

# SWST Newsletter

May-June 2001

SOCIETY OF WOOD  
SCIENCE AND  
TECHNOLOGY

**SWST**

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## Editor's Note

Dear Readers:

I hope that everyone is looking forward to a fun summer! Even with the semester being over, I am finding that writing reports and getting presentations ready for the upcoming FPS Meeting are keeping me busy. It was only a few weeks ago that I got the March-April Newsletter out the door. Here is the May-June Newsletter for your perusal. I am looking forward to seeing everyone in Baltimore. If you have any news or humor, please feel free to send me an email for inclusion in the next Newsletter.



On a more somber note, today I received an email that one of my former students (Jeff Dunbar) was badly injured in a particleboard plant explosion at GP in Gaylord, MI. Nine employees were injured and six of them critical. Jeff is undergoing skin grafts at the Spectrum Health Blodgett Burn Center. My thoughts and prayers are with him.

Respectfully submitted,  
Doug Gardner

## News Items

### Wood Truss Council of America – New Hire Program

#### The Purpose:

Once you find a new employee, it has been proven that the best approach is to take this person through an on-the-job training program. WTCA's New Hire Program was created by component manufacturers to act as a guide in training new employees. The program consists of an outline of all the material that our membership believes would provide excellent grounding in the truss industry. This program can be undertaken in your facility or at the employee's home. Please note that this program assumes that your company's Human Resource Department has taken the proper steps to filter out the best possible employees. This program, along with three to six months of hands-on work in your facility, should allow you to determine if the new hire is going to succeed and where the person will best fit inside your organization.

WTCA's New Hire Program outlines thirty units (or days) of training. Each unit will consist of one to two hours of training. Please note that it is not necessary to conduct WTCA's New Hire Program in consecutive days. Take breaks and skip between the units, as you deem necessary. Once all 30 units are completed, the employee should take the WTCA Certification Exam (Unit 31) to assess the current skill level, and then take the appropriate WTCA Truss Technician Training Program for the desired industry competency level. Obviously, this program does not include truss design software training. Those supplying engineering services to our industry have great training programs for their software; therefore, we did not feel the necessity to duplicate. Our members thought it best that we keep our program structured to truss industry fundamentals. Management should schedule their new employees to attend software training hosted by the plant's plate supplier at their discretion (new hires may have to complete the plate supplier's pre-requisites).

### SWST Distinguished Service Award

The 2001 SWST Distinguished Service Award will be presented to Tom Maloney, Washington State University at the Annual Meeting in Baltimore.

## Committee Reports

### SWST Accreditation Committee Report

During the 2000-2001 fiscal year the SWST Accreditation Committee has:

- 1) completed a 5-year review of the BS program in Wood and Paper Science at the University of Minnesota with a recommendation to the Executive Board that SWST accreditation be continued until 2006;
- 1) completed a site visit and 10-year evaluation of the BS program in Forest Products at Oregon State University; the report is in draft form and will be finalized in May 2001; and
- 1) began work on a proposal for major revision of the SWST accreditation standards and procedures that could shift our standards to a performance or outcomes base.

This move is now being taken by the Society of American Foresters. Historically, SAF and SWST have conducted joint accreditation activities, although we each maintain separate standards. It will be important for SWST and the accredited programs to seek a reasonable degree of harmonization to ensure that we can continue to benefit from our long-standing collaboration. In addition, many universities are moving to outcomes-based assessment in response to new requirements from the regional higher education accrediting bodies. An outcome-based standard differs from our current practice in that it specifies the knowledge that a graduate must have mastered rather than specifying successful completion of a specific course. So, rather than requiring that students in an accredited program take an X-credit course in wood anatomy, the accredited program must demonstrate that graduates have mastered a set of learning objectives that reflect the important elements of wood anatomy. As you can imagine, reassessing SWST standards and procedures will be a major undertaking during the next two years and we plan on involving a wide variety of educators and practitioners in the process. Any member who wishes to participate in the drafting process should contact the Committee Chair.

Tom McLain, Chairperson

### Policy and Critical Issues Report

The critical issues committee have focused on how to generate interest from SWST members regarding the development, approval, and posting of our very first policy statements and have come to the following recommendation/procedure:

- (1) identify a topic that will attract a champion
- (2) have the champion draft up a policy statement

- (3) Judd will tweak it into a standard format
- (4) Upon approval, the statement gets published/posted.

