

Mechanical Engineering @ Iowa State



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Zou receives CAREER Award

Qingze Zou, assistant professor of mechanical engineering, has received a prestigious National Science Foundation CAREER Award in recognition of his research and educational activities. His proposal, entitled "Rapid Broadband Nanoscale Viscoelasticity Measurement and Mapping of Soft Materials," will begin next summer and continue through 2014.

Spring fellows announced

This spring, two students have been named Seward, Ratcliffe, and Galloway Foundation Mechanical Engineering Fellows, and three students will continue their positions. Jing Ren and Sai Samudrala are the newest fellows, joining Victor Roa-Baerga, Tristan White, and Melissa Wickham, who were appointed in fall 2008.

This named assistantship is awarded to selected on-campus graduate students who are enrolled full time in the Department of Mechanical Engineering and is made possible through the Roderick Seward, Flossie Ratcliffe, and Helen M. Galloway Foundation, Inc.

ME student receives Dean's Student Leadership Award

At the 9th Annual Student Leadership Banquet, ME senior Clay Hopes will receive the Dean's Leadership Award. The award is designed to encourage and honor students involved in university-wide or academic-specific leadership activities.

Hopes is from Treynor, Iowa, and will be receiving his bachelor of science degree in mechanical engineering with a minor in entrepreneurial studies this spring. He has been actively involved in international activities, traveling through more than twenty countries and completing three study abroad experiences in Australia, Germany, and Scotland. In addition, he received a scholarship to assist with research in Germany during the summer of 2008.

At Iowa State, Hopes initiated a new program to give international exchange students the opportunity to live in the Greek community. He also actively promotes studying abroad as a global ambassador in the Iowa State Study Abroad Center. He is a project leader for Engineers Without Borders and is working on Iowa State's Solar Decathlon. Furthermore, Clay has completed an eight-month co-op with United States Gypsum.

The banquet, held on January 26, 2009, also recognized the presidents and other outstanding members of each of the engineering student organizations, as well as selected faculty and staff, for their leadership accomplishments and contributions to the College of Engineering.

SAE 40th-Anniversary Celebration

SAE International will host a 40th-anniversary ceremony on Saturday, January 31, from 2 to 4 p.m. in the Howe Hall atrium. During the celebration, the students will unveil the 2009 formula car, display the 2008 Baja car, and discuss various aspects and history of SAE at Iowa State. Refreshments will be

award



Team XO⁴ poses with their award-winning design.

Rewarding a semester of innovation

At the end of the fall semester, 120 ME students gathered in the Alliant Energy-Lee Liu Auditorium in Howe Hall to see the ME 270 final design competition. Four teams presented their designs for a human-powered battery charger, and the winning team would receive the Galen F. Smith Memorial Design Award.

Team XO⁴ from section D won the competition with their walking charger design. The results, tabulated from student voting, put team Generation CY from section C in second place, team Power Key from section B in third place, and team Power from section A in fourth.

Also at the event, team Poseidon from section A gave a presentation of their treadle pump design as an example of future ME 270 class projects.

The design award was named for Galen F. Smith, an ME student from Curlew, Iowa, who was struck and killed by lightning on June 11, 2008, while working outside with his father on their farm. As a student, Smith's team won the spring 2008 ME 270 design award, and he was known for being an unselfish team member who always was present with a smile and ready to listen to anyone's ideas or concerns. The award is offered to promote design excellence, remember an exemplary student, strive for excellence of character, and recognize a job well done.

Funding awards

- Tim Bigelow, ECpE and ME assistant professor, received a \$245,201 CAREER Award for "Ultrasound Histotripsy System Development to Improve Cancer Treatment" from the National Science Foundation.
- Matthew Darr, ABE assistant professor, and Robert Brown, Gary and Donna Hoover Chair in Mechanical Engineering, received a \$34,832 award for "Distributed Biomass Processing Systems, Phase I" from Toyota Motor North

served, and students, faculty, sponsors, and press are invited to attend.

ME staff earn degrees

In December, two ME staff members earned higher education degrees. Carol Knutson, account clerk, earned her associate's degree in science from DMACC. She will be continuing her education to pursue a bachelor's degree in liberal arts. Jessi Strawn, communications specialist, received her master's degree in rhetoric, composition, and professional communication.

American Inc.

- Valery Levitas, Shafer 2050 Challenge Professor, received a \$72,292 award for "Phase Transformations in Ceramics under Compression and Shear" from the Army Research Office.

Two minutes with...

An engineer who's working to make better, cleaner engines. See Song-Chang's feature on the Iowa State homepage at www.iastate.edu/news/twomin/2009/kong.shtml.

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

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