Autónoma Agraria Antonio Narro*, Saltillo, Mexico (2009), and two FAO NAFC awards (2008 and 2010).

Dr. Ledig actively participated in IUFRO Division 2 Physiology and Genetics, serving as Coordinator of IUFRO WP 2.04.09 on the World Directory of Forest Geneticists and Tree Breeders (1995–1998). The Directory listed more than 1800 names from 86 countries and was a collaborative project of the FAO's North American Forest Commission and IUFRO.

Dr. F. Thomas Ledig passed away on 20 May 2015 in Vallejo, CA, at 76 years old.

Selected research sources:

1. *The conservation of genetic diversity: the road to La Trinidad*. The Shaffer Lectureship in Forest Science. Vancouver, British Columbia, 18 p. 1988.
2. *World Directory of Forest Geneticists and Tree Breeders*. Ledig, F. T. and Neale, D. B., compilers. Gen. Tech. Rep. PSW-GTR-170. Albany, CA: PSWRS, USDA FS, 189 p. 1998.
3. Postglacial migration and adaptation for dispersal in pitch pine (*Pinaceae*). *Amer. J. Bot.* 102(12): 2074–2091. 2015.

Personal sources:

1. Palmberg C. In Memoriam: Dr. F. Thomas (Tom) Ledig, 13 August 1938 to 20 May 2015. http://forestry.fao.msgfocus.com/files/amf_fao/project_59/May_2015/Tom_Ledig_Obituary_-_inFO_news_30-04June.pdf Retrieved 01.04.2019.
2. Lux L. Personal communications (May 2019) at lindalux100@gmail.com



MERLO, Maurizio

Maurizio Merlo received the IUFRO Distinguished Service Award in 2000 for his outstanding contributions in bringing forest economists of the Mediterranean countries and Latin America to IUFRO.

Maurizio Merlo was born on 22 September 1944 in Vittorio Veneto, Italy. He graduated with a Diploma in Agriculture from Technical College in Conegliano (1964) and obtained his M.Sc. in Agriculture (Hons) from the University of Padova (1970) and Ph.D. in Land and Environmental Economics from Wye College, London University (1978). He began his professional career as an officer in the National Service (1964–1965), and then served as an Assistant Professor (1971–1974), Lecturer (1978), Associate Professor (1981), and Professor of Forestry and Environmental Economics and Policy (1985) at the Faculty of Agriculture and Forestry, Padova University. He was Dean of Forestry courses (1990–1995), and Dean of the Course in Wood Technology and Industry (1995–1997; 2001–2003) there, and a Coordinator of the Ph.D. Forestry Programmes for the University of Padova, Trento, and Parma (1991–1994). He was Visiting Professor of Cuyo University, Argentina (1989) and the Mediterranean Centre, Spain (1991–1996, 2000–2002).

Dr. Merlo was one of the pioneers in the field of interdisciplinary and multi-functional research. His interests covered the economic valuation of non-market services, multifunctional use and optimization of forest resources' consumption, and design of forest policy and management methods and tools. He authored and co-authored over 150 scientific publications of which about 100 were in peer-reviewed journals. His international activity covered dozens of countries and numerous organizations. As an expert, he was invited to conduct research for the UN FAO, OECD, the World Bank, the EU Commission, IAAE, EAAE, and many Italian governmental agencies and organizations. He was an EFI Board member and one of the leaders of MEDFOREX (MEDiterranean FORest public goods and Externalities) Center. He was a founder of a research network of authors from 18 Mediterranean countries that published the book "Valuing Mediterranean Forests" (CABI Publishing 2005).

From 1980, Dr. Merlo held leading positions at many professional societies and associations, e.g., Member of the Board and Programme Committee of the Italian (1982–1989) and the European Agricultural Economics Society, a consultant for the Ministry of Agriculture and Forestry, National Institute of Agricultural Economics, Land Reclamation and Drainage Consortia, and many others. He has also served on the editorial boards of several scientific journals, such as *Cahiers d'Economie et Sociologie Rurales*, *Politica Agraria*, *Ambiente e Foreste*, *Landscape Planning*, *Cellulosa e Carta*, and *Forest Policy and Economics*. He was recognized nationally and internationally for his research, administrative and educational activities. From 1986, Dr. Merlo served as Coordinator of WG 4.04.02 – Managerial Economics, Deputy Coordinator of IUFRO RG 4.13.00 – Managerial, Social and Environmental Accounting, and Coordinator of the IUFRO TF on Forest Biotechnology.

Professor Maurizio Merlo passed away after a severe heart attack on 24 August 2003 at the age of 59.

Selected research sources:

1. *Elementi di economia ed estimo forestale-ambientale*. Pàtron, Bologna, 556 p. [Elements of economy and forest environment valuation]. 1991.
2. *Valuing Mediterranean forests: towards total economic value*. M. Merlo and L. Croitoru, eds. CABI Publishing, Oxfordshire (UK), 448 p. 2005.

Personal sources:

1. Dedication and Acknowledgement. In: *Valuing Mediterranean forests*, CABI, pp. xv–xvi. 2005.
2. Gatto P., Krott M. In memoriam. Professor Maurizio Merlo. *For. Pol. & Econ* 6: 85. 2004.
3. Jöbstl H. Personal communications (April 2019) at hans.joebstl@boku.ac.at
4. Gatto P. Personal communications (April–May 2019) at paola.gatto@unipd.it



NIK, Abdul Rahim

Abdul Rahim Nik received the IUFRO Distinguished Service Award in 2000 for his outstanding leadership in organizing the XX IUFRO World Congress.

Datuk Dr. Abdul Rahim Nik was born in September 1955, Terengganu, Malaysia. He completed his B.Sc. in Forestry (1979) at Louisiana State University, M.Sc. in forest hydrology (1981) from University of West Virginia, USA, and Ph.D. in Tropical Forest Hydrology (1990) from the University of Wales in Bangor, United Kingdom. In 1981, he joined the Forest Research Institute Malaysia (FRIM) as a researcher working in the field of forest hydrology and watershed management. While in FRIM, he was entrusted with various leadership positions as division director, including Techno-Economics, Forest Environment, Forestry and Conservation, and Biodiversity and Environment. In 2008, he was promoted to Deputy Director General of FRIM (2008–2011) and in April 2011, he was seconded to the Ministry of Natural Resources and Environment, Malaysia as Deputy Secretary General 2011–2015, where he coordinated and supervised policy issues related to environmental management, climate change, forestry, biodiversity, wildlife and marine parks. Upon his retirement from the civil service, in December 2015, Dr. Abdul Rahim Nik was appointed as Chief Executive Officer (CEO) of Malaysian Timber Council (MTC).

In parallel, he was directly involved in numerous international collaborative scientific projects, namely the ASEAN–US Watershed Project as a Resource Person (1984–1987), joint chair of Malaysia–Japan joint project on tropical forest ecology and biodiversity (2001–2010), and Project Leader of a model project for cost analysis to achieve sustainable forest management funded by International Tropical Timber Organization (ITTO) (1997–2000). In addition, he served as National Project Leader of a UNDP/GEF and DANIDA Funded Project dealing with the conservation of tropical peat swamps (2002–2008) and Project Manager of Malaysia–Denmark Twinning programme on multipurpose forestry (2002–2005). He was appointed as National Chairman of the WG on the Greenhouse Gases Inventory for Malaysia’s the Second and Third National Communication Report for the United Nations Framework Convention on Climate Change (UNFCCC)(2007–2010). He was also a part-time Lecturer at the Forestry Faculty, *Universiti Putra Malaysia* (1991 & 2000) and an adjunct professor at *Universiti Tenaga Malaysia* (2012–2013).

Dr. Abdul Rahim Nik research interests include ecosystem studies, tropical forest hydrology and watershed management, environmental management, climate change and forest meteorology. He has authored and co-authored more than 100 technical and semi-technical papers in scientific journals and edited over 15 books. Dr. Abdul Rahim Nik was Chair of the Congress Organizing Committee (1996–2000) for the XX IUFRO World Congress held in Kuala Lumpur in 2000. He has also served as a member of the IUFRO International Council (2010–2015). He has received numerous recognitions and awards including Best Scientist Award from FRIM, Environmental Fellowship from the Asia Foundation, and Fellowship from the East-West Center, Hawaii, USA, Fellow of the Academy Sciences Malaysia (ASM), and was awarded the “*Panglima Mahkota Wilayah*” (PMW) from His Majesty Malaysian King, which carries the title “*Datuk*”.

Selected research sources:

1. Effects of selective logging methods on water yield and streamflow parameters in Peninsular Malaysia. *J. of Trop. For. Sci.*, Spec. Environ. December, 5(2): 130–154 (with Don Harding). 1992.
2. Runoff characteristics in a tropical rain forest catchment. *Japan Agric. Research Quarterly* 39(3): 215–219 (with S. Noguchi and M. Tani). 2005.

Personal sources:

Abdul Rahim Nik. Personal communications (May 2019) at abdrahim.nik@gmail.com



PÄIVINEN, Risto Teuvo Matias

Risto Teuvo Matias Päivinen received the IUFRO Distinguished Service Award in 2000 for significant input in furthering the scientific, technical, and organizational aims of IUFRO.

Risto Päivinen was born on 23 July 1952 in Helsinki, Finland. After military service (1971–1972), he earned his M.Sc. in Forestry (1976), M.Sc. in forest inventory and management planning (1980), Licentiate in Forestry (1982) from the University of Helsinki, and Ph.D. in Forestry (1987) from the University of Joensuu. He was an Assistant and acting Associate Professor in the Department of Forest Mensuration and Management at University of Helsinki, and Research Officer in Finnish Forest Research Institute (*Metla*) 1976–1985. Dr. Päivinen then served as Associate Professor (1985) and Professor (1998), and as Deputy Dean (1990–1991) and Dean (1992–1993) of the Faculty of Forestry, University of Joensuu.

In 1993, Professor Päivinen was invited to lead the newly established European Forest Institute as Acting Director, where he was appointed Deputy Director (1993–2000), served as Director of EFI (2000–2014) and retired in 2015. Since January 2015, he has worked as Senior Advisor at Tapio Ltd., Finland. Professor Päivinen's scientific interests range from inventory of forest resources, remote sensing and forest management planning to global forest monitoring, sustainability assessment, information services and in recent years to science-policy-practice interaction. He has authored and co-authored more than 130 scientific papers.

Professor Päivinen has been a member of advisory boards, e.g., International Center of Forestry and Forest Industry, St. Petersburg Forest Technical Academy (1997–2014), the EU FLEGT–REDD Facility, boards, e.g., Finnish Society of Forest Science, Foundation for European Forest Research (1997–2014); steering committees, e.g., European Innovation Partnership (2012–2014); editorial boards, e.g., Forest Ecology and Management (1997–2006), and International Journal of Forest Research (2002–2010), to name just a few. He was made a Corresponding Member of the Italian Academy of Forest Sciences (*Accademia Italiana di Scienze Forestali*) in 2005. In 2018, he was elected as Chair of the Finnish Forest Mensurationist Club. His achievements have been recognized with many honours and awards, including Golden Medals from St. Petersburg Forest Technical Academy, Russia (2003), National Forest Centre of Slovak Republic (2005), Finnish Taxator's Club (2006) and *Metsähallitus* (2013); Honorary Doctorate of University of Freiburg, Germany (2008) and Cajander Silver Medal from the Finnish Society of Forest Science (2009). He was decorated as 'Knight, First Class, of the Order of the White Rose of Finland' (2005).

Professor Päivinen has a long-term record of service in IUFRO. He served as Chair of S4.02.05 Remote Sensing and World Forest Monitoring (1991–1995), Leader of RG 4.02 Forest Resources Inventory and Monitoring (1996–2000) and Coordinator of IUFRO TF on Global Forest Information Service (1998–2005).

Selected research sources:

1. *A Planning Model for Forest Inventory*. (Dissertation) University of Joensuu. Publications in Science 11, 179 p. 1987.
2. *Reference sample plots to combine field measurements and satellite data in forest inventory*. Kilkki, P. and Päivinen, R. University of Helsinki, Department of Forest Mensuration and Management. Research Notes 19, 7 p. 1987.
3. A concept for assessing sustainability impacts of forestry-wood chains. Päivinen, R., Lindner, M., Rosén, K. and Lexer, M. J. *European Journal of Forest Research* 131(1): 7–19. 2012.

Personal sources:

Päivinen R. Personal communications (April 2019) at paivinen.r@gmail.com



PRICE, Martin Francis

Martin Francis Price received the IUFRO Distinguished Service Award in 2000 for advancing IUFRO expertise in the roles of forests in the sustainable development in mountain regions.

Martin Price was born on 26 April 1957 in London, UK. He earned a B.Sc. (Sp. Hons.) in Natural Environmental Science (1978) at the University of Sheffield, UK, an M.Sc. in Environmental Science (1981) at the University of Calgary, Canada, and a Ph.D. in Geography (1988) at the University of Colorado, USA. He worked in various positions in Canada (1981–1984), as a Scientific Associate in Bern, Switzerland (1985/1986) and as a Post-doc at the National Center for Atmospheric Research in Boulder, CO, USA (1988–1991). In 1991, he was appointed Scientific Director at the International Centre for Alpine Environments in France. He worked at the University of Oxford as Research scientist (1992–1995) and Programme leader of Mountain Regions and Conservation Programme (1995–2000). Since 2000, he has been Director of the Centre for Mountain Studies, Perth College, University of the Highlands and Islands (UHI Millennium Institute until 2011) in Scotland, and was appointed Professor Mountain Studies in 2005. He was Adjunct Professor at the University of Bergen, Norway from 2014 to 2017, and has been the Chairholder of the UNESCO Chair in Sustainable Mountain Development since 2009.

As an expert in sustainable mountain development, mountain protected areas and biosphere reserves, upland policy and socio-economic changes in mountain regions, Prof. Price has served on numerous committees nationally and internationally. Since 1993, he has been a member of the UK National Committee for UNESCO's Man and the Biosphere Programme, and its Chair (2011–2018) and Vice Chair (since 2018). He has been the founding chair (1998–2003) of the Royal Geographical Society's Mountain Research Group. He has worked with international organizations including the European Commission, FAO, IUCN, UNDP, UNEP and UNESCO, and has been a principal organizer and co-organizer of many meetings on mountain issues and a member of advisory and editorial boards of scientific journals including *Society and Natural Resources* (1994–1999), *Mountain Research and Development* (since 1994), *International Journal of Biodiversity Science and Management* (since 2005) and others, including as Associate Editor-in-Chief of *Journal of Mountain Science* since 2004. He served as the Coordinator of IUFRO TF on Forests in Sustainable Mountain Development (1996–2000) and co-edited a book on the topic. He has authored and co-authored over 60 peer-reviewed papers, 4 books, 26 reports, 25 book chapters, and has also edited 13 books and 5 journal issues. He has supervised over 50 graduate and doctorate students.

Professor Price has received numerous grants, awards and other recognitions including the Nobel Peace Prize as Principal Lead Author, Inter-governmental Panel on Climate Change (2007), King Albert Mountain Award (2012) and Fellowship of the Royal Society of Edinburgh (2018).

Selected research sources:

1. Mountain research in Europe: An overview of MAB research from the Pyrenees to Siberia. Man and the Biosphere Series No. 14, UNESCO/Parthenon, Paris/Carnforth, xxiv + 230 p. 1995.
2. *Forests in sustainable mountain development: A state-of-knowledge report for 2000*. M. Price and N. Butt, eds. CAB International, Wallingford, xxxiii + 590 p. 2000.
3. *Mountains: A very short introduction*. Oxford Univ. Press, xviii + 134 p. (In Japanese, 2017). 2015.

Personal sources:

1. URL: www.perth.uhi.ac.uk/mountainstudies Retrieved 03.06.2019.
2. Price M. Personal communications (June 2019) at Martin.Price.perth@uhi.ac.uk



SAARIKKO, Jarmo Uolevi

Jarmo Uolevi Saarikko received the IUFRO Distinguished Service Award in 2000 for his outstanding contribution into IUFRO information technologies and Internet advancement.

Jarmo Saarikko was born on 7 October 1957 in Helsinki, Finland. From 1976 to 1992 he studied zoology, botany and geography at the University of Helsinki and spent one year as an exchange student at the Southern Illinois University at Carbondale, USA (1980/1981). He received his B.Sc. in Zoology (1983), M.Sc. in Zoology (1988) and a Licentiate degree in Zoology (1992) from his *alma mater*. In parallel, he also collaborated with the University's Museum of Zoology, Bird Ringing Centre (1986–1987). He then worked as a Researcher at the University of Helsinki (1988–1993). Since 1993, his career has been linked with the Finnish Forest Research Institute (*Metsäntutkimuslaitos*, Metla, now Natural Resources Institute Finland (Luke, *Luonnonvarakeskus*) in which he has served as a Senior Advisor, in IT (1994), Communications/Internet services (2001), Library (2006), and Senior Specialist in Information Services at Luke (2015–2017). On the Metla website he has run a very popular and well-known service “World Wide Web Virtual Library: Forestry” (1995–2008) that has linked forest researchers all over the world. In November 2017, he moved to work as an Information Specialist at the National Library of Finland, an independent institute under the University of Helsinki.

His early research interests focused primarily on zoology with a concentration on the behavioral ecology of shrews, which he studied under the guidance of the famous ecologist, Professor Ilkka Hanski. His work with the Bird Ringing Centre resulted in the first computerized ring recovery maps. He then changed his career direction, working in research support as a qualified information professional specializing in metadata, taxonomies, classification, ontologies, knowledge management, and library services. He had started growing expertise in this area by providing information on the research activities at the Department of Zoology in the Gopher network, the predecessor of World Wide Web. Mr. Saarikko has authored and co-authored over 30 research and technical papers, reports and edited books.

Mr. Saarikko joined IUFRO unit S6.03-00 and participated from the start in IUFRO–METLA collaboration on information technologies and Internet (1994). He served as Deputy Coordinator for 6.03.03 Forest Decimal Classification (2001–2005), and 9.01.01 Library, information networks and terminology (2011–2017). He has had an impact on the early presence of IUFRO on the Internet by being webmaster on the first website and homepage for IUFRO at Metla in Helsinki for its first year. He supported the IUFRO World Congress in Tampere via its local host organization and maintained the website content for many years after the Congress. He was member of the IUFRO TF on Internet Resources (1995–2000) and later the IUFRO GFIS Task Force (2000–2005) and served in both of them as a Secretary. He participated in three world congresses in Tampere (1995), Kuala Lumpur (2000), and Brisbane (2005). He published the GFDC in Finnish (2016) and Swedish (2017) and has been developing a multilingual online version of the GFDC.

ORCID ID: <https://orcid.org/0000-0002-6801-6151>

Selected research sources:

1. Timing of rest and sleep in foraging shrews. *Animal Behaviour* 40(5): 861–869 (with I. Hanski). 1990.
2. The forest of information: beating paths through the jungle. *Unasylva*, No. 204 Looking forward, Vol. 52–2001/1 (with R. Päivinen, R. Mills and M. Hailu). 2001.
3. *Global Forest Decimal Classification (GFDC)*. D. Voshmgir, J. Saarikko and B. Holder, eds. Prepared by IUFRO Working Party 6.03.03. IUFRO World Series Vol. 19. Vienna. 338 p. 2006.

Personal sources:

Saarikko J. Personal communications (June 2019) at jarmo.saarikko@helsinki.fi



SCHÖNENBERGER, Walter

Walter Schönenberger received the IUFRO Distinguished Service Award in 2000 for his outstanding contribution to Division 1 activities on forests in mountain regions.

Walter Schönenberger was born on 15 July 1944 in Kirchberg, Switzerland. From 1966, he studied biology and earned a diploma (1971) and Dr. rer. nat. (1978) at the University of Fribourg. In 1972 he began his 34-year professional career at Swiss Federal Institute for Forest, Snow and Landscape Research (WSL), starting as a Research Scientist, and over the years progressing to Head of the research group on High Altitude Afforestation (1982–1994), and Manager of multidisciplinary projects on development on windthrow areas (from 1991). He served as a head of several research sections, e.g., on silviculture (1992–1994), mountain forests and of the research group mountain forest dynamics (1994–1999), and on the ecology of mountain forests (1999–2006). He was an Exchange Scientist at the Forest Research Institute in Christchurch, New Zealand (1980–1981).

Dr. Schönenberger focused his research in the areas of forest regeneration in avalanche areas, ecology of the alpine timberline, ecology and techniques of afforestation at high altitudes, reforestation and natural forest regeneration in subalpine forest fire areas, reforestation of windthrow areas, and management of protection forest. He authored and co-authored 110 research papers, book chapters and technical reports in these and related fields of research. He was an organizer and co-organizer of several international workshops in these topics.

In parallel to his research, Dr. Schönenberger lectured at the Swiss Federal Institute of Technology and taught case studies in high altitude afforestation. He organized an annual excursion and afforestation course at the research site Stillberg near the treeline ecotone (1980–2230 m a.s.l.) in Davos area, the Central Alps for students with focus on natural hazards and tending of protection forest. He served as a co-referee for many diploma and PhD theses at Swiss Federal Institute of Technology, University of Chambéry, and University of Grenoble, France. He has offered regional courses on afforestation, forest regeneration, mountain silviculture, windthrow, management of mountain forest for forest managers and forestry students.

Dr. Schönenberger has been a member of *Schweizerischer Forstverein* (Swiss Forest Association) and the Swiss Academy of Sciences, and served at the scientific committee AlpenForum. He actively participated in IUFRO activities within WG on Ecology of Subalpine Zones that participated in the EU-project INTEGRALP, and as Deputy Coordinator of WP 1.05.14 Silvicultural Problems in Mountain Regions (1991–2000).

Selected research sources:

1. Structure of mountain forests: assessment, impacts, management, modelling. *F. Ecol. and Mgmt.* May, 145 (1–2): 1–2 (with P. Brang). 2001.
2. *Vivian's legacy in Switzerland – impacts of windthrow on forest dynamics*. W. Schönenberger, A. Fischer and J. L. Innes, eds. *Forest Snow and Landscape Research* 77(1–2): 1–224. 2002.
3. Silviculture in mountain forests. In: *Encyclopedia of forest sciences*. Elsevier Academic Press, vol. 3, 1085–1094 (with P. Brang). 2004.
4. Reforestation in central Europe: lessons from multi-disciplinary field experiments. *For. Snow Landsc. Res.* 78, 1/2: 53–69 (with P. Brang and A. Fischer). 2004.

Personal sources:

Schönenberger W. Personal communications (August 2019) at schönenberger@wsl.ch



SZARO, Robert (Bob) Chester

Robert Chester Szaro received the IUFRO Distinguished Service Award in 2000 for expertly guiding the IUFRO Special Programme for Developing Countries and improving forestry research throughout the world.

Robert Szaro was born on 17 January 1949 in New York City, USA. He earned his B.Sc. in Wildlife and Fisheries Science (Dual Major with honors) at Texas A&M University (1970), M.Sc. in Zoology at University of Florida (1972) and Ph.D. in Ecology at Northern Arizona University (1976). In 1993, he has also attended Senior Executive Fellows Program (SEF) at Harvard University. Dr. Szaro began his career as a Teaching Assistant at the University of Florida (1972) and then as Research Assistant at Northern University (1973–1976), Adjunct Professor at University of Maryland (1978), and University Associate at Arizona State University, Tempe, Arizona (1978–1988).

In 1976, he began his service in various positions at governmental agencies, including the US Fish and Wildlife Service Center in Maryland (1976–1978), the USDA FS Rocky Mountain & Range Experiment Station (1989–1992), Washington Office in D.C. (1992–1996), as Deputy Director of Pacific Northwest Research Station (2000–2004), and as Chief Scientist for Biology at the US Geological Survey in Reston, VA (2004–2008). After retirement, he was a Consultant and Smithsonian Journeys Study Leader at Smithsonian Institution, Washington, D.C. (2008–2016), Wine Educator at Doukenie Winery, Purcellville, VA (2009–2016) and a Consultant to the World Bank (2017). Dr. Szaro was recognized with numerous awards for his services and achievements.

Dr. Szaro has a wide spectrum of research interests starting from zoology and nature conservation to ecosystem services and adaptive management. He has authored and co-authored more than 130 scientific papers, has edited four special journal issues and three books. He has served on the Editorial Advisory Board for *Landscape and Urban Planning* (1994–2008) and was a member of the editorial board of several other journals. He was part of the U.S. Delegation to the Biodiversity Convention Conference of the Parties (COP), and the WB GEF on biodiversity conservation in production forests.

In 1996–2000, Dr. Szaro served as Coordinator for the IUFRO–SPDC and Agricultural Attaché (Forestry) for the U.S. Embassy in Vienna, Austria. In his capacity as Coordinator for IUFRO–SPDC (1996–2000), he was responsible for forestry research capacity building efforts throughout the developing world with particular focus primarily on Africa, Asia, and Eastern Europe. He then served as a Coordinator of TF on Endangered Species and Nature Conservation (2006–2010).