By far and away, (1) is the toughest step. Is there any way that you can do a SWST-wide e-mailing of a call for a policy-statement champion. The call could read:

SWST is in the process of developing a series of policy statements, generally ranging in length from one to three pages, designed to provide policy makers and media scientifically-based and impartial information regarding a variety of topics of particular interest to the forest products/wood science community. The process and policy statements will initially follow a template conceived and followed by the Society of American Foresters. For a full description of said policy statements, we urge the SWST membership to visit the following URL address and envision how such policy statements might benefit our community:

<http://www.safnet.org/policy/statements.htm>

Examples of policy statements for consideration might include:

- Wood Properties from Sustainable Forests
- Environmental Advantages of Wood and Wood-based Composites
- Need for Additional Funding for Forest Products Research Programs
- Disposal of Treated Wood
- Effect of Population Growth and Consequences of Increased Wood Demand

SWST members eager to champion such a policy statement are encouraged to contact Judd Michael, Chair of the Policy and Critical Issues Committee (jhm104@psu.edu), for development, approval, and subsequent publication/posting.

### **Annual Report for the Education Committee**

The education committee finished revising the Teaching Unit No. 1. Audrey Zink-Sharp worked very hard on this effort and it was delivered to the SWST office. Audrey has begun to look at Teaching Unit No. 2.

Mike Barnes reported that the Minorities in Agriculture and Natural Sciences Conference display was a success.

Contributions for support of the Student Poster Competition from universities and industry have nearly reached a sustainable level. Donors will be mentioned prominently: on a poster at the meeting, on our website, in the competition announcement, at the podium during the meeting, in the newsletter, and in the journal. This much publicity may be of interest to industry. The committee will focus on this as one of their priorities during the coming year.

The judges for the poster competition for the 2001 Annual Meeting will be Dr. Michael Hunt (Purdue), Dr. Larry Soltis (Forest Product Laboratory), and Dr. Dan Dolan (Virginia Tech).

The SWST Directory of Schools has been completed and is in the hands of the main office.

Dan Dolan, Chair

### **INTERNATIONAL RELATIONS 2000-2001**

#### **Special Charges for 2000-2001:**

1. Develop and implement a promotion and information effort to increase SWST affiliate membership. Follow up on Greg Foliente's suggestions concerning IUFRO and affiliate member information found in his 1998-99 report.
2. Prepare a recommendation on how SWST may form long-term relationships with similar organizations outside of North America. What are the mutual benefits? Consider in this recommendation the potential impact on SWST membership and distribution of technical information. Review and consider Greg Foliente's annual report comments concerning this charge.

#### **Report Summary**

This Committee was made aware of its specific duties/charges in November 2000. Activities and specific recommendations related to these charges are reported herein. Our main recommendation is to continue these charges for next year's Committee to finish.

#### **Report on Activities**

**Charge 1)** Develop and implement a promotion and information effort to increase SWST affiliate membership.

#### **Activities:**

At the 2000 SWST annual committee meeting, we were reticent about actively promoting the affiliate status to non-United States persons. The rationale behind this is that affiliate status infers either non, or minimal dues requirements which we felt could potentially result in a flood of potential "candidates". This, in turn, could result in an administrative quagmire.

The Committee left the meeting agreeing that the strategy would be to selectively disseminate information on affiliate status at meetings and conferences to pre-selected potential candidates. We did not discuss any formal arrangements or

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campaign beyond this.

#### Recommendations:

1. Consider developing a rational, revenue generating approach for increasing affiliate membership. This would include active information dissemination by SWST members at international conferences, as well as providing information on listserves, discussion groups, and to personal contacts.
2. Prepare a SWST Web page dedicated to affiliate membership information (e.g., what it is, what the benefits are, how much it costs, who to contact, etc.). Every SWST member should know about affiliate membership information or where to get this information.
3. Develop and make available hardcopy affiliate member registration and promotional materials to SWST members for dissemination.

**Charge 2)** Prepare a recommendation on how SWST may form long-term relationships with similar organizations that reside outside of North America.

#### Activities:

Through discussion at the 2000 annual meeting, the Committee confirmed its support for developing relationships with similar entities worldwide.

#### Recommendations:

1. In a global, networked world, it is critical that organizations like SWST interface with similar organizations. In this context, the Committee recommends that the Board charge the Committee with developing a rationalized selective list of potential global partner organizations. SWST is unique in its depth of focus on wood science. This should be the primary selection criteria for organization identification. The mutual benefits are considerable including scientific exchange, potential for collaboration, and expansion of perspectives for SWST members.
2. Develop a web page with dedicated to international partners on the SWST Web Page. This would include links to these organizations.

