SWST Newsletter

January-February 2003

SOCIETY OF **WOOD** SCIENCE AND TECHNOLOGY

SWST

Inside this issue:

Editor's Note

Dear Readers:

I hope that everyone is off to a successful start to the new year. We have been experiencing one of the coldest winters in recent memory. Below zero weather (Fahrenheit) tends to deter me from outside recreational pursuits. As I write it is lightly snowing and 10 degrees. I will attempt the cross country ski trails today!

The news these days is rather distressing. We have seen several wood products companies in Maine go out of business and Great Northern Paper is going through bankruptcy. The state of Maine is facing a looming $1 billion dollar deficit over the next two years. War with Iraq is imminent. We have lost several colleagues in the past few months.

I for one am looking forward to happier news.

Respectfully submitted,

Doug Gardner

News

OBITUARIES

Benjamin A Jayne (1928 – 2002)

The wood science and technology profession and SWST lost one of its great educators, scientists and administrators with the unexpected death of Professor Emeritus Dr. Benjamin A. Jayne. He passed away at his home in Gig Harbor, Washington on September 8, 2002 at age 73. He was preceded in death by his daughter Kristie, and is survived by Betty - his loving wife for 52 years, son David, daughter Summer, three grandchildren and two sisters.

Dr Jayne was borne in 1928 in Enid, Oklahoma. He graduated form Boise Junior College (now Boise State University), Idaho. He was named to the All-American junior college football team and to the Boise State University Hall of Fame. He extended his undergraduate studies at University of Idaho, from where he received his Bachelor Science of Forestry degree in 1952. Following his graduation he continued his graduate studies at Yale University, School of Forestry, receiving his Master of Forestry degree in 1953 and Doctor of Forestry degree in 1955. The Forest Products Research Society awarded him the first place "Wood Award" in 1955.

Dr Jayne began his teaching career as an Instructor at Yale University in 1955 and was promoted to Assistant Professor before leaving Yale University in 1958. From the onset of his research activities he was engaged in the application of classical mathematical modeling to the nondestructive evaluation (NDE) of wood products. He continued his pioneering work on the NDE at Washington State University as an Associate Professor of Wood Science, the position he held until 1961. At this time he interrupted his research and teaching activities to become a National Science Foundation Senior Postdoctoral Research Fellow at the University of California, San Diego. During this time he expanded his basic skills in the area of mathematical modeling of elastic and viscoelastic materials. The subject area of his postdoctoral topic became the focal point of his professional life as he applied the basic knowledge of mathematical modeling to wood and paper products.

Following his postdoctoral studies, Dr Jayne joined North Carolina State University as a Professor of Wood Physics. At this position he continued his research and teaching activities focusing on the modeling the orthotropic behavior of fibrous materials. In 1966 he joined the University of Washington as Professor and Associate Dean of the College of Forestry. During this time period Dr Jayne realized the need for reference materials in the field of wood mechanics and wood physics and invited me to spend a year of sabbatical leave working with him on a text/reference book. The result of this work: Bodig and Jayne "Mechanics of Wood and Wood Composites" was published in 1982 after the two of us worked on it for a decade. In 1971 Dr. Jayne was promoted to Director of the Center for Quantitative Science in Forestry, Fisheries and Wildlife at the University of Washington, This position he held until 1976. At this time he became Dean of the School of Forestry and Environmental Studies at Duke University, the position he held for ten years. The next three years, he was Professor of Natural Resources at the same institution. In 1988 he accepted the position of Maurice K. Goddard Professor of Forestry and Environmental Resources, School of Forestry, Penn State University, the position he held until his retirement in 1992.

Dr. Jayne was a strong promoter of the wood science and technology profession. He was a charter member of the Society of Wood Science and Technology and became SWST's president in 1968-69. He was a major moving force in establishing the journal of the SWST: " Wood and Fiber" and was it's first editor from 1968-72.

