

November 2006						
29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	1	2

# INSIDE VT WOOD

#### Reminder...

Remember to submit department news items by Friday 3 pm of each week to Will Pfeil at <a href="wpfeil@vt.edu">wpfeil@vt.edu</a> 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**

- November 15 is our next department meeting 10:00 11:00 am Brooks Classroom.
- We have a survey of student impression out to our undergraduate students now; this is a modified form of assessment gathering information. The survey can be found on our homepage under the most recent news item. Surveys are due Friday this week.
- Danville Community College is considering establishing a new associate degree program in Wood Science and Forest Products. I will be back on Southside November 27-28 meeting with all parties again in the on-going discussion.

# Director of VT Green Engineering Program to Give Seminar

### 'Green Engineering: Applications for Wood Science and Forest Products'

Dr. Sean McGinnis, director of the VT Green Engineering program will be our guest speaker in graduate seminar on Tuesday November 14. Seminar is at 8:10 am in the Brooks Classroom. Please join us!

Sean McGinnis joined the MSE and the Biological Systems Engineering (BSE) departments in October 2005 as a jointly appointed Senior Research Scientist. He directs the Green Engineering program which teaches students about the environmental implications of engineering practice across all College of Engineering disciplines. From 1998 – 2005, Dr. McGinnis worked for Johnson & Johnson's Spectacle Lens Group as a research scientist, R&D coating group manager, and "Design for Environment" plant champion. Prior to this, he worked as a process engineer in the area of sputtered magnetic thin films at Intevac, Inc, in Santa Clara, California. He also held a postdoctoral appointment at Uppsala University, Sweden, in the Department of Inorganic Chemistry with research on fullerene and metal carbide thin films.

Dr. McGinnis received bachelor's degrees in both chemical engineering and MSE from the University of Minnesota and master's and doctorate degrees in MSE from Stanford University. His current research focuses on sustainable manufacturing processes, green engineering, and design for the environment

#### **Department Hosts Winemakers from South America**

by Tom Hammett

Tom Hammett working with Jim Green, International Marketing Specialist - Forest Products, Office of International Marketing in the Virginia Department of Agriculture & **Consumer Services** (VDACS) organized a visit to the Virginia Tech campus for a group of 12 winery owners from South America on November 9. 2006. The South American Reverse Trade Mission included wine makers and two trade journal writer from Uruguay, Argentina, Paraguay and Chile. The



goal of the mission was to learn more about wooden barrel manufacturing and sustainable forest management in Virginia and Kentucky. The trip included stops at the Virginia Department of Forestry and a major trade show in Miami. During their visit the department organized a luncheon at The Inn. Paul Winistorfer and Bob Smith made presentations to the group after lunch. There were initial discussion about the department providing short courses and research on barrel components.

#### Walking the Beam on Family Day

As part of the Family Day activities, the Wood Engineering Lab hosted a program entitled "Walking the Beam: How Wood Science Can Prevent Falls on Construction Sites." This program showcased research by Dr. Dan Hindman on the possibility of falls caused by the 'twist out' or lateral buckling of unbraced wood I-joists on a construction site. The program was attended by about 20 people representing six or seven families. Majors of the students who visited included Civil and Environmental Engineering, Forestry, and University Studies.



An I-joist placed in the test apparatus to measure the load where buckling occurs.

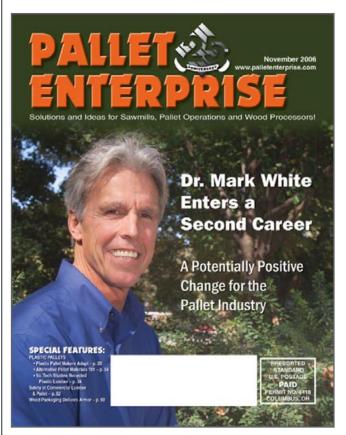
The program was hosted by Dr. Hindman and Dr. Jong Nam Lee, research scientist in Wood Science. First, a short discussion was given on n the use of engineered wood products (EWPs) in the residential construction industry. Next, a 20 foot I-joist was buckled using the MTS Universal Testing Machine to demonstrate what lateral buckling looks like. Buckling consists of the beam moving to the side and twisting out of place due to only a vertical load. For the beam shown above, the lateral buckling load was approximately 185 lbs, which is below 191 lbs, the average weight of US males.

While the measurement of the buckling load is important, the human body actually imposes a horizontal load during walking in addition to the vertical load. Also, depending upon the type of activity workers are performing, such as carrying a large panel, they may move their center of gravity to one side, causing a twisting force leading to lateral buckling at lower loads than those measured by the testing machines. To give the families a closer look at lateral buckling, participants were invited to 'walk the beam' using the safety platform. This test fixture allowed them to walk on an unbraced beam. After walking a few feet away from the end, most people found that the beam would start to shake, wobble and twist.