### Marra Award Winners

#### First Place:

Zhang, Jun, and D. Pascal Kamdem. Interaction of copper-amine with southern pine: Retention and migration. Vol. 32, No. 3., pp. 332-339.

#### Second Place:

Anagnost, Susan E., Richard E. Mark, and Robert B. Hanna. Utilization of soft-rot cavity orientation for the determination of microfibril angle. Part I. Vol. 32, No. 1, pp. 81-87.

### SWST Annual Report Public Liaison Committee

The Public Liaison Committee has the responsibility of maintaining lines of communication with cooperating organizations, to inform SWST members of relevant meetings of such organizations and to promote public awareness of wood science. Our special charges for 2001-01 were to 1) Update the list of contacts for cooperating organizations, and 2) Develop a display of pictures and text geared toward younger audiences, informing them of careers in wood science.

With regard to special charge 1, we have reviewed our current list of contacts and forwarded the following recommendations to Vice President Rice: a) Drop 4-H contact as it has discontinued its wood science scholarship program (ca. 1996). This action precipitated the name change of the SWST 4-H committee to the Public Liaison committee during 1996-1997. We as a committee are unsure if 4-H still maintains any wood science program of a national scope. b) Drop Future Farmers of America (FFA). To the best of our knowledge, we have had only one significant contact with the organization, that of a display booth and representative (Stokke) at the FFA annual convention (November 1995). While this was potentially a means to inform students, advisors, and parents (30,000 attendees) of educational and career opportunities in wood science, changes in the FFA convention structure and perhaps a lack of fit between these students' interests and those of SWST meant that the effort was not repeated. c) Contact remains Mr. John Zinn, Senior Vice President, for the International Woodworking Machinery and Furniture Supply Fair USA. d) Renewable Natural Resources Foundation (RNRF). Our primary activity with a cooperating organization is with RNRF, as Howard Rosen serves on as an active participant on their Board. Fred Kamke serves as board alternate. e) Coalition for Education about Environment, Food, Agriculture and Renewable Resources (CEEAFAR). We made a one-time contribution (1995-1996) to assist this fledgling group in establishing programs for k-12 science education. CEERAR has failed to develop sustainable funding. Dr. Vernon Cardwell, Agronomy Professor at the University of Minnesota is an informal contact, but we recommend dropping CEEAFAR as it no longer exists. f) Council for Agricultural Science and Technology (CAST). SWST was an associate member of CAST from 1994-1996. We have recommended that we drop this contact, as most of their activities (reports and white papers) center on production agriculture issues. However, recent discussions by Stokke with CAST personnel suggests that the organization has not excluded forestry or wood utilization issues by choice, but be-

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cause of a lack of participants with interests in these areas. CAST is currently re-evaluating the roles of associate member societies, so this may be something that SWST will wish to revisit. CAST maintains offices in Ames, Iowa and in the Washington, D.C. area. g) National Research Council (NRC). We have been unable to identify an appropriate contact. h) Wood Machinery Manufacturers' Association. Contact is Dana Klaus, Director of Meetings and Communications.

Special charge 2 is to develop a youth display. To date, we have received a collection of photos from Wood Magic Science Fairs from Mike Barnes and Amy Garrard, Mississippi State University and from Audrey Zink, Virginia Tech. The Committee offers a hearty thanks to Mike, Amy, and Audrey. Our goal is to have a display ready for the Annual Meeting in Baltimore, but we will have to hold our collective breath in hopeful anticipation of its completion!

Doug Stokke, Chair

### Report on Membership

Since May 2000, 68 new members have joined SWST, 24 regular and 44 students.

### Publication Policy Committee Report May 16, 2001

Charges:

- 1) Identify 3-4 topic areas for state-of-the-art papers and potential authors, etc.

State of the Art papers can be either solicited or volunteered. One solicited paper has been reviewed and awaits publication (Bowyer - *Environmental Implications of Wood Production in Intensively Managed Plantations*). Second solicited paper was not yet submitted for review (Dagher - *Advanced Engineered Wood Composites*). A topic for third solicited paper (*E Business and Forest Products Industry*) was not accepted by reviewers.

In addition to solicited papers, outlines for two volunteered papers were submitted and positively reviewed. Authors (Shook - *Innovation adoption and diffusion within the realm of wood-based products* and Kasal - *Phenomenological Failure Criteria for Multiaxially Loaded Wood Members*) are in the process of preparing their papers.