During the decade Dr. Jayne and I worked on our book on Mechanics of Wood and Wood Composites I have learned a great deal from him about the application of fundamental sciences of mathematics and physics to the quantification of the mechanical behavior of wood and wood composites. I was greatly impressed with his knowledge of the fundamental sciences and his dedication to apply them to the quantitative description of the various physical and mechanical behaviors of wood and wood composites. The wood science and technology profession will truly miss him. However, I know that his pioneering works on the orthotropic behavior of wood composites and their nondestructive evaluation will continue to be the basis for many more scientific and technical developments to come.

Jozsef Bodig, PhD, Fellow of IAWS
Emeritus Professor
Wood Science and Civil Engineering
Colorado State University
Fort Collins, CO, USA

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Balázs G. Zombori (1970-2002)

Balázs G. Zombori, a faculty member at Washington State University, died in an automobile accident south of Spokane, Washington, December 23, 2002. He was born May 21, 1970 in Budapest, Hungary where he attended school. After a year of mandatory military service he enrolled in the University of Forestry and Wood Science at Sopron, Hungary, from which he graduated with honors in 1993. He later received a Master of Science in Wood Technology degree there. He also received a Master of Science in Timber Engineering from Brunel University in England in 1994. In 1996, he came to the United States to pursue doctoral studies at the Virginia Polytechnic Institute and State University. He received a Ph.D. in Wood Science and Forest Products there in 2001.

Balázs came to Pullman in 2002 where he was Assistant Professor of Civil & Environmental
Engineering and served as research faculty in the Wood Materials and Engineering Laboratory at WSU. He was a member of several professional organizations and was widely published in his field.

Balázs traveled extensively to more than 22 countries in Europe, Asia, and North America. He enjoyed sailing and home brewing. He had an outgoing and exuberant personality and a keen sense of humor. Although Balazs had only been in Pullman a short time, he had already made many friends in the community and will be greatly missed.

He is survived by his parents, László Zombory and Hedvig Belitska-Scholtz of Budapest, Hungary. They are grateful for the support they are receiving from Balazs' friends concerning his recent tragic death. The Zombory family requests that memorial gifts be donated to support the academic work of Balazs' sister Klara; a Chinese-Hungarian language specialist.

Please send letters of condolence and memorial gifts to:

Dr. Laszlo Zombory
5 UGOCSA U.
BUDAPEST 1126
HUNGARY - EUROPE

Other News

Dr. Todd Shupe, Associate Professor, was recently elected as Chair of the MidSouth Section of the Forest Products Society. The Society's Vision is to be the world leader in technical information transfer to further the socially beneficial use of wood and fiber resources. The Society's Mission is to foster innovation and research in the environmentally sound processing and use of wood and fiber resources by disseminating information and providing forums for networking and the exchange of knowledge. The MidSouth Section includes Louisiana, Arkansas, Texas, Oklahoma, Tennessee, Mississippi, and Mexico. Congratulations Todd!

Conferences

China International Wood-Forestry Fair"(CIWF)

We are pleased to inform you that "China International Wood-Forestry Fair"(CIWF), as the branch of the 6th China Beijing International High-tech Expo will be held in May 23-26,2003. it is authorized by the State Council of People 's Republic of China .it is jointly organized by PRC Ministry of Science and Technology, the Ministry of Foreign Trade and Economic Cooperation, the Ministry of Education, the Ministry of Information industry ,China Council for the Promotion of international Trade and Beijing Municipality. It has been successfully held five times since its establishment in 1998,it is the most influential and the largest technique show in technology field with extensive international participation; and it is the comprehensively largely-scale event platform of trade, business cooperation, idea and information exchange.

Because of the rapid development of China economy and Beijing's holding 2008 Olympics, China is moving ahead with large-scale infrastructure construction. Beijing will build 12 Olympic gyms and one Olympic center. Besides this, China government will invest USD 20.8 billion for Beijing infrastructure in the areas of business facility, travel industry, high-tech industry, agriculture, satellite cities and so on. At present, nearly 5000 big hotels and restaurants in China need to be renovated, and some large markets and recreation areas need to be ornamented as well. At the same time, the Chinese government plans to build 200 million sqm. of housing each year, a total about 4 million apartments.

