

May 2007						
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INSIDE VT WOOD

Reminder...

Remember to submit department news items by Friday 3 p.m. of each week to Will Pfeil at wpfeil@vt.edu for inclusion in Inside VT WOOD each Monday morning. All past issues of Inside VT Wood reside on our department website under the publications link.

News From Paul Winistorfer

- Congratulations to Dr. Dan Hindman, who learned last week that he was selected as the recipient of the L.J. Markwardt Wood Engineering Award awarded by the Forest Products Society. The award is intended to encourage research and promote knowledge of wood in the engineering field as a means of enhancing the efficient utilization of wood. Dan will be recognized at the International Convention of the Forest Products Society in Knoxville, TN in June. Congratulations to Dan and we will share in his accomplishment during and after the awards presentation! Faculty recognition continues to bring accolades to our department and college.
- I will be making a presentation on workforce development and WoodLINKS at the West Virginia Wood Industry Summit in Buckhannon, WV this week. Conference details are available at <http://www.wvhaz.org/summit2007.html>
- I will be scheduling a 'facilities buff-up day' sometime for early summer. Back by popular demand, taking a day to enhance, maintain and repair our facilities is important all the time. We will schedule soon.
- I will also be scheduling a faculty 'work session' soon to finish up important graduate curriculum business and other items that require faculty attention.
- We have received financial support from the Center for Excellence in Undergraduate Teaching (CEUT) to pilot the new assessment tool WEAVEonline. We will be specifically using monies to develop assessment protocol for the Wood Enterprise Institute as a pilot to assessing our entire undergraduate degree program as required by the upcoming SACS accreditation.
- Congratulations to Dr. Joe Loferski who recently reached the official milestone of 25 years in our program — Joe has actually worked in our program 27 years as of July 2007. Congratulations Joe and thanks from all of us for the great contributions you have made to our department, your outstanding performance in the classroom and for your collegiality among us. You have made a difference! Best wishes on the next 25 years with us (get started on those grants and publications now).

Ed Brewer, Asa Christiana and Paul Winistorfer Selected as Judges for Veneer Technologies' 2007 Craftsman's Challenge

April 10, 2007—[Veneer Technologies Inc.](http://www.veneer.com), a Newport, N.C.-based veneer and edgbanding supplier, announces that the judges for the [2007 Craftsman's Challenge™](http://www.veneer.com) competition are Ed Brewer, president of the Architectural Woodwork Institute (AWI); Asa Christiana, editor of Fine Woodworking magazine; and Paul Winistorfer, department head, Department of Wood Science and Forest Products, Virginia Tech.

Veneer Technologies Craftman's Challenge competition aims to reward excellence in the use of natural veneer and wood products through cash awards and other recognition for the entire supply chain in woodworking: end users, distributors, distributor sales representatives, and student designers.

Brewer is the third-generation president of his 70-year-old family-owned company, Louisville Lumber and Millwork. "We support this wonderful competition and this effort to promote the use of wood and natural veneer," said Brewer. "The idea of all parts of the supply chain working together to encourage the use of veneer and wood products in the right ways, in beautiful ways, is key to ensuring that our domestic industry will thrive in future."

Christiana came to Fine Woodworking via an education that began in engineering and moved into English and Journalism. After college, he was off to Africa with the Peace Corps to teach math—in French. He found a home for his left-brain/right-brain personality as editor of the magazine. "Veneer Tech's Craftsman's Challenge showcases the power and versatility of veneer," says Christiana. "The company makes no stipulations about where the veneers were purchased. The goal is simply to recognize the finest work in wood veneer. Fine Woodworking magazine teaches the best techniques and uses for veneer and is proud to support the mission of the Craftsman's Challenge."

Winistorfer is a professor of wood science at Virginia Tech and the current president of WoodLINKS USA. "Our industry, to remain vibrant and competitive, needs to reward creativity and encourage talented students as well as amateur woodworkers and professionals," says Winistorfer. "This competition does much to encourage us all."

Entry materials are available from Veneer Technologies sales representatives, distributors, and through www.veneertech.com. The competition is designed to be easy to enter; help in entering is readily accessible by telephone (800-593-5601). Online entry is encouraged for submissions of digital photography and forms. Entries will be accepted through June 8, 2007. Competition categories include Architectural Woodworking, Cabinetry, Furniture, Specialty Items, Store Fixtures and Student Designs. Any amount of natural veneer used from any source will qualify entries. Entrants each may submit up to a total of three entries.

A cash award of \$5,000 will be made to the creator of the grand prize-winning entry. The top student entry receives a \$1000 scholarship check. The distributor of the veneer for the grand prize-winning entry will receive \$3000, and the corresponding distributor salesman will receive \$2000. These cash prizes as well as other awards will be made during the Association of Woodworking and Furniture Suppliers (AWFS) show, July 18-21, 2007, in Las Vegas. Winners will also receive publicity in ads and in industry publications.

Veneer Technologies is located in Newport, N.C., and specializes in natural face veneers, sheet veneer, and edgebanding. The company employs approximately 130 people and is known for high technology veneer processing.

Shiloh High School Creates Virginia Tech Bulletin Board



WoodLINKS USA teacher Mark Smith of Shiloh High School in Hume, Illinois created a Wood Science and Forest Products bulletin board in his classroom after receiving our department materials last week. We distributed program materials to 122 schools in 22 states and have already heard from high school students interested in our program! We have planted some seeds here and must continue to foster interest in our program.

Tech Fundamentals

We have purchased ad space for the department in Tech Fundamentals, the special issue produced by the Collegiate Times and mailed in the summer to all incoming freshman students. Nearly 5,000 students and their parents will see our department inside the front cover.

