

# **Oregon Wood Innovation Center**

**Connecting People, Ideas, Resources** 

#### he Softwood dia: An Overview

	Coming OWIC events:	Rajat Panwar		industry, and the advent of 2010
F	February 24-27: <u>Forest</u> Products Management Development Corval-	PhD Student		Commonwealth Games in New
		Wood Science and Er	ngineering	Delhi.
		Oregon State Univers	sity	
	lis, OR	Rajat.Panwar@orego	nstate.edu	Currently, India's annual con-
				sumption of softwoods is
	April 26-27: <u>Selling</u> Forest Products Cor-	Eric Hansen, OSU Prot	fessor of	reported to be approximately
	vallis, OR	Forest Products Marketing, Chris	700,000 m3 (approximately 300	
		Knowles, OWIC Research Assis-		million bdft). The majority of
		tant, and Rajat Panwar recently		softwoods are used in the con-
		completed a market research		struction sector as shutterings
		trip to India. The purpose of		(similar to concrete forms in the
		the trip was to assess potential		US), but the furniture sector also
		ndian markets for softwood		uses a significant amount. Most
		lumber produced in t	he U.S.	of the demand is met through
Inside this Issue:		India, the second		
	Woody Biomass	most populous		
	Utilization Grant 2	country in the world,		
	Sustainable 2	has been in the news		
	Procurement	for quite sometime		
	Featured Re- 2	regarding its rapid		
	seacher	economic develop-	1 her	
	Ask the expert 3	ment. However,	Tunical rata:	Loutlat for chutaring (laft) and chut
	Events of inter- 4	many sectors such	construction of a multi-story concrete building	
	est	as forestry and		
		agriculture are still		

lenges arise from the fact that penetrating the existing value chain is not easy. Opportunities exist in that there are only a few key softwoods importers in India and accordingly clientele choice is not too wide.

Multiple Indian market assessment studies conducted by the members of the Forest Business Solutions Team at Wood Science and Engineering Department suggest that Indian softwood importers are predominantly

> priented to buy logs. However, changes in international wood trade combined with changes in sawmilling practices in India are slowly opening up these Indian importers to consider import-

shuttering used in ding (right).

> imports, with New Zealand currently the largest supplier. Indians posess limited knowledge about US softwoods.

India's wood market is largely fragmented and wood products' trading is dominated by close relationships and networks. The presence of such a closely knit community may pose both challenges and opportunities for exporters of US softwoods. Chaling lumber as well.

The key to successfully serve the Indian market is working out viable freight costs. On top of everything, Indian importers hold a skepticism regarding American exporters' commitment to continue to serve the Indian market when the US domestic economy strengthens. Accordingly, it is important for potential exporters to develop

Continued on Pg. 3

under developed. There are several factors that have combined together to further the proposition that India could be a potential market for the US softwoods including rising per capita income, rising middle class, changing consumer preferences

towards Western products, a boom in both the housing and commercial construction sectors, raw material scarcity in the domestic wood products

> Oregon State College of Forestry

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## **2008 Woody Biomass Utilization Grant**

The State and Private Forestry Tecnology Marketing Unit of the US Forest Service has announced the 2008 Woody Biomass Utilization Grant (<u>http://www.fpl.fs.fed.us/tmu/</u> <u>grant-2008/biomass-2008/index.</u> <u>html</u>).

The program has more than \$4 million available in the form of grants which address the national challenges of dealing with low-valued biomass material removed from hazardous fuel reduction activities, restoration of insect and diseased conditions or catastrophic weather events. Grants will range in size from \$50,000 to \$250,000 each.

Applications must be submitted to apply for this grant program. Pre-applications must be postmarked by close of business November 2, 2007. The full application is due by close of business February 1, 2008. Information about this grant program has also been posted to the Woody Biomass Utilization discussion forum on the Oregon Wood Innovation Center website (http://owic.oregonstate.edu/ bboard/forumdisplay.php?fid=9).

The Oregon Wood Innovation Center staff is available to provide feedback on proposals to be submitted to this grant program.

## **Sustainable Procurement of Wood and Paper Products**

Businesses in all industries from manufacturing to retailing are shifiting their purchasing practices in an attempt to purchase sustainabily manafactured products. Purchasing managers often find this change in purchasing philosophy very confusing raising questions such as: "How do I know what is sustainable?", "Where do I find information?", and "What does all of this terminology mean?".

The World Business Council for Sustainable Business Development, in

## **Featured Researcher: Charles Brunner**

The featured researcher for the month of October is Dr. Charles Brunner. Charles is an Associate Professor & Undergraduate Advisor in the Department of Wood Science and Engineering at OSU. He has been with the department for 24 years.

Dr. Brunner's research focuses on two major areas (1) scanning and (2) process modeling, with a focus on improving the efficiency of manufacturing in the forest products industry. He currently has one graduate conjunction with the World Resources Institute, have produced a report that can help firms gain an understanding of the basics of sustainable purchasing. The report, Sustainable Procurement of Wood and Paper-Based Products: An Introduction, is available at (<u>http://www.wbcsd.org/</u> <u>plugins/DocSearch/details.asp?type</u> <u>=DocDet&ObjectId=MjY0Nzk</u>).