The problem of falls from elevation during construction is very large – accounting for approximately 1/3 of all construction deaths and injuries. This research hopes to demonstrate that the material behavior of lateral buckling may be responsible for some of these falls. Hopefully, through combining research and worker education, the number of falls from elevation can be reduced. The families enjoyed the program and gave many positive comments.



A student walking on the unbraced I-joist using the safety platform



Dr. Mark White is the first individual to be featured on the cover of Pallet Enterpise

# Mark White Featured on Cover of Pallet Enterprise

Mark White is featured on the cover of the November issue of the Pallet Enterprise. In the 25 years of publication, this is the first time that the Pallet Enterprise has featured an individual on its cover. Publisher Ed Brindley wrote a beautiful tribute to Mark honoring and recognizing his contributions and achievements during his 31 years serving the industry. To see an electronic version of the article, check out

http://www.palletenterprise.com/articledatabase/view.asp?articleID=2078

#### **CULD Attends Pack Expo 2006**

The Center for Unit Load Design and the Packaging Science Program exhibited in Pack Expo 2006, held October 29 - November 2 in Chicago. Pack Expo is the premier packaging tradeshow in North America. Ralph Rupert and Bonnie Maccubbin manned the booth, while Dr. Jongkoo Han and six packaging students enjoyed the show. The show included a scholarship luncheon on October 31 in which a designated scholarship of \$5,000 from Blue Print Automation (Colonial Heights, VA) was awarded to the VT packaging science program. The Packaging Machinery Manufacturers Institute (PMMI) will be awarding additional scholarships from pooled industry donations to each of the exhibiting schools in the near future.

#### Maren Roman speaks at Purdue

by Maren Roman

Maren Roman will be traveling to Purdue University on Monday to give an invited seminar on Tuesday afternoon to the Department of Forestry and Natural Resources as part of their Graduate Seminar Series. On Tuesday morning, Roman will have a chance to visit Purdue's Nanotechnology Center.

#### Maren Roman becomes Associate Director of Education

by Maren Roman

Upon request of director Richard Turner, Maren Roman has agreed to serve a 3 year term as Associate Director of Education for the Macromolecules and Interfaces Institute (MII).

#### **General Announcements**

#### **Summer Session Grant Program Deadline Extended**

The deadline for the Provost Office Summer Session Grant program has been extended to November 13, with notification date moving to November 20th, 2006.

One of the recommendations from the Provost Special Summer Session Task Force was to develop an incentive program to promote summer session as an integral component of a student's learning, discovery and engagement experience while with Virginia Tech. To that end, the Provost Office has established a Summer Session Grant Program that awards \$5,000 grants for departments to deliver individual courses in the 2007 summer session that are new to summer offerings. Cross-college program development grants are also available. Proposed course offerings can be classroom-based, labs, online or blended. Criteria, application process, and key dates for the grants can be found at: <a href="http://iddl.vt.edu/domains/summer/ssgp.php">http://iddl.vt.edu/domains/summer/ssgp.php</a>.

Applications for the Summer Session Grant Program can be submitted electronically between October 6 through November 6, 2006. Notification of awards will be made on November 17, 2006.

The Summer Session Advisory Committee looks forward to receiving proposals from your department.

# Virginia Tech employees in the Following Areas Have Requested Leave Donations:

#### **Physical Plant**

If you are a salaried classified employee or a 12-month regular faculty member, you have an opportunity to participate by donating annual leave in increments of 8 hours.

There is no maximum donation limitation per year, nor is there a minimum balance that must be maintained. Donation forms can be downloaded from the Human Resources website at <a href="http://www.hr.vt.edu/forms/">http://www.hr.vt.edu/forms/</a>, click on Alphabetical List, then open up the Leave Donor Form P6A.

Leave donations received after the employee's eligibility status changes (such as, return to work, disability retirement, retirement, etc.) will be returned to the donor in accordance with established Personnel procedures.

However, you MUST donate your leave to either a specific individual or area.

Please return the completed form to: Pam Lucas – (0318)

Thank you,

Lynett Cruise ph: 540-231-1237 Human Resources fax: 540-231-2352 Virginia Tech lcruise@vt.edu

www.hr.vt.edu

#### Bucy named interim assistant vice president and head of sponsored programs.

David Richardson, assistant vice president for sponsored program administration in the Office of the Vice President for Research, has accepted a position at Penn State University as the assistant vice president for research and director of the Office of Sponsored Programs effective the first of 2007. Richardson joined OSP at Virginia Tech as interim associate director in January 2001 and was named director in July.

Brad Fenwick, vice president for research noted that, "David Richardson has made a number of significant contributes to the University's research administration enterprise which provides a solid foundation for the future."

