

InCyde Mechanical Engineering

October 29, 2010

Mechanical Engineering Industry Advisory Council



Once a semester a group of industry professionals gather to discuss and brainstorm about progress and goals, while providing a direct link from industry to the department. They are all ISU alums and make up the mechanical engineering industry advisory council.

The industry advisory council (IAC) has a diverse range of professional experience with current members serving as business managers, professional engineers, and a medical doctor, among other roles. On October 15, the fall IAC meeting was held and the department welcomed five new members hailing from Sauer-Danfoss, Pella, Kiewit Power, Rockwell Collins, and Park Nicollet Health Services. IAC members had a day-long meeting with the opportunity to network with faculty and students, and they also enjoyed a student design poster session.

Bioenergy Recognition

Robert Brown, Director of the Bioeconomy Institute, has recently been named one of the [top 100 people in bioenergy](#) according to *Biofuels Digest* who noted that he is "among the top academics in the field" of bioenergy. Brown has led transformative research on bioenergy and renewables, and in September organized an international conference focusing on thermal and catalytic sciences for biofuels and biobased products.

Research Features

Assistant Professor Song Zhang has been making waves with his research on 3D imaging technology. An [article and video](#) on his research were featured in *The Scientist* magazine over the summer; another paper was recently highlighted by the *Journal of Optics Express* with a [video](#) showing an ultrafast technique involved in 3D shape measurement; and one of his papers was recently featured on the cover of [Optic Letters](#).

3D Printing

The mechanical engineering department recently purchased, installed and activated two 3D printing systems for rapid prototyping activities. “The 3D printers are available for all ME courses and activities where design and



prototyping may occur,” points out Senior Lecturer Emmanuel Agba. The pictures to the left show 3D models of vehicle rims designed by students used in ME 419 Computer Aided Design that were rapidly produced to evaluate for design flaws and manufacturing feasibility. “With the introduction of the 3D printers into our curriculum, we have enhanced the ability of students to render their designs into physical examples that can be used for class

discussions, reports, and testing,” says Agba. “Additionally, we can use the system to render 3D models of mechanical and biological systems showing color, stress, pressure or thermal distributions which will in turn aid classroom discussions and project work.”

Judy Vance Advisory Appointment

Judy Vance has been appointed as a member of the Clemson University Mechanical Engineering Industrial Advisory Board. This appointment gives Vance the opportunity to help contribute to their department’s success while also strengthening ties and efforts as a professor at ISU.

Emeritus lunch

Seven emeritus faculty members came back to campus this week for a lunch meeting with interim department chair, Ted Heindel. The department was happy to welcome Bill Bathie, Al Joensen, Bill Cook, Max Gassman, Pat Kavanagh, Dick Pletcher, and Jerry Colver. Emeritus faculty gather twice per academic year to learn about what is currently going on in the department.



Emeritus faculty pose for a picture after a networking lunch: Colver, Bathie, Cook, Gassman, Heindel, Pletcher, Joensen, Kavanagh