The cover of the "Wood Science" special issue of Tech Fundamentals. The title "Wood Science" is prominently displayed in the center. Below the title is a globe showing the Americas. The cover is filled with various article titles and topics, including "Scholarships, Internships, Summer Jobs, and Small Classes", "Manufacturing", "Global Commerce", "Wood and Fiber-based Products", "Distribution and Consumer Packaging", "Recycling and Recovery", "Composite Wood Materials", "Art, Business and Science", "Cellulose Reinforced Polymer Composites", "Living with Wood", "Marketing", "Industrial Design", "Architecture", "Business to Biomaterials", "Chemistry and Chemical Change", "Energy", "Carbon Storage, Carbon Sink and Carbon Dioxide", "Nanocomposites", "Sustainability with Wood", and "Chemistry and Chemical Change". At the bottom, there is a blue banner with the text: "Wood and renewable-materials utilization is emerging as a critical endeavor for human health, national security, mitigating global climate change, and sustainability of the planet and people." Below this banner is the logo for "The Department of Wood Science & Forest Products at Virginia Tech" and the text "The Leading North American Program in Discovery, Learning and Engagement". On the right side, there is contact information for the Department of Wood Science and Forest Products: "College of Natural Resources, 270-Clayton Hall 6002, Virginia Tech, Blacksburg, Virginia 24061, phone: 540.231.4800, fax: 540.231.6176, web: www.woodscience.vtu.edu".

Glasser Presents in Golm, Germany

Wolfgang G. Glasser, Professor emeritus of Wood Science in the Dept. of Wood Science and Forest Products, has presented an invited seminar last week on the topic of:

WOOD – Are molecular interactions responsible for smartness and self-repair?

The talk was part of the Kolloquium series of the Department of Biomaterials of the Max Planck Institute of Colloids and Interfaces in Golm (near Potsdam), Germany.

The Department of Biomaterials of the Max Planck Institute conducts fundamental research in the areas of Plant Biomechanics, Biomimetic Materials, Research on Bones and other mineralized tissues, and other topics. The Max Planck Institute in Golm involves about 250 researchers (faculty, staff and students) in four different departments (biomaterials, colloid chemistry, interfaces, and theory). The Department of Biomaterials is headed by Prof. Peter Fratzl, who has studied parallels between bone and wood structure, and how these two biomaterials recover after irreversible deformation (see article in *Nature Materials* 2, 2003, 810-814). Fratzl has introduced the term “slip-stick mechanism” for the Velcro-like behavior of wet wood. Glasser’s early research on the structure of residual lignin in high yield pulps provides a hypothetical explanation for the molecular interactions between lignin and carbohydrates that might be responsible for the mechanical behavior.

The area of plant biomechanics is coordinated by Dr. Ingo Burgert, who teaches this subject at the Freie Universitaet of Berlin.

Glasser was in Golm as part of a visit to the Fraunhofer Institute on Applied Polymers (IAP) with which he has a multi-year consulting arrangement. The IAP specializes on different types of naturally-occurring polymers, such as cellulose, starch, and lignin. The IAP has recently made break-through discoveries in the fields of cellulose-reinforced composites for the automotive market, and on melt-blown cellulosic nonwovens.

The IAP is one of about 60 Fraunhofer Institutes Germany-wide. The head organization holds the critical patents for the MP3 digital audio encoding technology.

Wood Mechanics II Goes to Timbertruss

On Wednesday, May 2nd, Dr. Hindman’s WOOD 3316 class visited the Timbertruss plant in Salem, Virginia. Timbertruss manufactures roof trusses, floor trusses and wall panels. Timbertruss also is a distributor for TrussMark homes, an integrated housing system package including all structural and exterior building products needed for constructing a custom home. Gary Saunders, president of Timbertruss, led the tour. The students visited the production floor where the trusses and wall panels are manufactured, the distribution facilities for the TrussMark projects. They also visited the engineering offices where the truss and building specifications are developed and checked. Finally, the students heard a presentation about the importance of truss bracing on the stability of the structure. At the end of the tour, Dr. Hindman presented Gary Saunders with one of our VTWood hats, while Gary provided t-shirts and hats to all of the students.



WOOD 3316 Class at Timbertruss. Back row: Kevin Knight, Gary Saunders, Rob Hart, Gi Young Jeong, Josh Hosen, Scott Gutshall. Front row: David Kelley, Jesse Paris, John Foster, Adam Birkett, Phil Boyd, Loren McGarrahan.

5th Drying Lumber with a Solar Dry Kiln

The 5th drying lumber with a solar dry kiln workshop was held at the Brooks Forest Products Center on April 26-27, 2007. Dr. Bond organized and taught the course with assistance from retired professor Fred Lamb. The two day workshop was attended by nineteen small lumber producers and users from 11 different states. The workshop introduced the principles of drying hardwood and softwood lumber in a solar kiln and provided information on the design and operation of the Virginia Tech solar kiln. Ninety percent of the participants indicated that what they learned at the workshop would directly influence them financially.

General Announcements

The April Issue of Biomass R&D Initiative Newsletter is now available at: <http://www.brdisolutions.com/default.aspx>



The banner features a green background with a circular collage of images on the left showing various biomass-related activities. The main text reads "Biomass R&D Initiative Newsletter". Below this, there are two rows of dark red buttons with white text: "Feature Article", "Biomass Spotlight", "On the Hill", "Grassroots", "Marketplace", "Events", "Solicitations", and "R&D Awards".

Life-size Works In Driftwood

<http://www.rense.com/general70/drift.htm>

