News from Audrey Zink-Sharp, Interim Department Head

**CONGRATULATIONS** go to Dr. Daniel Hindman and Dr. Maren Roman for being promoted to Associate Professor and receiving tenure effective July 1, 2010. This is a very significant accomplishment in their careers and we wish Dan and Maren much success in their future endeavors.

- I am pleased to announce that Dr. Patrick Tobin will be joining our department as Adjunct Associate Professor. Dr. Tobin is a Lecturer and Program Coordinator at the Galway – Mayo Institute of Technology (GMIT), Letterfrack, Ireland. He has been involved in technical, management, consulting, and training work with the wood products and furniture industry for 20 years. His specialty areas include information systems, operations management and strategy, project management, and product development in small and medium-sized enterprises. Welcome Paddy, we are very glad you will be joining our department.

If anyone is interested in a study abroad in Ireland, see the flyer at the end of this newsletter.

**Fernando Navarro Successfully Defended His Dissertation – Maren Roman**

On June 29, 2010, Fernando Navarro, a fourth year PhD student under the supervision of Dr. Maren Roman, successfully defended his dissertation. In his doctoral research, Fernando developed a method for the size analysis of wood-derived nanoparticles by atomic force microscopy and studied the fabrication of micropatterns by inkjet printing of the nanoparticles onto glass substrates. During his studies at Virginia Tech, Fernando has earned several awards, including the 2007 Eastman Chemical Company award for best oral presentation, the 2008 Mentor of Distinction Award of the Macromolecules and Interfaces Institute, and the 2009 Outstanding PhD Student Award of the College of Natural Resources and Environment. He plans to move with his family – wife and two sons (10 and 8) – back to Mexico, where he holds a position of Research Professor in the Wood Science Department of the University of Guadalajara.
Congratulations to Sudip Chowdhury, recipient of second place in this year’s Forest Products Society Wood Award competition. His paper, *Application of Small-Specimen DMA and $^2$H NMR to Probe in-situ Organization of Lignocelluloses*, was selected by a committee of judges to receive the prestigious award. Sudip recently travelled to Madison, Wisconsin, to the Society’s 64th International Convention, to accept the award. A Ph.D. candidate under the direction of Dr. Chip Frazier, Sudip is also a Wood-Based Composites Center Fellow. Originally from India, Sudip completed an M.S. degree in Civil and Environmental Engineering at Washington State University before coming to Virginia Tech.

Since 1948, the Forest Products Society’s annual Wood Award (first and second place) has recognized and honored the most outstanding research in the field of wood and wood products conducted by graduate students. The highly competitive award comes with an engraved plaque and honorarium. Fellow Wood-Based Composites Center student, Ariji Sinha, a Ph.D. candidate from Oregon State University, was awarded first place.

Additional news about our Department at this year’s FPS Annual International Convention – Tom Hammett and Henry Quesada

Drs. Henry Quesada and Tom Hammett lead the Virginia Tech delegation to the 64th Forest Products Society Annual International Convention (IC) in Madison, Wisconsin, during June, 2010. This year’s IC saw nearly four hundred participants—an increase over recent year’s attendance, in spite of the poor economy. Dr. Quesada’s research group presented four papers and two posters and chaired a session. Dr. Hammett presented two papers, one with his former PhD student, Richard Bonsi, and displayed two posters. Tom was also an invited participant in a strategic planning “listening session” held just prior to the beginning of the IC. The FPS is conducting a year-long effort to re-position itself so that it is more responsive the needs of its members and clients. Tom joined 25 other key stakeholders including present and former board members to help gather information and start a list of priorities that will help chart new directions for FPS.
In addition to Henry and Tom’s participation at the annual convention, several graduate students also attended. Scott Lyon and Johanna Madrigal presented papers, and Amy Jahnke, Wang Chao, and Scarlett Sanchez displayed posters on their research. Also Post-Doctoral Associate Gi Young Jeong presented two papers. There were several positive comments, especially from some of the foreign participants (from over thirty countries!), who especially appreciated the high quality of the technical presentations.

VTLeanTeam members conduct research in The Netherlands - Mathias Schmitt and Urs Buehlmann

Researching factors determining the success of lean transformation efforts in companies is at the heart of the research of Mathias Schmitt, VTLeanTeam member and graduate research assistant in the Department of Wood Science and Forest Products. For this purpose, Mathias is spending his summer semester working with René Aernoudts and the Lean Management Instituut (LMI) in Driebergen, The Netherlands. While being involved in Lean Transformation efforts at world-class companies, Mathias gains insights valuable for his research. The week of June, 20, 2010 Urs Buehlmann, VTLeanTeam member and Associate Professor, visited Mathias in the Netherlands to discuss the research project’s progress and to determine plans for the upcoming Fall semester. Highlights of the week were visits to companies in different stages of lean transformations.