Linda Bucy, director of post award administration in the Office of Sponsored Programs (OSP), has been appointed interim assistant vice president and director of the Office of Sponsored Programs.

"Continuity of the leadership within the Office of Sponsored Programs is critically important in advancing the discover mission of the University. I have complete confidence in Linda and the other members of the OSP to meet the grant and contract administration needs of the University," said Fenwick.

Bucy joined OSP as associate director in September 2001 and became director of post award in early 2006. She worked previously with the Virginia Tech Controller's Office, serving on the Finance Implementation Team, and was a senior auditor within the Internal Audit Department.

"At the appropriate time, we will be conducting a national search to fill this position," said Fenwick.

#### A major new educational initiative to address global climate change is underway

Focus the Nation will involve over 1,000 universities and colleges in nationwide, simultaneous one-day symposia that will explore the challenge of "Stabilizing the Climate in the 21st Century." This effort could do for the issue of global climate change what Earth Day, 1970 did for the environmental movement.

Organizers expect that with several million students nationwide discussing global warming solutions, political candidates and elected officials from all parties will join the dialogue. Building from a base in educational institutions, Focus the Nation is also encouraging involvement by faith and civic organizations, businesses, and cities and towns.

Prof. Eban Goodstein, Director of Focus the Nation will speak at noon, Wednesday, Nov. 15 in Room F of the Graduate Life Center on the Virginia Tech Campus. He will discuss the challenge of climate change, explain the Focus the Nation program and all the activities that will lead up to it, and will tell how Tech can be involved.

You can learn more at: www.focusthenation.org. If you care about the future, PLEASE COME!!!

Prof. Richard C. Rich School of Public and International Affairs and Department of Political Science 531 Major Williams Hall Virginia Tech Blacksburg, VA 24061-0130

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## Virginia Clean Cities, Virginia Tech and the Virginia Department of Mines, Minerals and Energy presents...



## Farmer and Small Producer Biodiesel Workshop

Monday, November 20, 2006 9:00 am – 4:00 pm Squires Student Center 221 Squires Student Center, Blacksburg, Virginia



#### Agenda:

9:00 a.m.	Registration/Continental Breakfast			
9:45 a.m.	Welcome	Donald Langrehr - Blacksburg Town Council		
9:55 a.m.	Overview/Virginia Tech Biodiesel Program	Lisa Schweitzer – Virginia Tech		
10:05 a.m.	What is Biodiesel/Who Uses it/Market Update	Chad Freckmann – Blue Ridge Clean Fuels		
10:35 a.m.	Oilseed Crops & Markets	Fred Shokes – Virginia Tech Extension Harbans Bhardwaj –Virginia State University Dave Starner – Virginia Tech Extension		
11:10 a.m.	The Cooperative Model of Piedmont Biofuels	Matthew Rudolf – Piedmont Biofuels		
11:35 a.m.	How Biodiesel is Made Safely	lan Doran – Virginia Tech		
12:00 p.m.	How to Make Biodiesel Legally	Chelsea Jenkins - Virginia Clean Cities		
12:20 p.m.	Lunch (provided)			
1:05 p.m.	Safety/Byproducts (glycerol discussion)	Matthew Rudolf – Piedmont Biofuels		
1:25 p.m.	Possible Solutions for Glycerol Utilization	Zhiyou Wen – Virginia Tech		
1:45 p.m.	Methanol Safety & Availability	TBD, Methanex		
2:10 p.m.	Fuel Quality/Fuel Testing	Cathie Johnston - Intertek Caleb Brett		
2:30 p.m.	Canola Budget	Mike Roberts – Virginia Tech Extension		
2:50 p.m.	Break			
3:05 p.m.	Waste Vegetable Oil Collection	Jason Johannessen – SVWA Biodiesel Initiative		
3:30 p.m.	Facilitated Q&A			
4:00 p.m.	Closing Remarks	Chelsea Jenkins – Virginia Clean Cities Lisa Schweitzer – Virginia Tech		

#### **Biodiesel Workshop REGISTRATION Information:**

Visit <a href="http://www.hrccc.org/registrationNov20.html">http://www.hrccc.org/registrationNov20.html</a>; Fee: \$15 per person

Note: Payment will be collected on the day of the conference. Only cash, check or money orders accepted. Only those registered online prior to November 20<sup>th</sup> will be admitted. If you cannot register online, call (757) 256-8528 for instructions on how to register. A limited number of scholarships are available. Request an application at <a href="mailto:info@hrccc.org">info@hrccc.org</a>.

Find directions here: http://www.vt.edu/where\_we\_are/campus\_guide/directions.php













Virginia Clean Cities Email: info@hrccc.org Website: www.hrccc.org/biodiesel.html

This project is supported by the Southeast Biomass State and Regional Partnership and administered by the Southern States Energy Board for the U.S DoE