The report helps firms understand the far-reaching, long-term impacts their purchasing decisions can have on the forests from which the products were harvested, the communities supported by wood-using industries, and the places where those products are purchased and used. The information presented in the report is organized around ten key issues, or "essential questions" which might be addressed by firms when considering how to procure wood and paper-based products in a sustainable manner.

student with a research focus on tracking of lumber and wood components for the purpose of process analysis and control.

Dr. Brunner teaches several undergraduate classes including Wood Technology and Utilization (WSE 210) and Secondary Wood-Products Manufacturing(WSE 446). He is also a Co-instructor for Wood Science and Technolgy Senior project (WSE 411, WSE 412, WSE 413), a course which helps students develop their problem solving skills. Dr. Brunner has served as the academic advisor for the Department's undergraduates and chairman



of the undergraduate curriculum committee for 18 years.

More information about Charles Brunner is available at <u>http://wood-</u> <u>science.oregonstate.edu/facstaff/</u> <u>brunner.php</u>.

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# **Ask the Expert**

Have questions related to wood? The faculty of the Wood Science and Engineering Department at OSU have the expertise to handle almost any question about wood. Simply submit your question using the Ask the Expert form (http://owic.oregonstate.edu/ askexpert.php). Please be as specific as possible.

The following are examples of recent 'Ask the Expert' questions:

**Question:** We are preparing to take down several hybrid poplar trees that line our driveway and have become too large. We have cut the limbs off the lower parts for years and these trees are large enough and quality enough to become lumber but we don't know who buys them. Might you be able to help?

**Answer:** You can check the Oregon Forest Industry Directory to see if some of the firms listed there might be interested in the logs. The direct link to companies that have listed hybrid poplar in their list of species is: <u>http://www.</u> <u>orforestdirectory.com/results/log-</u> <u>buyers/hybrid-poplar</u>

**Question:** On slide 3 of your PowerPoint presentation entitled <u>So-</u> <u>lar Dry Kiln Demonstration</u> project it states that the living tree may contain over 200% moisture by weight. How is this possible? If the tree was 100% moisture, wouldn't it be made up entirely of water?

**Answer:** This is one of those idiosyncracies with wood. Most of the wood products industry calculates moisture content via what is called the 'dry basis.' However, the pulp & paper industry typically uses wet basis.

For both dry basis and wet basis, the numerator is the weight of the water in a sample; in practice, this is calculated as (weight of wet wood) - (weight of ovendry wood). For dry basis, the denominator is the weight of the wood ovendry. For wet basis, the denominator is the weight of the wet wood. An example: Let's say the sample of interest weighs 6 grams and ovendry it weighs 2 grams. Dry basis MC = (6-2)/2 = 200% MC

Wet basis MC = (6-2)/6 = 67% MC

Thus, it is impossible to be over 100% when wet basis is used. However it is common to see dry basis MC well over 100%. In practical terms, an MC of 200% means the wood is holding twice its own weight (dry weight) in water.

The chapter on Physical Properties and Moisture Relations of Wood from the USDA's Wood Handbook lists average green moisture content of several hardwoods and softwoods. See page 6. Low-density species like western redcedar are notorious for being extremely heavy when green but very lightweight when dry - this is borne out by the average green sapwood MC of 249%!

# Indian Softwood Market Continued from Pg. 1

long-term relationships and the trust necessary among Indian importers.

Based on the information gathered during this trip, a report was generated which outilines the softwood market in India and presents potential strategies for entering the Indian market. The full version of this report is available on the Oregon Wood Innovation Ceneter website at <u>http://</u> owic.oregonstate.edu/pubs/india. pdf.

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# **Events of interest**

#### October 16-18,2007

Making Wood Work: Local Energy Solutions Missoula, Montana <u>http://fuelsforschools.org/biomass\_boiler\_work-</u> <u>shop.html</u>

#### October 18-19, 2007

Western Hardwood Association Lumber Grade School Location to be announced Port land, OR <u>http://www.westernhardwood.com/WHAGrade-</u> <u>School07.htm</u>

### October 23-25, 2007

Continuous Improvement Using Statistical Process Control for Forest Products Manufacturers The University of Tennessee Forest Products Center Knoxville, Tennessee <u>http://web.utk.edu/~tfpc/Intelligent/SPC\_Training/</u> SPC%20trainingmain%20page.htm

### December 4-6, 2007

Advanced Statistical Seminars for Forest Products Manufacturers The University of Tennessee Forest Products Center Knoxville, Tennessee <u>http://web.utk.edu/~tfpc/Intelligent/SPC\_Training/</u> SPC%20trainingmain%20page.htm

## If you have an event you would like to include, please submit it to <u>Chris.Knowles@oregonstate.edu</u>.

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

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