Also, there are at least two other authors who are considering a submission of an outline in the future. Due to the number of papers currently in the "pipeline", these authors were not encouraged to "hurry" with their submissions and no additional topic areas for solicitation were consid-

ered.

- 2) *Clarify the process for SOA papers*

The SWST Publication Policy Committee developed a definition of what constitutes a State of the Art paper; and to bring order and objectivity to the process of writing and reviewing State of the Art papers, the Committee has established a 7-step policy and procedures for the preparation, review, and publication of these papers. For details refer to *Wood and Fiber Science*, 32(4), 2000, pp. 389-390.

NOTE: Committee realizes that number of papers published per year is limited by what the Society can afford. At least one author indicated that he is willing to forego his honorarium. An advanced notice of such act would enable the Society to publish more papers. However, it can be awkward to ask authors whether they would be willing to do this. Therefore, guidance is sought from the Board on how to deal with this issue. Perhaps, the Editor, after notifying potential authors of their outline acceptance, can ask whether they will require a honorarium.

### SWST Visiting Scientist Program Report May 2001

During the 2000-2001 fiscal year the SWST Accreditation Committee has:

- 1) supported the application of three visiting scientists; Earl Kline received an international grant to visit Lulea University in Sweden; Doug Gardner visited the Mississippi State University and Jim Funck visited the University of Maine;
- 2) sought to add another member to the committee; and
- 3) solicited suggestions on how to increase participation in the program.

Tom Hammet, Chairperson

### WOOD & FIBER SCIENCE June 2001 Robert L. Youngs, Editor

#### *Production of the Journal*

The July 2001 issue (volume 33 no. 3) publishes 16 papers and an editorial with a record 192 pages.. Carol Ovens has another 28 papers in various stages of processing and I have 45 in review and revision.

The 31 papers received so far this year, slightly exceeds the number received at the same time last year, a year with record receipt of papers.

Average duration between receipt of accepted paper and publication was 11.6 months for the January issue, 13.2 for the April issue, and 10.4 for the July issue. The April issue

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contained some papers that had taken much time in review and revision.

#### *ISI Journal Citation Reports*

Information passed to me from ISI Journal Citation Reports indicated that our journal ranks well among the comparable journals of the world. The data I have are for Impact Factor, which is the average number of times recent articles were cited, using an algorithm developed by the ISI founder, and Cited Half-Life, which relates to the number of years prior to the current one (1999 for these data) that account for 50% of the journal's total citations in the current year. Data I have are:

Journal	Impact Factor	Cited Half Life
Holzforschung	0.995	7.7
IAWA Journal	0.722	8.3
WOOD & FIBER SCi	0.550	>10
Wood Science & Techno	0.373	>10
Forest Products Journal	0.336	>10

## Conferences and Events

### Upcoming Conferences From FPS

#### FPS 55th Annual Meeting

June 24-27, 2001, Wyndham Baltimore Inner Harbor Hotel, Baltimore, Maryland, USA

#### FPS-Sponsored Technical Seminars at the Forest Products Machinery & Equipment Exposition

July 19-21, 2001, Georgia World Congress Center, Atlanta, Georgia, USA

#### Enhancing the Durability of Lumber & Engineered Wood Products: Bringing Technologies to Market

February 11-13, 2002, Radisson Resort Parkway, Kissimmee (Orlando), Florida, USA

#### SMALLWOOD 2002: Community & Economic Development Opportunities in Small Tree Utilization

April 11-13, 2002, Albuquerque, New Mexico, USA

#### FPS 56th Annual Meeting

June 23-26, 2002, Monona Terrace Convention Center, Madison, Wisconsin, USA

#### FPS 57th Annual Meeting

June 22-25, 2003, DoubleTree Hotel, Bellevue, Washington, USA

#### FPS 58th Annual Meeting

June 27-30, 2004, Amway Grand Plaza Hotel, Grand Rapids, Michigan, USA

## Visiting Scientist Report

### Visit to the University of Maine

By Jim Funck

It was a pleasure to be invited by the faculty at the University of Maine to be an SWST Visiting Scientist. I'd like to start this report by expressing my appreciation to the University of Maine, Doug Gardner, Steve Shaler, Barry Goodell, Bob Rice, and the SWST for sponsoring and hosting my visit.