Selected research sources:

1. Riparian forest and scrubland types of Arizona and New Mexico. *Desert Plants* 9: 66–139. 1989.
2. IUFRO's Special Programme for Developing Countries: 15 years of progress. In: *25th Anniversary IUFRO Secretariat in Vienna, Austria*. IUFRO, Vienna, pp. 16–17. 1999.
3. Evolving approaches toward science-based forest management. *Forest, Snow and Landscape Research* 78(1–2): 9–20 (with C. E. Peterson). 2004.

Personal sources:

Szaro R. C. Personal communications (April 2019) at rszaro@gmail.com



WHITEHEAD, David

David Whitehead received the IUFRO Distinguished Service Award in 2000 for his outstanding leadership in contributing knowledge of canopy processes and physiological regulation of forest water and carbon exchange.

David Whitehead was born on 14 May 1951 in Coventry, U.K. He earned his B.A. (First Class Hons) in Biology at the University of York (1972) and Ph.D. in Environmental Physiology at the University of London (1976). In 1972, he started his research career in crop physiology at Rothamsted Research in Harpenden, one of the oldest agricultural research stations in the world, and the University of London and proceeded as a Post-Doctoral Fellow at the University of Edinburgh (1975–1979).

In 1979, Dr. Whitehead moved to New Zealand where he was appointed as a Scientist at the Forest Research Institute (now Scion, a Crown Research Institute) in Rotorua and Christchurch (1992–2011). He was promoted to Science Team Leader and Chief Scientist (2011–2016) at the Manaaki Whenua – Landcare Research at Lincoln. Since 2016, he has served there as a Scientist. In parallel, he has worked as a Principal Investigator in Soil Carbon Research at New Zealand Agricultural Greenhouse Gas Research Centre (since 2010) and Adjunct Professor at the School of Biological Sciences, University of Canterbury (since 2013). He has taught also at Lincoln University and Victoria University of Wellington and co-supervised 16 Ph.D. and 3 M.Sc. students. He has been a visiting researcher in USA and Canada (1996–1997), France (2003), Australia and other countries.

Since his post-doctoral work on investigating forest water use in relation to wood structure, Dr. Whitehead's research interests have focused on the processes regulating carbon, water and energy exchange in *Pinus radiata* forests, measuring and modelling biophysical processes regulating water use and carbon sources and sinks in forest, shrubland and grassland ecosystems. More recently, Dr. Whitehead has worked in agricultural systems, studying the effects of environmental and management practices on changes in soil carbon storage, soil carbon and nitrogen dynamics and on science/policy interface in global change issues. He has authored and co-authored about 150 peer reviewed journal articles, 14 book chapters and books edited and 24 conference proceedings.

Dr. Whitehead is a member of numerous professional societies including the British Ecological Society (1978–2019), the Royal Society of New Zealand (1979), and was a member of the New Zealand Society of Plant Physiologists (1979) and its President (1981–1982). He has served as a member of editorial boards of scientific journals, e.g., *Tree Physiology* (since 2000) and *Functional Ecology* (2005–2016), invited Reviewer at the Australian CRC for Forestry (2006–2010), Chairman Science Review Panel for CSIRO Division of Sustainable Ecosystems, Australia (2009) and a member of the Scientific and Technical Committee of the '4 per 1000' Initiative (2016–2019). Dr. Whitehead was Deputy Leader (1981–1993) and Leader (1994–2000) of IUFRO WG 2.01.12 Canopy Processes. Dr. Whitehead received a certificate acknowledging his contribution to the Nobel Peace Prize awarded to the IPCC in 2007 and was elected as a Fellow of the Royal Society of New Zealand in 2012.

Selected research sources:

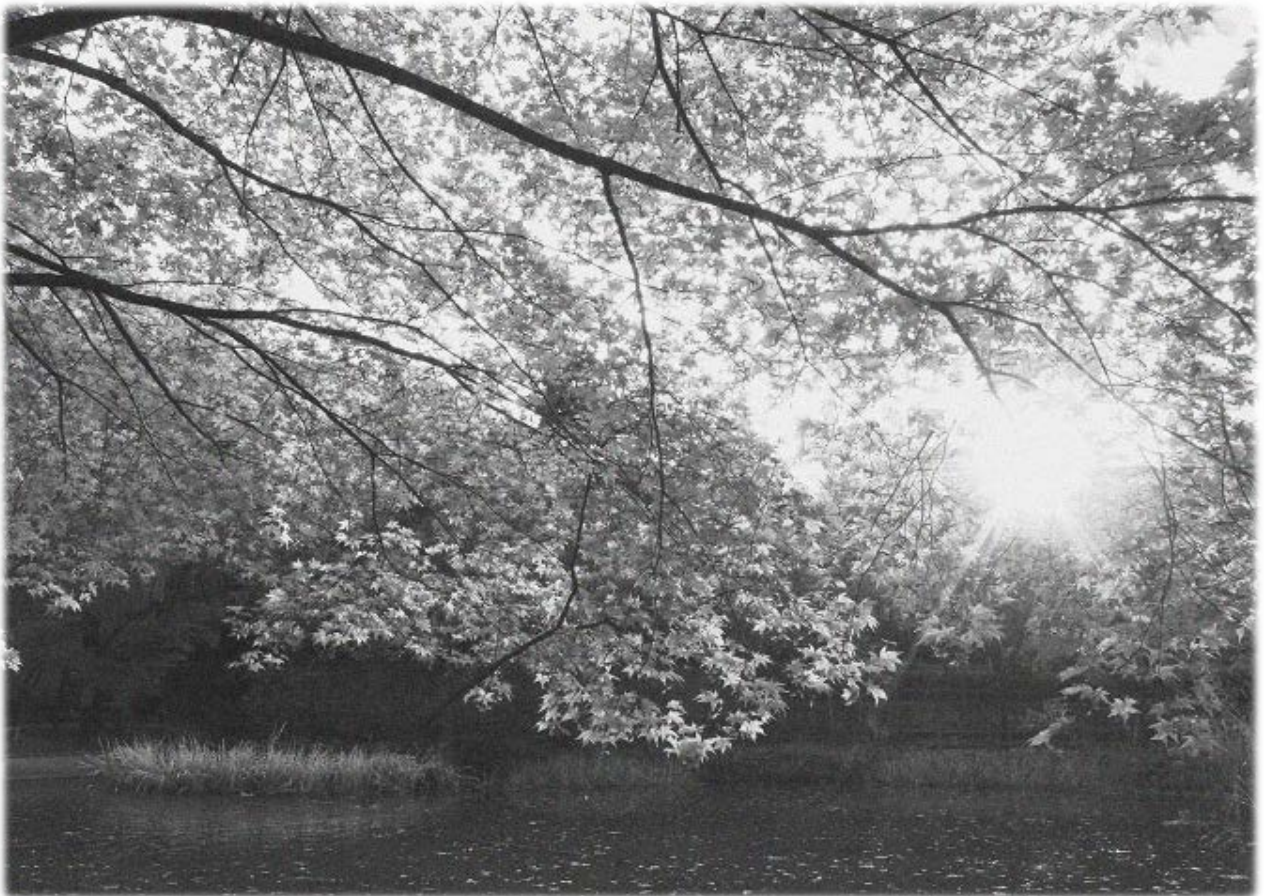
1. *Crown and Canopy Structure in Relation to Productivity*. Fujimori, T. and D. Whitehead, eds. Proceedings. Forestry and Forest Products Research Institute, Ibaraki, Japan, 448 p. 1986.
2. Forests as carbon sinks – benefits and consequences. *Tree Physiology*, Sept. 31(9): 893–902. 2011.

Personal sources:

Whitehead D. Personal communications (June 2019) at whiteheadd@landcareresearch.co.nz

2001 – 2005

<i>Jochen KLEINSCHMIT</i>	<i>Germany</i>	<i>2002</i>
<i>Leon MEJNARTOWICZ</i>	<i>Poland</i>	<i>2002</i>
<i>Gerhard MANNBERGER</i>	<i>Austria</i>	<i>2003</i>
<i>Hans-Jakob MUHS</i>	<i>Germany</i>	<i>2004</i>
<i>John A. YOUNGQUIST</i>	<i>USA</i>	<i>2004</i>
<i>Nikolai A. MOISEEV</i>	<i>Russian Fed.</i>	<i>2004</i>
<i>Gary BACON</i>	<i>Australia</i>	<i>2005</i>
<i>John INNES</i>	<i>Canada</i>	<i>2005</i>
<i>Howard ROSEN</i>	<i>USA</i>	<i>2005</i>
<i>Rodolphe SCHLAEPFER</i>	<i>Switzerland</i>	<i>2005</i>
<i>Eric TEISSIER DU CROS</i>	<i>France</i>	<i>2005</i>
<i>Keith RENNOLLS</i>	<i>UK</i>	<i>2005</i>





KLEINSCHMIT, Jochen

Jochen Kleinschmit received IUFRO Distinguish Service Award in 2002 for his longstanding contribution to IUFRO activities within the Division 2.

Jochen Kleinschmit was born on 19 June 1936 in Escherode, Germany. He studied forestry at the Faculty of Forestry in Hannover Münden (University of Göttingen) and in Freiburg and graduated with Dipl. Ing. Forestry (1961), and in 1963, he got his Ph.D. in Forestry from the Department of Silviculture from the University of Göttingen, at the age of 27. He served as an Assistant in the Ministry of Agriculture of Lower Saxony, Hannover (1963–1964), Assistant at the Institute for Forest Utilization of Göttingen University (1964–1965) and in the Institute of Forest Genetics of the Federal Research Organization in Schmalenbeck. From 1967, his professional career was linked with the Lower Saxonian Forest Research institute in his home town Escherode, where he served as Head of the Forest Office and the Department of Forest Tree Breeding (later – Department of Gene Resources) until his retirement in 2001.

Dr. Kleinschmit's earlier professional interests were focused on forest tree breeding and related areas, in which he conducted pioneer research in the propagation of conifers, mainly Norway spruce, on large-scale cuttings, and on the provenance of broadleaved tree species such as oaks and beech. Jochen Kleinschmit and his coworkers used 130 Douglas fir provenances collected in the USA and Canada, which served as the basis for a European international provenance experiment. These provenance trials were evaluated 25 years later. Latterly, he worked on the gene conservation of such noble hardwoods as wild pear, wild apple, wild cherry, nuts, ash, maple, and elms, being involved in the EUFORGEN program and led the Network on Noble Hardwoods. His research activities have been always tightly linked to forestry practice.

Dr. Kleinschmit authored and co-authored over 270 papers, book chapters and reports including more than 50 articles in leading journals such as *Allgemeine Forst- und Jagdzeitung*, *Silvae Genetica*, *New Zealand Journal of Forest Science* and over 120 papers in other sources. He has served as a member several editorial boards of scientific journals including *Silvae Genetica*, *Forest Genetics*, *Annales des Sciences Forestières*, *Acta Forestalia Fennica*, and of various commissions for the evaluation of the scientific activities in the U.K. and France. Dr. Kleinschmit has been a member of German State forest tree breeding association, Federal-State Organization for the Conservation of Forest Genetic Resources and the Association for the Control of Forest Reproductive Material. He also served as an expert to the GTZ in several missions.

Dr. Kleinschmit served for two terms as Coordinator of the WP on Norway spruce breeding (1972–1981) and then WP on breeding theory (1982–1990). He has organized and has been co-organizer of many IUFRO international meetings, e.g., on Norway Spruce Provenances and Breeding (Bucharest, 1979), and several other conferences and symposia held in Escherode, e.g., on Breeding Programmes and Strategies (1982).

Selected research sources:

1. Biotechnologische Verfahren bei Generhaltung und Züchtung von Waldbaumarten. *BioEngineering*, 3: 236–239 (with D. Hoffmann, A. Meier-Dinkel, and J. Jörgensen). [Biotechnological procedures for the conservation and breeding of forest tree species]. 1988.
2. Integration of Conservation and Utilization in Temperate Hardwood Species, p. 1–13. In: *Biodiversity: Biomolecular Aspects of Biodiversity and Innovative Utilization*. B. Sener, ed. Pringer US, xx, 412 p. (with J. R. G. Kleinschmit). 2002.

Personal sources:

1. Paule L. (2001) A Proposal for awarding of DSA to Dr. Jochen Kleinschmit.
2. Kleinschmit J. Personal communications (November–December 2019) at jochen@kleinschmit.de



MEJNARTOWICZ, Leon E.

Leon E. Mejnartowicz received the IUFRO Distinguished Service Award in 2002 in recognition of his contribution to IUFRO activities within Division 2 since 1978.

Leon Mejnartowicz was born on 6 January 1939 in Szczepanowicze, Poland (now in the Republic of Belarus). He attended Krasiczyn's Forestry School (1952–1956), and was recognized there by the Minister of Forestry with a Matriculation Award in 1956. He worked in Olsztyn's Forest Appraisal and Survey Bureau (1957–1959), studied Biology at Olsztyn Pedagogical Institute (1959–1961) and Biology and Earth Sciences at Nicolaus Copernicus University in Toruń (1961–1966) receiving an M.Sc. in Biology (1966). In 1966, he began his research career at the Institute of Dendrology, Polish Academy of Sciences in Kórnik from which he retired in 2008. He obtained his PhD in Biology (1971) and Habilitation in Genetics (1976) from the Institute of Applied Sciences / Agricultural University in Poznań. He became Associate Professor in 1988 and Full Professor of the Polish Academy of Sciences in 1993. He was granted a DAAD scientific scholarship at Georg August University in Göttingen, Germany (1973–1974), and then became Head of the Isoenzymes Laboratory at ID PAS Kórnik (1975–1976) and established the Biochemistry Genetics Laboratory at Institute of Dendrology in Kórnik in 1977. In 1980 he was elected as Professor of Genetics at Nicolaus Copernicus University in Toruń and in 1984 invited to Oxford and Göttingen Universities to lecture on the effect of environmental pollution on the genetic structure of forest tree populations. He served as a Visiting Professor at Georg August University of Göttingen (1982, 1985, 1987, and 1999) and the Toruń University (1990).

Dr. Mejnartowicz worked intensively in the field of plant genetics, biochemical genetics, forest population genetics, provenance study of Douglas fir (104 populations), European and Polish larch, Norway spruce, Scots pine, Yew, and other species. He pioneered and was involved in the study of all 18 Carpathian and 10 Sudeten populations of silver fir, and numerous provenances of black alder using isoenzymes as genetic markers as a tool for the identification of a lost population. He authored and co-authored over 130 scientific publications. He pioneered the introduction of isoenzymatic study of mistletoe (*Viscum album*) and undertook a very important genetic analysis of differences between and into populations of forest trees.

Dr. Mejnartowicz was a Member of Polish Botanical Society and Polish Genetics Society. He also served as a member of the editorial board for several journals, including *Forest Genetics* (1993–1998), *Dendrobiology*, *Acta Societatis Botanicorum Poloniae* (1988–2009), Deputy Coordinator of the IUFRO units S2.09.15 Genetic Aspects of Air Pollution and WP 7.04.00 Genetic Aspects of Air Pollution (1978–2001), member of the Evaluation Team of International Science Foundation Research Grants Program, Washington, USA (1991–1996), and was Deputy Chairman for the monograph "Our Forest Trees" (1975–1990). He has been recognized nationally and internationally by the Polish Academy Sciences Award (1977), the Award of German Forester Bound (1986), and the Moscow State Forest University Award (2009).

Selected research sources:

1. Provenance differentiation among Douglas fir seedlings. *Arboretum Kornickie* 15: 198–219 (with S. Białobok). 1970.
2. Genetic analysis of silver-fir populations in the Northern Carpathian and Sudeten mountains. *Acta Societatis Botanicorum Poloniae* 73(4): 285–292. 2004.
3. Reconstitution of a lost forest tree population: a case study of Norway spruce (*Picea abies* (L.) Karst.). *For. Ecol. Mgmt.* 255 (1): 2103–2108 (with W. Chałupka and A. Lewandowski). 2008.

Personal sources:

Mejnartowicz L. Personal communications (March–June 2019) at imejnart@neostrada.pl



MANNBERGER, Gerhard

Gerhard Mannsberger received the IUFRO Distinguished Service Award in 2003 for his long-term involvement in IUFRO business and his outstanding personal role and commitment in supporting the IUFRO Secretariat and the Union.

Gerhard Mannsberger was born on 3 March 1961 in Wiener Neustadt, Austria. In 1980–1987, he studied forestry and received his Diplom-Ingenieur from the University of Natural Resources and Life Sciences (BOKU). After working in the fields of science and consulting (forest ecology, forest protection) at the Austrian Health Department, at the Austrian Environment Agency and in a private Company (1984–1989), he began his career as a governmental forest officer being appointed as an expert of the Department (1989) and then Deputy Director for Forestry (1992) at the Government of Lower Austria. In 1996 he was promoted to the Head of Directorate General for Forestry at the Austrian Federal Ministry for Agriculture, Forestry, Water Management and Environment, a position that he held until the end of 2018. During this period, Gerhard Mannsberger carried out additional responsibilities, leading the sector on the “protection against natural hazards” (2002–2007), being also the Republic of Austria Owners’ representative at the Austrian Research Center for Forests (BFW) (2005–2018) and Person in charge for the Federal Budget line of about 300 Mio Euro allocated for the sector “Forest, Water, Natural Hazards” (2014–2018). He played a key role in establishing the bioeconomy strategy of the Ministry. In parallel to his responsibilities, Mr. Mannsberger has been a lecturer on Forest Policy Strategies in Europe at BOKU (2002–2017) In February 2018, he was appointed Vice Rector for Organization and Process Management at BOKU, and in April 2018, he became the Chair of the Board of Directors of Austria Federal Forests (*Österr. Bundesforste*).

Dipl.-Ing. Mannsberger worked on various issues, e.g., sustainable forest management linking forests environmental services (water, air, recreation) with social issues, pursuing the path “ecology and economy in the forest”, forestry and natural hazards, Austrian forest policy in national and international context. He participated in several research projects related to forest decline (*Waldsterben*) (e.g. in the Austrian State Forests). He authored and co-authored several scientific and technical publications and reports, including articles in journals and various proceedings of scientific meetings, and other sources.

Dipl.-Ing. Mannsberger has been a member of several national and international professional societies, organizations and processes, e.g. Ministerial Conference on the Protection of Forests in Europe (e.g. Vienna 2003, Warsaw 2007, etc.), UN Intergovernmental Forum on Forests and Forest Forum, European Commission, EFI and others. His contribution was recognized with several honours and awards, such as Order of Merit of the Republic of Austria (Großes Silbernes Ehrenzeichen, 2006), Honorable Member of the Forest Manager Association of Romania (2003), Award of PEFC–Austria (2017), Honorary Senator of the University of Life Sciences Vienna (2017), to name just a few. From 1996, Gerhard Mannsberger served IUFRO in various capacities and since 2003 has been the IUFRO Board member representing Austria as the host country and maintaining comfortable working conditions for the IUFRO Secretariat in Vienna.

Selected research sources:

1. *Sustainable forest management as a basis for a steady supply of high quality wood and lumber: an introduction to Austrian forestry*. Proceedings, FAO Workshop (Ossiach, Austria, 18–24 June 2001). <http://www.fao.org/3/Y9351E/Y9351E04.htm#ch4> Retrieved 20.06.2019.
2. Forests and public health: The Austrian experience and hopes. The Green Care Wald project. *Santé Publique*, S1, 2019/HS Forests and public health, pp. 257–262. 2019.

Personal sources:

1. URL: <https://www.boku.ac.at/en/universitaetsleitung/rektorat/vizerektor-fuer-organisation-und-prozessmanagement/> Retrieved 24.02.2019. Photo.
2. Mannsberger G. Personal communications (June 2019) at gerhard.mannsberger@boku.ac.at



MUHS, Hans-Jakob

Hans-Jakob Muhs received the IUFRO DSA in 2004 for his long-term contribution into IUFRO advances in biochemical genetics, improvement and silviculture of beech, and on legislation on forest reproductive material.

Hans-Jakob Muhs was born on 14 February 1939 in Alt-Mühlendorf/Warder, Schleswig-Holstein, Germany. He earned his Diploma in Wood Science at the University of Hamburg (1968). He received a prize from the Freiburg Forest Faculty for his dissertation, also accepted as his habilitation thesis, on “Investigation of the population structures of different selection lines of *Drosophila melanogaster* using isozymes”. It was supervised first by Klaus Stern at the Institute of Forest Genetics and Forest Tree Breeding (BFH – Institut für Forstgenetik) at Grosshansdorf, Germany, and then under Hans Marquardt at the Forest Botanical Institute, Forest Faculty of Freiburg, Germany (1976). He served as Deputy Director of the BFH – Institut für Forstgenetik (1976–1989) and Director until his retirement (2004).

The methodology of Isozyme separation and interpretation of gene loci was first studied by Dr. Muhs on *Drosophila melanogaster* and then applied to tree species. These biochemical methods turned out to be a powerful tool in forest genetics and tree breeding. Later, his interests changed to the genetic structure of tree species, especially provenance studies of European Beech (*Fagus sylvatica* L.). He established several international series of beech provenance trials and initiated additional series after *détente* (1990) in the eastern part of the distribution area. More than 400 provenances originating from the whole area of distribution were tested on over 70 field-testing sites located throughout the range of beech. IUFRO helped in collecting the numerous seed samples and in establishment of the field sites.

As consultant to the national government, the EU Commission, and the OECD, Dr. Muhs contributed to a fundamental revision of the rules for the marketing of forest reproductive material. Progress in the procurement, production, and widening of the species spectrum of forest reproductive material as well as new methods of cloning by *in vitro* culture as a prerequisite for genetic modifications, all required a comprehensive revision of the rules. After intensive work and over 12 sessions, a majority of countries adopted the completely revised draft of the OECD Scheme. The revision of the OECD-Scheme would not have been possible without the contacts provided by IUFRO.

Dr. Muhs contributed to IUFRO for 30 years. He co-chaired IUFRO WP S2.04-05 on Biochemical Genetics, (1973–1986), founded, coordinated and participated in two IUFRO units – the Interdivisional WP S2.10.00 on Improvement and Silviculture of Beech (1984–1996) and WP S2.03-14 on Legislation on Forest Reproductive Material (1985–2004). He organized and supported numerous IUFRO workshops and meetings in these fields and in 1995 received the IUFRO Certificate of Appreciation.

Dr. Hans-Jakob Muhs passed away on 20 July 2021 in Kleve, Germany, and was buried at the New Ahrensburg Cemetery, Bornkampsweg.

Selected research sources:

1. Measures for the conservation of forest gene resources in the Federal Republic of Germany. In: *Genetic Effects of Air Pollutants in Forest Tree Populations*. F. Scholz, H.-R. Gregorius and D. Rudin, eds. Springer-Verlag, Berlin Heidelberg, pp. 187–198. 1989.
2. Variation in temperature sum requirements for flushing of beech provenances. *Silvae Genetica* 44, 343–346 (with G. von Wuehlisch and D. Krusche). 1995.

Personal sources:

Muhs H.-J. Personal communications (October–November 2019) via Dr. Georg von Wühlisch.



YOUNGQUIST, John A. P.E.

John A. Youngquist received the IUFRO Distinguished Service Award in 2004 for his longstanding leadership of Division 5 and other services for IUFRO.

John Youngquist was born in 1939 in Madison, Wisconsin, USA. In 1962, he obtained his B.Sc. in Chemical Engineering and Professional Engineering (P. Eng.) Registration (1965) from the University of Wisconsin–Madison. He then studied law (1965), and Business Management (1977) at the University of Wisconsin–Madison and Statistics & Advanced Calculus at Rutgers University, New Brunswick, NJ (1967). He began his professional career at Ray-O-Vac Corp. working as a Technical Manager, Quality Control Manager, and Assistant Plant Manager (1967–1975). In 1975, he joined the USDA FS Forest Products Laboratory in Madison (FPL–M) as a Research Project Manager, and retired from that position in 1999. In 2000, he formed John Youngquist & Associates, specializing in scientific writing and consulting in the fields of natural resources and wood-based composite products.

John Youngquist is well-known for his pioneering research in wood chemistry, and the development of wood processing technologies and wood-based composite products. His consulting company focuses on the broad area of engineering, natural resources, and science and grant writing. He has also taught scientific writing for students and professors whose first language is not English.

Mr. Youngquist has served as member of the editorial board of *Journal of Tropical Forest Science* (1992–1995), Croatian journal *Drvna Industrija* (from 1994), *Journal of Tropical Forest Products* (from 1995), and CAB Abstracts (1997–2000). In 2004, he was a co-editor and prepared several chapters of the *Encyclopedia of Forest Sciences*. He authored and co-authored more than 120 scientific and non-technical papers and six approved patents. Mr. Youngquist was recognized with many honours and awards for his research and project management, including the USDA Superior Service Awards (1982, 1995, 1996, 1998, 2001), Outstanding Federal Supervisor of the Year (1991), USDA FS Engineering Manager of the Year (1993), USDA FS Chief's Award for Technology Transfer (1999), and several Certificates of Merit from FPL–M (1985–1997).

