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## The International Conference on Wood Adhesives 2013

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<http://www.forestprod.org/woodadhesives/>

The International Conference on Wood Adhesives 2013 took place from 9-11 October 2013 in Toronto, Canada, and involved IUFRO Division 5 Forest Products and Research Group [5.04.00 Wood Processing](#).

From adhesive suppliers to users of the downstream product, from industry to academia, government, or NGO, this conference provided an opportunity to interact with leaders in the field from around the world and hear about the latest developments. It is held every 4 years, this time with 226 attendees from 28 countries, and was organized by the US Forest Service, Forest Products Laboratory, the Forest Products Society, and the University of Toronto.

To encourage industry participation, the Wood-Based Composites Center (WBC), a U.S. National Science Foundation Industry/University Cooperative Research Center, was invited to hold their semi-annual Industry Advisory Board Meeting in conjunction with the Conference. Forty WBC industry professionals and faculty and seven WBC graduate students participated in both meetings. The WBC is a multi-university research center focused on conducting member-requested fundamental research for the wood composites industry while training future professionals. This model worked well for both groups and will be repeated for future conferences.

### Key topics

Several talks discussed how the **adhesives cured on a sheet** to make an easy specimen for testing can, in some cases, have properties very different from the same adhesive cured between two pieces of wood. The difference is that wood absorbs certain low molecular weight components from the adhesive before cure is complete. Data was presented which suggested this absorption phenomenon influenced bond properties in such diverse areas as physical morphology, extent of cure, thermal-mechanical stability, bond strength, and formaldehyde emissions, among others.

**New analytical methods** continue to allow researchers to ask questions that previously could not be addressed. New applications in nanoindentation, x-ray tomography, x-ray fluorescence, and modeling, for instance, are making new experimental approaches possible.

Strong interest continues in developing **bio-based alternatives to conventional products**. Multiple talks were driven by a desire to replace fossil fuel based materials with bio-based materials.



Photo provided by Forest Products Society:  
Plenary session draws speakers and attendees from around the world to discuss the science and future of wood adhesives.

Plenary session speakers discussed the **outlook for wood adhesive needs** and requirements (consumer and regulatory) in North America and Europe. The keynote emphasized the power of transformational thinking to create enormous value to a company and its customers.

*Winners of the Student Poster Competition* included Jesse Paris, Oregon State University (first place), Matthew Schwarzkopf, Oregon State University (second place), and Ashley Hellenbrand, University of Maine (third place). All three students are supported by the Wood-Based Composites Center, WBC.

A *peer reviewed conference proceedings* will be electronically published in January by the Forest Products Society. Work has already begun in terms of choosing a venue for the next International Conference on Wood Adhesives in 2017, with Chris Hunt ([cghunt@fs.fed.us](mailto:cghunt@fs.fed.us)) as point of contact.

*Oral and poster presentations are already available for viewing at [http://www.forestprod.org/attend\\_events/past\\_conferences/wood\\_adhesives\\_2013.php](http://www.forestprod.org/attend_events/past_conferences/wood_adhesives_2013.php) to conference attendees, and will be available to all FPS members 6 months after the conference.*