

Teak in Productive Landscapes: An Introduction to Global Efforts Put into the Conservation and Sustainable Management of Teak Resources

Report about the TEAKNET Partner Event at the 27th Session of the FAO Regional Forestry Commission Asia-Pacific by PK Thulasidas, TEAKNET Coordinator and Coordinator of IUFRO Working Party 5.06.02, and Michael Kleine, Deputy Executive Director, IUFRO HQ, Vienna

Teak (*Tectona grandis* L. f.) is recognized for its physical and aesthetic qualities as one of the most important and valuable hardwoods in the world. Although it occupies only a marginal position in the volume of world timber production and trade, teak together with mahogany, red cedar and Indian rosewood belongs to the tropical hardwoods that are most in demand for the luxury market and for heavy duty applications and holds the top rank in more than 20 countries.

The economic value (including value of timber, pulp, food, wood energy, and non-wood forest products) is one of the main reasons for giving priority to the species with regard to conservation and management. For most of the countries - albeit being an introduced species - teak offers a good opportunity to produce quality timber and is a major asset for the forestry economy. Teak-based small-scale production systems enable farmers to diversify farm production, support food security, generate income, reduce financial risk and are an important alternative source of quality timber for wood industries.

In the 27th Session of the Asia Pacific Forestry Commission meeting at Colombo during 23-27 October, Teaknet organized the partner event with the financial support of FAO of the United Nations on the occasion of a *Global Teak Study* report published by IUFRO in its World Series Publications Volume 36 in June 2017: <https://www.iufro.org/publications/series/world-series/article/2017/06/21/world-series-vol-36-the-global-teak-study-analysis-evaluation-and-future-potential-of-teak-reso/>

The Future of Forests and Forestry in Asia and the Pacific

The 27th Session of the Asia-Pacific Forestry Commission in Colombo, Sri Lanka from 23-27 October 2017 started with a partner event on the future of forests to be assessed in the forthcoming 3rd Asia-Pacific Forest Outlook Study "The future of forests and forestry in Asia and the Pacific: The path to 2030 and beyond".

Read a report by Dr Michael Kleine, IUFRO Deputy Executive Director on the IUFRO blog: <http://blog.iufro.org/2017/10/25/the-future-of-forests-and-forestry-in-asia-and-the-pacific/>



Participants of TEAKNET-IUFRO partner event. Photo credit PK Thulasidas.

In view of the imminent threat of losing natural teak forests and in order to expedite the research results achieved so far, the international partners IUFRO, FAO, and TEAKNET promote the initiation and implementation of a global program for the conservation, improvement, development and sustainable use of teak genetic resources. Such a *Global Teak Support Program* (GTSP) would contribute to preserving the native teak resources before further decline and sustainably managing planted teak forests for improved production and income generation.

The partner event discussed the concept and important components of the global teak support program encompassing the following main issues:

- Enhancing the conservation and sustainable management of existing native teak forests
- Expanding the genetic resource base of planted teak forests in view of new challenges
- Strengthening international collaboration and regional networking in expanding national capacity for the conservation and sustainable management of teak resources

Delegates from the Asia-Pacific region and from other regions gathered for the event organized by TEAKNET in association with IUFRO to discuss how best to further strengthen the understanding and knowledge of teak genetic resources, promote their sustainable use and management, and contribute to develop and promote in-situ and ex-situ conservation programs through development assistance and research collaboration.

Michael Kleine, Deputy Executive Director of IUFRO, chaired the session, which was attended by over 26 partici-

pants from 15 countries. Following short presentations about the concept of a future global teak support program and its important components related to natural teak forests, smallholder teak growing, genetic improvement, silviculture and wood quality, a panel of experts from ITTO, FAO, ICRAF and local research institutions deliberated on potential areas of work of a future global teak support program. The following panelists gave presentations:

- Michael Kleine, IUFRO HQ, Vienna, Austria; 'Global Teak Support Program – Addressing Current Challenges of Natural and Planted Teak Forests'
- Yazar Minn, Assistant Director, Forest Research Institute, Yezin, Myanmar; 'Planting Teak for the Rehabilitation and Restoration of Productive Landscapes'
- James M Roshetko, World Agroforestry Center (ICRAF), Southeast Asia Programme, Indonesia; 'The Significance of Planted Teak for Smallholder Farmers'
- KMA Bandara, Director, Sri Lanka Forestry Institute; 'Genetic Conservation and Improvement of Teak in Sri Lanka'
- PK Thulasidas, TEAKNET Coordinator, India; 'Teakwood Quality from Natural and Planted Forests'



Photo source: Pixabay

After the presentations the panelists listened to the audience's comments on the major question: *In moving the GTSP forward what are essential areas of involvement and activities the project should pursue?* The panelists noted the comments and suggested the following major actions to be considered in a future global teak support program:

- Improve the conservation and management of natural teak forests in its native habitat
- Assist in the conservation and improvement programs of teak genetic resources
- Support good management practices in planted teak forests
- Promote small-scale teak production by smallholder farmers
- Improve the international marketability of teak
- Strengthen TEAKNET as international teak information network and partnership platform

For further details on results and conclusions, please read on at: <https://www.iufro.org/science/divisions/division-5/50000/50600/50602/activities/>

Read the latest issue of the Teaknet Bulletin 10(4) here: <https://www.iufro.org/science/divisions/division-5/50000/50600/50602/publications/#c20880>

IUFRO Tokyo 2017: Actions for Sustainable Forest Ecosystems under Air Pollution and Climate Change

Scientific excursion to Mt. Fuji and surrounding forests.
Photos by courtesy of IUFRO Tokyo 2017



Report about the 28th IUFRO conference for Specialists in Air Pollution and Climate Change Impacts on Forest Ecosystems in Fuchu, Tokyo, Japan, 22-26 October, 2017, by Makoto Watanabe, Deputy Coordinator of Working Party 7.01.05 and conference organizer of IUFRO Tokyo, and Elena Paoletti, Coordinator of Research Group 7.01.00. Meeting website:

<http://web.tuat.ac.jp/~iufro-tokyo2017/Home.html>

The conference was held at the Tokyo University of Agriculture and Technology in Fuchu, Tokyo, Japan on October 22-26, 2017. The meeting, which was financially supported by IUFRO-Japan, was a great success and brought together 72 participants from 16 countries who gave a total of 63 presentations (37 oral and 26 poster presentations). For the first time, the conference was organized back-to-back with the Asian Air Pollution Workshop.

The conference offered an excellent possibility to discuss the most up-to-date activities for improving the sustainability of forests under the impacts of air pollution and climate change, to share the current state of knowledge on scientific gaps in the understanding of the interactions of climate change, air pollution and forest ecosystems, and to discuss research priorities and challenges for future research.

A main focus was on air pollution in East Asia, particularly the impacts of tropospheric ozone and nitrogen depositions and of climate change impacts (e.g. heat and drought) on growth and carbon sequestration of forests. Novel subjects such as the effects of black carbon on tree physiology or impacts of global changes on pollination were also presented. Monitoring, modeling and research subjects were presented and there was also the possibility to discuss urban forest issues, herbivores, heavy metals, hydrology, and biogenic volatile organic compounds.

Conference sessions

- Asian forest ecosystem under changing environment
- Developing detection, monitoring and evaluation
- Ecophysiological and genetic understanding of plant responses

- Water and nutrient cycles in forest ecosystems
- Modelling and risk assessment
- Forest ecosystems under multiple stressors

The conference covered wide aspects of the impacts of air pollution and climate change on forest ecosystems. Constructive and fruitful discussions across scientists with different backgrounds were developed in the all presentations.

Awards

The IUFRO award 2017 for achievements in air pollution and climate change impacts on forest ecosystems was awarded to Prof. Takayoshi Koike from Hokkaido University

in Japan, in recognition of his outstanding merits as a scientist and as a mentor of young scientists.

The Bill Manning Award for the best poster was awarded to Elisa Carrari (Institute for Sustainable Plant Protection, Italian National Research Council). She received the award from Takeshi Izuta, chair of the local organizing committee, on 25 October 2017.

Proceedings will be published after peer-review in two international journals, the Journal of Plant Research and the Journal of Agricultural Meteorology.