So here goes the story (the truth, the whole truth, and nothing but the truth). It was a dark and stormy April morning when I left Portland (Oregon, not Maine) bound for Bangor (Maine, not the UK). Thanks to the Comair pilots strike, my flight schedule went from really nice to really bad. Instead of one day to see the sights and one day at the University, I ended up with only one day, period. It was snowing in Salt Lake City (which is right on the way from Oregon to Maine, if you turn the map inside out), so things were moving slowly there. As a result, I was too late for my connection in Boston (or so I thought). It turned out that the whole Northeast coast was a series of cancellations or delays, so I could still make my flight. Oops – I suddenly became one of the cancellations. This made me standby number 14 for a plane that only held 28 passengers and was the last flight that night. My "one" day visit was fast becoming a "none" day visit. I decided to tough it out anyway, and after a 4000-hour delay (I might be off by a few hours, but it was hard to tell), I actually made it on the plane. It was lucky I was standby number 14, because they threw standby number 16 off the plane after they realized they had too much luggage for a full 28-passenger load (either that or a number of us need to lose a few pounds). After my 14 hour trip (14 seemed to be my lucky number), I finally settled in for a nice nights sleep at the Country Inn, only to be rudely awakened at 3:30 a.m. my time.

Unfortunately, I'm not a morning person. However, my gracious host for the morning, Steve Shaler, recognized that I was from the Northwest, and quickly took me to the best coffee shop in Veazie. Having had my initial fix, we took a tour of the area and campus. It was obvious that there are a lot of areas of growth on the University of Maine's Orono campus, not the least of which is the new Center for Advanced Engineered Wood Composites. This impressive facility is a 33,000 square feet "one-stop shop" for development and testing of composite materials. It contains a full range of equipment that allows them to develop and manufacture a composite and then to completely analyze the composite's physical and mechanical properties, both destructively and nondestructively. Doug Gardner was busy working on the installation of a new twin-screw extruder, which is why he's now known as "Dr. Extruder". The structural testing portion of the Center was designed for maximum flexibility (ability to be changed – not a floppy floor), using the National Highway Transportation De-

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partment's main lab as a model. Steve Shaler's microscopy and modeling/visualization labs provide excellent nondestructive evaluation capabilities.

After a very interesting tour, we went next door to visit the pulp and paper facilities and were then off to see the rest of the campus and Nutting Hall. All the teaching for the Wood Science and Technology program is conducted in Nutting Hall, and Barry Goodell and Bob Rice maintain their offices and labs there. As with the others, Barry and Bob are conducting lots of great research and have modified their labs to do so (just try and get Bob's floor to conduct vibrations).

I was certainly completely satisfied with my trip by that point, but for some reason they thought I needed to earn my keep (I guess there really is no such thing as a free lunch). I started by giving a talk about drying softwood veneer to Bob Rice's drying class. I think Bob and Barry had me do this so that the students would appreciate their lectures more when compared to "that guy from Oregon". However, the students were polite, attentive, and asked good questions. It's always nice to see that we have some great undergraduates coming through our wood science programs. After the lecture, I did get my "free lunch", which was a pizza feed with the FPS Student Chapter. Then they put me back to work giving a seminar at the AEWG on our machine vision and color research.

To top the trip off with a bang, Barry was kind enough to be a fantastic tour guide as we rushed over to Bar Harbor to catch the sights. Acadia National Park is beautiful (even in April), and we had one heck of a good lobster dinner afterwards. That was about enough for me to call it a day. After a good nights sleep, I was once again rudely awakened at 3:30 a.m. my time (I've got to get those east coast people to operate on west coast time). Bob Rice took me for breakfast at a great restaurant in Bangor, and then it was off to the airport. The return flights would have actually been pretty good if it hadn't been for the incident at Logan International Airport where all the fire trucks and ambulances rushed out to a far runway, surrounded one of the jets after it landed, and all the passengers hopped out on the slides. Even that wouldn't have made me nervous, except it looked for a long time like they were pulling that plane up to my gate.

The SWST Visiting Scientist program is designed not only to allow the host institution to learn about the visiting scientist's program, but also to allow the visitor to learn about the host institution. While I hope I imparted some new information to the folks in Maine, I can certainly say that I learned the following five points.

- 1) Don't try to fly to Bangor if Comair pilots go on strike (you can't get there from here).
- 2) Don't expect to see beautiful fall colors in April (inside joke).
- 3) The lobsters are mighty tasty in Maine (which I already knew, but it was positively reinforced).
- 4) Those "wood science folks" at the University of Maine are an extremely active bunch (which I also

already knew, but it was positively reinforced).

- 5) The Wood Science and Technology Program and Advanced Wood Engineered Composites Center are quite impressive (which I did not fully know).

In summary, I highly recommend that you pay a visit to Orono. It will be well worth the trip.

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

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