



# MECHANICAL ENGINEERING NEWS

March 7, 2003

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

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

Please email them to: [peter\\_avitabile@uml.edu](mailto:peter_avitabile@uml.edu) or leave them with Jackie Paradise in the Mech Eng office.

## Mechanical Engineering Seminar Series - Speakers for Spring 2003

**Mar 5** Charles Roche, Pratt & Whitney

**Mar 12** Alan Nathan, U Illinois-Urbana

**Mar 26** John Seymour, Applied Mechanics

**Apr 2** John Mirageas, FLIR Systems

**Apr 9** Rick Greenwald, SIMBEX

**Apr 16** Ton Vasko, Pratt & Whitney

**Apr 23** Gene Niemi – UMASS Lowell

**Apr 30** Lou Goodman – UMASS Dartmouth

## Resume Writing Workshop - March 12<sup>th</sup> 2:30pm BL122

In the last newsletter, there was some extensive discussion on tips for writing your resume. At this point, if you are graduating this spring, you really need to have your resume in good shape. You never know when an opportunity will arise and someone asks for your resume. If it is not put together well and you forward a poorly written or incomplete resume, then you may have lost a golden opportunity.

Remember this ---

***You only have one chance  
to make a first impression !!!***

There will be a brief presentation on some thoughts on what your resume should be all about. The presentation will be on Wednesday March 12<sup>th</sup> at 2:30pm in the Mechanical Engineering Lab Conference Room Ball 122.

Bring your current resume. After the brief presentation, some guidance will be provided as to how to "spruce up" your existing resume or provide extra thoughts as to how to best display your capabilities and all that you have learned here during your educational process here at UMASS Lowell.

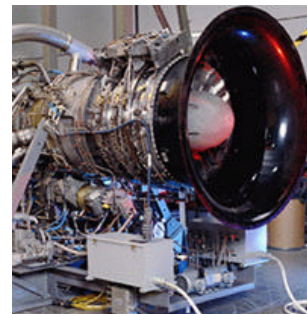
## Spotlight on COMPANIES



Pratt & Whitney  
E.Hartford, CT  
[www.pratt-whitney.com](http://www.pratt-whitney.com)

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 \$27.9 billion company that includes Otis elevators, Carrier HVAC systems, Sikorsky helicopters and Hamilton Sundstrand aerospace systems.

Today, Pratt & Whitney engines power more than half of the world's commercial fleet. Pratt & Whitney military engines power the Air Force's front line fighters today – the F-15 and F-16 – and our F119 and F135 engines power the front line fighters of the future – the F-22 Raptor and Joint Strike Fighter. Their 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.



Chuck Roche of Pratt & Whitney gave an excellent presentation at the Mechanical Engineering Seminar last Wednesday. If you weren't there, you missed a great presentation.



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## SPOTLIGHT on Faculty



**Tim Kostar**  
Visiting  
Assistant  
Professor

Prof. Kostar received his BSME, MME, and Ph.D. from the University of Delaware, Department of Mechanical Engineering. During his stay at the University of Delaware, Tim conducted research at the Center for Composite Materials, a research center within the College of Engineering. His studies concentrated in the area of advanced textile composite materials with a focus on 3D braiding.

Following graduation, he worked with Foster-Miller, Inc., a privately owned R&D company in Waltham MA, as a Project Engineer. While with Foster-Miller, his primary duties included heading the textile preforming Internal Research and Development effort, and technical lead on commercial contract development with the aerospace industry. As aspect of the latter, he initiated development of 3D braided ceramic matrix composite (CMC) next generation turbine engine components.

Tim went on to work with General Electric Aircraft Engines in Cincinnati, OH as a design engineer with the Experimental Technology Demonstrator Engine group. His primary responsibilities included CMC material design and development under the IHPTET program, 3D preforming and CMC material analysis lead on the Internal Research and Development team, and program manager for an Air Force program focusing on design and manufacture of prototype 3D preformed, CMC airfoils.

He has published many technical papers in the area of 3D braiding for textile composites, is a contributing author to *3-D Textile Reinforcements in Composite Materials*, and is well known in the textile composite preforming community. In addition, he holds a US patent titled *Braiding Machine Having Self Propelled Bobbin Carriers* and has been trained in the methodologies of Six Sigma.

Born and raised in Yardley PA, a small town approximately thirty miles north of Philadelphia, Tim and his wife Mayumi recently moved to the New England area from Cincinnati. One of his many interests is music, where he has been a performing musician most of his life and now finds enjoyment in producing digital recordings on his home computer. He enjoys reading (partial to the works of Robert Jordan and anything of a philosophical nature), computer gaming, fishing of all varieties, and firearms collecting.

## Student Advising

### is just around the corner

It is not too much longer and student advising will be upon us. When you have a chance, take a look at where you are in your program of studies. Start to think about what elective courses, required courses and general education courses you still need to take. Spring break is also just around the corner too and that would be a great time to revisit your program of studies to figure out what additional courses are needed to keep your degree on track.

Another good idea is to sign up EARLY with your advisor to get your schedule defined and get the registration process finished as soon as possible.



DEPARTMENT OF  
MECHANICAL  
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University of Massachusetts at Lowell