Read the full report at:

<https://www.iufro.org/science/divisions/division-7/70000/70100/70105/activities/>

Conservation of Forest Genetic Resources

Report about the Fifth International Conference "Conservation of Forest Genetic Resources" on 2-7 October 2017 in Gomel, Belarus, by Konstantin V. Krutovsky, Coordinator of the IUFRO Research Group 2.02.00 - Conifer breeding and genetic resources. Meeting website: http://www.forinst.basnet.by/2017/index_en.php

This conference in Belarus was the first international meeting in this cycle that was held outside the Russian Federation. The four previous meetings took place in Barnaul, Altai Territory (2007 and 2015), Novosibirsk (2009), and Krasnoyarsk (2011). It is proposed to organize the next conference in 2019 in Kazakhstan. The meeting was hosted by the Institute of Forest of the National Academy of Sciences of Belarus and attracted a total of 256 participants from 18 countries.

The event was dedicated to the memory of the recently deceased outstanding scientists Zinaida Serafimovna Podzharova (Belarus), Nikolay Vasilyevich Glotov and Anatoly Ilyich Iroshnikov (Russia), who made invaluable contributions to forest genetics, tree breeding and population biology.

One overarching theme of this conference was the application of innovative genetic and genomic approaches to improve conservation, protection, sustainable reproduction, resilience and rational use of forest genetic resources, considering heterogeneous environment and climate change. Main objectives were, among others, to overview current progress in forest genetics and genomics and to share international experience in conservation of forest genetic resources.

Key issues discussed:

- Theoretical and methodical problems of study, conservation and use of forest genetic resources
- Structure and dynamics of population gene pools, "relic" populations and migration, geno-geography, adaptation of forest genetic resources considering global climate change and anthropogenic influence
- Molecular technologies and next generation sequencing (NGS) methods, whole genome studies of forest genetic resources



Conference participants. Photo by courtesy of the Institute of Forest of the NAS of Belarus

- Tree improvement and breeding, seed orchards and conservation of genetic diversity: problems, current state and prospects for development; introduction of valuable tree species
- Biotechnology, genetic and cell engineering; breeding for resilient, decorative and economically important traits

This conference brought together geneticists, breeders, and foresters to present and discuss new scientific findings in the areas of forest tree breeding, seed production, genetics, genomics and biotechnology, and how these can be applied for conservation, reproduction and the rational use of forest genetic resources. A wide range of population and genetic studies of the main forest-forming conifer and deciduous species was presented including also whole genome sequencing and annotation in conifers. The program was very diverse with more than 50 oral presentations and more than 60 posters.

The conference proceedings with abstracts are available at: http://www.forinst.basnet.by/2017/files/2017-InForest-conference_proceedings.pdf

Read the full report at: <https://www.iufro.org/science/divisions/division-2/20000/20200/activities/>

9th Pacific Regional Wood Anatomy Conference (PRWAC) and Annual Meeting IAWS 2017

Report by Hisashi Abe, Yasuhiro Utsumi and Yafang Yin, Deputy Coordinator of IUFRO RG 5.06.00 - Properties and utilization of plantation wood

The joint conference of the 9th PRWAC (Pacific Regional Wood Anatomy Conference), the Annual Meeting of IAWS (International Academy of Wood Science) 2017 and the 9th International Symposium of Indonesian Wood Research Society (IWoRS) were successfully convened on 26-29 September in Bali, Indonesia. About 190 participants from 18 countries attended the meeting and actively discussed various aspects of wood science. The event was co-sponsored by IUFRO Research Groups 5.01.00 - Wood and fibre quality, and 5.06.00 - Properties and utilization of plantation wood. Meeting website: <http://woodconference.fkt.ugm.ac.id/9th-prwac/>

For the full report with information on the IAWA business meeting, please go to: <https://www.iufro.org/science/divisions/division-5/50000/50600/activities/>



Participants of the 9th Pacific Regional Wood Anatomy Meeting (PRWAC), 2017.