Mr. Youngquist is affiliated with several professional societies, e.g., Forest Products Society, where he served as Vice President, President-elect and President (1993–1996). He is also a Fellow of International Academy of Wood Science (since 1996). He has been active in IUFRO, serving as a Deputy Coordinator (1991–1995) and Coordinator of IUFRO Division 5 Forest Products (1996–2000), IUFRO Board member (1990–2000), Chair of the Honours and Awards Committee (1997–2000), and Chair of the Finance Committee (1997–2000).

Selected research sources:

1. Wood-Based Composites and Panel Products. Chapter 10. *Wood Handbook, Wood as an Engineering Material*. Gen. Tech. Rep. FPL-GTR-113, Madison, WI: U.S. Department of Agriculture, Forest Service, Forest Products Laboratory. 31 p. 1999.
2. Forest products research in IUFRO: history and potential. In: *ICEUPT'99: Int. conf. on effective utilization of plantation timber*. 1999, May 21–23; Chi-Tou, Taiwan ROC. 16: 627–632 (with R.L. Youngs). 1999.
3. *Encyclopedia of Forest Sciences*. J. Burley, J. Evans and J.A. Youngquist, eds. Elsevier Academic Press: Amsterdam, 2004. In 4 volumes. 2400 p.

Personal sources:

1. John Youngquist. In: *Encyclopedia of Forest Sciences*. 2004.
2. Youngquist J. A. Personal communications (April 2019) at john@grant-assistance.com



MOISEEV, Nikolai Alexandrovich

Nikolai Alexandrovich Moiseev received the IUFRO Distinguished Service Award in 2003 for his long-term activities and promoting IUFRO in the USSR and Russia.

Nikolai Moiseev was born on 13 December 1929 in Yakutino, Grachevsky district, Orenburg region, but for his first 15 years grew up in the taiga forests in the River Pinega basin in Archangelsk region. He graduated with honours both from the Buzuluk Forestry College, Orenburg region (1949) and from the Faculty of Forestry, Leningrad Academy of Forestry Engineering (now St. Petersburg State Forestry University, named after S.M. Kirov) (1954) from where he earned his Ph.D. in Forestry (1958). He became Doctor of Science (1976), Professor (1987), Member of the USSR Academy of Agricultural Sciences (1988) and the Russian Academy of Sciences (2013).

In 1957, Professor Ivan S. Melekhov invited Dr. Moiseev to his recently established Institute of Forestry and Wood Chemistry, the USSR Academy of Sciences, where he progressed from Assistant Researcher to Senior Researcher (1959), Deputy Director for Research (1961) and Director of the Institute (1962–1965). From 1965, he worked at the All-Union Forest Research Institute and Forestry Mechanization (VNIILM) in Pushkino, Moscow region, where he progressed from Senior Researcher (1965) to Head of the Department (1967). In 1970–1977, he served as a Head of the Department of Science and International Relations of the USSR State Committee on Forestry, and from 1977 to 1996, Dr. Moiseev was Director of VNIILM and, from 1996, he headed the Department Economics of Forestry and Wood Industry at Moscow State Forest University.

The main research interests of Academician Moiseev are in the field of economics and organization of forestry, forest industry, forest management, state forest policy, forest legislation and forest management. He is the author and co-author of more than 550 scientific publications, including 25 books, monographs, textbooks, and manuals. He was awarded the USSR State Order of the Labour Red Banner (1979), the G.F. Morozov Gold medal (2003), and the G. Cotta medal (1986). He is an Honoured Forester (1979) and Honoured Scientist of the Russian Federation (1999), and member of many governmental, academic, and research councils, and editorial boards. He is also an Honorary Doctor of the St. Petersburg State Forestry Academy (2003) and the Northern (Arctic) Federal University (2009), Foreign Member of the Royal Swedish Academy of Agriculture and Forestry (KSLA), member Academy of Sciences and Literature of Finland, Italian Forest Academy, and Honorary Doctor of the Dresden Technical University, Germany. He is also an Honorary Citizen of Pushkino District (2000).

Academician Moiseev approached VNIILM to be a IUFRO member (1976). He was one of key organizers of IUFRO meetings in the USSR and Russia (1976, 1979, 1985, 1992, 1994), served as a member of IUFRO Executive Board (1977–1981), President's Nominee (1982–1986), and representative of the USSR to the IUFRO International Council (1987–1990). He was very active in holding two IUFRO Management Committee meetings in the USSR (Moscow and Sochi 1980) and Russia (Pushkino 2003).

Professor N. A. Moiseev passed away on 23 July 2020 aged 90 years and was buried at the Troekurovsky cemetery in Moscow.

Selected research sources:

1. *Воспроизводство лесных ресурсов: Вопросы экономики, планирования и организации*. М.: Лесн. пром. 263 с. [Reproduction of forest resources: Issues of economy, planning and organization]. 1980.
2. *Лесоустройство в России*. М.: МГУЛ. 268 с. [Forest management and planning in Russia. Moscow, MSFU, 2014. 268 p. (with A. G. Treyfeld and R. G. Treyfeld).]. 2014.

Personal sources:

1. Моисеев Николай Александрович (к 85-летию). РАН, МГУЛ, ВНИИЛМ. Москва. 57 с. [Moiseev Nikolai Alexandrovich (to the 85th anniversary). RAS, MSFU, VNIILM. Moscow 2014. 57 p.]. 2014.
2. Моисеев Н. А. Personal communications (March 2019).



BACON AM, Gary John

Gary John Bacon received the IUFRO Distinguished Service Award in 2005 for his excellent work in organizing and holding the XXII IUFRO World Congress in Brisbane, Australia.

Dr. Gary Bacon was born on 16 May 1947 in Brisbane, Queensland, Australia. He obtained both his B.Sc. (Hons) (1970) and Doctorate (1978) degrees in Forestry from Australian National University. He pursued his career with Queensland (Qld) & New South Wales (NSW) Forestry and Qld Primary Industries (DPI). From 1971 to 1980, he worked in forest inventory, yield regulation programming, plantation establishment and thinning research.

After spending time as a Sub-District Forester he transferred into marketing, then research manager and Director field operations (1981–1990) before appointment as Assistant Commissioner of the NSW Forestry Commission (1990–1992). Dr. Bacon returned to Qld as General Manager, Land Management DPI (1992–1995), and finally as Executive Director for Qld Forestry (1995–1999). From 2000–2018, he worked as an Adjunct Professor at the Environmental Futures Institute, Griffith University (GU) and acted as a consultant and JAS–ANZ accredited auditor to the Australian forest industry.

Dr. Bacon introduced a raft of new nursery and plantation management practices, new marketing protocols, established the Qld Forest Research Institute and a Forest Industry Development Division. His team at DPI created the first drought severity maps for Qld and Australia. The GU team established agroforestry trials with Australian Centre for Agricultural Research on- and off-shore. He authored and co-authored over 120 publications and reports.

Dr. Bacon chaired a number of national and international committees, advisory boards, and cooperation projects of Australia with the USSR (1990), CSIRO, New Zealand and Australian states (1996–2000). He served as National Secretary (1983–1985) and National President (1985–1986) for the Institute of Foresters of Australia (IFA), as well as Vice President for the International Union of Societies of Foresters (1990–1994). He was honored by IFA with the A.R. Henderson Bequest (1974), Hedges Prize (1977), Fellowship (1989) and William Jolly Medal (2000) for his research, administrative and teaching activities. He was awarded The Order of Australia (AM) in the Queen's Birthday Honours List (2016).

Dr. Bacon was Chair of the Australian Congress Organising Committee for the 2005 IUFRO Congress themed *Forests in the Balance: Linking Tradition and Technology*. It was the first Congress held 'down under' (southern hemisphere) in the 113 year history of IUFRO. Over 2100 participants from 90 countries attended.

Selected research sources:

1. Studies on the Establishment of Open Root Caribbean Pine Planting Stock in Southern Queensland. *Australian Forestry* 40 (3): 173–191 (with P.J. Hawkins). 1977.
2. A celebration of World Forest Research. *Australian Forestry* 69(2): 77–79. 2006.
3. Vertical distribution of soil extractable organic C and N contents in 78 year old tree plantations in subtropical Australia. *Environ. Sci. Pollution Research* 24: 22312–22320 (with X. Zhou, H. Dong, Z. Lan and C. Chen). 2017.

Personal sources:

1. Dr. G. J. Bacon, President of the Institute for the Biennium 1985–86. *Austral. Forestry* 48 (4): 213. 1985.
2. Dr. Gary Bacon. Recognition, Queens Birthday Honours. *IFA, The Forester*, June, p. 7–8. 2016.
3. Bacon G. Personal communications (April 2019) at gary-bacon@bigpond.com



INNES, John Lockhart

John Lockhart Innes received the IUFRO Distinguished Service Award in 2005 for his long-term contribution to IUFRO activities in various capacities.

John Innes was born on 3 September 1957 in Kirkcaldy, U.K. He earned his B.A. (1979) and Ph.D. in Geography (1982) from the University of Cambridge. He was a part-time researcher at the UK Nature Conservancy Council (1976) and the UK Institute of Terrestrial Ecology (1977–1979), part-time lecturer and tutor at the University of Cambridge (1982–1983), and NERC Research Fellow at University College Cardiff (1983–1985). In addition, he was a Senior Research Associate at the Climatic Research Unit of the University of East Anglia (1985), Lecturer at the University of Keele (1985–1986), and Senior Scientific Officer at the UK FC Research Division (1986–1992). In 1992, Dr. Innes was appointed as Head of the Forest Ecosystems Department at Swiss Federal Research Institute (*WSL*) in Birmensdorf, Switzerland (1992–1999). In 1999, he was appointed as Professor and Forest Renewal BC Chair of Forest Management at the University of British Columbia (UBC) in Vancouver, Canada, and from 2010 until now, he has been Dean of the Faculty of Forestry there.

During his career, Professor Innes has researched and taught various subjects such as geography, climate change, forestry, forest ecology, forest management, biodiversity conservation, social aspects of forest practices, and many others. He has actively participated in research projects in BC and Yukon Territory (Canada) as well as in the USA, Chile, Mexico, Peru, Republic of South Africa, India, Myanmar, People's Republic of China (PRC), and Australia. He is an Honorary Professor at the University of Melbourne and at four different universities in the PRC. He was part of the IPCC team that shared the Nobel Peace Prize (2007), and he is a holder of the CIF's International Forestry Achievement Award (2015). He was elected a Foreign Member of the Royal Swedish Academy of Agriculture and Forestry (KSLA) in 2018. In 1995, Professor Innes received the IUFRO Scientific Achievement Award. Professor Innes is Associate Editor of *Environmental Conservation* and a member of the Editorial Advisory Board of several other journals, research series and encyclopedias. He has authored, co-authored and edited over 300 papers and 18 books. He is a Registered Professional Forester (Australia). He is the Chair (now President) of the CFA (since 2010), Chair of the Standing Committee on Commonwealth Forestry (since 2012), a chair or a member of various organizations and associations on forest research and education, e.g., member of Advisory Group on Forestry Education of the UN FAO and Chair of the Asia-Pacific Forestry Education Coordination Mechanism (*AP-FECM*).

Professor Innes has an outstanding record of service for IUFRO since 1990 as a Chair of three Task Forces (Climate Change and Air Pollution, Environmental Change, and Resources for the Future), Chair of the IUFRO Congress Scientific Committee (2001–2005), Vice President Policy (2006–2010), and Chair of the Honours and Awards Committee (2014–2019). He has had a long-term service in decision-taking positions in IUFRO as a member of IUFRO Management Committee, Board, Enlarged Board, and International Council.

Selected research sources:

1. *Air Pollution and the Forests of Developing and Rapidly Industrializing Regions*. J.L. Innes and A.H. Haron, eds. CABI Publishing, Wallingford, U.K., 262 p. Rep. No. 4, IUFRO TF on Environmental Change. 2000.
2. *Sustainable Forest Management: From Concept to Practice*, 1st Edition. John L. Innes and Anna V. Tikina, eds. Routledge, 396 p.: 222 Color and 45 B/W Illus. 2016.

Personal sources:

1. John L. Innes. Biographical sketch. In: *Forests and Forest Plants*—Volume I./Encyclopedia of Life Support Systems (UNESCO–EOLSS). John N. Owens, H. Gyde Lund, eds. EOLSS Publishers, p. 260–261. 2009.
2. Innes J. L. Personal communications (April 2019) at john.innes@ubc.ca



ROSEN, Howard Neal

Howard Neal Rosen received the IUFRO Distinguished Service Award in 2005 in recognition of his substantial contributions to furthering the scientific, technical, and organizational aims of IUFRO.

Howard Rosen was born on 25 June 1942 in Washington, D.C., USA. He received all his degrees in Chemical Engineering – B.Sc. from the University of Maryland (1964), and M.Sc. (1966) and Ph.D. (1969) from Northwestern University in Evanston, Illinois, USA. In 1970, he began his professional career as a Research Chemical Engineer at USDA FS Office in Carbondale, IL, doing research on wood physics, drying, and dimensional stability. In 1985 he was promoted to Research General Engineering at Forest Products, USDA FS Washington Office, where he was responsible for overseeing complex and diverse national programs and worked until his retirement in 2006. He has remained in this position since then as a Retired volunteer. He also keeps active with organizational work within the International Academy of Wood Science (IAWS), IUFRO, Renewable Natural Resource Foundation (RNRF), World Wood Day Foundation (WWDF), and International Wood Culture Society (IWCS).

Dr. Rosen's research interests have been in the field of wood physical properties, drying, dimensional stability, wood culture, woody biomass use, and bioenergy. He also performs outside organizational duties and served as a consultant for forest products research and development. He has authored and co-authored 104 publications in professional journals and received six patents on wood drying, psychrometry, and energy recovery. As an expert and presenter, Dr. Rosen has attended numerous national and international symposia, scientific meetings and workshops to which he contributed over 140 presentations and invited papers. Since 1999, Dr. Rosen has been a Lifetime Fellow and Contributor to the IAWS (serving as its Treasurer since 2005) in recognition of his distinguished career in wood science and technology. He received the 2005 Distinguished Service Award of the Society of Wood Science and Technology (SWST) for significant contributions to the wood science and technology profession and service to SWST, and delivered the prestigious IAWS Academy Lecture (2010).

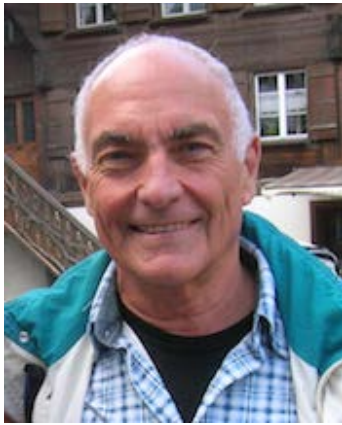
Dr. Rosen has an outstanding record of almost 40-year service for IUFRO. He started as Chair of the Wood Drying Working Party (1982–1990), Leader of WG on Wood Processing (1991–2000), Deputy Coordinator for Division 5 Wood Products (2001–2005), Chair of WP 5.10.01 Wood Culture (2008–2017), and Research Leader of the IUFRO unit on Forest Products Culture (since 2018). He also chaired and setup 14 IUFRO technical sessions, organized 2 meetings including coordination of Division 5 meeting in São Paulo, Brazil (1988), chaired the All Division 5 meeting in Roturua, New Zealand (2003) and chaired a Plenary Session and the Poster Committee at the XXII World Congress in Brisbane, Australia (2005).

Selected research sources:

1. Recent advances in the drying of solid wood. In: *Advances in Drying*. Hemisphere Publishing Co., New York, pp. 99–145 [Theoretical chapter in book]. 1987.
2. Rosen, H. N. and F. Kayihan (Guest Editors). *Drying Technology* 10(5): 1151–1348. 1992.
3. Drying of Wood and Wood Products. In: *Handbook of Industrial Drying*. Arun Mujumdar, ed. Marcel Dekker, Inc., New York, USA, pp. 899–920. 1995.
4. United States wood biomass for energy and chemicals: possible changes in supply, end uses, and environmental impacts. *Forest Products Journal* 47(2): 63–69 (with K. E. Skog). 1997.
5. Rosen H. N. (Guest Editor). Papers from the IUFRO World Congress 2005. *NZ J. of For. Sci.* 35(2/3): 198–220. 2005.

Personal sources:

Rosen H. Personal communications (April 2019) at howard.rosen@verizon.net



SCHLAEPFER, Rodolphe

Rodolphe Schlaepfer received the IUFRO Distinguished Service Award in 2005 for his long-term contribution to IUFRO activities in various capacities.

Rodolphe Schlaepfer was born on 22 June 1940 in Sainte-Croix, Switzerland. He received his Diploma of Forest Engineer (1964) from the Swiss Federal Institute of Technology in Zurich, his M.Sc. in Forest Inventory and Forest Ecology (1966) from Laval University, Quebec, Canada, and Diploma in Statistics (1969) with major in Biometry from the University of Edinburgh, Scotland. He began his career in 1967 as a Research Scientist in Forest Growth at the Swiss Federal Institute for Forest Research (WSL, now Swiss Federal Institute for Forest, Snow and Landscape Research) in Birmensdorf. He then worked as a Statistician at Ciba-Geigy in Basel (1969–1976), Professor for Statistics and Physics at the Swiss Engineering School for Agronomy (1976–1982), Professor and Chair for Forest Management (1982–1987) at the Swiss Federal Institute of Technology in Zurich (ETHZ), and ETHZ Professor for Forest Science and WSL Director (1987–1996). From 1997, he has served as a Professor and Director of the Laboratory of Ecosystem Management at the *Ecole Polytechnique Fédérale de Lausanne* (EPFL – Swiss Federal Institute of Technology Lausanne) until retirement as Professor Emeritus in 2005. However, he remained active serving as a member of the ETH Appeals Commission (2011–2019). He is an Honorary Professor of the School of Architecture, Civil and Environmental Engineering (ENAC).

Professor Schlaepfer's fields of expertise have covered forest biometry, forest management in the tropics, monitoring systems, criteria and indicators for sustainable management of biological resources, statistical methods, including experimental design, sampling techniques and data analysis with R, forest and landscape ecology, and participation techniques in environmental projects. In these and related areas he authored and co-authored more than 100 research papers, book chapters, books and reports. Since 2017, he has been a lecturer for Experimental Design and Data Analysis with R at the Swiss Federal Institute of Technology in Lausanne.

Professor Schlaepfer has been a member of several national and international professional societies. He has also served as an expert or reviewer of various non-governmental and governmental organizations and journals.

Professor Schlaepfer formed and served as a Coordinator of the IUFRO TF "Forest, Climate Change and Air Pollution" (1990–1995), IUFRO Treasurer (1996–2000), Coordinator of IUFRO unit S4.14.00 Ecosystem-based management of forested landscapes and Deputy Coordinator of S6.06.00 Management of forest research (2001–2005), as well as being a member of the IUFRO EEB (1991–2000).

Selected research sources:

1. *Long-term Implications of Climate Change and Air Pollution on Forest Ecosystems*. R. Schlaepfer, ed. Progress Report of the IUFRO Task Force "Forest, Climate Change and Air Pollution". World Series Vol. 4. Vienna, IUFRO; Birmensdorf, WSL, 132 p. 1993.
2. *Ecosystem-Based Management of Natural Resources: a Step Towards Sustainable Development*. IUFRO Occasional Paper 6, 37 p. 1997.
3. Recent climate change: Rethinking drought in the context of Forest Fire Research in Ticino, South of Switzerland. *Theor. & Applied Climatology* 82(1–2): 17–25 (with M. Reinhard and M. Rebetez). 2005.

Personal sources:

1. URL: <https://people.epfl.ch/rodolphe.schlaepfer/bio?lang=en> Retrieved 14.06.2019.
2. Schlaepfer R. Personal communications (June 2019) at rodolphe.schlaepfer@epfl.ch



TEISSIER DU CROS, Eric Barthélémy

Eric Barthélémy Teissier du Cros received the IUFRO Distinguished Service Award in 2005 for serving the Union for more than 25 years.

Eric Teissier du Cros was born on 2 June 1944 in Beaufort-sur-Doron, France. In 1967, after his graduation at the National Institute of Agronomy (*Institut National Agronomique*), Paris, and his specialization in plant genetics, he was appointed at the National Agriculture Research Institute (INRA = *Institut National de Recherche Agronomique*) in Nancy. Meanwhile he continued his education and obtained his Ph.D. in 1969 from Clermont-Ferrand University.

He began his professional career as a research scientist on poplar selection and breeding in the Forest Research Department of INRA, Nancy. In 1974, he also took on the French programme on beech diversity and the genetic mechanisms to be considered in beech stand management and regeneration. In 1975, he moved to the Orléans Research Station of INRA where he expanded his work to coordinate an EU project on selection and breeding of trees for short rotation forestry (since 1981). From 1985 to 1990 he was Administrator of the research station, covering forest research, soil science and cattle breeding. In 1990, he moved to Avignon to carry on and develop the EU project on Mediterranean cypress (Greece, Italy, Spain, Portugal and France). He was also appointed INRA Coordinator for forest tree genetics and breeding (Nancy, Orléans, Bordeaux, Avignon, French Guyana and Guadeloupe). From 1999 to 2005, he chaired the French Commission for the Conservation of Forest Genetic Resources.

Dr. Teissier du Cros joined IUFRO for the first time at a meeting on forest genetics in Stockholm, Sweden (1974). In 1981, he organized in Grammont, Belgium the first meeting of the WP S2-02-10, later S2-03-07 Breeding Poplar and was elected Coordinator of this WP. In 1984, he was co-organizer of a IUFRO/FAO meeting on poplar breeding, improvement and culture during the 17th Session of the International Poplar Commission (Ottawa, Canada). From 1987 to 1990 he was the regional member for West Europe on the IUFRO Executive Board. In 1991, he was elected Deputy Coordinator of Division 2 Physiology and Genetics. In 1996, he became Coordinator of the Division and a member of the Executive Board. He coordinated the scientific part of the 2000 IUFRO World Congress in Kuala Lumpur, Malaysia. At that Congress Dr. Teissier du Cros was elected IUFRO Vice President for Science, a position that he held until his retirement in 2005, while continuing to work for some years as Division 2 Web moderator. For 2 years after his retirement, he worked as consultant for Italian forest programmes. For his great enthusiasm and the energy with which he carried out his longstanding service for the Union, Dr. Teissier du Cros was awarded IUFRO Honorary Membership during the 2010 Seoul, S. Korea World Congress.

Selected research sources:

1. *Le Hêtre* [Beech]. INRA, 614 p. 1981.
2. *Cypress. A practical Handbook*. Eric Teissier du Cros, ed. Florence, Italy, 139 p. (Also published in Greek, Italian, Spanish, Portuguese and French). 1999.
3. *Forest Genetic Resources Management and Conservation. France as a case study*. Ministère de l'Agriculture. Bureau des Ressources Génétiques. Commission des Ressources Génétiques Forestières, 60 p. (Also published in French). 2001.

Personal sources:

1. Teissier du Cros, Eric. In: Teplyakov V. *Honorary Members of IUFRO: 1953–2017*. Vienna, IUFRO, pp. 92–93. 2018.
2. Teissier du Cros E. Personal communications (April 2019) at eric.teissierducros@gmail.com



RENNOLLS, Keith

Keith Rennolls received the IUFRO Distinguished Service Award in 2005 for his leadership in research on the application of mathematical modeling, informatics and statistics of IUFRO Division 4.11.

Keith Rennolls was born on 29 April 1947 in Plymouth, UK. He earned his B.Sc. in Mathematical Physics from Sussex University (1970), and Postgraduate Certificate in Education (PGCE) (1972) and M.Sc. Statistics (1976) from London University. In 1976, he began his career as a Forest Biometrician at the Statistics Branch, Alice Holt, Forestry Commission Research UK. He supported and collaborated with researchers in Mensuration, Growth and Yield, Inventory, Wildlife, and Site Studies. He then served as a Medical Statistician at the Medical Research Council, London (1985–1988). In 1988 he joined the University of Greenwich as Head of Statistics and Operational Research (1988–1999), during which he developed and taught on various B.Sc. and M.Sc. programmes and supervised several Ph.D. students. He was awarded the title of Professor of Applied Statistics in 1994, and was Head of Mathematical Sciences (1999–2002). He retired in 2007.

