

### InCyde Mechanical Engineering April 29, 2008

#### **Brown named distinguished professor at Iowa State**

Congratulations to Robert Brown for being named a distinguished professor at Iowa State. Distinguished professorships are awarded to faculty members who exhibit exemplary performance in research and who have attained a national or international reputation. Additionally, a distinguished professor is expected to have demonstrated outstanding performance in teaching and advising, professional practice, or institutional service.

#### **Pletcher retires with recognition of impact on university and profession**



Wickert presented Pletcher with a picture of central campus as an honorarium to Pletcher's impact on mechanical engineering.

Students, faculty, staff, friends, and family commemorated Richard Pletcher's contributions to mechanical engineering during his retirement reception. Pletcher's reception was held on April 25 in the Campanile Room at the Memorial Union. During the program, Jonathan Wickert, chair, Department of Mechanical Engineering; Mark Kushner, dean, College of Engineering; Tom Shih, chair, Department of Aerospace Engineering; Ted Okiishi, emeritus professor; and Pletcher's son-in-law and son all spoke of their admiration and respect for Pletcher as a researcher, educator, and

#### **Graduation is just around the corner**

As we reach the end of the semester, graduation commencements and reception plans are being finalized.

#### *Graduate students*

The university's commencement ceremony for graduate students will be held at 8 p.m. on May 9 in C. Y. Stephens Auditorium.

The College of Engineering is holding a master's and PhD reception before the commencement ceremony on May 9 to celebrate the achievements of graduating students. The reception will be in 220-240 Scheman, beginning with a social at 5:30 p.m. and a program from 6:00 to 7:00 p.m. Check the following Web site for more information:

[www.eng.iastate.edu/alumni/events/asp](http://www.eng.iastate.edu/alumni/events/asp).

#### *Undergraduate students*

The university's commencement ceremony for undergraduate students will be held in Hilton Coliseum on May 10 beginning at 1:30 p.m.

The Department of Mechanical Engineering will be hosting a pre-commencement reception on May 10 to recognize the graduates within the department. The reception will begin at 9:00 a.m. with a breakfast and a program from 9:30 to 10:30 in the ISU Research Park Rotunda (2321 North Loop Drive). Check the following Web site for more information:

[www.eng.iastate.edu/alumni/events/asp](http://www.eng.iastate.edu/alumni/events/asp).

#### **New communications specialist to help**

author, as well as a humble, caring individual.

During the program, Pletcher was attributed with transforming the landscape of the field of computational fluid dynamics. Throughout his career, he has impacted students through his talents as an educator and the profession and his colleagues through his research efforts.

Among comments of Pletcher's confidence, integrity, and expertise, there was much discussion of the impact of Pletcher's textbook Computational Fluid Mechanics and Heat Transfer. Pletcher collaborated with Dale Anderson and John Tannehill from aerospace engineering and engineering mechanics to create the textbook, which "literally marked a revolution in the education of engineers and scientists in the field of CFD," according to Wickert.

Pletcher reflected on his more than 40 years with Iowa State and spoke about the numerous opportunities and challenges, calling his experience an "adventure." Pletcher also gave tribute to his graduate students, who spent a lot of time in the "trenches," and mentioned that it was "always rewarding to see them succeed."

Congratulations to Richard Pletcher for his distinguished career and many accomplishments.

#### **Gent receives Teaching Excellence Award**

Congratulations to Steve Gent, a PhD student studying under Mark Bryden, for receiving a Teaching Excellence Award for his outstanding performance as a laboratory instructor and teaching assistant. The purpose of this award is to recognize and encourage outstanding achievement by graduate students in teaching. The intent is to recognize up to 10 percent of the graduate students involved in teaching each year.

#### **Kong receives SAE Teetor Education Award**

Song-Chang Kong recently attended the 2008 SAE World Congress and received the Ralph R. Teetor Educational Award. The SAE Teetor Program stimulates contacts between younger engineering educators and practicing engineers in industry and government. The objective of the award is to provide an engineering atmosphere in which these teachers can meet and exchange views with practicing engineers.

#### **spread word about ISU ME**

Jessi Strawn joined the ME staff to help the department with communication-related initiatives. She has been busy learning about individual faculty and staff members and preparing communication pieces. If you have any news you would like to share, please send it to [jlstrawn@iastate.edu](mailto:jlstrawn@iastate.edu).

#### **Dates set for final senior design project presentations**

On May 1, ME students will present their senior projects, including models, designs, pricing details, and testing results.

- Section B--12:40 to 3:30 p.m. in room 1312, Hoover
- Section C--3:40 to 6:30 p.m. in room 1134, Sweeney

The teams worked on the following projects with specific goals and objectives:

- Altec project: Concept a trailer to make loading, roading, and unloading the unit as easy and safe as possible.
- Do-it project: Investigate issues within a company's line of lead smelting pots used for manufacturing fishing lures (by small companies or the hobbyist).
- Snap-on alternate joint project: Develop alternate joining methods for traditionally constructed, steel tool storage products.
- Snap-on composite project: Develop a composite materials base tool storage product.
- Camp Courageous project: Re-engineer the drive and braking systems of a locomotive donated to Camp Courageous to meet the needs of the user as the camp expands its system in the future.

### **Funding awards**

The following faculty members recently received sponsored funding awards:

- Jonathan Wickert received a \$164,175 award for Improving the Quality of Web Material Production through a Higher-Order Stress and Stability Model from the National Science Foundation.
- Xinwei Wang received a \$101,323 award for Sub-Surface Structural Damages in Laser-Assisted Surface Nanostructuring: Experimental Characterization and Atomistic Modeling from the National Science Foundation.

### **Patents issued to members of the ME department**

During the Marston Club/PPEA/DAC/Patent Award Dinner on April 10, Palaniappa Molian was presented with a Patent Award Plaque for the patent he was issued for an ultra-hard low-friction coating based on AlMgB14 for reduced wear of MEMS and other tribological components and systems.

In January, Robert Brown and former members of ME Corey Wistrom and Jerod Smeenk were issued a patent for a method and apparatus for filtering gas with a moving granular filter bed.

Do you have department news you'd like to share? Please e-mail news items for InCyde Mechanical Engineering to Jessi Strawn at [jlstrawn@iastate.edu](mailto:jlstrawn@iastate.edu)

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