20th International Nondestructive Testing and Evaluation of Wood Symposium

By Xiping Wang, USDA Forest Service Forest Products Laboratory, Coordinator of IUFRO Research Group 5.01.00 (<https://www.iufro.org/science/divisions/division-5/50000/50100/>)

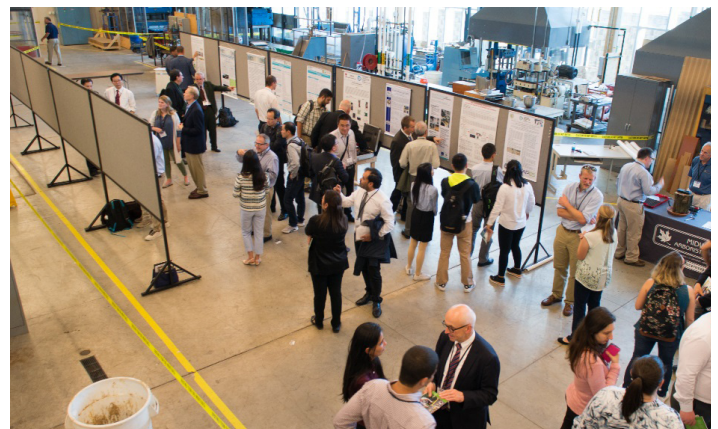
The 20th International Nondestructive Testing and Evaluation (NDTE) of Wood Symposium was held at the USDA Forest Products Laboratory (FPL), 12-15 September, 2017, in Madison, Wisconsin, USA (<http://forestprod.org/symposium/>). Co-sponsored by Forest Products Society (FPS) and IUFRO Research Group 5.01.00, the event attracted scientists and practitioners in the field from 18 countries. Over 60 technical presentations were made, covering a broad range of nondestructive testing and evaluation related topics.

The opening session on "Nondestructive Evaluation—Application and Research Needs" included keynote speakers from around the globe, who presented the state-of-the-art technologies in nondestructive testing and evaluation of wood. Research results presented in 12 technical sessions covered a broad spectrum including: in-forest wood property assessment, urban tree defect assessment and risk analysis, evaluation of seedlings and young trees for genetic improvement, evaluation of roundwood, structural timber and engineered wood products, as well as condition assessment of wood structures and wooden artifacts.

Several equipment development firms showcased their products during the symposium's poster session. The technical content of this symposium has been captured in 539 pages of proceedings, which can be accessed from the IUFRO website:

<https://www.iufro.org/publications/proceedings/proceedings-meetings-2017/#c26220>

The International NDTE of Wood Symposium is a forum for those involved in nondestructive testing and evaluation of wood, wood-based materials and products. It brings together the international research community, users of various nondestructive testing technologies, equipment development and manufacturing professionals, repre-



Poster session and equipment demonstration at the 20th International NDTE of Wood Symposium.

sentatives from various government agencies and other groups to share research findings and new nondestructive testing products and technologies.

This symposium series started in Madison, Wisconsin, USA, in 1963. Since its inception, 20 symposia were held in various countries around the world, including Brazil, China, Germany, Hungary, Switzerland, and the United States. The 21st International Nondestructive Testing and Evaluation of Wood Symposium will be hosted by the Forest Research Institute Baden-Wuerttemberg (FVA). It will take place on September 24-27, 2019 in Freiburg, Germany.

For more information and pictures, go to: <https://www.iufro.org/science/divisions/division-5/50000/50100/activities/> or <https://www.iufro.org/science/divisions/division-5/50000/50100/50109/activities/>

Forest Operations Researchers and Geospatial Scientists Meet in Joint Symposium

Report about the 17th SSAFR in Suquamish, USA, on 27-30 August 2017, by Sándor F. Tóth, Symposium Chairman and Deputy Coordinator of IUFRO 3.04.01 – Operations Systems Analysis and Modeling

The Symposium on Systems Analysis in Forest Resources (SSAFR) is an international gathering taking place every two or more years since 1975. Past symposia brought together scientists from around the world who studied forest systems with the goal of making better management and policy decisions. Common topics included harvest scheduling, spatial reserve design, wildfire management, invasive pest detection and control, forest ecosystem services, supply chain optimization for biofuel and non-timber forest economics. The overarching link across these topics has been the use of operations research and decision theory to inform on-the-ground management and policy.