Professor Rennolls' research has been primarily on the application of mathematical modelling and statistics in forestry, ecology, biodiversity and the natural environment. Areas of focus have included spatial statistics, forest mensuration and growth, forest inventory design and analysis, remote sensing and image analysis, biodiversity, neural networks, and social networks. Since then he has been involved with web ontology languages and services for Forest Information Services with the development of the NEFIS and the Forest Model Archive (FMA) projects. He has authored/co-authored more than a hundred research papers, book chapters, books, reports and edited proceedings. Professor Rennolls has been a member of the Royal Statistical Society (and its Council), the Biometrics Society (and its UK Committee), and the Institute of Chartered Foresters. He has consulted for national and international organizations. He has also been a member of the editorial boards of several scientific journals.

He presented at his first IUFRO conference, of unit 6.02 Advisory Group of Forest Statisticians, in Freiburg, Germany in 1978. Professor Rennolls served as Coordinator of the IUFRO units 4.11.02 Mathematics (1990–2000) and 4.11.00 Informatics, Modelling & Statistics (2000–2005) and contributed to the organization of many IUFRO conferences, in particular 4.11.00 conferences in Greenwich, UK (1980); Thessaloniki, Greece (1983); and Cairns, Australia (2005). In 2003 he initiated, with 4.11.00 colleagues, the *Journal of Forest Biometry, Modelling and Information Sciences* (FBMIS), and served as its Editor in Chief until 2009.

Selected research sources:

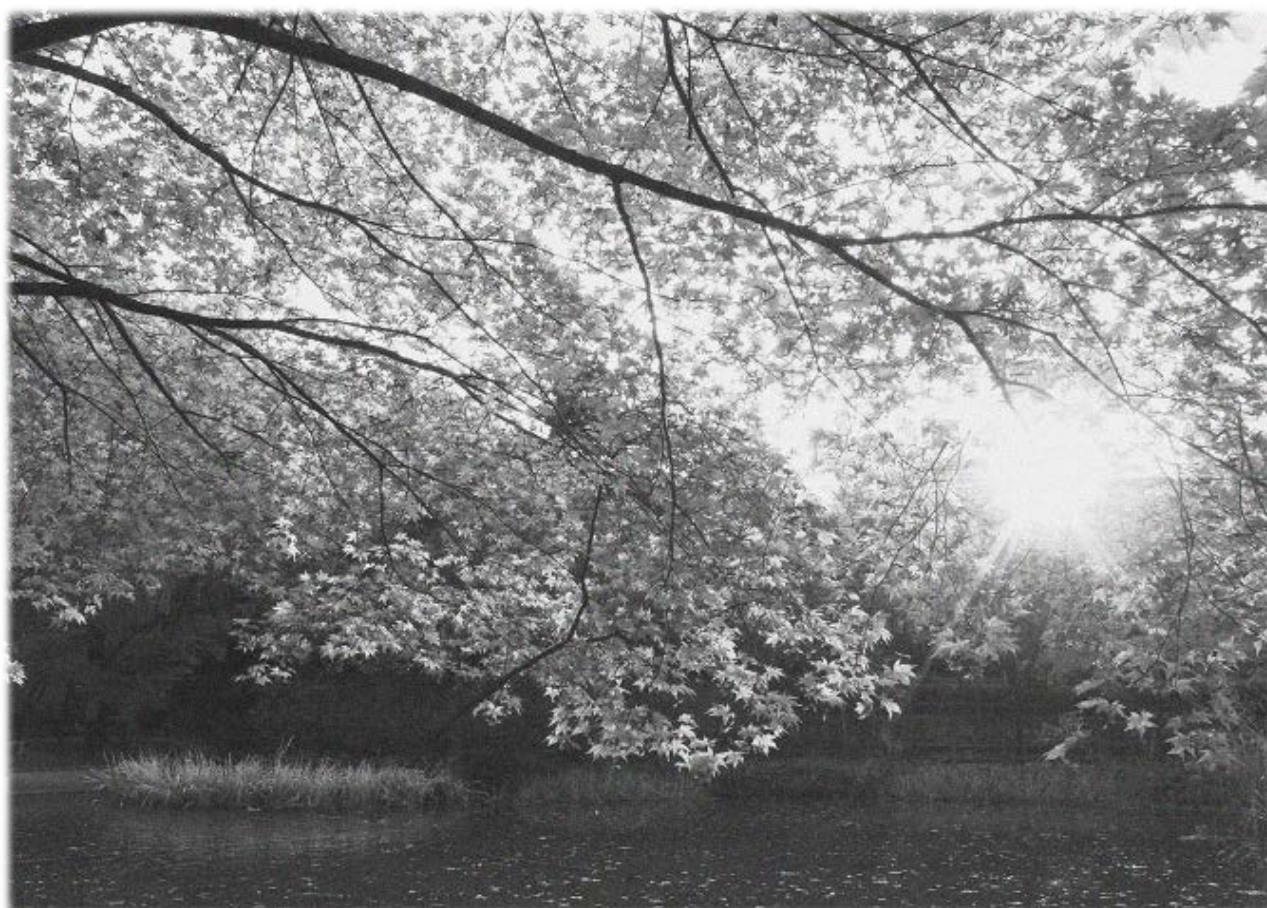
1. An Integrated Forest Process Model: its Calibration and its Predictive Performance. *For. Ecol. and Mgmt.* 25: 31–58 (with P. Blackwell). 1988.
2. Species diversity structure analysis at two sites in the tropical rain forest of Sumatra. *J. of Tropical Ecology* 16: 253–270 (with Y. Laumonier). 2000.
3. Rennolls K., Tomé M., McRoberts R. E., Vanclay J. K., LeMay V., Guan B. T. and Gertner G. Z. Potential contributions of statistics and modelling to sustainable forest management: review and synthesis. Chapter 20, pp. 314–341. In: *Sustainable Forestry: from Monitoring and Modelling to Knowledge Management & Policy Science*. Edited by Reynolds K. M. *et.al.* CABI, 525 p. 2007.
4. Base-Age Invariant Site Index Models from a Generalized Algebraic Parameter Prediction Approach. *Forest Science* 54(6): 1–8 (with M. Wang and B. Borders). 2008.

Personal sources:

Rennolls K. Personal communications (August 2019) at k.rennolls@gmail.com

2006 – 2010

<i>Dennis P. DYKSTRA</i>	<i>USA</i>	<i>2006</i>
<i>Klaus von GADOW</i>	<i>Germany</i>	<i>2006</i>
<i>Axel ROEDER</i>	<i>Germany</i>	<i>2006</i>
<i>Jack R. SUTHERLAND</i>	<i>Canada</i>	<i>2006</i>
<i>Karel VANCURA</i>	<i>Czech Republic</i>	<i>2009</i>
<i>Markku AHO</i>	<i>Finland</i>	<i>2009</i>
<i>John A. PARROTTA</i>	<i>USA</i>	<i>2010</i>
<i>Jung Hwan PARK</i>	<i>Rep. of Korea</i>	<i>2010</i>
<i>Seung-Jin SUH</i>	<i>Rep. of Korea</i>	<i>2010</i>





DYKSTRA, Dennis Peter

Dennis Peter Dykstra received the IUFRO Distinguished Service Award in 2006 for contributions as Coordinator of Division 3 and service on the IUFRO Board.

Dennis Dykstra was born on 27 June 1944 in Roseburg, Oregon, USA. After receiving a B.Sc. (Hons.) in Forest Engineering from Oregon State University (OSU) in Corvallis (1966), he served as a lieutenant in the US Army with duty in Vietnam. He then obtained an MBA in Forest Industries Management from the University of Oregon in Eugene (1971).

After working two years for a timber company in California he returned to OSU as an instructor and earned a Ph.D. in Industrial Engineering with a minor in natural resource economics in 1976. He served six years as an assistant professor of forest engineering at OSU and also became certified as a licensed professional engineer in Oregon and California. Dr. Dykstra was appointed Associate Professor at Yale University (1978–1980), Associate Professor and Professor at Sokoine University in Morogoro, Tanzania (1980–1983), and Professor at Northern Arizona University in Flagstaff (1986–1992).

Dr. Dykstra's research interests have been in the field of forest operations, forest technologies, and software development. He has authored or co-authored more than 300 publications. In the mid-1980s he worked as a Research Scholar at IIASA in Laxenburg, Austria. In 1992 he accepted a post at the FAO in Rome, where he developed the *FAO Model Code of Forest Harvesting Practice* (1996), which has been published in four languages and served as a model for the development of forest practice legislation in around 30 countries. From 1994–1999 he was Deputy Director General for Research at CIFOR, where he supervised research and organized workshops and conferences in Indonesia, Malaysia, Cameroon, Gabon, Ghana, Côte d'Ivoire, Tanzania, Malawi, Zimbabwe, Brazil, Bolivia, Costa Rica, and Peru. He served as President of the World Forestry Center in Portland, Oregon (1999–2001), and as Research Scientist at the USFS Pacific Northwest Research Station in Corvallis, OR from 2005 until his retirement in 2011.

Dr. Dykstra has served in a number of professional societies and organizations including CFA, SAF, ISTF, FPS, FHS, and the Council on Forest Engineering. He also served as a member of editorial boards, technical and associate editor of scientific journals, e.g., *Forest Science*, *Forest Ecology and Management*, *Journal of Tropical Forest Science*, *International Journal of Forest Engineering* and others. He has received several national and international recognitions including distinguished lectureships, lifetime membership in the Tropical Forest Foundation, and was selected as an OSU Outstanding Alumnus in Forest Engineering. He held a variety of offices in IUFRO, including Coordinator of IUFRO Division 3 Forest Operations (1996-2005) and served as a member of the IUFRO Board.

Selected research sources:

1. *FAO Model Code of Forest Harvesting Practice*. FAO, Rome, Italy, 85 p. (with R. Heinrich). 1996.
2. *Technologies for Wood Tracking: Verifying and Monitoring the Chain of Custody and Legal Compliance in the Timber Industry*. WB, Washington DC, 68 p. (The first author in a multi-authored publication). 2003.
3. *RILSIM 2.0 User's Guide: Software for Financial Analysis of Reduced-Impact Logging Systems*. Manual to accompany CD-ROM. Int'l Programs, USDA FS, Washington, DC, and Blue Ox Forestry, Portland, OR, 120 p.

Personal sources:

Dykstra D.P. Personal communications (May 2019) at dennisdykstra@blueoxforestry.com



von GADOW, Klaus

Klaus von Gadow received the IUFRO Distinguished Service Award in 2006 for his contribution to the re-structuring of IUFRO's Divisions, especially Division IV.

Klaus von Gadow was born on 19 May 1941 in Rostock, Germany. He grew up in Northern Germany as the son of a forester. His father was a distinguished ornithologist and botanist who actively practiced what became known as near-to-nature forestry (*Naturgemässe Waldnutzung*), a type of forest management that was sneered at by the German academic establishment of the 1960s, but now enjoys wide national and international acceptance.

Klaus von Gadow received his B.Sc. in Forestry (1969) from the University of Freiburg, an M.Sc. (1977) and a Ph.D. in Forestry (1978) from the University of Stellenbosch, and a Habilitation (1986) from the University of Munich. He worked at the University of Stellenbosch as lecturer and professor from 1978–1991, and from 1991 until 2006 as a Professor of Forestry at the Georg August University in Göttingen. Together with his doctoral students he developed what has been described as the Göttingen School of forest structural analysis. He was involved in optimizing the management of planted forests, but his main interest has always been the study of the structure and dynamics of natural forests, based on long-term observation.

After his retirement from the university in 2006, Klaus von Gadow continued to serve the international research community, as a mentor of young scientists in Mexico and China, and as a consultant for FAO in India (2017), and as a member of the *Białowieża* consultative committee for the Ministry of Environment, Warsaw (2019). In 2000 he established the successful Springer book series *Managing Forest Ecosystems* together with Prof. Timo Pukkala and Margarida Tomé. He is the Founding Editor in Chief of the Springer Open Access Journal *Forest Ecosystems* of Beijing Forestry University, established in 2014. Over 50 years of active research he has authored and co-authored more than 300 scientific publications, including 22 textbooks.

His accomplishments and achievements were recognized with the Fernow Award from the *Deutscher Forstverein* in 1996, and the Distinguished Forestry Award of the Southern African Institute of Forestry in 2018 in recognition of his contribution to international forest research. He has been awarded Honorary Professorships by the Chinese Academy of Forestry (1998) and the Beijing Forestry University (2016), and Honorary Doctorates by the Estonian University of Life Sciences (2000) and the University of Santiago de Compostela, Spain (2019).

Klaus von Gadow has been an active collaborator in IUFRO, starting in 1986 as coordinator of the newly established IUFRO unit 4.04.06 Management Planning and Managerial Economics in Short Rotation Timber Plantations. He was later elected to coordinate IUFRO's Division 4 Inventory, Growth, Yield, Quantitative and Management Sciences, and served as a IUFRO Board member (1996–2005).

Selected research sources:

1. Über den Zuwachsverlust bei der Ästung von Nadelbäumen. *Allg. Forst u. JagdZtg* 139(8): 176–184 (with G. Mitscherlich as first author). [On the loss of growth after pruning coniferous tree]. 1968.
2. Observations on self-thinning in pine plantations. *South African J. of Science* 82(7): 364–368. 1986.
3. *Forest Management*. Academica Press, Pretoria, 151 p. (with B. V. Bredenkamp). 1992.
4. *Modelling Forest Development*. Springer Netherlands, ix, 213 p. (with G. Hui). 1999.
5. *The Potential of Permanent Forest Observational Studies in India*. Report prepared for FAO, 38 p. 2017.

Personal sources:

Gadow, K. Personal communication (April 2019) at kgadow@gwdg.de



ROEDER, Axel

Axel Roeder received the IUFRO Distinguished Service Award in 2006 for his long-term leadership in IUFRO Divisions IV and VI.

Axel Roeder was born on 20 December 1941 in Berlin, Germany. He studied forestry in Göttingen University and the University of Freiburg. He received his Ph.D. (1970) from the University of Göttingen and worked with the Hessian Office for Inventory and Long-Term Planning. He received his habilitation (1974) from the University of Freiburg where he had been working as a Research Assistant in M. Prodan's Department of Forest Biometry (1971–1974). He then served as an expert for business economics and information systems in the Hessian Ministry of Forestry (1974–1979) and

Director of the Hessian Forestry Office in Usingen (1980–1986). In 1987, Dr. Roeder was appointed Director of the Research Institute of Forest Ecology and Forestry (FAWF) of Rhineland-Palatinate in Trippstadt where he served until his retirement in 2006.

Dr. Roeder combined his administrative and research work at the FAWF with his professorship at the University of Freiburg. He was also Visiting Professor at the Forestry Faculty in Curitiba, Brazil (1984), and the Agricultural University of Saigon, Vietnam (1988). His research interests are in the field of biometrics, forest inventory, monitoring, management and governance, marketing, business policy in social conflict areas, forest ecology, nature conservation, forest education, and forest recreation. He has authored and co-authored more than 80 scientific publications.

Dr. Roeder served as a scientific appraiser for GTZ (German Society for Technical Cooperation) for the economic evaluation of forestry development projects in the Republic of Haiti (1985). He was President of the DVFFA - German Union of Forestry Research Organizations, and has worked for many years on the Committee on Forestry of the EU Cooperation in Science and Technology (COST). In 2010 he received the Order of Merit of the Rhineland-Palatinate.

Prof. Dr. Axel Roeder has been active in the IUFRO for almost 30 years. He was Deputy Leader of the IUFRO Working Group on Statistical Methods, Mathematics and Computers (1978–1986), Deputy Coordinator (1987–1990) of Division VI General Subjects, and Coordinator of IUFRO Division IV Planning, Economics, Growth and Yield Management and Policy (1991–1995). In 1992, he was in the group of people who launched the IUFRO Centennial Plaque on the wall of the former Forest Academy in Eberswalde. From 1996 to 2005 he served as a German representative to the International Council of IUFRO.

Selected research sources:

1. *Werthholzproduktion bei der Fichte mittels kronenspannungsarm gewachsenen Z-Bäumen. Ökonomische Prognose unter Berücksichtigung waldwachstumskundlicher und holzqualitativer Eigenschaften* M. Bücking, R. Moshhammer, A. Roeder. Mittlg. FAWF Trippstadt, No. 62/07, 295 S. [Production of valuable spruce crop trees. Economic prognosis with respect to growth and wood quality]. 2007.
2. *Management von Forstbetrieben*. I. Grundlagen, Betriebspolitik. 381 S. II. *Management- und Informations-system*. 365 S. III. *Leistungssystem. Zusammenfassung und Ausblick*. 292 S. G. Oesten and A. Roeder. Institut für Forstökonomie der Universität Freiburg. [Management of forest enterprises. Vol. I. Basics, politics. Vol II. Management- and Information Systems. Vol. III. Performance System, summary and outlook.]. 2012.

Personal sources:

1. URL: https://de.wikipedia.org/wiki/Axel_Roeder Retrieved 11.04.2019.
2. Roeder A. Personal communications (July 2019) at Axel.Roeder2@t-online.de



SUTHERLAND, Jack R.

Jack R. Sutherland received the IUFRO Distinguished Service Award in 2006 for his outstanding leadership and support of IUFRO Working Party 7.03.04 Diseases and Insects in Forest Nurseries.

Jack Sutherland was born on 10 November 1936 in Roseville, Ohio, USA. After finishing Roseville High School, he earned his B.Sc. in Agricultural Science (1958) and M.Sc. in Botany and Plant Pathology (1960) at Ohio University, Athens, Ohio, and Ph.D. in Plant Pathology (1964) with minors in Statistics and Soil Science from West Virginia University, Morgantown (1964). He joined the Laurentian Forestry Centre, Canadian Forest Service, Quebec City, as a research scientist in 1964, and then moved in 1967 to the Pacific Forestry Centre (PFC) in Victoria, BC, where he was promoted to the highest position/level – Principal Research Scientist in 1988, and from which he retired in 1996. Dr. Sutherland was Adjunct Professor and taught mycology and forest pathology at the University of Victoria and Simon Fraser University, British Columbia, as well as forest protection at the Southwest Forestry College in Kunming, China.

Dr. Sutherland focused his research on the biology and management of diseases of seeds, nursery seedlings, seed orchards and young plantations as well as on nematode and fungus-caused diseases such as root rot in bare root forest, nurseries, and co-developed *Ventblock* growing containers for managing grey mould of container-grown seedlings. He has authored and co-authored 169 scientific and technology transfer papers, review articles, book chapters, and edited books. He served as Associate Editor for many journals, including *Plant Disease*, *Canadian Journal of Plant Pathology*, *Canadian Journal of Forest Research*, *New Forests*, and *Journal of Forest Science*. He served on the Forestry Committee, BC Science Council and other national and international bodies.

Dr. Sutherland was active member of the International Plant Pathology Society, American Phytopathological Society, Canadian Phytopathological Society, Agricultural Institute of Canada and the B.C. Institute of Agrology. He advised the Government of Canada and Canadian forest companies on government regulations related to pine wilt such as the export of non-kiln dried lumber to Europe, especially the UK and Finland. Internationally, he served as a consultant on nursery problems and cultural practices mostly in China, but also in Japan, Czech and Slovak Republics, Sweden, Argentina and Norway as well as the International Plant Genetics Resources Institute, Rome, to name just a few. The Canadian Phytopathological Society awarded Dr. Sutherland with its Outstanding Research Award (1994) and the Forestry and Game Management Research Institute, Czech Republic, with its Memorial Medal (1996).

Dr. Sutherland has been an active IUFRO Officer since 1985. In 1988 he has established and led the IUFRO WP S2.07-09 (since 1996, S7.03.04) Diseases and Insects in Forest Nurseries and hosted its first meeting in 1990 and then organized and co-organized six meetings, edited and published their proceedings. He has been also Deputy Coordinator of SG 7.02.00 Pathology (1996–2005).

Selected research sources:

1. *Cone and seed diseases of North American conifers*. J. R. Sutherland, T. Miller, R.S. Quinard, eds. Forestry Canada, Pacific and Yukon Region, Victoria, BC, 77 p. 1987.
2. *Proceedings of the first meeting of IUFRO WP S2.07-09: Victoria, BC, Canada, August 23–30, 1990*. J. R. Sutherland and S. G. Glover, eds. Information report, BC-X-331. Victoria: PFC, vii, 298 p. 1991.
3. *Diseases and Insects in Forest Nurseries*. R. Perrin and J.R. Sutherland, eds. INRA, Paris, 332 p. 1994.
4. *Pine Wilt Disease*. B. G. Zhao, K. Futai, J. R. Sutherland, and Y. Takeuchi, eds. Springer, (digital). 2008

Personal sources:

Sutherland J. Personal communications (August 2019) at jacksutherland@shaw.ca



VANČURA, Karel

Karel Vančura received the IUFRO Distinguished Service Award in 2009 for organizing international meetings and for his long-term, significant and voluntary contribution to the development of IUFRO.

Karel Vančura was born on 3 October 1946 in Prague, Czechoslovakia. He obtained his M.Sc. in Forestry (1968) from the University of Agriculture (now Mendel University) in Brno, and Ph.D. in Silviculture (1985) from the University of Agriculture in Prague. After graduation he worked as forest ranger and forester assistant at Central-Bohemian State Forests (1969–1970), he was certified as a Professional Forest Manager (1972), and appointed as Head Forester of the Forest District in Zbraslav (1970–1974). Afterwards he continued as a researcher at the Forest Biology and Breeding

Department (1974–1990), Deputy Director for Research (1990–1992) and Director (1992–1998) of Forestry and Game Management Research Institute (FGMRI) at Jíloviste.

Dr. Vančura was then promoted to Director of the Forestry Development Department (1998–2000) and Head of External Relations (2000–2004) at the Ministry of Agriculture. He was responsible for international contacts in the forestry branch and thus actively participated in international programs e.g. as EUFORGEN Program national coordinator (1992–2005), Czech Republic representative to the Pan-European Process, observer and member of the European Commission Standing Forestry Committee (1998–2004) as well as Czech representative on the Timber Committee and European Forestry Commission (COFO 1991–2003). In addition to his administrative duties, he worked as a lecturer at the Czech University of Agriculture in Prague (1998–2000). The FGMRI as well as Forest Research and Management Institute Romsilva granted him Honorary Diplomas in 2003. Similarly, he was recognized by the Technical University in Zvolen, Slovakia and Czech Forest Management Institute in Brandys, where he finished his forestry career in 2008 because of health problems.

Dr. Vančura's research interest has been in the area of coniferous provenance testing, forest tree breeding, air pollution impact on trees and forests, sustainable forest management, social forestry, legal aspects of forestry and environment, and multi-disciplinary research. He organized international meetings, authored and co-authored about 150 publications and edited books, proceedings and reports. He is a Czech Forestry Association member. He has served as an editor of the local newsletter and chronicler of the market town Davle (since 2005), and has been an organizer of various exhibitions in his place of residence. Dr. Vančura has collaborated with various IUFRO parties since 1974. He has served *inter alia* as Chair of the IUFRO Statutes Committee (1996–2000), Chair of the Honours and Awards Committee (2001–2005), Deputy Coordinator of Division 2 (2005–2010), member of IUFRO Board on various capacities for three terms (1996–2010). The Union has recognized his service with two Certificates of Appreciation (2001, 2004).

Selected research sources:

1. The Czech program for the conservation of forest genetic resources. In: *Erhaltung genetischer Ressourcen im Wald*. T. Geburek, B. Heinze, eds. Ecomed-Landsberg, pp. 159–169. (in German). 1998.
2. Report on effect of current forest practices on forest biological diversity in Czechia, 1999. In: *Evaluation of the Impact of Forest Management on Biological Diversity in Central Europe*. K. Rykowski and G. Matuszewski, eds. Warsaw, pp. 309–333. 1999.
3. *Forest and Water in the Heart of Europe*. K. Vancura, ed. MZe Praha, 320 p. 2007.

Personal sources:

1. URL: <https://prabook.com/web/karel.vancura/414258> Retrieved 18.05.2019.
2. Vančura K. Personal communications (May 2019) at vancura.family@volny.cz



AHO, Markku

Markku Aho received the IUFRO Distinguished Service Award in 2009 for his service and particular contributions to the advancement of IUFRO.

Markku Aho was born on 17 April 1946 in Tornio, Finland. He earned his M.Sc. in Forestry (1970) at the Faculty of Agriculture and Forestry, University of Helsinki. He spent almost his entire professional career at the Ministry for Foreign Affairs of Finland starting as Forestry Development Officer at the Department for International Development (1972–1974), being promoted to Head of Section for Social Development and Human Resources (1977–1981), and then appointed as Forestry Adviser at the Unit for Sector Policy (1993–1998). He served at the Unit for Multilateral Financing Institutions at the Department for International Development (1998–2000), as Counsellor for Global Environmental Affairs/Forests at the Unit for Sector Policy (2000–2003), as Counsellor for the Environment at the Unit for International Environment Policy at the Department for Global Affairs (2003–2008) and the Department for Development Policy (2008–2013). He has also served as a Director of Forestry Training Programme, National Board of Vocational Education at the Ministry of Education (1984–1989).

