IOWA STATE UNIVERSITY

Department of Mechanical Engineering

InCyde Mechanical Engineering May 8, 2008

Qin is mechanical engineering teacher of the year

Congratulations to Dr. Zhaohui (George) Qin, for receiving this year's Mechanical Engineering Teacher of the Year Award. Qin obtained his PhD in mechanical engineering in 2007 from Iowa State specializing in thermal-fluid systems and is currently a lecturer in the department.

The Mechanical Engineering Teacher of the Year Award is selected by the ME senior class, and all faculty and lecturers who are actively teaching are eligible for the award. Last year's winner, Michael Pate, was not included on the ballot, as is the tradition for this award.

Iowa State's ME department in the news

A recent U.S.News and World Report about graduate schools included two articles that mentioned Iowa State's ME department. "Mechanical Engineering Is on the Rise" included insight from Robert Brown about the extensive knowledge mechanical engineers have with regard to energy and thermodynamics.

Brown provided course advice for individuals headed into thermal systems or mechanical systems research in the related article "Hot Tips for a Graduate Degree in Engineering." This article also includes a photo of Nathan Franka, an ME graduate student, in the Experimental Multiphase Flow Lab.

Read the articles on the U.S.News and World Report Web site.

- "Mechanical Engineering Is on the Rise" <u>www.usnews.com/articles/education/best-graduate-schools/2008/03/26/mechanical-engineering-is-on-the-rise.html</u>
- "Hot Tips for a Graduate Degree in Engineering" <u>www.usnews.com/articles/education/best-graduate-schools/2008/03/26/hot-tips-a-graduate-</u>

Funding awards

The following faculty members recently received sponsored funding awards:

- Michael Pate, ME, and Carl Bern, ABE, received a \$62,429 award for Demonstrating Drying of Grain, Distillers Grain, Industrial Products with a Simple, Innovative, and Extremely Efficient Heat Recovery Process from Shivvers, Inc.
- James Oliver, Judy Vance, Mark Bryden, Atul Kelkar, and Eliot Winer, ME; Scott Chumbley, MSE; Brian Steward, ABE; Norio Nakagawa and Chester Lo, CNDE; and Alexander Stoytchev, ECPE, received a \$1,599,874 award for Deere Phase V from Deere & Company.
- Song-Charng Kong received a \$124,576 award for Engine Testing Project from West Central Cooperative.

Summer hours starting May 12

From May 12 to August 15, 2008, the ME office will be open during summer hours of 7:30 a.m. to 4:00 p.m.

Pi Tau Sigma initiation

Congratulations to the following ME students who were initiated into Pi Tau Sigma on April 27, 2008:

- Muhammad Azizirrahim
- Janelle Byer
- Joseph Dong
- Nicole Gassman
- Kalinda Kaluarachchi
- Jared Noack
- Anas Abdul Rahman
- Mohd Yusoff

degree-in-engineering.html

Bryden and several students spending five weeks overseas

Mark Bryden is heading off to Mali in May with a group of students to teach Applied Methods in Sustainable Engineering and International Development. Located in western Africa, Mali is one of the poorest nations in the world. None of the villages have access to electricity, phone, or the Internet, and only half of the 7,000 people have access to clean water in the form of deep wells.

The class is based on applying and deploying specific technologies that have been developed in classes at Iowa State, with projects that created simple valve systems for the village water system, a sustainable lighting system for a village without electricity, assessment and trials of cook stoves, and development of metal-working capability, as well as other locally maintainable and needed projects.

Save the date for the fall 2008 faculty retreat

Be sure to mark Wednesday, August 20, 2008, on your calendars for the 2008 ME Fall Faculty Retreat. The retreat will be in the Speer Room of the Mahlstede Building at Reiman Gardens.

Mechanical Engineering Graduate Student Organization (MEGSO) raises funds and elects new officers

In April, MEGSO held a T-shirt sale fundraiser and had outstanding results. The group designed and sold ME shirts with a Cy logo. They sold their initial stock of 100 shirts and made and sold an additional 100 shirts because of the enthusiastic response. The money raised will help sponsor social activities for graduate students.



