

Vol. X, No. 12**March 24, 2011**

IPST Hosts Executive Conference

On March 9-10 at the Georgia Tech Learning and Conference Center, GT's Institute of Paper Science and Technology (IPST) and its Director, Dr. Norman Marsolan, hosted an Executive Conference, titled "Remaining Competitive in an Evolving Industry: Seizing Emerging Forest Industry Opportunities in Operations, Process, and Product Innovations." Included among the attendees were representatives from fourteen manufacturing and five supplier companies, as well as industry association (TAPPI, Agenda 2020 Technology Alliance) and government (USDA, Forest Products Laboratory) representatives and fifteen Georgia Tech and IPST faculty. The two-day conference highlighted how state of the art Georgia Tech research in bioengineering, chemistry, biomolecular engineering, organic photonics, materials science and nanotechnology can have significant implications for cost reduction, improving production processes, and transformative product innovations that will make the paper industry more competitive.

Dr. Marilyn Brown, Professor of Energy Policy at GT, discussed implications that energy policies, such as the carbon tax, renewable electricity standard, and industrial energy efficiency protocols, would have on the industry. Dr. Deepak Divan, Associate Director of the Strategic Energy Initiative at GT, noted that pulp and paper companies could be energy players and that a holistic energy strategy using smart grids that were dynamically controlled could yield significant cost savings.

Focusing upon the changing industry structure and steps that companies currently pursue to improve their operating processes and more efficiently utilize their assets, Dr. Patrick McCarthy, CPBIS Director, moderated a panel made up of a representative from a pulp and paper manufacturer, a chemical supplier, and an industry consultant.

Day 2 of the conference focused upon product innovation and the present and future roles of

bioengineering and nanotechnology on pulp and paper products. Dr. Bernard Kippelen, Director, Center for Organic Photonics and Electronics at GT, noted that the future of consumer packaging will reflect 'a convergence of emerging technologies: digital printing, flexible and printed electronics, and smart packaging' which will have significant implications for company supply chains. In a related presentation, Dr. Oliver Brand, Professor of Bioengineering and Microsystems, discussed the significant improvements in functionality and cost effectiveness that will result from increased micro/nanotechnology applications in packaging.

In a keynote address, Dr. Stylianos Kavadias, Professor of Operations Management at GT, and Dr. William Rouse, Executive Director of the Tennenbaum Institute at GT, provided insights on the challenges that face companies in a dynamic environment and how innovation can successfully transform companies to remain competitive.

Dr. Marsolan identified five strategic thrusts for IPST: Operational Excellence, Biorefining, Biomaterials and New Product Development, Business Policy, and Education. CPBIS' focus and research on business and industry studies is well aligned with IPST's strategic thrust on Business Policy.

For more information on the Executive Conference, please contact IPST Director Norman Marsolan (norman.marsolan@ipst.gatech.edu) or visit IPST's home page (www.ipst.gatech.edu).

AF&PA News

The American Forest and Paper Association last week released three of its ongoing series of industry reports, dealing respectively with paperboard, containerboard and Kraft paper. Following are brief summaries:

- Total boxboard production increased by 2.8% compared to February 2010, but decreased 10.4% from January.

- Unbleached Kraft Folding production increased compared to February 2010.
- Solid Bleached Folding production also increased over February 2010.
- Recycled Folding production decreased over January and last year.
- Inventory of Solid Bleached Kraft Paperboard saw an increase over January 2010.
- For the sixteenth straight month, containerboard production rose over the same month a year ago, but may be leveling off. Total production increased 14,100 tons or 0.6% when compared to February 2010. Production fell compared to January 2011, with month over month average daily production down 2.0%.
- Linerboard production was flat over last year.
- Medium production was up over February 2010.
- Total Kraft paper shipments were 125.5 thousand tons, an increase of 11.1% compared to February 2010, and down 3.0% when compared to January 2011. Total inventory was 71.8 thousand tons.
- Total Unbleached Kraft shipments increased over the same month last year.
- Total Bleached Kraft shipments were up over February 2010.