Timber harvest from China's natural forests will be reduced greatly to ensure the healthy development of China nature forest. The Chinese government will limit the disafforestation of domestic nature forest, 51.46-million cubic meters of timber output in 2002. The exploitation amount will decrease 20% each year form 2002. According to the statistics of China the total timber demand of China in 2002 is 105-million cubic meters, of 12.185-million cubic meters import logs in first half year, which increase 52.5% than same term last year; 2.517-

million cubic meters import bolt timber, which increase 39.3% than same term last year. So the large quantity of import timber is needed to supplement the Chinese timber market shortage. In addition, Since China's entry into the WTO, the China Customs government has decreased the rate of import tax on wood; all of these facts will bring great opportunities for foreign timber firms to enter the China market.

So we sincerely welcome your company come to China attending this Great Event, through this exhibition to know more about China Market, to present your new product and new technology, to have a negotiation with the end-user.

More information in our website: www.ciwf.com.cn <http://www.ciwf.com.cn>

Quality and Profit Improvements for Wood Veneering Operations

Dear Industry Colleague,

If your company works with decorative wood veneers, then you ll want to make it a point to attend a highly informative seminar, Quality and Profit Improvements for Wood Veneering Operations.

The program will take place March 6-7 at the Ramada Inn, Jeffersonville, IN. It is co-sponsored by Purdue University and Wood & Wood Products.

Program highlights include:

* 13 timely presentations by industry experts that can help you improve quality, save money or both.

* Optional plant tours of B.L. Curry and Sons Inc., E.M. Cummings Veneers Inc., Flexible Materials Inc. and Custom Plywood Inc.

* Tabletop exhibits featuring products and services offered by suppliers to the wood veneer industry including: R.S. Bacon Veneer, Diehl Machine, Dynea Overlays, Interwood Forest Products, Jellico Chemical Co., R&D Coatings, United Plywood and Wood Mosaic.

I look forward to seeing you in Jeffersonville.

Best regards,
Rich Christianson
Editorial Director
Wood & Wood Products

FPS Northeast Section Meeting

The Forest Products Society, Northeast Section will be holding their spring conference to discuss and illustrate the latest innovations in wood engineering. Sponsored by Boise Cascade Corporation and the Forest Products Society, the meeting will be held at Foxwoods Resort and Casino in Mashantucket, Connecticut on May 9, 2003.

Conference topics include:
- Contemporary uses of wood world-wide
- Wood and the environment (life cycle analysis)
- Technological advances in green buildings
- Structural applications of small diameter timber
- Overview of the wood plastics industry
- Detailing of engineered wood products

Speakers are from the U.S., Canada and Europe.
They include: Jim Taggart - Architectural journalist, BC; Paul Winistorfer - Professor, Virginia Tech, VA; Mark Knaebe - Forest Products Lab, WI; Leander Bathon - P.E., Germany; Steven Winter - Architect, Steven Winter Associates, CT.

Peggi Clouston, Conference Organizer
Conference website: http://www.umass.edu/bmatwt/events/fpsne2003.html

Structural Design with Wood at Virginia Tech

An introductory course on *Structural Design With Wood* will be offered May 12-14, 2003 on the campus of Virginia Tech University. The new course is designed for individuals who never had the opportunity to learn wood design basics in a university-level course, but are involved in the design, construction, and inspection of wood buildings. The primary focus and objectives of this course are a mastery of wood design basics and understanding of the many factors routinely used and required by the 2001 National Design Specification for Wood Construction. The course notebook will contain the design examples presented at the course, relieving the participants of extensive note taking. The course will also include a tour of the Brooks Forest Products Research Center and a structural testing demonstration. For registration details, go to: www.conted.vt.edu/sdww/

Questions about course content can be directed to Frank Woeste, P. E., at 540-951-0469 (e-mail: fwoeste@vt.edu)

