



Three Grants Awarded for Improving Durability of In-Service Wood Products

Engineered wood composites, which account for more than 40% of the building materials used in U.S. residential construction, are generally more vulnerable to water-related problems than solid wood products. Research is under way to improve in-service durability of engineered composites. A Small Business Innovation Research Grant has been awarded to NanoDynamics, Inc. for the development of controlled-release biocides for engineered composites using nanocarrier delivery systems. FPL scientists Carol Clausen, Zhiyong Cai, and Craig Clemons are principal investigators, along with a consortium of industrial and academic partners on the \$300,000 proposal.

It seems unlikely that a single antimicrobial compound, whether synthetic or natural, will provide the 'magic bullet' to control biological agents that affect wood products. Development of synergistic combinations of selected compounds, especially those derived from natural sources, is recognized as a promising approach to improved wood protection. A Small Business Innovation Research Grant has been awarded to Summerdale, Inc. to evaluate organic acid formulations for wood protection with a primary focus on mold inhibition. Carol Clausen is the Forest Products Laboratory Principal Investigator on the proposal.

Environmentally benign biocides are also needed to control fungal and termite damage to in-service wood when moisture management practices fail. A USDA-CSREES Biopesticides Grant has been awarded to FPL researchers Carol Clausen and Frederick Green for management of fungal and termite biodegradation of wood with plant essential oils.

Researcher Elected President of American Wood Protection Association

On April 20, Bessie Woodward, a microbiologist at the Forest Products Laboratory was elected president of the American Wood Protection Association (AWPA). Woodward is the first female president in the history of the century-old organization and will serve a one-year term. Woodward has been involved in wood preservation research since 1980. Her research focuses on the development of new methodologies aimed at shortening the time to evaluate long-term performance of wood preservatives. AWPA is a non-profit world-wide recognized organization which is responsible for propagating voluntary wood preservation standards. AWPA standards help ensure treated wood products perform satisfactorily for their intended use.

Patent Awarded for Method of Measuring Residual Ink in Recycled Paper

Ink removal is one of the most important steps in recycling mixed office wastepaper, old magazines, and old newsprint. FPL researchers have patented a system and method that provide a way to monitor de-inking progress in recycled papers. The piece of paper is illuminated with a beam of radiation and an amount of the beam reflected and transmitted by the paper is measured. FPL researchers David Vahey, Jun Yong Zhu, and Carl Houtman are listed as inventors on this patent.

Researcher Honored by International Academy

Dr. Robert J. Ross, supervisory general research engineer at the Forest Products Laboratory, has been elected a fellow of the International Academy of Wood Science (IAWS). IAWS is a non-profit assembly of

June 2009

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wood scientists, recognizing all fields of wood science with their associated technological domains, and securing a worldwide representation. This election is regarded as a very high honor in the wood science community and is a reflection of the contributions that Dr. Ross has made in his field.

Dr. Martin Moskovits Will Speak At TAPPI June Conference

TAPPI and Alberta Ingenuity Fund are co-sponsoring the 2009 International Conference on Nanotechnology for the Forest Products Industry, scheduled for June 23-26, 2009 in Edmonton, Alberta Canada. The theme of this year's event is "Unlocking the Potential of Nano-Enabled Biomaterials."

Dr. Martin Moskovits will make a keynote presentation, "Nanooptics: Illuminating Nanostructures," on Friday, June 26. He is Chief Technology Officer of API Nanotronics Corp. and President of API's NanoOpto division. The company is dedicated to designing and manufacturing optical components and optical sensors based on proprietary nanostructures and nanofabrication technologies,

Dr. Moskovits' presentation is part of a technical program including more than 40 presentations. Also conference delegates will tour Canada's National Institute for Nanotechnology (NINT) on Tuesday, June 23. Located on the University of Alberta campus in Edmonton, this research facility was founded in 2001. NINT is an integrated, multi-disciplinary institution with researchers in physics, chemistry, engineering, biology, informatics, pharmacy and medicine. Its objective is to discover design rules for nanotechnology and develop platforms for building nanosystems and materials that are constructed for specific applications.

This internationally known event brings together leading researchers, industry experts, government representatives and other stakeholders to share advances, perspectives and discuss new ideas and breakthrough concepts on nanotechnology-based advances. More details are available at www.tappi.org/09nano.

And finally...

Forest Products Laboratory to Celebrate 100 Years of Research

FPL will officially be celebrating its centennial on June 4, 2010. Notices about special events and products will be distributed throughout this year and next to commemorate our many scientific achievements. We will also be sharing noteworthy historical accomplishments and items of interest in both FPL News and NewsLine, our lengthier quarterly newsletter. Did you know that one of the first challenges of FPL scientists was to develop preservatives for railroad ties? Building and repairing rail lines took a heavy toll on our Nation's forests, and FPL's preservation research slowed the replacement of rotten ties and lengthened their service life.



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