*Participants at the 2017 SSAFR in Suquamish, USA.
Photo by Mikael Rönqvist.*

The 2017 SSAFR (<http://depts.washington.edu/ssافر17/>) was unique in that it brought together two traditionally disconnected disciplines both working on forest decision support systems: the remote sensing/geospatial informatics community and operations researchers. The former group is concerned with how to best collect and process data on forests and other resources, whereas the latter tries to optimize resource management given whatever data is available. Despite the obvious feedback between the two groups, so far they have generally operated separately.

At this symposium, questions such as how to streamline data collection protocols for competing forest management objectives were studied. Operations researchers and remote sensing scientists met to share their research in applied optimization, simulation, management science,

and geospatial informatics as they pertain to forest management and policy analysis. Geospatial analysts study how to best collect and process data, whereas operations researchers try to optimize management given whatever data is available.

Participants from industry learned how much operations research can offer for decision support. Visualization techniques to display complex information about optimal solutions, tradeoffs, conflicts and remotely sensed data have evolved to new heights. The 18th SSAFR will be held in Chile in March 2019 chaired by Prof. Andrés Weintraub.

Read the full report for more information about organization and participation here: <https://www.iufro.org/science/divisions/division-3/30000/30400/activities/>

Sustainable Forest Management in the Context of Global Change

Report about the International Symposium on Sustainable Forest Management in the Context of Global Change (ISSFM-CGC) in Harbin, China, on 1-3 August 2017, by Shirong Liu, IUFRO President's Nominee, Deputy Coordinator Division 8 Forest Environment

The Symposium that was organized by IUFRO Division 8, supported by Division 1 and Research Group 1.06.00, and hosted and sponsored by the Northeast Forestry University and the Ecological Society of China, was attended by 123 participants from 22 countries. The conference program comprised a total of six plenary keynote presentations, 29 presentations in concurrent sessions and some posters. Information about the meeting was widely disseminated by the Northeast Forestry University and other forest research institutes and universities, IUFRO, and the Ecological Society of China. IUFRO, especially Division 8, was well exposed to a wider range of forest scientists through the meeting. It was considered to hold such symposia on a regular basis in the future.

Against the background of global climate change, the restoration of forest resources, the enhancement of ecosystem functions of existing forests and the sustainable management of forest ecosystems are environmental issues that need to be resolved worldwide. Consequently, the discussions focused on the following themes:

Restoration and rehabilitation of forest ecosystems in the context of global change:

The conifer-oriented forest management vs. broadleaf forests decreases biodiversity and ecosystem resilience and increases the likelihood of both yield and economic losses.

Sustainable management of forest ecosystems in the context of global change:

Adaptation strategies should be developed at different management levels to appropriately modify genetic properties, tree species, stand structure, growth/yield models, and rotation length.

Forest ecosystem services and functions in the context of global change:

The growth response to climate warming is significantly dependent on tree species and geographical location. Trees growing in the southern boundary are more susceptible to drought stress caused by rapid warming. Young trees of *Pinus koraiensis* are more likely to decline than older ones under climate warming, but it is not identified in other species.

Participants concluded, among other things, that it is vital to understand the short-term/long-term environmental and societal impacts of planted forests in order to find ways of achieving desired goods and ecosystem services while improving their vitality, resilience and sustainability. There is a need to set up long-term silvicultural trials where the dynamics of planted forests can be monitored and adjusted over time.

Forests are facing numerous challenges caused by various environmental, social economic and political factors, including but not limited to climate change, loss of biodiversity, emerging and invasive forest pests and disease, land erosion and loss of soils, illegal logging and trade of wood, and land use changes. It is crucial to adopt site-appropriate measures to facilitate forest management under global



Participants of ISSFM-CGC.
Photo by courtesy of Northeast Forestry University.

change. The measures include training, surveillance on high-risk activities, monitoring of forest practices and revenue, and development of legislation for forest practices.

In China planted forests are increasingly managed for achieving multiple purposes including wood production, non-wood products, and other ecosystem services. Rather than focusing on continuous area expansion, higher priority should be given to the improvement of productivity and quality, which contributes to increasing the value of planted forests. Monoculture plantations especially of exotic trees should be converted into mixed planted forests to avoid negative consequences. A landscape design approach should be applied for meeting diversified services and achieving landscape sustainability.