Recent Forestweb/Industry Intelligence Headlines

Forestweb and its sister company, Industry Intelligence, publish weekly news reports tracking recent developments in and around the paper and forest products industries. Subscription information is at <http://www.forestweb.com/Corporate/index.cfm>

Below is a small sampling of recent headlines, together with brief synopses.

March 20

Production stopped at Mitsubishi Paper Mills' paper mills in Hachinohe, Kitakami, Shirakawa, Japan, in aftermath of earthquake, as company assesses damage; financial performances of European operations not immediately affected

The Hachinohe mill appears to have been hit hardest; there were six personal injuries and the mill was flooded by the tsunami.

China to install 30 [tissue] machines over next 36 months to meet high demand; Longueuil, Quebec-based NBSK and recycled fiber producer Fibrek seeing good pulp market prospects going forward

The Chinese are critically short of fiber and their international buying is pushing up world pulp prices.

March 13

Arauco to keep 550,000 tonnes/year Valdivia, Chile, market pulp mill down until drought conditions improve; mill has been closed since March 6

The shut is said to do with the lack of a pipeline to the ocean—that is, when the river water is low, due to lack of rain, the mill cannot handle the effluent.

Domtar to sell idled Prince Albert, Saskatchewan, pulp and paper mill to Paper Excellence, will convert to dissolving pulp mill; transaction subject to customary closing conditions, expected to close Q2 2011

The Prince Albert mill was closed in the second quarter of 2006.

February 28

Mercer feasibility study shows British Columbia's Celgar and Germany's Stendal pulp mills could swing to dissolving pulp output in addition to NBSK pulp with investment of US\$30M-US\$40M per mill

A preliminary analysis indicates that Celgar and Stendal would be respectively first and second quartile cost producers of dissolving pulp.

NewPage shuts down both coated paper machines at 250,000 tons/year Whiting, Wisconsin, mill as of Feb. 18, hires firm to handle inquiries from potential buyers
Layoffs started Feb. 15 and will continue through March,

February 21

Arauco restarts earthquake-damaged 500,000 tonnes/year softwood pulp line in Arauco, Chile, in late January; Arauco and CMPC say most recent earthquake did not affect operations

Both Arauco and CMPC suffered damage and production losses in the Feb. 27, 2010 magnitude 8.8 earthquake. The magnitude 6.8 earthquake that struck Chile Feb. 11, 2011 caused no damage to either company's operations.

Republic of Belarus to build bleached sulfate pulp mill in Svetlogorsk with 400,000 tonnes/year

*capacity, of which 250,000 tonnes will be exported;
China to provide loan for estimated US\$676M
construction cost*

The decision to go forward with the project has been made.

*Stora Enso and Arauco in advanced negotiations with
Andritz for supply of equipment for 1.3 million tonnes/
year JV Montes del Plata pulp mill in Punta Pereira,
Uruguay*

Start-up of production is scheduled for the first half of 2013.

Statistics Corner: Forest Products Sales by Farms

As shown in Figure 1 on the next page, farm sales of forest products range from over \$50 million in Georgia to less than \$300,000 in Rhode Island. Sales in states not represented on the chart are less than \$300,000. Figure 2 is a geographical representation of the same data. ■

