THE UNIVERSITY OF IOWA COLLEGE OF ENGINEERING 2007-2008 LECTURES COMMITTEE REPORT May 12, 2008

Lectures Committee: David Wilder, associate professor of biomedical engineering, chair; Fred Streicher, College of Engineering director of marketing and communications, ex-officio member

Caterpillar "On the Edge of Technology" Seminar Series

The Caterpillar Foundation, Peoria, IL, generously provided financial support of the Caterpillar Colloquium Series in time for the 2007-2008 Academic Year. Unlike previous years when all six undergraduate programs were provided equal funding, the 2007-2008 allocation was altered at Caterpillar Foundation's request to focus only on Civil Engineering, Industrial Engineering, and Mechanical Engineering. The three programs are most relevant to Caterpillar Corporation's business. Lectures held include:

- Dr. Robert Sierakowski, chief scientist, munitions directorate, Air Force Research Laboratory, Eglin Air Force Base, FL, presented a Mechanical Engineering seminar October 18 on "Air Force Science and Technology in the 21st Century."
- Professor Jorg Imberger, director of the Center for Water Research, and Vice-Chancellor's Distinguished Fellow, University of Western Australia, Crawley, Australia, presented a Civil and Environmental Engineering seminar November 1 on "Real Time Self Learning River Basin Management Systems."
- William S. Marras, Honda Endowed Chair in the Department of Industrial and Systems Engineering at the Ohio State University, presented an Industrial Engineering seminar April 17 on "The Working Back."
- Vigor Yang, John L. and Genevieve H. McCain Chair in Engineering, The Pennsylvania State University, presented a Mechanical Engineering seminar April 24 on "Combustion Dynamics in Propulsion Systems."
- Pedro Alvarez, George R. Brown Professor of Engineering and department chair of civil and environmental engineering at Rice University, presented a Civil and Environmental Engineering seminar April 24 on "Microbial Interations with Fullernes and Other Engineered Nanoparticles: Environmental Implications and Applications."

Industrial Engineering will use the balance of its Caterpillar Foundation allocation during Fall 2008 Semester for a second speaker not available during Spring 2008.

Iowa Distinguished Faculty Lectures in Engineering

This exchange program enables faculty research award recipients from both Colleges of Engineering at the UI and ISU to visit Ames and Iowa City to enhance collaboration and share knowledge with undergraduate students and faculty. The 2006-2007 recipients of research awards were:

• Iowa State University

Dale E. Chimenti, professor of aerospace engineering and researcher at the Center for Nanodestructive Evaluation at ISU, presented a Mechanical Engineering seminar April 3 on "Materials Characterization Using Guided Wave Ultrasound."

• The University of Iowa

Karim Abdel-Malek, professor of biomedical engineering and director of the Center for Computer-Aided Design, is being scheduled by ISU for a Fall 2008 seminar. Scheduling conflicts prevented booking of a seminar during Spring 2008 semester.

Randall and Barbara Meyer "Grabbing the Globe" Seminar Series

For the 2007-2008 academic year, the College of Engineering will continue the college-wide seminar series, titled The Randall and Barbara Meyer "Grabbing the Globe" College-wide Seminar Series. The seminar series recognizes UI Distinguished Engineering Alumni Academy member Randall Meyer (BS 1948 with highest distinction in mechanical engineering) and his wife, Barbara.

For 2007-2008, the college-wide seminar series moved to an approach that included one seminar speaker per department per academic year (total of 5). Departments recommended a speaker to the Dean's Office. Each department then organized the speaker's visit.

Featured speakers were:

- September 27, 2008 Mechanical and Industrial Engineering seminar, featuring Mechanical and Industrial Engineering Advisory Board members who discussed "Globalization in Engineering." The panel included Craig Thies, director of engineering, Springboard Engineering, Inc., Newton, IA; Ed Merwald, vice president, engineering products, Emerson Process Management, Marshalltown, IA; Raymond Monroe, executive vice president, Steel Founders' Society of America, Crystal Lake, IL; Amanda Mikhail (BS 1999 in mechanical engineering), mechanical engineer, IBM, Rochester, MN; Herm Reininga (BS 1965 in industrial engineering), senior vice president (retired), Rockwell Collins, Inc., Cedar Rapids, IA; and Brian Rauch, vice president-engineering, John Deere Dubuque Works, Dubuque, IA.September 14, 2006 Dean Oskvig, President and Chief Operating Officer, Black & Veatch Energy, Overland Park, KS. Black and Veatch Corp. is a leading global engineering, consulting and construction company specializing in infrastructure development in energy, water, information and government markets.
- February 21 Civil and Environmental Engineering seminar, featuring Lilia Abron (PhD 1972 in chemical engineering), founder and CEO of PEER Consultants, PC, an environmental consulting firm headquartered in Washington, D.C., and a member of the College's Distinguished Engineering Alumni Academy.
- April 3, 2008 College-wide seminar, featuring Klaus G. Hoehn, vice president, advanced technology and engineering, a position he has held at Deere & Co. since January 2006. He is responsible for directing advanced technology development and engineering services that support worldwide agricultural, construction, and commercial and consumer equipment design and manufacturing.
- April 17, 2008 Chemical and Biochemical Engineering seminar, featuring Dr. John Klier, senior director of research and development at Dow Chemical Company, Midland, MI. In his position he oversees new products research in North America, India, China, Germany and The Netherlands.

Biomedical Engineering and Electrical and Computer Engineering did not schedule seminars for the 2007-2008 academic year.

Other Notable College-wide Seminars

• Paul D. Scholz Symposium on Technology and its Role in Society, sponsored by Tau Beta Pi, national engineering honor society, was presented April 10. The topic was "Solutions for a Sustainable World." Featured speakers were Carolyn Raffensperger, founding executive director of the Science and Environmental Health Network and co-editor of "Precautionary Tools for Reshaping Environmental Policy" and "Protecting Public Health and the Environment: Implementing the Precautionary Principle;" and Marc Franke, vice president of the Board of Directors for the Iowa Renewable Energy Association and author of "One Week to Save the Earth."