

Mechanical Engineering @ Iowa State



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Iowa State Solar Decathlon team places 12th in D.C.

Iowa State's Solar Decathlon team took 12th place in the 2009 DOE Solar Decathlon with its Interlock House. In the final contests, the team placed 6th in Net Metering (producing more energy than it consumed) and 5th in Engineering.

Germany's team took first place, followed by Illinois and Team California.

The house remained open for public tours until the students began dismantling it for transport back to Iowa on October 18.

Companies with ME ties take 1st and 2nd in business competition

BodyViz, an Ames virtual reality company developed by Jim Oliver, director of Iowa State's Virtual Reality Applications Center and professor of mechanical engineering, and Eliot Winer, associate director of the center and associate professor of mechanical engineering, has taken the top prize of \$25,000 in the fourth annual John Pappajohn Iowa Business Plan Competition. Read last summer's story in *The Des Moines Register* [about BodyViz](#).

Innovative Energy Solutions Inc., a company developed by ME professor Atul Kelkar, took second place and was awarded \$15,000. The company created a technology (process and device) to convert waste hydrocarbons, such as refinery waste or plastics, into liquid diesel fuel. Read about Kelkar's work in an [Ames Tribune feature](#).

Department hosts Complex Fluid Systems workshop

On October 7, the Complex Fluid Systems research group hosted a one-day workshop on campus to bring together leading university experts in the areas of complex fluid systems, foster interactions, and promote future collaboration in this field. More than 35 faculty, postdocs, and students attended the event.

During the morning of the workshop, experts delivered presentations on research directions and Iowa State expertise in the following technical tracks:

- Colloids, Polymers, and Biofluids
- Particle-Laden Flows, Sprays, Turbulent Reactive Flows
- Soft Matter, Hydrogels
- Turbulence, Aerodynamics, Geophysical Flows
- Material Rheology

The workshop also included poster sessions that allowed attendees to discuss research topics of mutual interest with the authors and co-authors of the posters.

Workshop participants met in afternoon breakout sessions to further discuss emerging research themes in each of the technical tracks and identify potential funding opportunities for collaborative team proposals. The workshop closed with a

ME alum receives Tau Beta Pi award

Richard H. Stanley, a 1955 graduate in mechanical and electrical engineering from Iowa State University, has received the 2009 Tau Beta Pi Distinguished Alumnus Award. Stanley, who is chair of the board of directors of the Stanley Foundation, Muscatine, Iowa, was honored at the 104th Tau Beta Pi national convention held recently in New Brunswick, New Jersey. ([News release](#))

Richard H. Stanley



ME students among DNR interns whose ideas are being implemented in Iowa

Two dozen Iowa companies are implementing environmental improvements recommended by interns with a Department of Natural Resources Pollution Prevention Program. Program coordinator Danielle Dilks says the interns are some of the top engineering students at Iowa's colleges and universities. ([News release](#))

Department of Mechanical Engineering Seminar Series

- October 27: "Electrical re-engineering of the heart: New treatments of arrhythmias," Igor Efimov, professor of biomedical engineering, Washington University in St. Louis
- November 3: "Sharp interface simulations of moving boundary problems," H. S. Udaykumar, professor of mechanical and industrial engineering, University of Iowa

Upcoming Technology, Globalization and Culture lecturers

- October 27: Topic TBD, Gene Tackle, director of the Climate Science Initiative and professor of atmospheric science and of agricultural meteorology at Iowa State University

summary session where the track principals discussed ideas from the breakout sessions and identified teams to develop grant proposals and research working groups for the focus areas.

- October 28: "From Iowa State University to Paris, France: Technology, Globalization and Culture in the Workplace," Christopher Sorensen, audio and videoconferencing at France Telecom
- November 3: "Challenges and Opportunities in the Global Aerospace Market," Dennis Muilenburg, president of Global Services & Support at Boeing
- November 4: "Globalization and the Global Crisis: What's Different This Time?" Tony Smith, chair and professor of the Department of Philosophy and Religious Studies at Iowa State University

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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