Read the full report with thematic background information, more photos and a list of participants at: <https://www.iufro.org/science/divisions/division-8/80000/activities/>

New Interim Director General of CIFOR



From 1 November 2017, Dr. Robert Nasi is taking on the role of interim Director General of the Center for International Forestry Research (CIFOR), following Peter Holmgren.

Dr. Nasi is no newcomer to CIFOR, having been with the Center for more than 20 years, holding a variety of research and senior management roles, most recently as Deputy Director General for Research.

(Photo by Rodrigo Ordonez, CIFOR ICG)

Dr. Nasi has longstanding relations with IUFRO and is a Deputy Coordinator of Research Group 1.02.00 – Tropical and subtropical silviculture.

In conversation with Forests News, he speaks about his decades of experience with CIFOR and in tropical forestry research, and lays out plans for the future.

Watch the interview here:

https://forestsnews.cifor.org/52338/in-conversation-with-robert-nasi?fnl=en&utm_source=General+contacts&utm_campaign=afc14dd7ca-CIFOR_News_Update_November_early_2017&utm_medium=email&utm_term=0_282b77c295-afc14dd7ca-117327209

Press release of 1 November 2017:

<https://www.cifor.org/press-releases/new-interim-director-general-reflects-on-the-future-of-forests-and-research/>

Awards

<https://www.iufro.org/discover/noticeboard/awards/>

2018 FPS Annual Excellence Awards

Deadline for nomination submission is February 1, 2018
The Forest Products Society presents four awards at the International Convention each year. These awards highlight student and professional innovation, research, and other significant contributions to the forest products industry and recognize exceptional service to the Society.

See more at: <http://www.forestprod.org/ic/awards.php>

Publications

Special Issue on Biological Invasions in Forests

The journal *Biological Invasions* has published a special issue compiling 25 articles summarizing various biological, sociological, and policy subject areas associated with forest invasions from a global perspective. These papers were prepared by the IUFRO Task Force on Forests and Biological Invasions. The publication of this special issue is intended to advance the integration of scientific knowledge and development of solutions to this very serious and growing problem:

<https://www.iufro.org/science/task-forces/biological-invasions/publications/>

Special Issue of Sustainability

Borges, J.G., Nordström E.M., Rodriguez, L. C. E. and Seifert, T. (Eds. and Coords. of 4.04.04) 2017. Decision Support for Forest Ecosystem Management Sustainability - Special Issue of *Sustainability* (ISSN 2071-1050)

http://www.mdpi.com/journal/sustainability/special_issues/forest_ecosystem_management

Proceedings from IUFRO Meetings

<https://www.iufro.org/publications/proceedings/>

Book of Abstracts of **IUFRO 125th Anniversary Congress** now with ISBN available for download at: <http://iufro2017.com/downloads/>

Lidia Gurau, Mihaela Campean, Mihai Ispas (editors): Proceedings of the **11th International Conference "Wood Science and Engineering in the Third Millennium" - ICWSE 2017**, held on 2-4 November 2017, in Brasov, Romania, ISSN 1843-2689. Supported by IUFRO Research Groups 5.04.00 and 5.05.00.

<https://www.iufro.org/publications/proceedings/proceedings-meetings-2017/#c26222>

Proceedings of the **9th Pacific Regional Wood Anatomy Meeting (PRWAC)**, 26-28 September 2017, Denpasar, Bali, Indonesia, involving IUFRO research units 5.01.00, 5.06.00. Publication year: 2017

<https://www.iufro.org/publications/proceedings/proceedings-meetings-2017/#c26220>

Proceedings of the Joint **Meeting of IUFRO WP 7.03.05 and WP 7.03.10**, 11-15 September 2017, Thessaloniki, Greece: <https://www.iufro.org/publications/proceedings/proceedings-meetings-2017/#c26220>

Wang, Xiping; Senalik, C. Adam; Ross, Robert J. (eds.) Proceedings of the **20th International Nondestructive Testing and Evaluation of Wood Symposium**, from 12-15 September 2017 in Madison, Wisconsin, USA, involving IUFRO research units 5.01.00, 5.01.09.