Mr. Aho has been actively involved in the international aid programs of Finland to developing countries. His responsibilities included programme management in forestry and natural resources, mobilization of financial resources for forestry development and coordination of programmes for technology transfer for forest management and forest industry development. At the country and regional level, he has served as Forestry Adviser to the Embassy of Finland at Dar es Salaam, Tanzania (1974–1977) where he was responsible for coordination of programmes for technology transfer for forest management and forest industry development, and then worked as a Development Programme Coordinator of Forest Division at the Ministry for Natural Resources, Tanzania (1981–1983). He was later appointed as Regional Forestry Advisor to the Department for Development Cooperation at the Embassy of Finland in Harare, Zimbabwe (1989–1992) covering the Southern African Development Community (SADC region).

In addition, Mr. Aho carried many other responsibilities as the National Focal Point for the UNCCD (2000–2013), member of the Finnish delegations to UNFCCC, UNFF, FAO Committee on Forestry, member of the EU Tropical Forestry Advisers Group, and Chairman International Forestry Advisers Group (1997–2001), to name just a few. He has also represented the Foreign Ministry at the FAO National Forest Programme Facility (2002–2012), the World Bank Forest Carbon Partnership Facility and the Advisory Board of the World Bank PROFOR (2002–2013), the Ministerial Conference on the Protection of Forests in Europe (2007), and others. Since 2013, he has served as a member of the Steering Committee of the Forest and Farm Facility hosted by FAO.

Mr. Aho has actively engaged with IUFRO by supporting the work of the Collaborative Partnerships on Forests and in the establishment of the Global Forest Expert Panels initiative, which IUFRO has played a key role in, as well as the establishment of a special IUFRO unit 9.05.07 on community forestry. He was one of the initiators of the IUFRO special project World Forests, Society and Environment (WFSE) supported by Finland for a long time, and a longstanding member of its Editorial Advisory Board.

Personal sources:

Aho M. Personal communications (July 2019) at markku1704@gmail.com



PARROTTA, John Anthony

John Anthony Parrotta received the IUFRO DSA in 2010 in recognition of his achievements in strengthening IUFRO's activities on traditional forest knowledge and providing outstanding services as Chair of the IUFRO World Congress 2010 Scientific Committee.

John Parrotta was born on 11 October 1958 in Methuen, Massachusetts, USA. In 1980, he obtained a B.A. in Biology (*summa cum laude*) and a B.Sc. in Chemistry (*magna cum laude*) both from Merrimack College, North Andover, MA, USA; an M.Sc. in Ecology from the University of Aberdeen, UK (1981), and M.Sc. (1983) in Forestry & Environmental Studies, M.Phil. (1984), and Ph.D. (1987) in Tropical Forest Ecology and Silviculture from Yale University, CT, USA.

Dr. Parrotta began his career as a research scientist at the University of Puerto Rico before joining the U.S. Forest Service's International Institute of Tropical Forestry in 1991. Since 2001 he has been the Forest Service's National Research Program Leader for International Science Issues in Washington, DC. The U.S. Department of State has recognized his contributions to the work of the Convention on Biological Diversity with awards in 2004, 2011 and 2012.

Dr. Parrotta's research interests include tropical forest ecology, silviculture and restoration, impacts of reforestation on biodiversity at site and landscape scales, ecology and traditional forest-related knowledge. In these and related fields he has authored, edited, and co-authored over 170 scientific publications, including books, proceedings and reports. Dr. Parrotta is a member of several national and international professional societies, as well as editorial and advisory boards for a number scientific journals including *Restoration Ecology*, *Ecosystems and People*, and *Forest Ecology and Management*. He was a coordinating lead author of the 2018 IPBES thematic assessment report on land degradation and restoration.

Dr. Parrotta has been active in IUFRO since 1993, when he became the coordinator of the newly established Division 1 Working Party on tropical forest restoration. He then served as Coordinator of the Division 1 WP and RG on rehabilitation of degraded sites, Deputy Coordinator of Division 1 (1997–2000; 2004–2010) and Division 8 (2010–2014), Coordinator of Division 1 (2000–2004), and Deputy Coordinator of RG 9.03 Forest History & Traditional Knowledge (since 2010). He also served as Coordinator of the Task Force on Traditional Forest Knowledge (2005–2011), Chair of the IUFRO World Congress Scientific Committee (2010 and 2014), Chair of Publications Committee (2002–2004), and member of the IUFRO Management Committee (2006–present) and Honours and Awards Committee (2010–2014). He also chaired the Global Forest Expert Panel on Biodiversity, Forest Management and REDD+ (2011–2012) and was a member of two IUFRO-led Global Forest Expert Panels, on Adaptation of Forests to Climate Change (2008–2009), and Forests and Food Security (2014–2015). He was elected IUFRO Vice-President (2014–2019), and President (2019–present).

Selected research sources:

1. Catalyzing native forest regeneration on degraded tropical lands. *For. Ecol & Mgmt*, 99: 1–8 (with J. Turnbull and N. Jones). 1997.
2. *Healing Plants of Peninsular India*. CAB International, Wallingford, UK and New York, 917 p. 2001.
3. *Traditional Forest-Related Knowledge: Sustaining Communities, Ecosystems and Biocultural Diversity*. J.A. Parrotta and R.L. Trosper, eds. World Forest Series, Vol. 12. Dordrecht: Springer, 621 p. 2012.
4. *Forest Landscape Restoration: Integrated Approaches to Support Effective Implementation*. S. Mansourian and J. Parrotta, eds. The Earthscan Forest Library. Routledge, 272 p. 2018.

Personal sources:

Parrotta J. A. Personal communications (April 2019) at john.parrotta@usda.gov



PARK, Jung Hwan

Jung Hwan Park received the IUFRO Distinguished Service Award in 2010 for his outstanding contribution to IUFRO and especially as COC Chair.

Jung Hwan PARK [박정환] was born on 20 September 1959 in Kangwon Province, Republic of Korea. He earned his B.Sc. (1982) and M.Sc. (1984) in Wood Products Engineering at Seoul National University and his Ph.D. in Environmental Resources Engineering (1995) at the College of Environmental Science Forest, State University of New York (SUNY-ESF) in Syracuse, NY. During his doctoral study, he worked as a tutor (1991–1995).

In 1985, he started his career as a Researcher at the Korea Forest Research Institute (KFRI, now National Institute of Forest Science, NIFoS) and progressed there to Senior Researcher (2003), Director of the International Cooperation Div. (2008), and Research Planning Div. (2010), Director General of Forest Genetic Resources Department (2016).

Dr. Park's research interests are in the development of drying schedules of commercially important Korean tree species, and evaluation of long-term performance under load of Korean structural timber. He also engaged in several research projects at NIFoS as a project leader, including evaluation of mechanical performances of Korean structural timber, and fire-damaged Korean red pine timber.

Dr. Park has been involved in the international cooperation of NIFoS since 1998. He has been the South Korean delegate to ITTO Council meetings, served as a member of the Expert Panel for project appraisal (2008–2011), and participated in other ITTO activities. With the financial support from the Korea International Cooperation Agency (KOICA), since 2002 he has developed and implemented training workshops on forest management for forest officers of developing countries. From 2003, Dr. Park represented NIFoS at the APAFRI Executive Committee and served as a Chairman of APAFRI (2016–2018). Dr. Park received high recognition at the national level when he was given the Outstanding Government Employee Award by the Prime Minister (2001) and Distinguished Government Employee by the President of Republic of Korea (2010).

Dr. Park has contributed to IUFRO in various ways. In 2002, he was put in charge of the bid process to host the 23rd IUFRO World Congress in Seoul in 2010, and was appointed by NIFoS as the Chair of the Congress Organizing Committee (2005). He served IUFRO as an *ex officio* member of the Board and Management Committee (2005-2010), Deputy Coordinator of IUFRO TF Resources for the Future (2010-2014), and Member of Board as a President nominee for Asia-Pacific (2014-2019). In addition, since 2005 Dr. Park has helped secure financial resources for the IUFRO-SPDC. His efforts are still evident through the annual voluntary contributions of NIFoS.

Selected research sources (in Korean, English abstracts):

1. KI Criteria of surface check under stepwise loading of drying stresses. *J. Korean Wood Sci. & Technol. (JKWST)* 27(4): 51–56. 1999.
2. Variation of material properties of fire-killed timber (I) - Mechanical properties of fire-killed Korean red pine in the east coast area. *JKWST* 33(6): 8–16 (with B. S. Park, K. B. Shim, and T. S. Cho). 2005.
3. *A New Introduction to Wood Drying*. Seoul National University Press, Seoul. (with Jung, H. S., H. Y. Kang, N. H. Lee, H. W. Lee, C. W. Kang and H. M. Yeo). 2008.
4. A study on log diameter classes of Korean softwood logs. *JKWST* 41(4): 337–345 (with K. M. Kim, C. D. Eom, and D. J. Jung). 2013.

Personal sources:

Park J. H. Personal communications (July 2019) at hwanpark@korea.kr



SUH, Seung Jin

Seung Jin Suh received the IUFRO Distinguished Service Award in 2010 for his outstanding contribution to IUFRO

Seung Jin SUH [서승진] was born on 2 January 1953 in Choongcheongnamdo Province, Republic of Korea (ROK). He earned his B.Sc. (1979) and M.Sc. (1986) in Forest Science at Seoul National University (SNU) and Michigan State University, respectively. He earned his Ph.D. in Forest Management (1994) at Seoul National University. He passed the technology examination for forestry in 1978 and joined the Korea Forest Service as a Senior Officer. He has had an extensive professional career at the Service including R&D policy in the forest sector, establishment of wildfire control centre, and others. He also worked at the ROK President Office for Agriculture and Forest Policy.

In 2001, Dr. Suh was appointed as the first publicly recruited president of the Korea Forest Research Institute (KFRI, now National Institute of Forest Science, NIFoS). During his service, KFRI made much progress in R&D operations and achievements due to his innovative approaches and outstanding leadership. KFRI was evaluated as a top national Institute in the assessment program of effectiveness of operational management and R&D achievement for 5 years in row. The successes of KFRI in operational innovation and achievement was reported to the President of Korea during a cabinet meeting (2005). Other institutes nationwide have adopted the participatory innovation model that he has established. Dr. Suh became Minister of the Korea Forest Service in 2006. He emphasized improvements to the administration of the Regional Forest Service during his service. The development of forest science and international cooperation in forest sector were also priorities for him. Dr. Suh was awarded the Red Stripe (1991) and Yellow Stripe (2009) of the Order of Service Merit, respectively.

Dr. Suh's research interests have focused on forest management and administration, criteria and indicators of sustainable forest management, international forestry, rehabilitation and reforestation in Korea and globally, and many other areas. He has authored and co-authored more than 100 research papers, book chapters and technical reports as well as giving numerous public speeches and presentations at national and international scientific symposia and meetings. He is a member of the Korean Forest Society, and was the president of Korean Erosion Control Association, and the SNU Forestry Alumni Association.

While he was in KFRI, Dr. Suh decided to host the 23rd IUFRO World Congress in Seoul, not only to provide an opportunity for Korean scientists to experience scientific communication, but also to share the successful experience of the Korean people in rehabilitation and reforestation of denuded and degraded forestland over a very short time. He made every effort make the Congress a success, including providing financial and administrative support. With his support, the Seoul Congress in 2010 was recognized at the time as the most successful IUFRO World Congress in history. He also contributed to the support of IUFRO's scientific activities by providing financial resources since 2002. As the Chairman of the IUFRO-KOREA chapter, he also made a big effort to encourage its activities during his service.

Selected research sources:

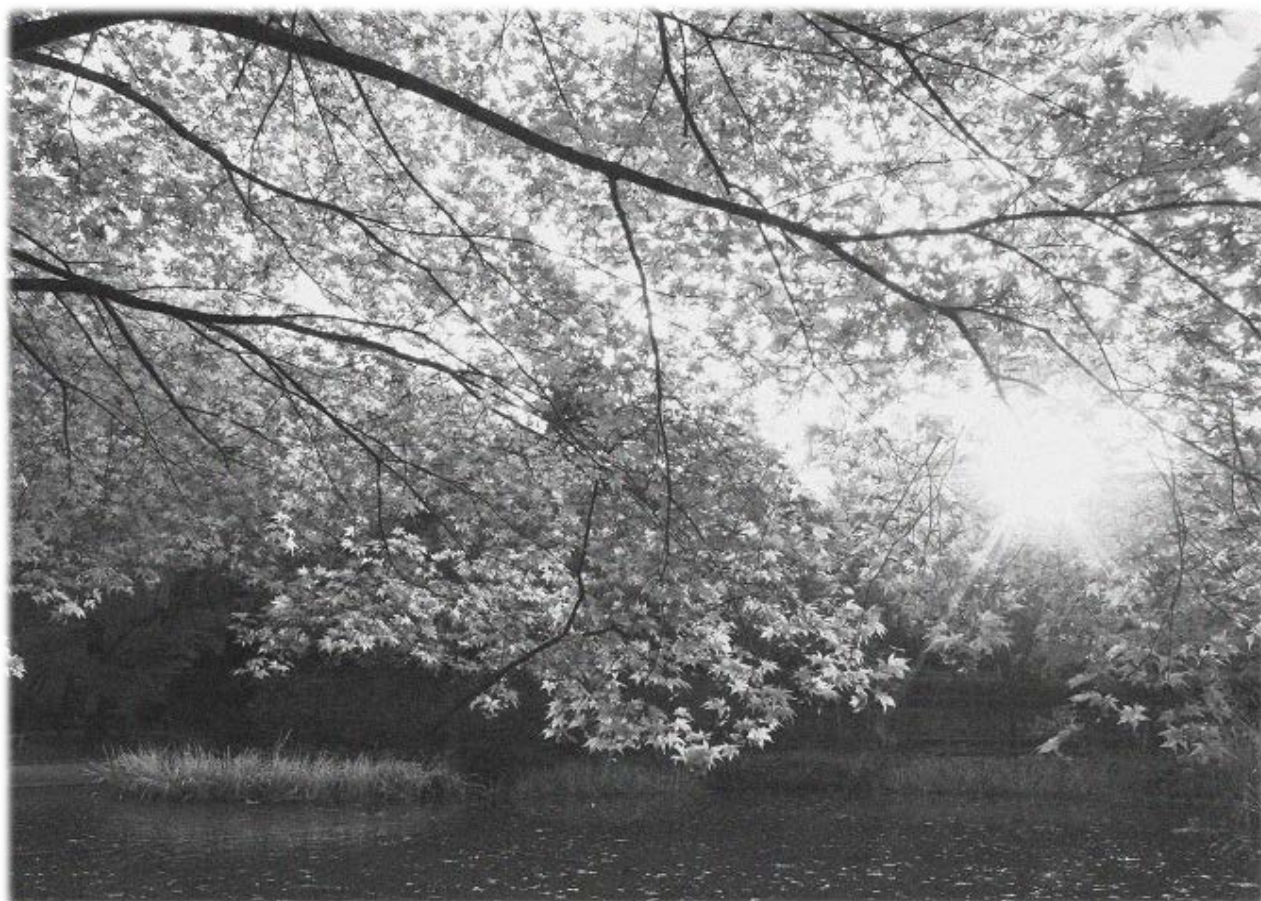
1. *Development of Criteria and Indicators for Sustainable Forest Management in Korea*. Ph.D. dissertation, Seoul National University, Seoul, Korea, 209 p. (in Korean). 1994.
2. Forest restoration and rehabilitation in Republic of Korea. Chapter 25, pp. 383–396. Lee D. K, Suh S. J. In: Stanturf J. A., Madsen P., eds. *Restoration of Boreal and Temperate Forests*. CRC Press, New York. 2005.

Personal sources:

Suh S. J. Personal communications (September 2019) at suhs77@hanmail.net

2011 – 2017

<i>Perry BROWN</i>	<i>USA</i>	<i>2011</i>
<i>Dave COWN</i>	<i>New Zealand</i>	<i>2011</i>
<i>Joseph R. COBBINAH</i>	<i>Ghana</i>	<i>2012</i>
<i>Gerardo MERY</i>	<i>Chile/Finland</i>	<i>2014</i>
<i>Peter HERBST</i>	<i>Austria</i>	<i>2014</i>
<i>Santiago Barros ASENJO</i>	<i>Chile</i>	<i>2014</i>
<i>Richard W. GULDIN</i>	<i>USA</i>	<i>2014</i>
<i>Hans R. HEINIMANN</i>	<i>Switzerland</i>	<i>2016</i>
<i>Konstantin von TEUFFEL</i>	<i>Germany</i>	<i>2017</i>
<i>Margarida TOMÉ</i>	<i>Portugal</i>	<i>2017</i>





BROWN, Perry J.

Perry J. Brown received the IUFRO Distinguished Service Award in 2011 for long-term service to IUFRO.

Perry Brown was born on 20 February 1945 in Helena, Montana, USA. After a year at Foothill College at Los Altos, CA (1963), he received his degrees from Utah State University (USU) in Logan, successively, B.Sc. in Forestry (1967), M.Sc. in Forest Recreation (1968) and Ph.D. (1971) in Outdoor Recreation and Social Psychology. He also studied Survey Research and Social Psychology at the University of Michigan (1968–1970). He started at USU as Assistant Professor (1971), moved to Colorado State University in 1973 progressing to Associate Professor (1974). In 1979 he became Department Head and Professor at Oregon State University (OSU) (1979–1988), and Associate Dean (1988–1994) of the OSU College of Forestry. From 1994–2010, he was Dean of the College of Forestry and Conservation at the University of Montana (UMT) and Director of the Montana Forest and Conservation Experiment Station (1994–2010), UMT Associate Provost for Graduate Studies (2008–2010) and Interim Provost and Vice President from 2010–2013, and finally Provost and Vice President from 2013 until his retirement in 2016.

Professor Brown's research was on outdoor recreation, human dimensions of wildlife, land planning, wilderness, natural resource policy, and the human dimensions of natural resources, much of which he pioneered. Along with B.L. Driver, G. Stankey, and R. Clark, he developed the Recreation Opportunity Spectrum (ROS) for natural resource planning that is in worldwide use. He authored and co-authored over 120 scientific publications. He has visited over 50 countries for educational and professional purposes.

During his 45 years of research, education and administration, Professor Brown has served as a member and chair of numerous committees and boards at universities, professional societies (e.g., SAF, NAUFRP for which he was President), as well as journals, e.g., *Journal of Forestry*, *Journal of Leisure Research*, *CABI Forestry Series* and the *International Journal of Wilderness*, and publishing houses, e.g., McGraw-Hill, Island Press, and John Wiley and Sons. He was recognized with election as a fellow in both the Society of American Foresters and the Academy of Leisure Sciences, with the USFS Chief's Certificate of Appreciation, Oregon SAF Service and Leadership Award, USU Professional Achievement Award, and membership in the Golden Key Honor Society .

Professor Brown has an extraordinary record of service for IUFRO since 1973 when he was elected as Co-Chair of IUFRO WG Recreation Behavior. He actively participated in ten IUFRO World Congresses from Oslo (1976) to the USA (2014) including the Centennial IUFRO Meeting in Berlin (1992). He has also attended and co-organized many inter Congress conferences, seminars and workshops. He served as Deputy Leader (1978–1990) and Leader of IUFRO unit on Forest Recreation (1991–1995), Deputy Coordinator 1996–2005 and Coordinator (2006–2010) of IUFRO Division 6, Social, Economic and Policy Sciences and was a member of the IUFRO Board, as well as Co-Leader of the TF on People and Forests (since 2011).

Selected research sources:

1. *Recreation Carrying Capacity in Wilderness: A Series of Topical Papers*. P. J. Brown and J. H. Schomaker, eds. Utah State University, iii, 119 p. 1973.
2. *Recreation Opportunity Spectrum User Preference Study*. Rep. to U.S.D.I. BLM. (with D. M. Ross). 1980.
3. *Social Science in Natural Resource Management Systems*. M. L. Miller, R. P. Gale and P. J. Brown, eds. Westview Press, Boulder, Co., 265 p. 1987.

Personal sources:

1. URL: <http://www.umt.edu/president/imx/provost/brownresume.pdf> Retrieved 10.05.2019.
2. Brown P. Personal communications (May 2019 and July 2020) at perry.brown@umontana.edu



COWN David (Dave) John

David John Cown received the IUFRO Distinguished Service Award in 2012 for his outstanding contribution to IUFRO, especially the development of Division 5 Forest Products.

David Cown was born on 21 December 1944 in Huntly, Scotland. He earned his B.Sc. (Hons) in Forestry at the University of Aberdeen (1967) and Ph.D. in Wood Science (1976) at the University of British Columbia, Canada. In 1967 he began his professional career as Forest Manager at Tilhill Forrestry, Elgin, Scotland.

After moving to New Zealand, he linked his career entirely with the New Zealand Forest Research Institute Ltd. (Scion) in Rotorua where he progressed from Wood Quality Scientist (1969–1973) to Group Leader (1976–1992), Manager of Wood Processing Division (1992–1997) and Scion Senior Scientist, Wood Quality (1998–2004). Dr. Cown was active as a consultant to various national and international projects. He retired in 2016.

Dr. Cown's research interests were in the general area of wood quality: quantifying impact of forest management practices on wood formation, properties and quality, product performance and value, "mapping" of the major wood properties across New Zealand, sawmilling and remanufacturing, and monitoring of international forest products research. He authored and co-authored over 300 research and technical papers, book chapters, books, and reports, including about 150 refereed scientific publications. He has also served as an Associate Editor of *Canadian Journal of Forest Science* and a member of the Editorial Board of the *South African Journal of Forestry*.

Dr. Cown has often been invited as a speaker on wood quality at international conferences (USA, Canada, Japan, Sri Lanka, South Africa, Chile, Slovakia, and Sweden). He has also provided numerous consultancies on the quality and uses of both softwoods (Australia, Canada, Fiji) and hardwoods (China, Fiji), on wood quality survey and sawing studies of mahogany (Fiji), and on the development of non-destructive sampling methods for wood quality. He participated in several New Zealand industry trade missions to promote radiata pine wood products in Korea, Thailand, and China. He served as a member of International Advisory Committee of Japanese Wood Research Society.

His achievements were recognized with several honours and awards, including the Bill Thode Award (2002), George Marra Award for Excellence (2006), and New Zealand National Science Award (2017). Dr. Cown served as a IUFRO Officer in various positions, including as Coordinator of IUFRO unit S5.01-05 on wood properties (1991–2005), Board member and Coordinator of Division 5 Forest Products (2005–2010), and since 2010 – Deputy Coordinator of Division 5 and IUFRO Extended Board member. He also organized All-Division 5 conferences in Rotorua (2002) and Taipei (2007) and helped in organizing other scientific and professional meetings.

Selected research sources:

1. Basic Wood Properties. Ch. 6., 15 pages. In: *Properties and Uses of New Zealand Radiata Pine: Wood properties*. J. A. Kininmonth, L. J. Whitehouse, eds. Ministry of Forestry. (with J. M. Harris). 1991.
2. Radiata pine and Douglas-fir: suitability for processing. *FRI Bulletin* 168, 74 p., ill. 1992.
3. Role of intensively managed forests in future timber supply. *CAB Reviews: Perspectives in Agriculture, Veterinary Science, Nutrition and Nat'l Resources*, 2(023): 1–12. 2007.

Personal sources:

Cown D. J. Personal communications (July 2019) at Rotorua, New Zealand.



COBBINAH, Joseph Rexford

Joseph Rexford Cobbinah received the IUFRO Distinguished Service Award in 2012 for his long-term contribution to IUFRO activities in various capacities.

Joseph Cobbinah was born on 5 January 1947 in Kumasi, Ghana. He received his B.Sc. (Hons) in Biological Science from the Kwame Nkrumah University of Science & Technology (KNUST) in Kumasi (1971) and Ph.D. in Entomology from the University of Adelaide, Australia (1978). Dr. Cobbinah has spent his entire professional career with the Forestry Research Institute of Ghana (FORIG), Kumasi. He progressed from Research Scientist (1979) to Senior (1983), Principal (1990), and Chief Research Scientist (1996). He was then promoted to the FORIG Deputy Director (1996), Acting Director (1997) and Director of (1997–2007), and works now as an emeritus Chief Research Scientist. As a Professor he has been teaching various courses at the KNUST Faculty of Agriculture and the Institute of Renewable Natural Resources (1982–1984), FORIG-University of Eastern Finland Graduate Program (2009–2015) and the Council for Scientific & Industrial Research (CSIR) Postgraduate College of Science & Technology (since 2015).

