



February 2009

New Wood-Based Composite Science Online Course Series

Oregon State University's College of Forestry has teamed up with the Wood-Based Composites Center, the Oregon Wood Innovation Center and OSU Extended Campus (Ecampus) to deliver Wood-Based Composite Science courses in a 19-course online series.

The new online Wood-Based Composite Science Short Course Series will debut in May and will provide career professionals with a fundamental knowledge of wood as an engineering material in the manufacture of wood-based composites. Students who complete courses from the series may be eligible for a Certificate of Mastery and will be able to improve manufacturing efficiency and product performance, troubleshoot processing problems and enhance their value to their employer.

Fred Kamke, JELD-WEN chair of Wood-Based Composite Science at OSU, thinks that providing the courses online will allow employees in the

industry to work the courses better into their schedules. "Many of the people we hope to reach work swing shifts and night shifts, so the online delivery works for them," Kamke said. "We have applied the same high standards of quality to the online



courses that we have with the traditional classroom-based short courses. We know the information is in demand, it was just a matter of packaging it in a format the user can easily access."

Courses are taught by experts in the field of wood science and technology and have been selected from top universities, government re-

search labs and industry. The courses are integrated and build upon each other to provide a logical progression as participants transfer newly-acquired skills to the workplace. Although the courses are self-paced, the instructors will provide consultation online through discussion and weekly chat sessions.

Each course is five weeks long and includes five to 10 hours of instruction. The fee for a 10-hour course is \$750. The Certificate of Mastery requires a minimum of 120 hours of instruction and costs \$9,000. The first course begins May 11. For more information on upcoming courses and to be added to the mailing list, visit ecampus.oregonstate.edu/woodscience.

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The Current Economic Situation: How did we get here and where do we go from here?

Presented by:
The Willamette Valley Chapter, Forest Products Society
and the Oregon Wood Innovation Center



March Dinner Meeting
6-8 PM, March 19th, 2009

Richardson Hall Room 107
Oregon State University
Corvallis, OR

The United States is in the midst of the worst recession in decades. The implications of this recession have been especially hard on the forest products industry. The Willamette Valley Chapter of the Forest Products Society has organized a panel of speakers to address how we got into this economic situation, the implications for forest landowners and the forest products industry, and how can we position ourselves to be ready when the economy turns.

Speakers

Art Ayre - Economist, Oregon Employment Department

David Ford - Director, Oregon Small Woodlands Association

Craig Adair - Director of Market Research, The Engineered Wood Association

Registration (Includes dinner):

FPS Members \$25

Non Members \$35

For more information and to register visit <http://owic.oregonstate.edu/FPS-WVC/>.

A REAL Value-Added Wood Product

Regardless of your knowledge of classical music or musical instruments, chances are you have heard of Stradivarius violins. These instruments, named after master luthier (stringed-instrument maker) Antonio Stradivari, were made in the late 1600s to

early 1700s. They are world-renowned as the benchmark against which all other violins are compared. And as it often goes, fame and fortune go together; in 2006, a Stradivarius sold for over \$3.5 million dollars. By our rough calculations, that works out to

be about \$4 billion per thousand board feet. Now that is a value-added wood product!

Many have long wondered why after 300 years, modern instrument makers have not been able to produce an instrument that

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Value-Added Wood Product cont.

can match the sound of a Stradivarius. What makes these instruments so special? Is it the wood Stradivari used, the varnish, or the design? Then again, might it be some 'secret' technique to alter the wood such as 'ponding' (submerging the wood in stream water) or 'stewing' (submerging in boiling water)? Despite the fact that we've had a few centuries to study the situation, the jury is still out - although, we're not entirely in the dark.

Recent research has revealed some differences between the wood used in antique violins and that used by modern instrument makers. A medical researcher from The Netherlands teamed up with a luthier from Arkansas to conduct a study comparing

the wood of 5 antique violins (2 made by Stradivari and 3 made by Giuseppe Guarneri Del Gesu, another 18th century craftsman) and 8 modern violins. The researchers used a medical CT scanner to examine wood density. They examined the median density and the difference in density between the earlywood and latewood for both the Norway spruce used on the tops of the instruments as well as the Norway maple used on the backs.

They found no significant difference in median density between the antique and modern violins. However, the earlywood-latewood density differential, for both the spruce and the maple, was significantly smaller in the antique violins. In short, the

density of the wood used in the antique instruments was more homogeneous.

What might these results imply for modern instrument makers? One possible outcome is the use of non-destructive testing devices like CT scanners to sort wood for musical instruments. Of course, other options include silvicultural techniques to minimize earlywood-latewood density differences as well as wood treatments to lessen these differences. Either way, there appears to be some opportunities here for wood innovation!

For more information, see the full article at the PloSone website.

Are you an employer looking to hire qualified students?

Post a position on our jobs board: <http://owic.oregonstate.edu/jobs/form.php>

To subscribe to this newsletter send an email to Chris Knowles with "subscribe to newsletter" in the subject line.

Contact us:

Oregon Wood Innovation Center

<http://owic.oregonstate.edu>

119 Richardson Hall

Corvallis, OR 97331-5751

Fax: 541-737-3385

Scott Leavengood

Scott.Leavengood@oregonstate.edu

541-737-4212

Chris Knowles

Chris.Knowles@oregonstate.edu

541-737-1438

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