<https://www.iufro.org/publications/proceedings/proceedings-meetings-2017/#c26220>

From Bali to Marrakech: A Decade of International Climate Negotiations

This book tells the story of the negotiations that resulted in the adoption of the Paris Agreement in 2015 through its entry into force in November 2016 through the Earth Negotiations Bulletin analyses and specially written nar-

atives. The book also contains a foreword by Christiana Figueres and a message from current UNFCCC Executive Secretary Patricia Espinosa.

It is available for free download at <http://www.iisd.org/sites/default/files/publications/bali-marrakech-decade-international-climate-negotiations.pdf>

Sustainable Woodfuel for Food Security - A Smart Choice: Green, Renewable and Affordable

This Working Paper published in 2017 by FAO explains how sustainable woodfuel is closely linked to food security and provides insights into how the linkages could be strengthened at all stages of woodfuel production, trade and use. ISBN: 978-92-5-109962-9

<http://www.fao.org/documents/card/en/c/36c8539c-dc9c-4fae-ab8e-ee5c43d30a25/>

Positions

<https://www.iufro.org/discover/noticeboard/position-announcements/>

Full-Time Tenure-Track Positions at the Rank of Assistant Professor or Project Assistant Professor

Submit your application by 20 December 2017

The Program of Landscape and Recreation, National Chung Hsing University (NCHU), is offering full-time tenure-track positions at the rank of Assistant Professor or Project Assistant Professor. The research field will be landscape planning, leisure and recreation, landscape planning and designing. Details: <http://www.nchu.edu.tw/en-index>

Contact for further information:

Ms. Ke, plr(at)dragon.nchu.edu.tw

Associate or Full Professor in Urban Forest Management

Submit your application by 8 January 2018

The Department of Forest Resources Management at the Vancouver campus of the University of British Columbia (UBC) invites applications for a full-time tenure-stream position at the rank of Associate Professor or Professor within the field of urban forest management.

http://www.hr.ubc.ca/jobs/faculty.php?job_id=27962

Graduate Research Assistant

Submit your application by 25 January 2018

Graduate research assistantship positions for the M.S. or Ph.D. program are available in the Department of Sustainable Bioproducts at Mississippi State University, USA. The successful candidate will work in highly multidisciplinary research projects and will receive technical training in the broad field of biomass processing, renewable polymers, and the development of organic coatings.

<http://www.cfr.msstate.edu/jobs/>

PhD Student for Research in Environmental (Bio) Geochemistry

Submit your application by 1 February 2018

The SWAMP lab at the University of Alberta is currently seeking a highly motivated and qualified student to undertake PhD research related to trace element sources and cycling in the Lower Athabasca River (LAR).

For further information about the project, please contact Dr. Chad W. Cuss, [cuss\(at\)ualberta.ca](mailto:cuss(at)ualberta.ca).

Details: [https://swamp.ualberta.ca/Portals/43/documents/Environmental_\(bio\)_geochemistry_PhD_position.pdf?ver=2017-08-24-124937-640](https://swamp.ualberta.ca/Portals/43/documents/Environmental_(bio)_geochemistry_PhD_position.pdf?ver=2017-08-24-124937-640)

Fellowships/Scholarships/Research Funding

<https://www.iufro.org/discover/noticeboard/fellowships-scholarshipsresearch-funding/>

PhD Studentship in Forest Growth and Yield Modeling

Submit your application by 21 December 2017

Applications are invited for a full-time research studentship in the field of forest growth and yield modeling leading to the award of a PhD degree from Stellenbosch University. The project will be based in the Department of Forest and Wood Science at Stellenbosch University.

<http://www0.sun.ac.za/pgstudies/postgraduate-programmes/faculty-of-agri-sciences/department-of-forest-and-wood-science.html>

PhD/PDF Opportunity: Parental Selection and Assessing the Potential Impacts of Elite Breeding in White Spruce

Submit your application by 15 January 2018

The Department of Renewable Resources of the University of Alberta, Canada, is seeking a PhD or PDF student to test the hypothesis that gene expression of gibberellic acid in white spruce (*Picea glauca*) seedlings can be used as an indicator of trees with superior growth characteristics.