Dr. Cobbinah's research interests span agriculture and forest entomology, pest control in tree nurseries and forests, sustainable forestry and forest production, snail farming, forest planting, and forest protection. He has authored and co-authored over 140 publications. He has held membership in the Entomological Association of America, African Association of Insect Scientists, Commonwealth Forestry Association, African Forestry Research Network (AFORNET) and others. At the national level, he has served as a member or leader of many national committees, e.g., as Commissioner of the Ghana Forestry Commission (1998–2003), Chair of the National Governing Council on Forest Certification (2004–2007). He was also Ghana's sole representative to UNCSTD, Coordinator of Plant Resources of Tropical Africa (PROTA), member of the Governing Board of TROPENBOS International, Africa Forest Forum (AFF), and others. He was recognized with an International Scientific Award by the Italian Snail Farmers Association (1988), the Fulbright Fellow (1991–1992), Rockefeller Scholar (1993) and ICRAF's Senior Distinguished Fellow (2007).

Since 1995, Dr. Cobbinah has served as a Coordinator of IUFRO WPs 7.03.02, 7.03.09, and 7.03.11. He was Country Representative on the IUFRO International Council (1997–2007), a member of the IUFRO TF on GFIS (1998–2004), Statutes Review Panel (2005), and H&A Committee (2013), as well as IUFRO Representative to the UNFF Scientific and Technological Major Groups (since 2009) and the ICSU Regional Review Panel (2013). He has played a leading role in the Forestry Research Network of Sub-Saharan Africa (FORNESSA) as a member of the Steering Committee (since 2000), Coordinator (since 2007), Chair of COC and CSC for the First IUFRO-FORNESSA Africa Regional Congress in Nairobi (2011–2012), Chair of the Steering Committee for IUFRO-GFIS Africa Project (1999–2004) and Resource Person at the IUFRO Regional Workshops on the Science-Policy Interface (2007) and Writing Convincing Research Proposal (2013). In 1990, he was nominated for IUFRO SAA.

Selected research sources:

1. *Forest Entomology of West Tropical Africa: Forest Insects of Ghana*. Kluwer Academic Publishing, the Netherlands, 210 p. (with M. R. Wagner, S. K. N. Atuahene). (2d ed., 2008. LXX, 244 p.) 1991.
2. *Snail Farming in West Africa: A Practical Guide*. CTA Technical Centre for Agricultural and Rural Cooperation, Ede, the Netherlands, 56 p. 1993.

Personal sources:

Cobbinah J. Personal communications (June 2019) at [jacobbinah@csir-forig.org.gh](mailto:jcobbinah@csir-forig.org.gh), joe.cobbinah@ymail.com



GULDIN, Richard William

Richard William Guldin received the IUFRO Distinguished Service Award in 2014 for his leadership as Chair, Congress Organizing Committee, XXIV IUFRO World Congress.

Richard Guldin was born on 24 July 1948 in Reading, Pennsylvania, USA. He earned his B.Sc. (Hons.) in Forest Science (1970) from Pennsylvania State University, and two degrees from Yale University – M.Sc. in Forest Science in 1976 and Ph.D. in 1979 with emphasis in renewable resources economics. He received post-graduate training in executive leadership, with a focus on the integration of science and policy at the Kennedy School of Government, Harvard University (2003, 2005). After graduation in 1970, Richard served four years as a military officer in the U.S. Army Corps of Engineers in Washington, DC.

In 1979 he started his Forest Service career as a Research Forester at the Southern Forest Experiment Station in New Orleans, Louisiana. In 1985 he moved to the agency headquarters where he was responsible for national resource assessments and later national research budgets. In 1990, he was the forestry expert for the U.S. Senate's Committee on Agriculture, Nutrition, and Forestry. In 1992–1996, Dr. Guldin served as Assistant Station Director for the Northeastern Forest Experiment Station in Radnor, PA. He was promoted to the Senior Executive Service in 1996 and returned to Washington D.C. as the Director of Quantitative Sciences for the Forest Service. He transformed the Forest Inventory and Analysis Program into an annualized national census of U.S. forests, and between 2002 and 2014, led the U.S. delegation to the Montréal Process Working Group (MPWG) for the Sustainable Management of Temperate and Boreal Forests. From 2002 he led the adoption and training on the FS Code of Scientific Ethics, aimed at achieving high standards in the conduct and reporting of research. He retired from government service in 2015 and developed his business "Guldin Forestry LLC".

Dr. Guldin joined the Society of American Foresters (SAF) in 1968. In SAF, he served as the first Student Chapter President at Yale, and then as Vice-Chair (1997–1998) and Chair (1999–2000) of SAF Economics, Law, and Policy WG, Acting Managing Director of Publications (2016–2017), and Acting Editor-in-Chief of the *Journal of Forestry* (2018). He is a Licensed Professional Forester (since 1987) and SAF Certified Forester (since 2003). Dr. Guldin has an extensive and impressive record of activities within IUFRO. He served as Leader of Division 6 WP on Forest Recreation and Policy (1991–1995), Coordinator of TF "Forest Science-Policy Interface" (1999–2005), and COC Chair for the XXIV IUFRO World Congress, held in Salt Lake City, Utah (2014), attended by 3,500 participants from over 100 countries. Since 2015, he has led the development of a new donations program for IUFRO, initially the Eberswalde Circle. Dr. Guldin has been recognized with several honours and awards including a National Science Foundation Graduate Fellowship (1974-1978), FS Chief's Award for Technology Transfer (1994), Fellow of SAF (2017), and Outstanding Alumnus, Penn State Forestry Alumni Association (2015).

Selected research sources:

1. Forest Science and forest policy in Europe, Africa, and the Middle East: Building Bridges to a sustainable future. *Scand. J. F. Res.* 19 (4): 5–13 (with N. E. Koch, J. A. Parrotta, C. Gamborg, and B.J. Thorsen. 2004.
2. Working Effectively at the Interface of Forest Science and Forest Policy. *IUFRO Occasional Paper* 17, 29 p. (with J. A. Parrotta and E. Hellstrom). 2005.
3. Scientific Ethics: Roots of the Forestry Profession. *J. of For.* 117(1): 78–79. 2019.

Personal sources:

1. URL: <https://ecosystems.psu.edu/alumni/awards/2015-outstanding-alumni/richard-w-guldin>
2. Guldin R. W. Personal communications (May 2019) at Rich@guldinforestry.com



HERBST, Peter

Peter Herbst received the IUFRO Distinguished Service Award in 2014 in recognition of his outstanding and valuable service to IUFRO.

Peter Herbst was born on 24 May 1959 in Villach Austria. He graduated as Dipl.-Ing. in Forestry from the BOKU University of Natural Resources and Life Sciences, Vienna (1984) and obtained his Magister Juris from University of Salzburg (1990). In 1987, he passed the State Examination for the Senior Forest Service. Masters degrees in forestry and timber management and in forest and environmental law has enabled him to make important contributions in engaging and promoting research on forest and environmental law development as well as to provide relevant consultancies to various organizations and governmental agencies. As a forest legal expert, he has consulted in over 20 countries in Europe and Central Asia, undertaking assessments of the technical sufficiency of forest and environmental legislation and regulations, analyzing forest law and forest policy, and drafting forest legislation.

Mr. Herbst is a member of several national and international professional societies and bodies, e.g., Association of Austrian Foresters, Association of Carinthian Lawyers, Austrian Association of Court Surveyors, International Association for the Study of the Commons (IASC) and the European Expert Association (EuroExpert). He acts as Member of the Commission for the Certification of Foresters (Examiner at State Examination for Senior Forest Service) and Certified Examiner for Forestry Master Craftsman's certificate (*Meisterprüfung*). In addition, international governance institutions like the FAO, World Bank and others have widely acknowledged his work.

Mr. Herbst has been extensively involved in practical forest management planning and community forest management, as well as lecturing in forest law, forestry, and forest policy and economics in BOKU, University of Sarajevo and others. He has authored and co-authored numerous scientific publications, and edited a multiplicity of proceedings of various meetings and technical reports in the sphere of his professional interests. He also acts as a reviewer for scientific journals, such as *Forest Policy and Economics*, *Journal of Environmental Management*, and others.

Peter Herbst was co-chair of the former RG S6.13.00 Forest Law and Environmental Legislation from 1994, and then chaired IUFRO RG 9.06.00 from 2000. He organized and co-organized numerous meetings of these research groups and joint symposia of various IUFRO units. The results of these conferences have been published as IUFRO World Series (a volume for Europe in 2000 and a volume for Latin America in 2005), and a series of more than a 15 publications of international IUFRO symposia on the Legal Aspects of European Forest Sustainable Development.

Selected research sources:

1. *Wegerecht & Grenzstreitigkeiten*. 2 ed. Neuer Wissenschaftlicher Verlag, Wien, 156 p. (with M. Maschl). [Right of Way & Boundary Disputes]. 2009.
2. *Legal Aspects of European Forest Sustainable Development (11)*. R. Šulek, P. Herbst, and F. Schmithüsen, eds. Faculty of Forestry, Technical University in Zvolen, Slovakia, 163 p. 2010.
3. *Der Baum im Nachbarrecht – Freude, Ärger, Risiko*. 4 ed. Neuer Wissenschaftlicher Verlag, Wien, 152 p. (with G. Kanduth and G. Schlager). [Trees and Neighbor Disputes – Rights, Obligations, Liabilities]. 2016.

Personal sources:

Herbst P. Personal communications (April 2019) at hp@net4you.at



BARROS ASENJO, Santiago

Santiago Barros Asenjo received the IUFRO Distinguished Service Award in 2014 for more than 20 years being a IUFRO Officer in different working groups, International Council member and organizer of several IUFRO congresses, such as IUFROLAT I, IUFROLAT II and others.

Santiago Barros was born on 7 April 1948 in Santiago, Chile. In 1975, he graduated with Diploma (Hons.) of Forest Engineer from the University of Chile, and in 1996, he got a Dipl. of Services Management at Adolfo Ibáñez University. In 1974, he began his professional career as a researcher at the Chilean Forestry Institute (INFOR), and then progressed to Project Manager (1975–1986), Head of the Forestry Division and Technical Advisor to the INFOR Executive Directorate.

As Project Manager, he led the Species Introduction Program, evaluating exotic species of high economic value in more than 8,000 plots at over 60 sites that were established during 1963–1975 throughout the country. He then led projects focused on provenance studies, establishment and management of plantations and genetic improvement (1996–2001). Since 2001, Mr. Barros has been Professor of Planted Forest Silviculture and served as Thesis Coordinator at the *Universidad Mayor de Chile* Forest Engineering School, and since 2006, he has coordinated the Department of International Relations and Communications at the INFOR's Executive Directorate. He is now in charge of the management of publications of INFOR and is also the Editor of *Ciencia e Investigación Forestal*.

Mr. Barros is the author, co-author or editor of more than 100 scientific and technical publications including several books and manuals related to the introduction of forest species, silviculture and improvement of forest plantations and forest development of arid and semi-arid zones. Since 1980, he has coordinated and organized numerous national and international congresses and seminars. He has served as a consultant at the national level to the National Forest Corporation (CONAF), Society of Agriculture and Services Easter Island (SASIPA-CORFO), Banco de Chile, the Scientific and Technological Development Support Fund (FONDEF) and won competitive funds financing the research and development in Chile. Internationally, he has been a consultant to the FAO, the International Development Research Centre (IDRC) of Canada, and the German Technical Cooperation Agency (GTZ). He worked as Regional Coordinator supervising about 25 IDRC projects in Latin America and the Caribbean, several of which refer to species introduction in different countries.

Mr. Barros has actively served in different positions in the IUFRO structure for more than twenty years, including Coordinator of IUFRO units 9.01.04 Forest Information Network for Latin America and the Caribbean and 1.02.05 Forestry and Management in Arid and Semi-Arid Zones, Deputy Coordinator of 9.01.00 Information and Communication, and member of the IUFRO IC on behalf of Chile.

Selected research sources:

1. *Eucalyptus: Principios de silvicultura y manejo*. Prado, J. and Barros S. eds., Instit. Forestal, Chile, 199 p. 1989.
2. *Actas. Simposio los Eucaliptos en el Desarrollo Forestal de Chile, Pucón, Chile, 24–26 noviembre 1993*. Barros, S., Prado, J. y Alvear, C. Eds. Instituto Forestal, Chile, 633 p. 1994.
3. *Collaboration and Partnership in Forestry: Conference proceedings (Div. 6 IUFRO Conf., Valdivia, Chile, November 11–17, 2002)*. Barros, S., ed. Virginia Tech., USA, CD-ROM. 2002.

Personal sources:

Barros Asenjo S. Personal communications (June 2019) at santiago.barros@infor.cl



MERY, Gerardo Andrés

Gerardo Andrés Mery received the IUFRO Distinguished Service Award in 2014 for his long-term service as Coordinator of the IUFRO Special Project on "World Forests, Society and Environment" (IUFRO-WFSE).

Gerardo Mery was born on 5 August 1946 in Santiago, Chile. He graduated from Forestry Engineering at the University of Chile, Santiago (1967–1972), and later continued his studies at the University of Helsinki, Finland (1979–1983) and obtained an M.Sc. in Forestry (1983). In 1971–1973 he worked at the Chilean Forest Service (CONAF) and the Chilean Natural Resources Institute (CIREN). After moving to Finland in 1974, he worked as a Researcher at *Metsähallitus* (Finnish Forest Service) and the 7th National Forest Inventory of Finland. In 1983 he was appointed Researcher and then Senior Researcher at the Finnish Forest Research Institute (METLA) where he worked continuously until 2014. He was a leader of the project *World Forests, Society and Environment* (WFSE) for 10 years at METLA and in 2001–2014 at IUFRO as a Coordinator of IUFRO-WFSE, and in 2015–2017 as General Coordinator of FAO/GEF project *Sistema Integrado de Evaluación y Monitoreo de Ecosistemas Forestales de Chile* (SIMEF) Integrated System for the Evaluation and Monitoring of Forest Ecosystems in Chile).

Mr. Mery's research interests have been in the field of forest inventory and assessment, sustainable forest management, forest policy, deforestation and afforestation, carbon policy issues, REDD and REDD+, governance, and social development and poverty alleviation in rural communities. He authored and co-authored more than 100 scientific papers, co-edited 11 major scientific publications, and wrote book chapters and reports. He carried out various short-term consultancies for national governmental organizations in Argentina, Australia, Chile, Colombia, Costa Rica, Finland, Peru and other countries as well as national and international projects and organizations, e.g., Jaakko Pöyry Oy, METLA, and Forest Institute of Chile (INFOR).

Mr. Mery is a member of various professional societies and organizations including the Association of Foresters of Finland (since 1983) and Finnish Forest Science Association (since 1995), Nordic Association of Forest Economists (1984–2001), and he served as a Member of the Board of Directors of the Latin American Institute of the University of Helsinki (1998–2004). His service was recognized by the President of Finland as *Suomen Leijonan Ritarikunnan – Suurmestari* (Knight of the Order of the Lion of Finland FL K) for outstanding professional work accomplished in Finnish organizations (1998), the Medal of the Finnish Forest Science Association (2006), INFOR's Distinction (2006), and METLA's Recognition for 31 years of continuous research work for the Institute (2014).

Selected research sources:

1. *Sustainable forestry challenges for developing countries*. M. Palo, and G. Mery, eds. Environmental Science and Technology Library. Kluwer Academic Publishers, Dordrecht, Boston, London, 384 p. 1996.
2. *World Forests, Markets and Policies*. M. Palo, J. Uusivuori, and G. Mery, eds. Kluwer Academic Publishers, Dordrecht, Boston, London, 495 p. 2001.
3. *Forests in the Global Balance – Changing Paradigms*. G. Mery, R. Alfaro, M. Kanninen, and M. Lobovikov, eds. IUFRO World Series Vol. 17, 318 p. 2005.
4. *Forests and society – Responding to Global Drivers of Change*. G. Mery, P. Katila, G. Galloway, R. Alfaro, M. Kanninen, M. Lobovikov and J. Varjo, eds. IUFRO World Series Vol. 25, 509 p. 2010.
5. *Forests under pressure – Local responses to global issues*. P. Katila, G. Galloway, W. De Jong, P. Pacheco and G. Mery, eds. IUFRO World Series Vol. 32, 561 p. 2014.

Personal sources:

Mery G. Personal communications (May 2019) at germerfor66@gmail.com



HEINIMANN, Hans Rudolf

Hans Rudolf Heinimann received the IUFRO Distinguished Service Award in 2016 for his longstanding contribution to IUFRO advancement, especially as leader of Division 3.

Hans Heinimann was born in 1954 in Liestal, Switzerland. He obtained his M.Sc. in Forest Sciences (1978) and a doctorate (D. Tech. Sc.) in Forest Engineering (1986) from the *Eidgenössische Technische Hochschule* (ETHZ, Swiss Federal Institute of Technology) in Zürich. In 1980 he began his professional career as an Assistant Researcher at the ETH Section of Forest Engineering, and in 1985 he was promoted to Head of the Forest Engineering Systems Section and Deputy Chief Forester at the Bernese Forest Service. He became an Associate (1991) and Professor of Forest Engineering (1997) at the ETHZ.

At the ETHZ, he served as Deputy Head and Head of the Department of Forest and Wood Research (1992–1997), Deputy Head and Head of the Department of Forest Sciences (2001–2007), Vice Rector for Education (2007–2013), Founding Head of the Institute of Terrestrial Ecosystems (2006), Founding Chairman of the Risk Centre (2011), Head of IDEA League Strategic Educational Committee (2008–2012) and other positions. He was visiting Professor at Oregon State University in Corvallis, OR, USA (1999–2000), University of Tokyo, Japan (2009), and Australian National University (2013), and Visiting Scientist (2002–2003) and Fellow (2004–2009) of the *Collegium Helveticum*, a Centre for Advanced Studies sponsored by ETHZ and the University of Zurich. He was the Program Director of the Future Resilient Systems research program at the Singapore-ETH-Centre, Singapore (2014–2019).

Dr. Heinimann's research interests have been focused on cross-disciplinary studies, forest operations, engineering and management, designing and improving land use policies and practices, land use optimization, adaptive ecosystem and land-use management, modelling, risk management of natural hazards, resilience of large-scale systems, influence of emotions on risk behaviour, and others. He has authored and co-authored more than 100 research papers, book chapters, books and reports. He has served as a Member of the editorial board of several scientific journals including *Forest, Snow and Landscape Research* (since 1999), *Scandinavian Journal of Forest Research* (2001–2009), and *Croatian Journal of Forest Engineering* (since 2008), and was Associate Editor of *Silva Fennica* (1999–2006).

Dr. Heinimann is a member of numerous scientific and professional societies, e.g., a member of the Swiss Academy of Engineering Sciences, American Economic Association, American Society of Agricultural and Biological Engineers, and Swiss Forest Association, to name just a few. He has been actively involved in the international scientific community, e.g., since 1991, he has served as Deputy and then Leader of IUFRO unit S3.06-01, two terms as Coordinator of IUFRO Division 3 Forest Operations (2006–2014) and IUFRO Board member.

Selected research sources:

1. Forest operations, engineering and management – the ways behind and ahead of a scientific discipline. *Croatian J. of For. Engineering* 28: 107–121. 2007.
2. A concept in adaptive ecosystem management – An engineering perspective. *F. Ecol. & Mgmt* 259: 848–856. 2010.
3. Concurrent optimization of harvesting and road network layouts under steep terrain. *Annals of Operations Research* 232(1): 41–64 (with L. G. Bont, and R. L. Church). 2015.
4. Infrastructure resilience assessment, management and governance—state and perspectives. In: *Resilience and risk*. Springer, Dordrecht, pp. 147–187 (with K. Hatfield). 2017.

Personal sources:

Heinimann H. R. Personal communications (June 2019) at hans.heinimann@env.ethz.ch



von TEUFFEL, Konstantin Freiherr

Konstantin Freiherr von Teuffel received the IUFRO Distinguished Services Award in 2017 for his management of the “IUFRO Directors Forum” from 2006–2017 and his exceptional organization of the IUFRO 125th Anniversary Congress in Freiburg Germany.

Konstantin von Teuffel was born on 2 February 1954 in Stuttgart, Germany. He studied Forest Sciences at the universities of Göttingen and Freiburg (1976–1981) and graduated with a Forestry Diploma in 1981. He then studied and passed the Great State Examination at the Forest Service Baden-Württemberg (1983) and became *Forstassessor* (officer) in Forest Management planning at the Forest District *Ochsenhausen*, and in 1985 – a Consultant in the Division of Human Resources, State Forest Service, Ministry of Nutrition and Rural Space in Stuttgart. In 1987–1989, he studied at the *Führungsakademie* (Leadership Academy) of Baden-Württemberg in Karlsruhe. He then served as Head of the State Forest Office in Ulm, Baden-Württemberg (1989), Head of the Department of Forest Policy at the State Forest Directorate Tübingen (1991) and Head of the Department of Silviculture, Forest Management Planning, Hunting and Forest Research at the Ministry of Rural Space in Stuttgart (1994). Since June 2000, he has been Professor and Director of the Forest Research Institute of Baden-Württemberg (FVA) in Freiburg.

Professor von Teuffel’s research interests have focused in the area of sustainable forestry, silviculture, forest management planning, forest policy and economics, forest research and education. In these and related fields he authored and co-authored book chapters, and reports as well as edited several proceedings of scientific conferences. He was a member of the editorial boards of *Annals of Forest Science* (2006–2017), and *Archive of Forest Science* (2009–2017). Professor von Teuffel has served as a member scientific, advisory and management boards of many national and international organizations and bodies including the EFI’s Regional Project Centre CONFOREST (2003–2009), European Forest Institute (2003–2010) being a Chairman of its Board (2006–2010). He was also involved in activities of the Forest Based Sector Technology Platform (FTP) serving as Head of its German National Support Group (2006–2016), Chairman of the FTP Advisory Committee and Member of the FTP High Level Group (2013–2016). He took leadership in several international R&D projects at the EU level.

Professor von Teuffel has actively participated in IUFRO accomplishments and events. He has served as Coordinator of IUFRO Research Unit 6.06 Managing Forest Research (2006–2015), Deputy Coordinator of IUFRO Division 9 Forest Policy and Economics (2010–2014), and Coordinator of IUFRO Special Programme “Directors Forum” (since 2015). He is also a longstanding member of IUFRO Board. During 2016–2017, he dedicated much of his energy to organizing the IUFRO 125th Anniversary Congress in Freiburg, Germany.

Selected research sources:

1. Norway spruce: Production of large-sized timber still economically sensible in southwestern Germany? *Allgemeine Forst und Jagdzeitung* 175(9): 171–182 (with U. Kohnie). 2004.
2. *Waldumbau für eine zukunftsorientierte Waldwirtschaft Ergebnisse aus dem Südschwarzwald*. K. von Teuffel, M. Baumgarten, M. Hanewinkel, W. Konold, H. Spiecker, H.-U. Sauter, and K. von Wilpert, eds. Springer, xvi, 442. [Forest Modification for a Future-oriented Forestry: Results from the Southern Black Forest]. 2005.
3. End user needs and requirements. *Sustainable Forest Management, Growth Models for Europe*. H. Hasenauer, ed. Springer, Berlin Heidelberg, pp. 19–35. 2006.
4. Current challenges in the management of forest research. *Folia For. Polonica*, Ser. A, 53(1): 77–81. 2011.

Personal sources:

1. URL: <https://www.forstpraxis.de/konstantin-frhr-von-teuffel-60/> Retrieved 06.06.2019.
2. Teuffel, K. F. von. Personal communications (June 2019) at konstantin.teuffel@forst.bwl.de



TOMÉ, Margarida

Margarida Tomé received the IUFRO Distinguished Service Award in 2017 for substantially furthering the scientific, technical and organizational aims of the Union.

Maria Margarida Branco de Brito Tavares Tomé was born on 29 June 1954 in Lisbon, Portugal. Her entire career has been tightly linked with her *alma mater* – *Instituto Superior de Agronomia* (ISA), from which she graduated in Forestry (1977), obtained her Ph.D. in Forestry (1986) and was habilitated (1996). She also graduated in Applied Mathematics: statistics, operations research and informatics (1984) and obtained a minor in Statistics (1986) from *Universidade de Lisboa*. She has progressed professionally at the same institutions, from Teaching Assistant (1978) to Assistant Professor (1989), Associate Professor (1990) and full Professor (since 2000).

Dr. Tomé has been actively involved in the ISA's public and management affairs. She progressed from a Member of the Educational Board (1980) to Chair of the Educational Board (1993–1996), from member of the *Board of Directors* (1984–1996) to Head of the ISA Computing Centre (1997–1998), from Member of the Executive Board (1987–1991) to Deputy Chair (1998–2000) and Chair (2002–2004) of the Forestry Department, and to the Chair of the ISA Scientific Board (2009–2013). At the international level, she served as a member of the Scientific Advisory Board of the EFI (2000–2004), EFIATLANTIC (2009–2012) and EFIMED (since 2011).

Dr. Tomé has research interests in the improvement of methods for forest ecosystem assessment, enhancement of forest models in order to cope with the complexity of the Atlantic and Mediterranean ecosystems as well as with the context of multi-faceted changes, integration of forest models into forest simulators, and in developing monitoring methodologies for carbon stocks.