Other Upcoming Conferences

37th International Wood Composite Materials Symposium April 7-10, 2003, Washington State University, Pullman Washington, USA

7th International Conference on Woodfiber-Plastic Composites (and other natural fibers) May 19-20, 2003, Monona Terrace Convention Center, Madison, Wisconsin, USA

Second International Precision Forestry Symposium June 15-18, 2003, University of Washington, Seattle, Washington, USA

FPS 57th Annual Meeting June 22-25, 2003, DoubleTree Hotel, Bellevue/Seattle, Washington, USA

Forest Products Machinery & Equipment Exposition June 25-27, 2003, Georgia World Congress Center, Atlanta, Georgia, USA

Employment Opportunities

University of Washington, College of Forest Resources, Professor and Director of the Center for Urban Horticulture and the Washington Park Arboretum (WPA)

The University of Washington, College of Forest Resources, invites applications for the position of Professor and Director of the Center for Urban Horticulture and the Washington Park Arboretum (WPA). The Center for Urban Horticulture (CUH) was established in 1980 with the goal of developing and applying current knowledge about plants to the solution of problems that are generated in urban and urbanizing environments. Fourteen University faculty with research and teaching programs are associated with CUH. CUH and WPA have a permanent staff of 22 and a strong volunteer program. CUH is responsible for co-managing, with the City of Seattle, the 230-acre WPA with over 4,400 woody plant taxa. CUH also manages the Union Bay Natural Area and the University's shorelines.

The holder of this tenured, full professor faculty position will provide administrative and academic leadership to continue building CUH into a world-class research and outreach interdisciplinary center devoted to urban horticulture, urban ecosystems, and plant collections. The Director must have superb executive skills, including strong organizational, people, fiscal, and planning skills, and demonstrated ability in budget planning and fund acquisition through grants and private gifts. The Director will have a leadership role in implementation of and fundraising for the approved Arboretum Master Plan. Collaborating with other University programs, academic institutions regionally, nationally and internationally and public and private agencies and organizations, the Director will build on the solid horticultural reputation of both CUH and WPA by continuing and broadening these and other programs. At his or her discretion in consultation with the Dean, the Director may participate in teaching and research.

Appointment is at the rank of full professor and salary and benefits are competitive. The preferred disciplinary focus is horticulture, but applicants in related fields will be fully considered. The applicant is expected to have attained the highest academic rank in his or her field. Applicants are invited to submit a letter of introduction stating interest, experience and qualifications, full curriculum vitae, and three letters of reference to: Gordon Bradley, Chair, CUH/WPA Director Search Committee, University of Washington, Box 352100, Seattle, Washington 98195-2100. The committee will begin reviewing applications on March 31, 2003; applications will be accepted until an appointment is made. Position start date is anticipated to be Fall 2003. For a full position description and information on the University, College and Center, refer to http://www.cfr.washington.edu/Internal/jobs/jobs.htm.

The University of Washington is an affirmative action, equal opportunity employer. The University is building a culturally diverse faculty and staff and strongly encourages applications from women and minorities.

WOOD TECHNOLOGIST

Western Wood Products Association, Portland, Oregon Responsible for providing technical support to companies on lumber manufacturing and finished products, evaluating and certifying lumber products, and maintaining and developing technical publications. Applicant must have a Bachelor's Degree in wood science and technology, wood products, or wood engineering. Knowledge, experience and understanding of lumber manufacturing, statistical process control, quality auditing, wood mechanics/engineering, product research and development are preferred.
Good communication skills (both oral and written), strong analytical skills, and post-graduate degree are desirable. Some travel required. We offer comprehensive benefits.
E-mail cover letter and resume to Kevin Cheung at kcheung@wwpa.org
Equal Opportunity Employer

Faculty Position in Bio-Based Materials and Processing Research

The Wood Materials and Engineering Laboratory at Washington State University announces a tenure track faculty opening in bio-based composites and polymers beginning August 16, 2003. The position will be filled at the assistant or associate professor level, with tenure home in the Department of Civil and Environmental Engineering.