2008 Pi Tau Sigma initiates.

Pi Tau Sigma's goal is to create a closer bond of fellowship among those who are striving and achieving in the highest ideals of the ME profession.

Tau Beta Pi initiation

Congratulations to the following ME undergraduate and graduate students who were initiated into Tau Beta Pi on April 27, 2008:

- Steven Chase
- Daniela Faas
- Joseph Goering
- Luke Murphy
- Zane Schaefer
- Ryan Schwartz
- Adam Upah
- Loren Zabel

Tau Beta Pi is the national engineering honorary and initiates students in the top 1/8 of their junior class and top 1/5 of their senior class who exhibit exemplary character.

McCorkle receives Research Excellence Award

Congratulations to Doug McCorkle, a PhD student studying under Mark Bryden, for receiving a Research Excellence Award for spring 2008. The purpose of the Research Excellence Awards is to recognize graduate students at the time of their graduation for outstanding research accomplishments as documented in their theses and dissertations. Students are expected to be academically superior and able to not only do research but also develop a well-written product.

Vance speaks about virtual reality at 2008



MEGSO T-shirt sale is a huge success.

Congratulations to the following students for being elected to the MEGSO offices and GPS Senate:

- Levi Swartzentruber, President
- Mathias Veltman, Vice President
- Catherine Peloquin, Treasurer
- Daniela Faas, Secretary
- Joshua Drake, GPSS Senator
- Som Shrestha, GPSS Senator
- David Werner, GPSS Senator

Meyer's research article featured in *Mechanical Engineering Magazine*

Terry Meyer's research was recently featured in the March 2008 issue of *Mechanical Engineering Magazine*. The article, "Too Hot To Handle," discusses the work being done in Meyer's lab to develop advanced laser techniques that help improve combustion systems and the performance of alternative fuels in modern combustion systems. The article is available at

www.memagazine.org/march08/departments/computing/computing.html.

William March Scholar in Mechanical Engineering established

The William March Scholar in Mechanical Engineering

Scottish Manufacturing Institution (SMI) Annual Conference

Judy Vance recently presented "Virtual Reality--The Potential for Greatness" at the 2008 SMI Annual Conference. The conference was held at Heriot Watt University in Edinburgh, Scotland, on April 10. Vance was one of three invited guest speakers at the conference, and she discussed the current state of virtual reality, the potential for new advances, a vision for the future, and some thoughts on the research funding base needed to accomplish this vision.

SMI is one of 16 Scottish Innovative Manufacturing Research Centers established by the Engineering and Physical Sciences Research Council (EPSRC), the United Kingdom's equivalent to the United States' National Science Foundation. SMI recently received Phase II baseline funding of 7.2 million pounds (\$14 million) from EPSRC to fund the next five years of research.

Department promotions

Congratulations to the following faculty members for their recent promotions:

- Gloria Starns was promoted to senior lecturer.
- Shankar Subramaniam earned tenure and was promoted to associate professor.
- Sriram Sundararajan earned tenure and was promoted to associate professor.

Beck part of award-winning learning community sub-committee

The College of Engineering Learning Community
Task Team sub-committee on outcomes and
assessments, which includes Doug Beck, recently
received the Learning Community Scholarship
Award. The sub-committee developed various
assessment tools for CoE learning communities to
use. Kelly Strong, ConE professor and subcommittee member, created an article about the subcommittee's work that will be published in a future
issue of the Journal of Learning Community
Research. The award honors an individual or a
research team that has significantly contributed to the
scholarship of learning communities.

award, created through a generous donation from William March, was recently established as a named position for an early career faculty member.

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

Department of Mechanical Engineering 2025 Black Engineering Building, Ames, IA 50010, 515 294-1423, <a href="mailto:issueeeing.com/issueeeing