Dr. Tomé has authored and co-authored more than 350 scientific publications, including 8 books, and she has edited the Kluwer/Springer series “Managing Forest Ecosystems” since 2000. She has been recognized with numerous honours and awards of *Instituto Superior de Agronomia*, *Junta nacional de Investigação Científica* (Portugal) as well as National Academy of Sciences (USA), Environmental Systems Research Institute (ESRI) Award for best scientific paper in GIS and others.

Dr. Tomé has been active in IUFRO since 1991, serving as Co-chair (1991–1995) and Chair of WP S4.01-04 (1996–2000), Deputy Coordinator (2001–2005) and Coordinator of IUFRO Division 4 – Forest assessment, modelling and management (2006–2014). She has also served as a member of the IUFRO TF “The role of forests in carbon cycles, sequestration and storage” (2001–2005), and from 2015, she was Co-chair of the IUFRO TF “Sustainable planted forests for a greener future”. She has organized and co-organized numerous IUFRO Division 4 scientific conferences, seminars and other symposia at national and international level, and edited their proceedings. Dr. Tomé was granted IUFRO Best Poster Award (2000) and IUFRO Scientific Achievements Award (2019).

Selected research sources:

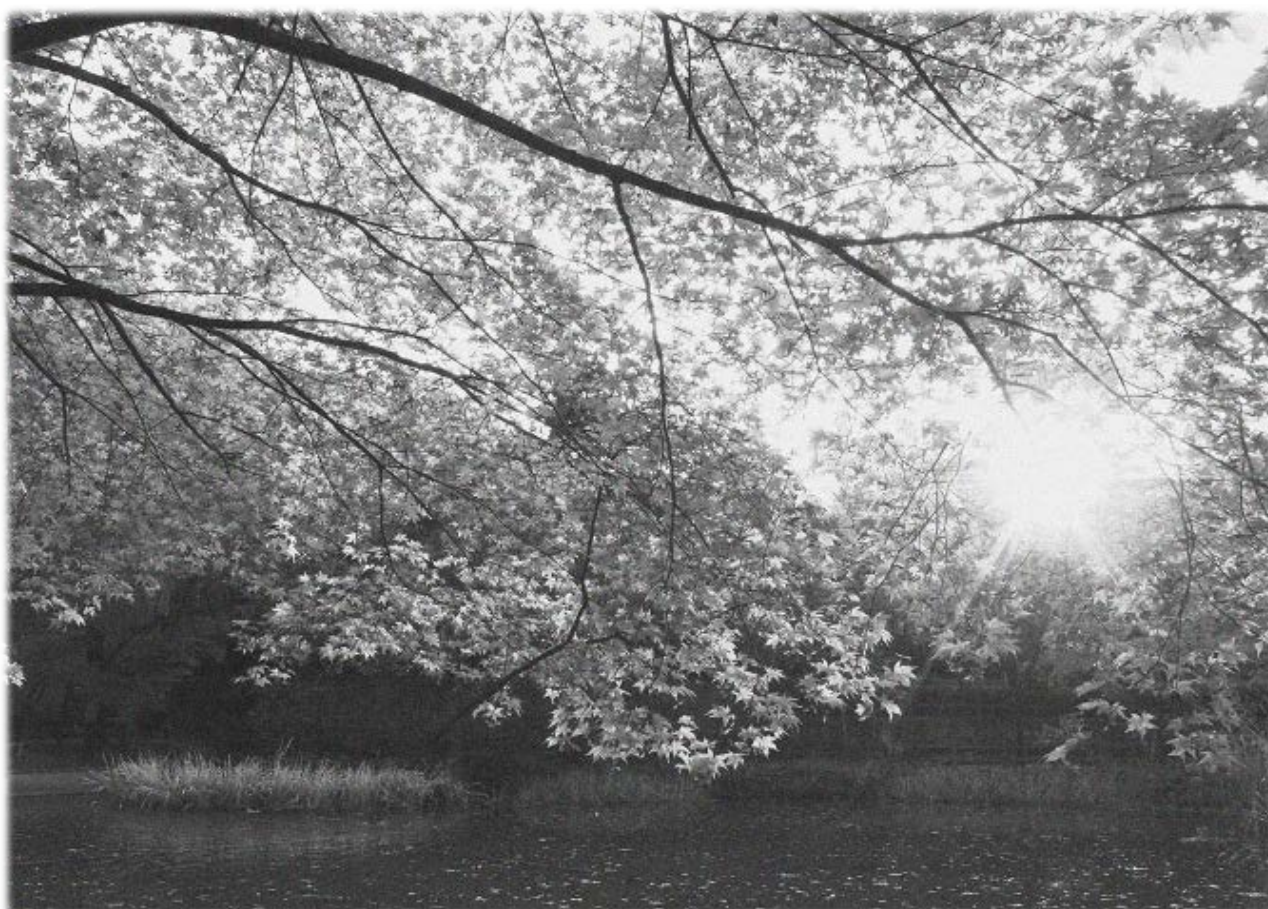
1. *Sustainable Forest Management*. K. von Gadow, M. Tomé, and T. Pukkala, eds. Series Managing Forest Ecosystems, Kluwer Academic Publishers B. V. Series, 368 p. 2000.
2. Burkhardt H., Tomé M. *Modeling Forest Trees and Stands*. Springer, xiv, 476 p. 2012.

Personal sources:

Tomé M. Personal communications (April 2019) at magatome@isa.ulisboa.pt

2018 – 2020

<i>Jean-Michel CARNUS</i>	<i>France</i>	<i>2018</i>
<i>Piotr PASCHALIS-JAKUBOWICZ</i>	<i>Poland</i>	<i>2018</i>
<i>John A. STANTURF</i>	<i>USA</i>	<i>2018</i>
<i>Valentin S. SHALAEV</i>	<i>Russia</i>	<i>2018</i>
<i>Victor K. TEPLYAKOV</i>	<i>Russia</i>	<i>2018</i>
<i>Joberto Veloso de FREITAS</i>	<i>Brazil</i>	<i>2019</i>
<i>Yeda Maria Malheiros de OLIVEIRA</i>	<i>Brazil</i>	<i>2019</i>
<i>Jerry VANCLAY</i>	<i>Australia</i>	<i>2019</i>





CARNUS, Jean-Michel

Jean-Michel Carnus received the IUFRO Distinguished Service Award in 2018 in recognition of his outstanding and valuable service to IUFRO and his role in enhancing the international cooperation in forest environment and ecology.

Jean-Michel Carnus was born on 22 December 1955 in Bordeaux, France. He earned his Baccalaureate C (Science) with first class honours (1973), Engineer Degree at *Ecole Polytechnique* in Paris (1978) and Doctorate Degree in Water Management at the ENGREF – National School of Rural Engineering, Water and Forestry (1980) in France. In 1981, Dr. Carnus began his career as a Rural Development Engineer in New Caledonia and from 1985 as Deputy Director of the Agriculture and Forestry Direction (*Department of Landes*), France. He then served as Research Engineer at the New Zealand Forest Research Institute, Rotorua (1993–1998). In 1999, he was appointed Director of Forest Research Unit at INRA (French National Institute for Agricultural Research) in Aquitaine, and since 2014, he served as Coordinator for the EU & International Cooperation at the INRA's Ecology Department. Since his retirement in 2018, Dr. Carnus has served as INRA representative in Oceania.

Dr. Carnus is an expert in forest environment and ecology, soils and water management, sustainable management of planted forests, and forest research. In these and related areas he authored and co-authored 250 scientific papers, book chapters, books, reports and edited proceedings. He served as advisor, member, coordinator and chair of various national and EU funded research projects and networks including COST-FPS, EFI ATLANTIC, the 7 FP international exchange programme TRANZFOR, the EU SCAR FOREST Group on Forest & Forestry Research and Innovation and many others. He was awarded a gold medal by the French Academy of Agriculture in 2017.

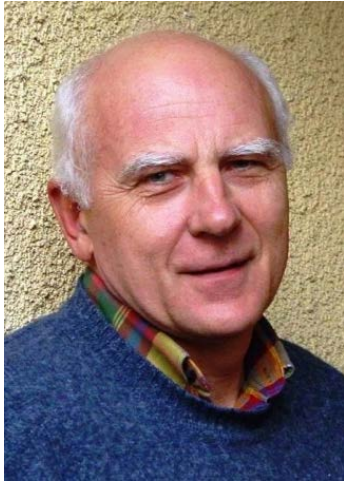
Dr. Carnus has been involved in IUFRO activities since mid-1990s. He served as Coordinator of RG 8.02 Forest Biodiversity (2005–2010), and Deputy Coordinator (2004–2010) and Coordinator (2010–2017) of Division 8 Forest Environment. He was a Member of CSCs for 2005 and 2014 IUFRO World Congress and 2017 IUFRO Anniversary Congress. In 2014–2017, he also served as a Member of the TF on Sustainable Planted Forests and TF on Forest, Soil and Water Interactions. He organized, co-organized and chaired several scientific symposia held also together with various international organizations such as IUSS, WWF, FAO in France (2004, 2005, 2013), Canada (2008), Ireland (2012), Portugal (2013), China (2015, 2018), and All Division 8 Conference as part of IUFRO Regional Congress for Asia and Oceania in Beijing, China (2016). For over 15 years, he was a member of IUFRO Board and Enlarged Board.

Selected research sources:

1. *Forest soils under global and local changes*. J-M. Carnus and C. Orazio, eds. Proceedings of IUFRO-IUSS International Symposium, Bordeaux. IEFC, 190 p. 2004.
2. The sustainable management and protection of forests: analysis of the current position globally. *AMBIO*, 37(4): 254–262 (with P. Freer-Smith). 2008.
3. *Sustainability Impact Assessment of Forest Management Alternatives in Europe*. G. M. Hengeveld, W. Mason, and J-M. Carnus, eds. Ecology and Society, Special Issue, 2012.
4. *Forêts d'hier et de demain: 50 ans de recherches en Aquitaine*. M. Arbez, J-M. Carnus and A. Kremer. Presses Universitaires de Bordeaux, 250 p. [Forests of Yesterday and Tomorrow: 50 years of research in Aquitaine]. 2018.

Personal sources:

Carnus J-M. Personal communications (February 2020) at jmicarnus@gmail.com



PASCHALIS–JAKUBOWICZ, Piotr

Piotr Paschalis-Jakubowicz received the IUFRO DSA in 2018 for his outstanding services to IUFRO for almost 30 years, being a General Board Member (2005–2014) and chairing the IUFRO Task Force on Education in Forest Science.

Piotr Paschalis-Jakubowicz was born on 25 January 1947 in Wola Bykowska, Poland. He graduated from Warsaw Agricultural University (SGGW) as a Forest Engineer (in 1969) and obtained his Ph.D. in Forestry sciences (in 1976) at the Faculty of Forestry of Warsaw University of Life Sciences and habilitated at the same University (in 1986). He began his professional career as scientific assistant at the Forest Institute at SGGW. As a Director of the GEF Grant Office he managed the WB Program for the Protection of Forest Biodiversity in Poland (1990–1993). In 1994 he became a Professor of Forestry Sciences, and since 1998 he has been a full Professor and Head of the Department (1997–2017) of Forest Utilization at the (Faculty of Forestry, Warsaw University of Life Sciences, SGGW). Professor Paschalis-Jakubowicz has been involved in forest education internationally. He was part a team that founded the Faculty of Forest and Pasture Areas and for this Faculty developed a full forest study program during his work at the University of Tripoli (1980–1983). He has been a visiting scholar and Professor at leading universities in Europe, America, Asia, Africa, Australia and New Zealand.

Professor Paschalis-Jakubowicz's research interests focus on theoretical research on the basis of the assessment of utility functions performed by forests in various regions and climatic zones of the world, forest policy and practice of forest resource use, international agreements regarding forest use and protection, climate change, and global biodiversity. He has authored and co-authored about 400 publications, including over 200 scientific articles and 8 books as well as undertaking several hundred reviews for foreign and domestic publications.

Professor Paschalis-Jakubowicz was elected President of the Union of European Foresters (1998–2005), and from 2003 to 2014, served on various positions at the MCPFE. He was involved in many international research programs, e.g., the 5th and 6th Framework Programs of the EU, Scientific Research Committee, EFORWOOD and COST. He was Chairman of the Committee on Forest Sciences at the Polish Academy of Sciences (1999–2007). For his outstanding achievements in the field of forestry sciences, he received the Award of the Prime Minister of the Republic of Poland (2017).

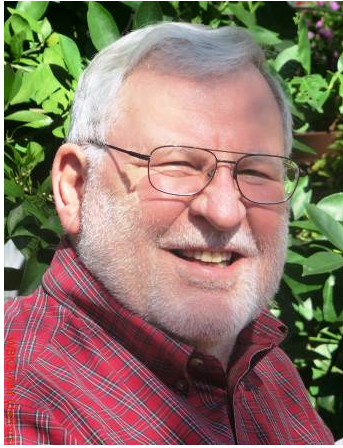
Since 1995 Professor Paschalis-Jakubowicz participated in IUFRO activities as a Deputy Coordinator (1995–2000) and Coordinator of IUFRO RG 3.10.00 Harvesting, Wood Delivery, and Utilization (2000–2014), as IUFRO Board member (2005–2014), as Chairman of the IUFRO Scientific Publishing Committee (2008–2009), Coordinator of IUFRO TF on Education in Forest Sciences (2010–2014) as well as long-term representative of Poland to the IUFRO International Council, also being Chairman of the Polish National Committee for IUFRO (1991–2006; 2010–2019). He has organized and chaired many sessions at IUFRO events in many countries. He received the IUFRO Certificate of Appreciation for his excellent organization of the IUFRO European Congress in Warsaw, Poland (September 2007).

Selected research sources:

1. *Model of Forest Utilisation for Certain Selected Countries of North Africa*. Warsaw, Warsaw Agricultural University Press, 60 p. 1986.
2. *Lasy i leśnictwo świata*. Centrum Inform. Lasów Państwowych, 550 p. [World forests and forestry]. 2015.

Personal sources:

Paschalis-Jakubowicz P. Personal communications (November 2019) at Piotr.Paschalis@wl.sggw.pl



STANTURF, John Alvin IV

John Alvin Stanturf IV received the IUFRO Distinguished Service Award in 2018 in recognition of his outstanding and valuable service to IUFRO as officeholder in Division 1 and inter-divisional achievements including research coordination, training, and publications in forest landscape restoration.

John Stanturf was born on 16 February 1948 in Monterey, California, USA. He earned his B.Sc. in Plant and Soil Science at Montana State University (1974), and M.Sc. and Ph.D. in Forest Soils at Cornell University (1979, 1983). Following a Lady Davis Post-Doctoral Fellowship year at the Faculty of Agriculture Engineering, Technion, Haifa Israel, he started his career as a research forester with Hammermill Paper Company, Warren, Pennsylvania. In 1985 he was appointed Assistant Professor of Soils, University of Pittsburgh at Bradford. In 1989 he joined the Pennsylvania State University as a Senior Researcher. In 1990 he moved to Savannah, Georgia as Manager, Pine Silviculture Research, Union Camp Corporation. From 1992 until his retirement in 2018, Dr. Stanturf was Senior Scientist and Project Leader at the US Forest Service in Mississippi and Georgia. In parallel, he was Adjunct Professor of Forestry at Mississippi State and Auburn universities (1994–2017). Since 2018, Dr. Stanturf has been a Visiting Professor at the Institute of Forestry and Rural Engineering, Estonian University of Life Sciences and Senior Researcher, InNovaSilva ApS, Vejle, Denmark.

Dr. Stanturf's research interests are in forest sciences, biosciences and environment, particularly in silviculture, disturbance ecology, restoration ecology, and bioenergy. Dr. Stanturf is an internationally recognized specialist on forest landscape restoration. He has conducted research in Africa, Asia, Europe and the Americas. He has authored and co-authored 190 research papers, book chapters, books, and reports as well as edited books and proceedings. He has been organizer and co-organizer of numerous research seminars, workshops, conferences and symposia. He has served on the editorial board of several journals.

Dr. Stanturf received numerous honours and awards, including the Delta Council Achievement Award for Hardwood Forestry (1997) and Ducks Unlimited Taking Wing Awards (1997, 1999). The US Forest Service distinguished him with the Civil Rights Award (2002), various Director's Awards (two in 2006 and two in 2011), and the highest level – Chief's Honor Award for Distinguished Science (2016). Dr. Stanturf holds a *Doctor Honoris causa* from the Estonian University of Life Sciences (2011).

Dr. Stanturf has vigorously participated in IUFRO activities, from his first congress in Montreal in 1990. During 2005–2010 he was Leader of RG 1.01.00, Deputy Leader of IUFRO RG 1.05.00, and Interdivisional Coordinator on Forest Landscape Restoration. From 2010 to 2019, he served as a Leader of RG 1.05.00, Deputy Leader of RG 1.01.00 and WP 1.01.12. Since 2015 he has been Deputy Coordinator of the Task Force on Forest Adaptation and Restoration under Global Change. He has been a member of the Society of American Foresters since 1977.

Selected research sources:

1. Achieving restoration success: myths in bottomland hardwood forests. *Restoration Ecol.* 9 (2): 189–200 (with S. H. Schoenholtz, C. J. Schweitzer and J. P. Shepard). 2001.
2. Contemporary forest restoration: A review emphasizing function. *Forest Ecol. Mgmt.* 331: 292–323 (with B. J. Palik and R. K. Dumroese). 2014.
3. *Restoration of Boreal and Temperate Forests*. J. Stanturf, ed. 2nd ed. CRC Press, 561 p. 2015.

Personal sources:

Stanturf J. A. Personal communications (October 2019) at drdirt48@gmail.com



SHALAEV, Valentin Sergeevich

Valentin Sergeevich Shalaev received the IUFRO Distinguished Service Award in 2018 in recognition of his great contributions to IUFRO over a long period of time.

Valentin Shalaev was born on 1 December 1944 in Baku, the USSR. He has linked his education and entire professional career with Moscow Forest Technical Institute (MFTI, since 1993 – Moscow State Forest University, MSFU, and since 2013 – Mytishchy Branch of Bauman Moscow State Technical University, MB BMSTU). He earned his Diploma (1968) and Ph.D. (1984) in Wood Technology at MFTI, and D.Sc. in Wood Technology (1995) at MSFU. At the Department of Sawmill Technology on this institution, he progressed from a Junior (1969–1970) to Senior (1973–1981) and Chief (since 2012) Researcher. In parallel, he has been teaching various courses as Assistant (1970), Associate (1973) and full (since 2002) Professor of Wood Technology. He has also served as Director of the Scientific Department (1981–1995), Director of the Institute of System Forest Research (since 1994), Dean of the Faculty for Advanced Training (1995–2002) and Vice-Rector for International Affairs (2002–2012).

Dr. Shalaev's research interests have been in sawmill technology, equipment, methods and technologies of forest ecosystem research, research organization, history and trends in forest education and research. He has authored and co-authored more than 450 scientific and technical papers, including more than 50 published in international journals and about 150 educational publications as well as numerous presentations at scientific fora, e.g., IUFRO and FAO World Congresses and EFI Conferences. He holds 65 registered patents for inventions. He has served as a member of scientific and editorial boards, e.g., the *MSFU Forest Bulletin* (2002–2013) and the *Encyclopedia of Forestry, Russia* (2006), *Innovations in Woodworking and Engineering Design; Management and Sustainable Development*, Bulgaria (since 2012) and proceedings of the TEMPUS-JPHES-No 516796 (2013–2014). Dr. Shalaev is a member of many societies and organizations, including the Society of American Foresters (1993) and the Society of Wood Science and Technology, USA (1995), International Higher Education Academy of Sciences, Russia (1998), and holds Honorary Membership in the Association of Forestry and Woodworking Enterprises of Mongolia (2005). In addition, he has served as a member of Public Councils at the Russian Federal Forest Service (1997–2000) and the Ministry of Education of the Russian Federation (2000–2005), and Executive Director of the Russian Scientific-Educational Association of Forest Complex (2005–2012).

Since 1986, Dr. Shalaev has participated in all IUFRO World Congresses. He encouraged the MFTI to join IUFRO (1987–1989), became co-founder (1999–2000) and Coordinator of the Association of Russian Organizations–Members of IUFRO and moderator of the “IUFRO in RUSSIA” web site (2001–2012). He has co-organized a IUFRO MC meeting in Russia (2003), initiated the establishment of a new IUFRO WG on Intercultural communications in the forest community (2004–2005), moderated the development of GFIS–Russia (2005–2012). He has represented Russia on the IUFRO IC (since 2006). He has co-authored many papers about IUFRO and a book “A History of IUFRO Congresses, Forest Research and Russia's Participation” (2017) that is a translation of the 2nd Russian edition in two volumes (2015, 1st ed. in 2014). In 2009, he received the IUFRO Certificate of Appreciation for his excellent contributions in promoting activities in Russia and his dedication to GFIS–Russia.

Selected research sources:

1. *Technology of Sawmill and Woodworking Industries: A manual for students*. Moscow, MGUL, 225 p. (with S. N. Rykunin, Yu. P. Tyukina) (in Russian). 2003.
2. *Biological Productivity and Carbon Budget of Larch Forests of Northern-East Russia*. Moscow, 296 p. (with D. G. Schepaschenko and A. Z. Shvidenko). 2008.

Personal sources:

1. Who is who in Russia. 6th ed. *Encyclopedia of the person*. The Hubner series, 2984 pp. 2012.
2. Shalaev V. S. Personal communications (June 2019) at shalaev@mgul.ac.ru



TEPLYAKOV, Victor Konstantinovich

Victor Konstantinovich Teplyakov received the IUFRO Distinguished Service Award in 2018 in recognition of his contributions to IUFRO over a long period of time.

Victor Teplyakov was born on 25 November 1954 in Mytishchi, Moscow Region, the USSR. He earned his Diploma (Hons) of Forestry Engineer (1977) and Ph.D. in Forest Management and Planning (1985) at Moscow Forest Technical Institute (MFTI, since 1993 – Moscow State Forest University, MSFU). He served as an Assistant Professor at the Department of Land Survey (1977), and at the Department of Forest Management he progressed from Assistant (1979) to Associate (1985) and full Professor (2004–2009). He has taught various courses including Biometry, Forest Inventory, Forest Management Planning, Forest Recreation Management and Forest History. He was a visiting scholar (1988–1989) at the University of Massachusetts under the US International Research Exchange Program (IREX) and Charles Bullard Fellow at Harvard University (1992–1993). He served as Deputy Dean of the Forest Faculty (1987–1990). In 1993 he designed the basics, was co-founder and a long-term member of the Board of the Institute of System Forest Research (since 1994). He then served as a Deputy Director (1993) and Director (1996) for Research at the Russian Federal Forest Service (RFFS), Head of the Forest Programme at the IUCN Office for Russia (1999), Coordinator of the IUCN Global TBFP (2004). In 2008 he was Visiting Professor and since 2009 Professor at College of Agriculture Life Sciences at Seoul National University until his retirement (2015).

Dr. Teplyakov wide interests cover forest ecosystem management, sustainable forestry, public involvement in decision-making, education, environmental impact assessment, long-term forest research and statistics, international forestry, forest governance and policy, and forest history. He has authored and co-authored more than 200 scientific articles, over 30 books, textbooks and manuals, more than a dozen technical reports, e.g., for the Russian Ministry of Education, IUCN, FAO, and the World Bank. He has served as a member of advisory and editorial boards of forestry journals published in Russia, China and the Republic of Korea. Dr. Teplyakov has been a member of several professional societies, e.g., All-Russian Conservation Society (1973), Russian Society of Foresters (1992, member of Board 1998–2007), SAF (1994–2013), FHS (1994–2013), and ISTF (1994–1999). He has served as a member of IUCN Forest Advisory Group (1996–2009), Public Council at the RFFS (2001–2004), SABs at Metla (2001–2005) and at the EFI (2005–2008), the WB Forest Policy Review team (2001–2002) and others. He was co-organizer of national and international meetings, including All-Union Environmental Conferences and All-Russian Congresses of Foresters (1987–2004). He has served as a moderator of the Preparatory Conference and national co-chair of the Ministerial Conference on ENA FLEG (Moscow and St.-Petersburg, 2005). In 2009–2011, he served as a consultant during the establishment of the Asia Forest Cooperation Organization (AFoCO).

Dr. Teplyakov has participated in IUFRO activities since 1998. He was Deputy Coordinator of WP S4.01.11 (1991–1995), Deputy Coordinator of Division 4 and representative of Russia on the IUFRO IC (1996–2000), General Board Member (2001–2010), Deputy Coordinator (2011–2014) and then member of IUFRO unit 9.05.00. He was a co-organizer of IUFRO conferences (1994, 1996) and IUFRO MC meeting (2003) in Russia, and co-founder of the Associations of Russian Organizations–Members of IUFRO (1999–2000). He initiated the cooperation agreement between IUFRO and IUCN (2005) and the establishment of a new IUFRO TF on Illegal Logging (2006–2010). He co-authored many papers about and published by IUFRO, e.g., “Keep Asia Green” (2007–2009). In 2003, he received the IUFRO Certificate of Appreciation.

