



MECHANICAL ENGINEERING NEWS

April 15, 2002

A newsletter for the UML Mechanical Engineering community (also available online at <http://m-5.uml.edu>)

Any items you would like to see included in the newsletter or any suggestions/comments?

Please email them to: medept@uml.edu or leave them with Jackie Paradise in the Mech Eng office.

Upcoming Seminars

Friday, Apr 19 (11:30-12:20pm, KI 309)

"Numerical Simulation of Thermal Plasmas in Materials Processing Operations," Prof. John McKelliget, UML Mechanical Engineering

Monday, Apr 22 (1:30-2:30pm, KI 309)

"Career Management", Ms. Kristine Stotz Langdon, Consultant (see below)

Tuesday, Apr 23 (9am and 10am, Ball 210)

Distinguished Corporate Speaker Series, Moldflow, Peter Ruscinski

Tuesday, Apr 30 (9am and 10am, Ball 210)

Distinguished Corporate Speaker Series, BOSE, Timothy Knop

Job Opportunities

Pratt & Whitney – Mechanical Engineer

With the recent awarding of the 5 billion dollar Joint Strike Fighter program, Pratt & Whitney is looking to hire many engineers. P&W typically has a 3.0GPA minimum requirement. Mechanical Engineers are involved in various areas, including heat transfer, structures, and aerodynamics.

For more information, see Jackie Paradise in the Mech Eng office.

Senior Executive Forum

"Career Management"

Ms. Kristine Stotz Langdon

Consultant to Spencer Stuarts Technology and Communications and Life Science Practices

Kristine Stotz Langdon will speak on the topic of career management for individuals with technical backgrounds. Her purpose is to highlight the diversity of opportunities that are accessible with a basis in a technical discipline. Also, she will give some advice on recommended paths given her perspective in her current role in executive search but also as a former CEO and current board member of fast paced technology driven companies.

Spotlight on ALUMNI /COMPANIES



Bose Corp.
Framingham,
MA

www.bose.com

As part of the departmental seminar series, an alumnus from the department, Ms. Lea Sutera gave a seminar on Friday, April 12. Her seminar was entitled "Moving Products from the Design Phase to Mass Production". In her talk, Ms. Sutera spoke about her position as a New Products Manufacturing Engineer and gave some examples from a recent project involving the decision to bring a plastics molding operation in-house for noise-reduction headphones for military applications.

Bose Corporation was founded in 1964 by Dr. Amar G Bose, professor of electrical engineering at MIT. While doing graduate work at MIT in the 1950s, Dr. Bose decided to purchase a new stereo system. He was disappointed to find that speakers with impressive technical specifications failed to reproduce the realism of a live performance. This led to extensive research in the fields of speaker design and psychoacoustics – the human perception of sound.

Over the years, research has led to many leading technical developments, including acoustic waveguide speaker technology, found in the award-winning Wave® radio and Acoustic Wave® music systems; speakers small enough to fit in the palm of your hand but with sound quality previously thought impossible from small speakers; and Auditor® audio demonstrator technology, which allows builders, architects and facility managers to hear precisely what a Bose system will sound like in their building, even if the building only exists as a blueprint.

Today, you can hear Bose wherever quality sound is important -- from the Olympic games to the Sistine Chapel, from NASA space shuttles to the Japan National Theatre. Bose has operations in the United States, Europe, Canada, Australia and Japan, as well as having recently entered the markets in Russia, China and India.



MECHANICAL ENGINEERING NEWS

April 15, 2002

A newsletter for the UML Mechanical Engineering community (also available online at <http://m-5.uml.edu>)

(page 2)

Spotlight on...Companies



www.pratt-whitney.com

Pratt & Whitney
CT, ME, and
international

Pratt & Whitney is a leader in the design, manufacture and support of engines for commercial, military and general aviation aircraft, space propulsion and power systems. Pratt & Whitney is a division of United Technologies Corporation, a \$24.1 billion company that includes Otis elevators and escalators, Carrier heating and air-conditioning systems, Sikorsky helicopters and Hamilton Sundstrand aerospace systems.

Over the years, P&W has patented hundreds of innovations, from heat-resistant coatings to aerodynamic blades – technologies that make air travel more cost effective, more comfortable and more dependable.

Today, Pratt & Whitney engines power more than half of the world's commercial fleet. P&W's military engines power the Air Force's front line fighters today – the F-15 and F-16 – and the F119 and F135 engines will power the front line fighters of the future – the F-22 Raptor and Joint Strike Fighter. P&W rocket engines send payloads into orbit at 20,000 miles per hour.

Pratt&Whitney gas turbines also are used to generate electricity in a growing number of locations. And Pratt & Whitney Canada is the world's leading producer of engines for corporate jets, commuter aircraft and helicopters.

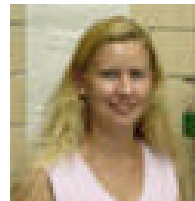
Today's competitive aviation industry demands far more than power from an aircraft engine. It demands thrust at the lowest possible cost and the highest level of reliability. In a business that shrinks the globe, Pratt & Whitney is truly worldwide, with representatives in 76 cities in 47 nations.

Excellence in Research Day

Fifth Annual UMass Lowell Student Research Symposium
Cumnock Hall
Thursday, April 25, 11am-2pm.

Find out about research being conducted by your friends, classmates, and students! Undergraduate and graduate students will be presenting their research posters. Free refreshments and raffle prizes!

UML Undergraduate Named TBP Scholar



Kari Stevens (UML, '03) was recently named a 2002-2003 Tau Beta Pi Scholar. She was one of only 38 scholars nationwide, from all engineering disciplines. The applicants are evaluated based on the following: high scholarship, extracurricular contributions, unusual promise of substantial achievement through a definite plan or purpose, and a program through which accomplishment will advance the interest of the engineering profession.

Kari, the current President of the UML chapter (TBP, MA θ), will receive a \$2000 scholarship towards her senior year.

Tau Beta Pi, Engineering Honor Society

Tau Beta Pi (TBP, www.tbp.org) is the only engineering honor society representing the entire engineering profession. Founded in 1885, it is the nation's second oldest honor society. TBP recognizes students of distinguished scholarship and exemplary character. As one of its services, TBP runs the Engineering Futures program to help engineering students build their interpersonal skills through sessions such as: People Skills, Group Process, and Analytical Problem Solving.

The following Mechanical Engineering students are current TBP members:

- | | |
|------------------|---------------|
| Michael Balazik | James Mangum |
| Suzanne Collins | Kari Stevens |
| Gary Hachadorian | Lara Thompson |
| Kevin Ledoux | |