

Purdue **MET** Department - **Making an Exciting Tomorrow**

Dear MET/CIMT Graduates and Current Students,

It has been an exciting year for the MET and CIMT programs and the new academic year is beginning. Our Freshman Orientation was held the Sunday before classes with a poker run to familiarize new students with our labs in Knoy Hall and Michael Golden Labs, as well as refreshments and some time to get acquainted with our faculty, graduate teaching assistants, and staff. We had a great turnout with over 80 of our 109 newly admitted CIMT and MET students participating.



Unfortunately, I have some sad news. Professor Emeritus Ed Widener passed away unexpectedly on July 4, just a year after retiring from the MET Department. Ed was easily one of the most memorable members of the MET faculty with his quick wit and delightful stories.

Anniversary Celebration

Last year marked two anniversaries in the department. The MET program marked its 40th anniversary and the CIMT program marked its 20th anniversary. We celebrated these events on April 15 in conjunction with the Distinguished Technology Alumni observance with a party and a golf outing. Current students and alumni gathered in front of Knoy Hall on a beautiful spring day for refreshments and good conversation. Highlights included the drawing for a Tiller autographed football, sales of the MET/CIMT Anniversary T-Shirt, and the chance to sit in a Viper driven by MET Distinguished Alumni Steve Lyman.



Note in picture at the right (l-r), former department heads Fred Emshousen and Hal Roach, Jim Lane, Ed Widener, and Steve Widmer.

Distinguished Technology Alumni

The department chose a distinguished alumnus from each program in recognition of the anniversary. From MET, we selected Steven P. Lyman, BS '73. Steve is the lead vehicle dynamics and chassis specialist for all high performance vehicle derivatives created by street and racing technology at DaimlerChrysler. His recent projects include the Chrysler ME Four-Twelve

Purdue MET Department - Making an Exciting Tomorrow

Supercar, Dodge Viper SRT-10, and the Dodge Ram SRT-10. It is Steven's innovative spirit that has fostered the completion of numerous publications and articles and has secured several patents. His writings include the DaimlerChrysler Vehicle Dynamics Engineering Book of Knowledge (1997-2003), the Vehicle Dynamics Dictionary (1984), and a series of articles in Viper Quarterly (1998-1999). Steven not only shares his knowledge through industry publications, but applies his expertise through patents. He has been involved in patents for the Midas high performance muffler (1975), Midas exhaust system flowbench (1976), DaimlerChrysler hydrostatic steering system (2000), and DaimlerChrysler leaf spring rear suspension power hop system (2003). Steven and his wife Gail reside in Canton, Michigan. "My technology degree provided the right balance of engineering theory, applied math and science principles, and the ability to communicate ideas."



From CIMT, we selected Dan DeYoung, BS '90. Dan is a Senior Systems Solutions Manager for Rockwell Automation. Dan has established a successful career in the automation industry. He is responsible for business management, local marketing, and system architecture consulting for Indiana Rockwell Automation customers. In addition, he has served Rockwell Automation as a system solutions manager and product support planning manager. Prior to Rockwell, Dan held numerous engineering positions with the Allen-Bradley Company. Dan's decision to attend the College of Technology was based on a desire to complete a path of study that provided the right balance of engineering skills and practical interactive experience. Being adaptable and embracing challenges has led to Dan's success. "I attribute my success to being willing to adapt to change." Although Dan has thrived in his career, he has many future aspirations including advancing in senior management, pursuing post-secondary education, performing independent consulting, and teaching at the college-level. "One of the most valuable tools I learned while earning my degree was the ability to effectively communicate complex topics through group presentations and team projects."



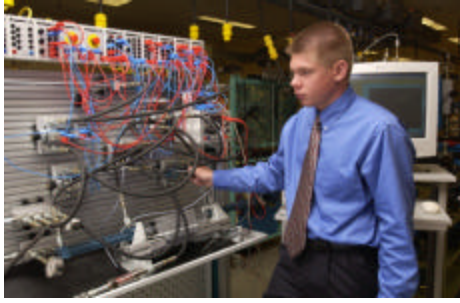
What's New in the Department?

It's no small thing, but the department offered its first course in Micro- and Nano- Manufacturing in the spring. A new member of our faculty, Dr. Mark Jackson, developed the new course that introduces the next generation of new materials and manufacturing processes based on the micro- and nano-scale. It may sound small, but the tools and techniques used to investigate the phenomena are very specialized, and there is incredible potential for a large impact on machining operations. Developments that Dr. Jackson are pursuing include new techniques for machining at over 500,000 RPM and the use of machine tools with nano-particle coatings that enhance tool life and tool performance. The development of a laboratory to bring these technologies to MET students is underway.



Fluid power is a signature area in the department. Thanks to the \$174,000 four-year grant from the Otto Maha Educational Fund, and essential involvement of Parker-Hannifin Corp., Bosch Rexroth Corp. and Rockwell Automation, our fluid power laboratory has been upgraded with four double-sided test stands equipped with modular snap-on components to build hydraulic, pneumatic and

Purdue **MET** Department - **Making an Exciting Tomorrow**



electric circuits.. Students can practice building and animating the circuits by using Automation Studio 4 software, then they build the circuit and take measurements and acquire data using LabVIEW 7 software. Students' feedback has been very positive, and their suggestions for improvements have been incorporated. This is an ongoing project to incorporate the newest technology in fluid power control.

The CIMT open house in May is turning into a big event. Families, visitors from industry, COT faculty and deans, and others from Purdue join the students as they demonstrate the completion of the capstone course by operating the automated factory and making product. This year, the class created some new and innovative products including a magnetic pen holder and a key fob to complement the desk accessory products. This was the first full-year capstone course and it proved to be a great success.



Upcoming Alumni Events

We're planning some new events. This fall, we will have an MET "tailgater" in the morning before the Purdue-Akron game on September 10. It's also Family Day, so we are inviting current students, families, and alumni to join us for lab tours, light pre-game refreshments, and conversation. Please stop by MGL-1208 on your way to the game. We will be here from 9:30 AM to game time.

We are also considering our spring 2006 event. We are hoping to have an MET entry into the Purdue Grand Prix race and are planning some events around our expected win. I welcome your suggestions to hear what you might like to do or how you can help – especially those who participated in Grand Prix as students! It's guaranteed to be fun.

Call for Graduate Students

We are growing our graduate program in MET. This past year saw the approval of our first MET master's degree Area of Specialization in Sustainable Engineering Technology and this fall we have three Ph.D. students. As our research mission grows, we are looking for qualified and motivated graduate students to fill the limited numbers of graduate teaching and research assistantships available. If you have ever thought about returning to complete a master's degree or even obtain a Ph. D., now might be the time. You can go on the COT website for information and application materials. http://www.tech.purdue.edu/pages/graduate_programs/index.html If you are looking for support, send me an email to discuss the opportunities in the department.

It is an exciting time now at Purdue, in the College of Technology, and in the Department of Mechanical Engineering Technology, and we hope to share it with you. Please tell me what you want to know and what you don't care about. I would like to be able to share stories from our alumni or our MET/CIMT current students with you, so send along items of interest. We will be planning at least one yearly MET event for our alumni, current students, and faculty. Please join us September 10th for our tailgate party and send your ideas for spring.

John R. Hartin
MET Department Head
jhartin@purdue.edu