<http://people.ales.ualberta.ca/barbthomas/Prospective-Students>

MSc Student - Project Title: Sex Response in Seedlings to Abiotic Drought Stress under Greenhouse Conditions in a Clonal Species

Submit your application by 15 January 2018

The Department of Renewable Resources, University of Alberta, is seeking a qualified MSc student to lead a greenhouse study on the effects of drought stress on sex performance of trembling aspen (*Populus tremuloides*).

<http://people.ales.ualberta.ca/barbthomas/Prospective-Students>

PhD Position: Forest Ecology, Forestry

Submit your application by 15 January 2018

A fully-funded Ph.D. position is available in the Faculty of Forestry at the University of Toronto. The Ph.D. candidate will examine whether and why increasing the functional diversity of tree species increases the productivity of forests. <http://forestry.utoronto.ca/caspersen-j/>

3 CGIAR-FTA Independent Steering Committee (ISC) Members

Submit your application by 31 January 2018

The CGIAR Research Program on Forests, Trees and Agroforestry (FTA) is seeking to appoint three independent members of its Independent Steering Committee (ISC), for a term of office of three years, scheduled to start on May 1, 2018.

<http://foreststreesagroforestry.org/about-us/call-for-applications-isc-members/>

IUFRO Meetings

Search our online calendar for a full list of meetings: <http://www.iufro.org/events/calendar/current/>

Find non-IUFRO meetings on the IUFRO Noticeboard: <http://www.iufro.org/discover/noticeboard/>

Also search for forest-related events in GFIS at: <http://www.gfis.net>

10-12 May 2018

Sustainable Forest Management for the Future - The Role of Managerial Economics and Accounting

Zagreb, Croatia

IUFRO Unit [4.05.00](#), [4.05.01](#), [4.05.02](#), [4.05.03](#)

University of Zagreb, Faculty of Forestry

Contact: Stjepan Posavec, [sposavec\(at\)sumfak.hr](mailto:sposavec(at)sumfak.hr)

<https://www.iufro.org/science/divisions/division-4/40000/40500/activities/>

26 Aug – 1 Sep 2018

IUFRO WP 7.02.01 Root & Stem Rots Conference

Uppsala, Sweden

IUFRO [7.02.01](#)

Contact: Rimvys Vasaitis, [rimvys.vasaitis\(at\)slu.se](mailto:rimvys.vasaitis(at)slu.se)

Jan Stenlid, [jan.stenlid\(at\)slu.se](mailto:jan.stenlid(at)slu.se)

<https://www.iufro.org/science/divisions/division-7/70000/70200/70201/activities/>

24-27 Sep 2018

African Forest-related Policy and Politics

Yaoundé, Cameroon

IUFRO [9.05.00](#)

Contact: Symphorien Ongolo,

[songolo\(at\)uni-goettingen.de](mailto:songolo(at)uni-goettingen.de)

<https://www.iufro.org/science/divisions/division-9/90000/90500/activities/>

27-29 Sep 2018

Innovations in Forest Industry and Engineering Design – INNO 2018

Sofia, Bulgaria

IUFRO [Division 5](#)

Contact: [inno_conference\(at\)ltu.bg](mailto:inno_conference(at)ltu.bg)

<http://inno.ltu.bg>

Other Meetings

19-20 Dec 2017

Global Landscapes Forum (GLF 2017)

Bonn, Germany

IUFRO will co-host two discussions forums:

19 Dec, 14:00-15:30, 'Rainfall recycling' as a landscape function: *Connecting SDGs 6, 13 and 15*

20 Dec, 9:00-10:30, *Restoring tropical forest landscapes for increased ecosystem goods and services:*

"Capacity building in complex social landscapes"

<http://events.globallandscapesforum.org/bonn-2017/>

28 Nov – 1 Dec 2018

1st World Forum on Urban Forests

Mantova, Italy

Organized by the Food and Agriculture Organization

(FAO), the City of Mantova, the Italian Society of

Silviculture and Forest Ecology (SISEF) and the

Politecnico di Milano. <http://www.fao.org/forestry/urbanforestry/en/>