2007 Sales, \$Millions

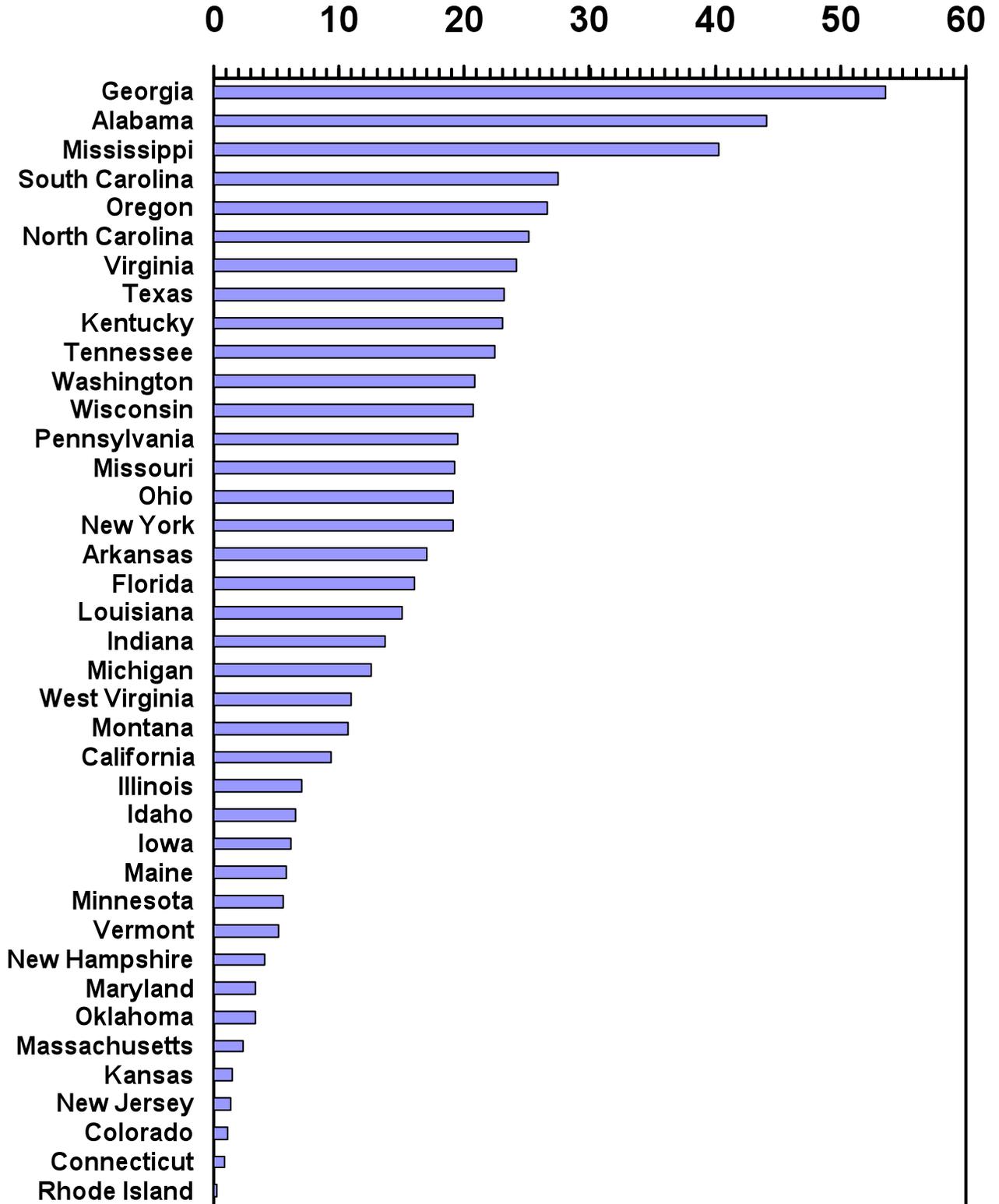
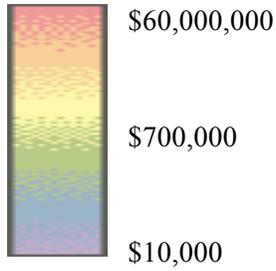
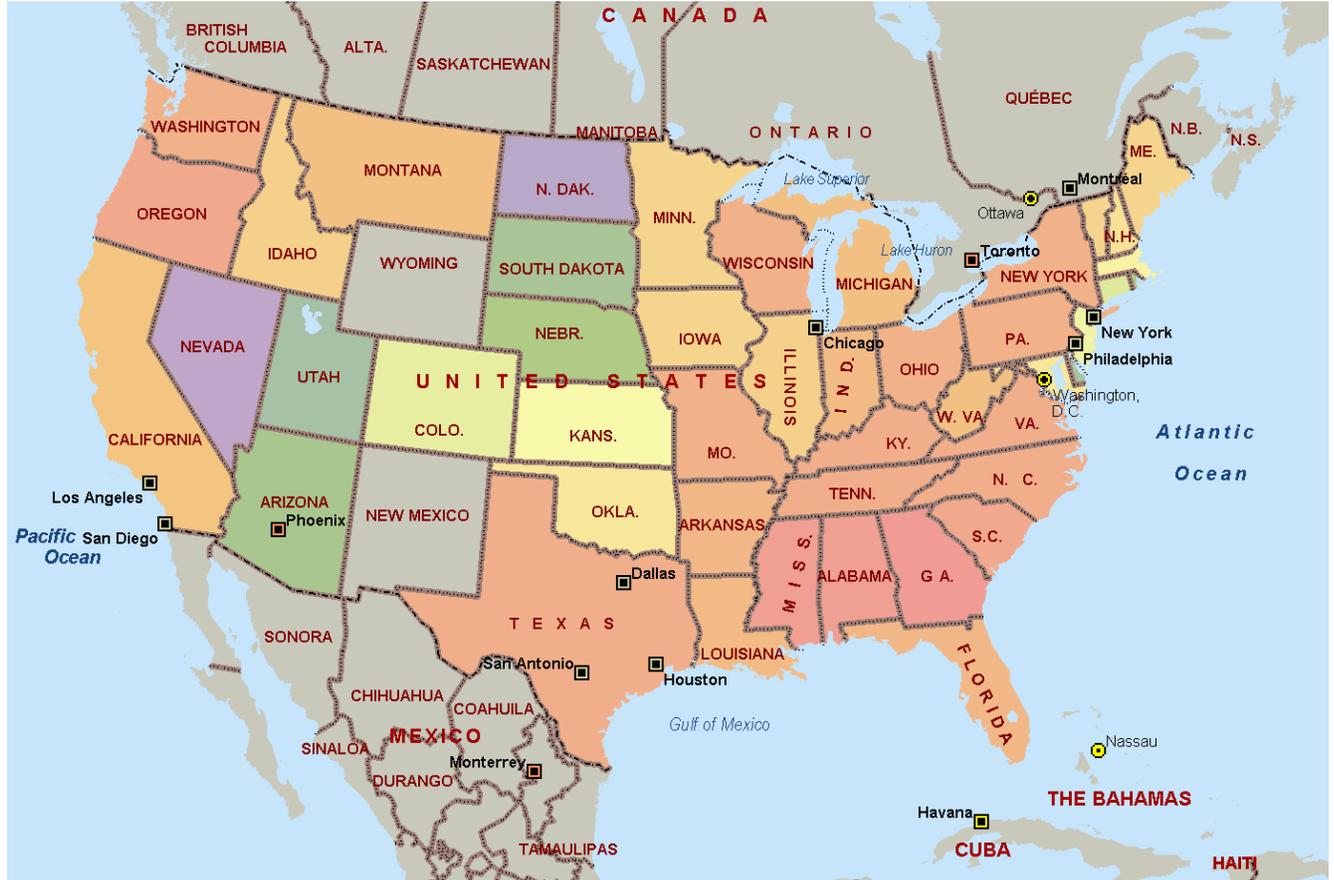


Figure 1. 2007 Sales of Forest Products by Farms (U.S. Dept of Agriculture)



2007 Sales of Forest Products by Farms



Source: United States Dept. of Agriculture

Figure 2. 2007 Sales of forest products by farms.