Candidates for the position must have a Ph.D. in engineering or related field, with demonstrated research experience in bio-based composites and polymers. Interest areas include characterization, production, or process modeling. The Department has several faculty members within the structural and materials engineering program with strong interests in wood research. The position provides excellent opportunities to participate in interdisciplinary research with other departments within the college and university. Joint appointment with other departments is also a possibility depending on the candidate interests and background. The position requires strong commitments to sponsored research, publication, teaching, and other scholarly activities.

Additional information about the Department and Laboratory is available at http://www.ce.wsu.edu and at http://www.wmel.wsu.edu

Review of applications will begin April 1, 2003 and will continue until the position is filled. Applicants are requested to send a cover letter indicating level of application (assistant, associate), resume, graduate and undergraduate transcripts and names, addresses and phone numbers of five references to:

Dr. Michael Wolcott
Chair, Search Committee
Wood Materials and Engineering Laboratory
Washington State University
Pullman, WA 99164-1806

WASHINGTON STATE UNIVERSITY IS AN EO/AA EDUCATOR AND EMPLOYER. Protected group members are encouraged to apply.

Research Opportunities for Engineering and Science Undergraduates

Announcing 10 Summer Research Internships at the University of Maine in the area of Advanced Engineered Wood Composites

The Advanced Engineered Wood Composites Center is a National Science Foundation funded multidisciplinary research group working toward developing the next generation of cost-effective, high performance fiber-reinforced polymer (FRP) wood composite construction materials. Researchers from structural engineering, mechanics, composites materials, and wood science have teamed up for some exciting and relevant research & development projects. Students will receive a $4,000 stipend plus a $700 travel allowance for a nine week project period starting June 9, 2003. Underrepresented students are encouraged to apply.
Applicants must be U.S. citizens or permanent residents.
Application Postmark Deadline: March 15.

Sample Projects: *Structural systems and component development, testing and modeling*
Characterization and processing of FRP reinforcement systems
Novel wood/FRP adhesion strategies
Environmentally benign manufacturing
Biological decay mechanisms
Microstructural characterization and modeling
Nondestructive evaluation, Advanced instrumentation

The summer program will be conducted at the University of Maine campus in Orono. Free housing is available on campus. There are numerous opportunities for outdoor recreational activities such as hiking, mountain biking, canoeing and sea kayaking. The campus is located a short distance from Bangor Maine and its international airport. Bar Harbor and Acadia National Park is one hour away to the east, and Baxter State Park, home of Mount Katahdin (the northern terminus of the Appalachian Trail) is an hour away to the north.
See our web site for more info: http://www.umeciv.maine.edu/REU

Or contact: Professor Eric Landis, REU Program Director Center for Advanced Engineered Wood Composites
University of Maine
5793 AEWC Building
Orono, ME 04469-5793
(207) 581-2173
(207) 581-3888 (fax)
landis@maine.edu

SPRINGTIME TEMPERATURE SWINGS ATTACK NORTHEASTERN FORESTS

Forest dieback in the northeastern United States and neighboring areas in Canada has been more frequent, more persistent, and more severe during recent decades, research has shown. Now scientists have found springtime temperature swings have intensified in that region during the same period. A new study links these escalating freeze-thaw episodes, which are known to harm trees, to an atmospheric pressure imbalance over the North Atlantic. The research, by scientists at the National Center for Atmospheric Research (NCAR) and the University of Washington, is published in the Journal of Climate, a publication of the American Meteorological Society (AMS).

For more information visit http://www.ametsoc.org/ams/amsnews/NCAR2002-27Mearns.pdf

SWST Membership Survey Conducted

Richard Vlosky

In Spring 2002, Dr. Richard Vlosky, Professor, Louisiana Forest products Development Center, LSU AgCenter, and Chair of the SWST membership committee conducted a survey of SWST members. The survey was conducted to better understand member opinions on current and potential member services. In addition, respondents evaluated the SWST website and the Wood & Fiber Science journal. Survey construction was an iterative process between Dr. Vlosky and the SWST board of directors with the Board having the final say on survey content and structure. The full findings from the survey will be published in a forthcoming issue of Wood & Fiber Science.