A major insight confirmed by these visits is that lean implementations have to be customized to each company individually to be successful. Also, different archetypes of lean are executed in different industries such as, automotive, chemistry, machine & equipment, and energy.

Urs Buehlmann, (left) and Mathias at the Lean Management Instituut in Driebergen, NL.
On May 21-22, 2010, a group of students and faculty represented the Department of Wood Science and Forest Products at the 32nd East Coast Sawmill and Logging Equipment Exposition in Richmond, Virginia. The Expo showcased the most state-of-the-art sawmill and logging equipment available on the market, including portable sawmills, dry kilns, firewood processors, logging/harvesting equipment, pallet manufacturing/recycling equipment, and software, and services. The group set up two booths to provide information about the Center for Unit Load Design and majors and upcoming workshops in the Department of Wood Science and Forest Products. Some wood science and forest product alumni visited the booth to reminisce about classes and research. Also, a few potential students asked questions regarding admissions and majors offered by the Department.

**Have you tried this? Visit Virginia Tech on YouTube:** You Tube offers another way to be a part of the Hokie Nation. Virginia Tech has its own channel on You Tube which is constantly updated with new videos about the university. Virginia Tech television spots, student profiles, and historical film clips are just a few of the things that can be found on the site. Submissions that reflect the many aspects of the Virginia Tech experience are welcomed. Departments or individuals who feel they have a video that may be appropriate for this site may contact viscom@vt.edu.

[http://www.youtube.com/virginiatech](http://www.youtube.com/virginiatech)

**Corrections to last month’s issue (Inside VTWood 5(5))**

Author credit was incomplete for several of the items in last month’s newsletter and should have been shown as follows:

Christian Fricke and Urs Buehlmann, Volvo Trucks’ Race to Excellence, pages 5 & 6.
Chao Wang and Urs Buehlmann, VTLeanTeam discovers canoeing, pages 7 & 8.
Angela Zhuo, Mathias Schmitt, and Urs Buehlmann, VTLeanTeam Supports Lean Transformation at Swan Corp., pages 8 – 11.
Upcoming Workshops

Energy Reductions Through Lean Thinking
This workshop will review the basic concepts of lean thinking, energy management systems, energy audits, and how lean thinking projects could lead your firm to significant energy reductions.
**Date and Location:** September 10, 2010. South Boston, VA
**Registration:** is $35 includes materials, coffee break, and lunch box. Please go to [http://www.ialr.org/news/event-registration](http://www.ialr.org/news/event-registration) to register.

Process Improvement Frameworks
This workshop will give the basic knowledge on different process improvement frameworks such as Value Chains, Supply Chain Management, Business Process Management, and Enterprise Resources Planning that can help your firm to decrease cost and positively impact customer satisfaction.
**Date and Location:** October 22, 2010. Blacksburg, VA
**Registration:** is $35 includes materials, coffee break, and lunch box. Please go to [http://www.cpe.vt.edu/](http://www.cpe.vt.edu/) to register.

Supply Chain Management: Trends, Opportunities, and Challenges
This workshop will focus on the most relevant aspects of supply chain management. We will review SCM basic concepts, third party logistics, SCM information technologies, and supplier relationships among other topics. We will focus on new trends and challenges in SCM that today firms new to be aware of to successfully compete in the market place.
**Date and Location:** November 12, 2010. Danville, VA
**Registration:** is $35 includes materials, coffee break, and lunch box. Please go to [http://www.ialr.org/news/event-registration](http://www.ialr.org/news/event-registration) to register.

For more information on any of the workshops visit [www.woodinnovation.org](http://www.woodinnovation.org) or contact Dr. Henry Quesada at [quesada@vt.edu](mailto:quesada@vt.edu) or (540) 231-0978
IRELAND

Study Abroad: Culture, Natural Resources, and Design in Ireland
Spring Break 2011
March 4 – 12

COURSE DESCRIPTION

Spend your Spring Break in beautiful and historical Ireland. Experience the culture and history of the rugged west coast. Explore the city of Galway and hike in Connemara National Park. Learn the ancient Gaelic sport of hurling. Visit the Galway-Mayo Institute of Technology and participate in a hands-on design and project management mini-course. Experience the world.

COURSE OBJECTIVES

• Learn about the culture and history of the Irish Connemara region
• Develop an understanding of natural resource use and conservation in the European Union
• Develop project design and management skills
• Appreciate the interconnected nature of the world

HIGHLIGHTS

• Virginia Tech course credit is available; use to fulfill curriculum requirements
• No prerequisites; open to all majors
• Course fee covers round trip airfare, in-country travel, lodging, some meals, and instruction
• Pre-travel lectures will help you get the most from the experience

For more information contact:
Dr. Robert Bush rbush@vt.edu or telephone 540 231-8834

Virginia Tech
College of Natural Resources
and Environment