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1. The seedlings and saplings distribution in naturally regenerated taiga forests. In: *Conf. on Forest Statistics*, D. R. Pelz, ed. Univ. of Freiburg & IUFRO S6.02. Sept. 13–15, Freiburg, Germany, p. 65–72. 1989.
2. *Ecological Information Systems and Forest Management*. VNIITsLesresurs No. 4, 24 p. (in Russian). 1994.
3. *Russian Forests in Anthropocene: Essays on the History of Peoples and Forests of European Russia for 25 ... 30 Thousand Years*. Moscow, Stagirit–M, 400 p. (with V. P. Tarasenko). (in Russian). 2003.
4. The Power of the Past. *Silva Carelica*, 46: 17–40. 2004.



de FREITAS, Joberto Veloso

Joberto Veloso de Freitas received the IUFRO Distinguished Service Award in 2019 in recognition of his outstanding and valuable service to IUFRO.

Joberto Veloso de Freitas was born on 23 November 1961 in Ipatinga, Minas Gerais, Brazil. He started his undergraduate at the *Universidade Federal do Amazonas* (UFAM, Federal University of Amazonas) in Manaus and earned his degree in Forest Engineering at the Federal University of Paraná (1987), in Curitiba. He then returned to Manaus and obtained his M.Sc. in Sciences of Tropical Forests at the *Instituto Nacional de Pesquisas da Amazônia* (National Research Institute of Amazonia). He obtained his Ph.D. in Forestry at the University of Aberdeen, Scotland, UK (2000–2004).

Dr. Freitas began his professional career in 1990 as a UFAM Professor of the Faculty of Agricultural Sciences teaching courses in Forest Resources, focusing on Forest Inventory and Forest Management in Amazon region. In 2004, he was assigned to the Ministry of Environment, joining the National Forest Program (NFP) as Manager for Sustainable use of Forest Resources, contributing to the creation of the Brazilian Forest Service (2006), where later in 2011 he became its Director of Research and Forest Information.

His work in the Brazilian Forest Service at national level is related to the leadership of the National Forest Inventory and the National Forest Information System. He is also actively involved in international processes and projects. As National Correspondent of the Global Forest Resource Assessment, he participated in FRA–2005, 2010, 2015 and 2020, acting as Co-Chair of the FAO Advisory Group for FRA (2012–2020). He also participated in projects and events in Latin America in partnership with ACTO (Amazon Cooperation Treaty Organization), ITTO and CATIE as a member of the Ibero-American Model Forest Network (RIABM) board of Directors.

Dr. Freitas is Coordinator of IUFRO unit 1.02.02 Ecology and Silviculture of Moist Forests in the Tropics (since 2014), and was Chair of the XXV IUFRO World Congress Organizing Committee (Curitiba, Brazil, 2019). He was also a member of IUFRO Board and IUFRO Enlarged Board (2014–2019).

Selected research sources:

4. Applying ecological knowledge to decisions about seed tree retention in selective logging in tropical forests. *Forest Ecology and Management* 256: 1434–1442 (with Michelle A. Pinard). 2008.
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7. Dynamics of global forest area: Results from the FAO Global Forest Resources Assessment 2015. *Forest Ecology and Management* 352: 9–20 (with Rodney Keenan and others). 2015.

Personal sources:

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2. de Freitas J. V. Personal communication (February 2020) at joberto.freitas@florestal.gov.br



de OLIVEIRA, Yeda Maria Malheiros

Yeda Maria Malheiros de Oliveira received the IUFRO Distinguished Service Award in 2019 in recognition of her outstanding and valuable service to IUFRO.

Yeda de Oliveira was born on 18 August 1952 in Curitiba, Brazil. She earned her Forest Engineering (1975) and M.Sc. (1980) degrees in Forest Engineering at the *Universidade Federal do Paraná* (Federal University of Paraná - UFPR), Brazil, and her Ph.D. in Forest Sciences at the University of Oxford, UK (2000). After an internship as a Cartographer at UFPR (1976–1977), in 1978 she began her professional career as a Forester and a Researcher at *Embrapa Florestas* (Embrapa Forestry) – Brazilian Agricultural Research Corporation, where she works until now.

Dr. de Oliveira's research has focused on forest engineering, forest resources monitoring, forest inventory, forest management and planning, remote sensing, growth and production including simulation and landscape scale spatial survey, analysis and practical implementation as well as on natural and planted forests fieldwork, and agroforestry as a productive alternative for small farmers, sustainable development and national and international cooperation. She has authored and co-authored more than 200 research papers, book chapters, manuals and technical reports.

Dr. de Oliveira is a member of the Sectoral Chamber of Planted Forests of the Brazilian Ministry of Agriculture, Livestock and Supply, is part of the team of the National Forest Inventory and is involved in promoting SDGs in the Embrapa's agenda. She has been involved and played a major role in the organization of several national and international technical and research events, seminars, workshops and conferences including four National Symposia on Forest Inventory in Brazil. She has participated also in UN FAO activities (Brazilian Delegate at UNFF meetings) and in more than 20 years of cooperation between the Brazilian Forest Service and FAO on the development of national programs. Her achievements during her long-term service for Embrapa were recognized with Awards for Excellence (1995, 2004, and 2010) and the "Women of Science" trophy in 2009, from the Government of the State of Paraná. In June of 2019, she received the "ANDEF-CropLife Brazil" award for Innovation and Sustainability in Agriculture, as the "Person of the Year".

Dr. de Oliveira served as COC Co-Chair (2014–2019) of the XXV IUFRO World Congress held in Brazil. Embrapa Forestry was the main partner of the Brazilian Forest Service (SFB) involved as host institution of the XXV IUFRO World Congress 2019.

Selected research sources:

1. Monitoring forest cover and deforestation. Chapter 7, pp. 186–216 (with F. Achard and D. Mollicone). In: *Handbook on Remote Sensing for Agricultural Statistics*. GSARS Handbook, Rome. 2017.
2. Brazilian National Forest Inventory: a landscape scale approach to monitoring and assessing forested landscapes, 2018. <https://pdfs.semanticscholar.org/9c61/9e4ee00d7f9d110ce342d63e141a0ef86c2d.pdf>
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VANCLAY, Jerome (Jerry) Klaas

Jerome Klaas Vanclay received the IUFRO Distinguished Service Award in 2019 for his leadership as Chair of the XXIV IUFRO World Congress Scientific Committee.

Jerry Vanclay was born on 20 June 1956 in Wageningen, Netherlands. He earned his B.Sc. in Forestry with first class honours from the Australian National University (1977), his Postgraduate Diploma in Computer Science (1980), B.A. with a major in Statistics (1984), and a higher doctorate in Forestry (D.Sc.For.) from the University of Queensland (1992). He also completed an M.Sc. in Forestry at Oxford University (1983). After graduation, he began work as an officer at the Queensland Department of Forestry working on resource estimation and modelling (1978–1991). Dr. Vanclay has then appointed as Professor of Tropical Forestry at Royal Veterinary and Agricultural University in Copenhagen, Denmark (1991–1994), Principal Scientist at CIFOR, Indonesia (1995–1999), and since 1999 as Professor of Sustainable Forestry at Southern Cross University (SCU) in Lismore, New South Wales, Australia. Professor Vanclay has also served as Dean of Science (2011–2019), and Head of SCU's School of Environment, Science and Engineering (2017–2019).

Professor Vanclay has wide-ranging research interests, and has published numerous papers on biodiversity, biomass, forest growth, modelling, rainforests, mixed plantings, tree breeding, site productivity, sustainability, wood properties and many others including several myth-busting papers on private native forestry, on faunal richness, and on timber harvesting. He has written over 400 publications, with more than 180 in refereed journals, such as *Science*, *Scientometrics*, *Forest Ecology and Management*, *Conservation Ecology*, *Journal of Wood Science*, and *Forest Ecology and Management*.

Professor Vanclay has made substantial contributions to the extension and promotion of science, research and education in Australia, Zimbabwe, the Philippines, Denmark, and Ghana. He has a long-term record of service in IUFRO as a Leader of Working Party S4.02.03 (1991–1995), Deputy Coordinator of IUFRO unit 4.02 and Coordinator of IUFRO unit 1.07.00 (1996–2000), Deputy Coordinator of Division 1 Silviculture (2001–2005), and Deputy Coordinator of Division 4 Forest Assessment, Modelling and Management (2011–2019). He has also served as a representative of Australia on the International Council, Coordinator of TF Foresight for Forest Sector Planning (2014–2019), member of IUFRO Board and IUFRO Enlarged Board (2001–2019), and Chair of Congress Science Committee (CSC) for the XXV IUFRO World Congress in Curitiba, Brazil (2014–2019). He has also served as co-editor of proceedings of IUFRO conferences and meetings.

Professor Vanclay was elected a Fellow of the Royal Society of NSW (2014), and a Fellow of the Institute of Foresters of Australia (2015). He received the Queen's Award for Forestry in 1997, and IUFRO SAA (2010).

Selected research sources:

1. *Modelling Forest Growth and Yield: Applications to Mixed Tropical Forests*. CAB International, Wallingford, U.K., 330 p. 1994.
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4. *Forest Growth and Yield Modeling*. Wiley, 428 p. (with A. R. Weiskittel, D. W. Hann and J. A. Kershaw). 2011.

Personal sources:

Vanclay J. K. Personal communications (October 2019) at jerry.vanclay@scu.edu.au

CONCLUSIONS

This booklet is about the recipients of the IUFRO Distinguished Service Award who undertook not only their personal research, but also served in different capacities for IUFRO, starting with regular participation in meetings and extending to the management of various projects, research and working units, as well as in Divisions, Congress Organizing Committees and senior management bodies.

Over 40 years (1981–2020), some 114 scientists representing 31 countries from all continents were awarded the IUFRO DSA. The USA has the highest number of recipients – 19 scientists, followed by Germany – 13, Austria and Finland – 7, Canada, Switzerland, the United Kingdom – 6, and Australia – 5 people. Other countries have had less than five awardees, e.g., Japan, Poland and Sweden, with 4 each, Brazil, Chile, New Zealand, and the Russian Federation with 3 each, Denmark, France, Italy, Republic of Korea and the former Yugoslavia with 2 each, and Croatia, Czech Republic and the former Czechoslovakia, Ghana, Hungary, India, Malaysia, Norway, Portugal, Romania, and Slovakia with 1 officeholder each.

A few of the scientists who have received the IUFRO DSA are also recipients of other IUFRO awards. Among them are three individuals who later became IUFRO Honorary Members, e.g., in 1992 – Mr. Oscar Fugalli (Italy), in 1995 – Professor Risto Seppälä (Finland), and in 2005 – Dr. Eric Teissier du Cros (France). IUFRO Scientific Achievement Awards were delivered to Professors Harold Burkhart (USA) in 1981, who also received IUFRO Host Country Scientific Award (2014), John Innes (Canada) in 1995, Jerry Vanclay (Australia) in 2010, and Margarida Tome (Portugal) in 2019, who also received the IUFRO Best Poster Award (2000).

Many recipients of the IUFRO DSA are well-known scientists, educators, managers, governmental employees and CEOs. They have dedicated much time to the Union, serving in various IUFRO units in all Divisions, the International Council, the Board, the Management Committee, as COC Chairs and in other positions, and in their area of interests they have organized, co-organized and led many global, international, and national meetings under the auspice of IUFRO and/or in tight cooperation with the Union. Many of the awardees have an impressive record of service in IUFRO in various positions for over 25–30 and more years. Many have served in two different Divisions and supported interdisciplinary research.

In this regard, in the conclusion of his paper, Dr. Kazuo Suzuki⁴³ has cited the words of the first IUFRO DSA awardee Professor Mitsuma Matsui addressed to the scientists of the next generation, *“The science related to trees has also made great progress with more specification. The fields related to tree health are diverse. In addition, the change in environmental condition is increasing. Therefore, it is inappropriate to analyse various phenomena observed in trees by using a single specialized research area. In a criminal investigation, it is the principle to return to the onsite field when the investigation is in stuck. Likewise, it is essential for forest scientists to return to the field. Carefully planned experiments based on close observations are becoming more important. I think what we forest scientists should do is to integrate our advanced expertise in various phenomena occurred in the onsite field.”* (Translation for this edition by Dr. Sumire Williams Kawamoto).

The author hopes that this booklet will be of interest for researchers, university students, forest managers and foresters at large, and they will see the historical development of forest and wood sciences and IUFRO through the short biographies of the Union’s distinguished officers.

⁴³ 鈴木和夫. 松井光瑤氏を偲ぶ. 樹木医学研究 13(1), 1-1, 2009-01-31. [Kazuo Suzuki. In memory of Mr. Mitsuma Matsui. *Journal of Tree and Forest Health*, 13(1), 1-1, 2009-01-31].

Epilogue

Adequately summarizing this book is rather difficult given the unique composition and focus of each Part. However, some overall reflections may be worthwhile.

Between 1953–2020, the three awards described in this book were granted to 252 people from all continents, but not equally. In Europe there have been 119 laureates, in North America – 73, Asia – 24, Australia and New Zealand – 18, South and Central America – 8, Africa – 5, and in the Eurasian country, USSR/Russia, 5 awardees. These numbers could be considered in designing the future strategy of the Union where it can build capacity of its member organizations from Africa, Central and South America, and Asia, and to stimulate forest-related researchers in these regions.

From a gender balance perspective, among 252 recipients of three IUFRO awards, the overwhelming majority have been given to men due, a reflection of the traditional (but now fast-changing) male dominance of the forestry profession, and forest science. Female laureates have included one Honorary Member, 14 Scientific Achievement Award (SAA) winners, and three recipients of the IUFRO Distinguished Service Award. Taking into account that Dr. Su See Lee has IUFRO Honorary Membership *and* the IUFRO SAA, and Dr. Margarida Tomé has received the IUFRO DSA and SAA, the total number of female-recipients is only 16 people. However, during recent years the number of female awardees has increased, a positive trend towards greater gender balance of IUFRO's awardees: in 2014, they comprised three out of ten, and in 2019 – five out of ten recipients of the Scientific Achievement Award.

Many researchers and scientists, the IUFRO Officers and organizations deserved to be awarded by IUFRO, and the best of them will receive their honours in the future. As a consequence, the project on the best IUFRO people is not ended! The author will be glad to further work on this.

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- IUFRO (2010) XXIII IUFRO World Congress: Forest for the Future: Sustaining Society and the Environment. 23-28 August 2010, COEX, Seoul, Republic of Korea. Congress Report. Seoul, Korea Forest Research Institute, 2010. 422 p.
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Acronyms and Abbreviations

- AAAS – American Association for the Advancement of Science
- ACIAR – Australian Centre for International Agricultural Research, Canberra, Australia
- ACS – American Chemical Society
- AEC – Atomic Energy Commission
- AFA – American Forestry Association
- AfDB – African Development Bank
- AFF – *Acta Forestalia Fennica*
- AID – Agency for International Development
- AIDAB – Australian International Development Bureau
- APAARI - Asia-Pacific Association of Agricultural Research Institutions
- AP-FECM – Asia-Pacific Forestry Education Coordination Mechanism
- API – American Paper Institute
- APS – American Phytopathological Society
- ASEAN – Association of Southeast Asian Nations
- ASM – American Society of Microbiology
- AWPA – American Wood Protection Association
- BC – British Columbia
- BioGeCo (or BIOGECO) – *Biodiversité, Gènes et Communautés* = Biodiversity, Genes, and Communities
- CAF – Chinese Academy of Forestry
- Canfor – Canadian Forest Products Ltd.
- CATIE – *Centro Agronómico Tropical de Investigación y Enseñanza* = The Tropical Agricultural Research and Higher Education Center, Costa Rica
- CBD – Convention on Biological Diversity
- CCGD – Center for the Conservation of Genetic Diversity
- CE – Council of Europe
- CENRAD – Centre for Environment, Renewable Natural Resources Management, Research and Development
- CEO – Chief Executive Officer
- CFA – Commonwealth Forestry Association
- CFS – Canadian Forest Service
- CG – Contact Group
- CGIAR – Consultative Group on International Agricultural Research
- CGRFA – Commission on Genetic Resources for Food and Agriculture
- CIBAGRO – *Centro de Información Bioagropecuaria y Forestal* = Bio-Agriculture and Forestry Information Center. Resistance, Argentina
- CIFF – *Communicationes Instituti Forestalis Fenniae* = Publications of METLA
- CIFOR – Centre for International Forestry Research
- CIRAD – *Le Centre de coopération internationale en recherche agronomique pour le développement* = French Agricultural Research Center for International Development
- CIRMOUNT – Consortium for Integrated Climate Research in Western Mountains
- CJFR – Canadian Journal of Forest Research
- CLAMS – Coastal Landscape Analysis and Modeling Study
- CoB – Chairman of the Board
- COST – Cooperation for Science and Technology in Europe
- COTE, LabEx – *laboratoire d'excellence COTE = LabEx*
COTE – cluster of excellence
- CRC – Cooperative Research Centre
- CRC-GA – Cooperative Research Centre for Greenhouse Accounting, Australia
- CRFA – Canadian Renewable Energy Association
- CSIR – Council for Scientific and Industrial Research
- CSIRO – Commonwealth Scientific and Industrial Research Organisation
- CTIA – Canadian Tree Improvement Association
- EB – Executive Board
- EC – European Commission
- ECE – Economic Commission for Europe
- ed. – editor
- eds. – editors
- EEB – Enlarged Executive Board
- EFI – European Forest Institute
- EFRSF – European Forest Research Support Foundation
- ENGO – Environmental Non-Governmental Organisation
- ENSTIB – *École Nationale Supérieure des Technologies et Industries du Bois* = National School of Wood Science and Wood Engineering, Université de Lorraine, France
- EOLSS – Encyclopedia of Life Support Systems
- EPA – Environmental Protection Agency
- ERP – Enterprise Resource Planning
- ESF – European Science Foundation
- EUSTAFOR – Association of European State Forest Organisations
- FABI – Forestry and Agricultural Biotechnology Institute, University of Pretoria, South Africa
- FBSTP – Forest-Based Sector Technology Platform
- FC – Forestry Commission of the United Kingdom
- FEFR – Foundation for European Forest Research
- FEMAT – Forest Ecosystem Management Assessment Team
- For. – Forestry: An International Journal of Forest Research
- For. Chron. – The Forestry Chronicle, Canada
- For. Com. Bull. – Forestry Commission Bulletin, UK
- Forstwiss. Centralbl. – *Forstwissenschaftliches Centralblatt*, Switzerland
- FPS – Forest Products Society

FRA – Forest Resources Assessment
 FRIM – Forest Research Institute Malaysia
 FRSC – Fellow of the Royal Society of Canada
 FTSE – Fellow of the Australian Academy of Technological Sciences
 FWPA – Forest and Wood Products Australia, Ltd.
 GEF – Global Environment Facility
 GLORIA – Global Observation Research Initiative in Alpine Environments
 GTR – General Technical Reports
 H.M.S.O. – Her Majesty’s Stationary Office, London
 HLG – High Level Group
 IAWA – International Association of Wood Anatomists
 IAWS – International Academy of Wood Science
 IBFRA – International Boreal Forest Research Association
 IBPGR – International Board for Plant Genetic Resources
 IC – International Council
 IDA – International Development Agency
 IEA – International Energy Agency
 IF&M – *L’Italia Forestale E Montana* = Italian Journal of Forest and Mountain Environments
 IFAC – International Federation of Automatic Control
 IFAD – International Fund for Agricultural Development
 IFB – *Institut français de la biodiversité* = French Institute for Biodiversity
 IFG – Institute of Forest Genetics
 IFS – International Foundation for Science
 IIASA – International Institute for Applied Systems Analysis
 IITA – International Institute of Tropical Agriculture, Ibadan, Nigeria
 ILO – International Labour Organization
 INRA – *Institut national de la recherche agronomique* = National Institute of Agricultural Research
 INTECOL – International Association for Ecology
 IPCC – Intergovernmental Panel on Climate Change
 IPGRI – International Plant Genetic Resources Institute
 IRGWP – International Research Group on Wood Protection
 ISF – Institute of Chartered Foresters, UK
 ISIS – Institute of Strategic and International Studies
 ISPP – International Society for Plant Pathology
 ISTF – International Society of Tropical Foresters
 ITE – Institute of Terrestrial Ecology, UK
 ITTO – International Tropical Timber Organization
 IUCN – International Union for Conservation of Nature
 IULA – International Union of Local Authorities
 J. – Journal
 J. Agric. Res. – Journal of Agricultural Research
 J. For. – Journal of Forestry, USA
 JFC – Journal of the Forestry Commission, UK
 KFRI – Kerala Forest Research Institute, Peechi, Kerala, India
 KSLA – Royal Swedish Academy of Agriculture and Forestry
 L. Sc. – Licentiate of Science
 LL.D – *Legum* Doctor = honorary doctorate
 LSBC – Life Sciences British Columbia
 LTER – Long-Term Ecological Research
 LTSER – Long Term Socio-Economic and Ecological Research
 MAFF – Ministry of Agriculture, Forestry and Fisheries, Japan
 MC – Management Committee
 MCPFE – Ministerial conference on the protection of Forests in Europe
 ENGOS
 METLA (or Metla) – Finnish Forest Research Institute (now part of the Natural Resources Institute Finland)
 NAS – National Academy of Sciences
 NAUFRP – National Association of University Forest Research Programs (USA)
 Ned. Bosb. – *Nederlands bosbouw tijdschrift / Nederlands Bosbouw Tijdschrift* = Dutch Forestry Journal, The Netherlands
 NERC – National Environment Research Council
 NGO – Non-Governmental Organisation
 NIFoS – National Institute of Forest Science (before April 2015: KFRI – Korea Forest Research Institute)
 NRC – Natural Resources Canada
 NSERC – Natural Sciences and Engineering Research Council of Canada
 OBE – Officer of the Most Excellent Order of the British Empire
 OECD – Organisation for Economic Co-operation and Development
 OFI – Oxford Forestry Institute, Oxford University
 OSU – Oregon State University, USA
 PEFC – Programme for the Endorsement of Forest Certification
 PG – Project Group
 PNW-GTR – Pacific Northwest Research Station, General Technical Report
 PRC – People’s Republic of China
 PSW – Pacific Southwest Station, USA
 PSW-RS – Pacific Southwest Research Station of the USDA Forest Service
 RAS – Russian Academy of Sciences
 RFF – *Revue forestière française*, France
 RG – Research Group
 RoK – Republic of Korea
 RPF – Registered Professional Forester
 RSA – Republic of South Africa
 RSC – Royal Society of Canada
 SAB – Scientific Advisory Board
 SAC – Scientific Advisory Committee
 SAF – Society of American Foresters
 SAFJ – South African Forestry Journal, published by National Information Solutions Cooperative (NISC)
 SBFC – Symposium on Biotechnology for Fuels and Chemicals
 SFM – Sustainable forest management

Sida (or SIDA) – Swedish International Development Cooperation Agency	TF – Task Force
SIM – Society of Industrial Microbiology	UBC – University of British Columbia, Canada
SITRA – <i>Suomen itsenäisyyden juhlarahasto</i> = the Finnish Innovation Fund	UN FAO – Food and Agriculture Organization of the United Nations
SNP – single nucleotide polymorphism	USAID – United States Agency for International Development
SPDC – (IUFRO-SPDC) – IUFRO Special Programme for Developing Countries, now – Special Programme for Development of Capacities	USDA FS – United States Department of Agriculture, Forest Service
SSA – Superior Scientist Award, USA	USDoE – United States Department of Energy
StAB – Stakeholder Advisory Board	USFS – United States Department of Agriculture, Forest Service
STRI – Smithsonian Tropical Research Institute, Panamá, Panama	VNIILM – All-Union Research Institute of Silviculture and Mechanization of Forestry, USSR/Russia
SUNY – State University of New York	WB – World Bank
SUNY-ESF – SUNY College of Environmental Science and Forestry	WCFSD – World Commission on Forests and Sustainable Development
SUNY-ESF – SUNY College of Environmental Science and Forestry	WFC – World Forestry Congress
SUNY-ESF – SUNY College of Environmental Science and Forestry	WG – Working Group
SWST – Society of Wood Science and Technology	WIF – World Innovation Foundation
TAPPI – Technical Association of the Pulp and Paper Industry; issues TAPPI Journal	WO – Washington Office, seat of USDA FS
TEAKNET – Asia-Pacific Network on Research and Development of Teak	WP – Working Party
	WSL – Swiss Federal Institute for Forest, Snow and Landscape Research
	WST – Wood Science and Technology, journal

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