The survey consisted of one mailing. A personalized signed cover letter explaining the reasons for conducting the study accompanied the surveys. Of the 257 surveys that were mailed, 168 were returned and all were useable for a response rate of 65 percent.

Survey recipients were asked to evaluate current SWST services. Respondents ranked the member journal Wood and Fiber Science as the most useful service that SWST provides. Seventy-nine percent of respondents found the journal to be very useful and 20 percent found it to be moderately useful. Next ranked was the accreditation certification that SWST does for wood and fiber science/wood technology-oriented universities. Ranked last was the annual meeting with 17 percent finding the meeting not useful at all and 13 percent not having any opinion. Twenty-six percent of respondents found the meeting to be very useful.

This study was conducted for a number of reasons. First, it is important for SWST to assess where the Society is currently with regard to member use of services and how valued these services are. Respondents offered many suggestions for improvement to all facets of the Society's offering. This membership survey should be conducted with some regularity to allow SWST better serve it's members as needs evolve over time. Results will be useful to gauge effectiveness of current offerings being provided to members and to help craft SWST strategic plans.

A few changes for annual meeting this year …

Within the past five years, the Society has conducted two surveys of member preferences. Among the many valuable comments received from members, one of the more common themes is that our members would like to have more presentations related to the fundamentals of wood science and materials characterization methods at our annual meeting. To address these comments, we are instituting two changes at the annual meeting this year. First, at the request of the Board and through the help of Frank Beall, the IAWS lecture will be offered on Sunday afternoon at the end of the joint SWST/FPS fundamental disciplines technical sessions. As many members are aware, these are generally very good presentations and the move should be advantageous to all. The second change will occur on Monday morning. With the approval of the Executive Board of the Forest Products Society, SWST will sponsor a technical program on Monday morning related to materials characterization methods and analysis. The program is still being developed and details will be available soon. The Board welcomes comment about these changes and hopes that they adequately respond to the membership's desire for additional basic technical information.

Bob Rice, President, 2002-2003

Humor

Rural Engineering Test – Submitted by Everett Ellis

1. Calculate the smallest limb diameter on a persimmon tree that will support a 10-pound possum.

2. Which of the following cars will rust out the quickest when placed on blocks in your front yard'? 66 Ford Fairlane. 69 Chevrolet Chevelle. 64 Pontiac GTO.

3. If your uncle builds a still that operates at a capacity of 20 gallons of shine per hour. How many car radiators are necessary to condense the product?

4. A woodcutter has a chain saw that operates at 2700 rpm. The density of the pine trees in a plot to be harvested is 470 per acre. The plot is 2.3 acres in size. The average tree diameter is 14 inches. How many Budweiser's will it take to cut the trees?

5. If every old refrigerator in the state vented a charge of R-12 simultaneously. What would be the decrease in the ozone layer?

6. A front porch is constructed of 2x8 pine on 24-inch center with a field rock foundation. The span is 8 feet and the porch length is 16 feet. The porch floor is 1-inch rough sawn pine. When the porch collapses, how many hound dogs will be killed?

7. A family owns a house and 3.7 acres of land in a hollow with an average slope of 15%. They have 5 children. Can each of the children place a mobile home on the family's land?

8. A 2-ton truck is overloaded and proceeding 900 yards down a steep grade on a secondary road at 45 mph. The brakes fail. Given the average traffic on secondary roads, what are the chances that it will strike a vehicle that has a muffler?

The ***SWST Newsletter*** is published six times a year by the Society of Wood Science and Technology, One Gifford Pinchot Drive, Madison, WI 53705, USA.

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SWST is a technical and professional organization for scientists and engineers working in academia, government, consulting and the forest-products industries and is dedicated to providing education and expertise regarding better ways to use and produce wood products

Items for the Newsletter may be sent to Doug Gardner, at the above address.

SWST