December 2009

From the Dean

Welcome to the inaugural issue of e-Currents. We are launching this online version of Currents Magazine in order to be good stewards of our environmental resources, as well as to contain costs.

These are trying times for Michigan and for our nation. Yet, we won’t let economic crises derail the long-term teaching, research, and outreach missions of the College of Engineering. Full story

Satish Udpa, Dean

News & Research

MSU Receives $2.5 Million DOE Award to Build Advanced Hybrid Engine
Michigan State University researchers have received a $2.5 million federal stimulus grant from the U.S. Department of Energy to build a prototype new engine and generator technology that can dramatically improve efficiencies and reduce costs of electric hybrid vehicles. Full story

Even the Concrete is Greener at MSU
Ground waste glass can be used as a sustainable and environmentally friendly supplementary cementitious material in the production of concrete, MSU researchers in the Department of Civil and Environmental Engineering have found. Full story

Nanocomposite Developed at MSU Could Help Automakers Meet Fuel Efficiency Standards
MSU researchers have developed a composite material modified with nanoparticles that is economical and could also help automakers meet new fuel efficiency standards, which will require automakers to increase fuel efficiency by more than 5 percent per year starting in 2012. Full story

Energy Research Focuses on Thermoelectrics, Biofuels, Battery Technologies, and Fuel Cells
The College of Engineering continues to expand its research in the alternative energy area. View video interviews with some of our researchers. Full story

HAPPENINGS

Jan. 22
College of Engineering Claud R. Erickson Award Nomination Deadline

Feb. 15
MSU Alumni Association Grand Awards Nomination Deadline

June 2-4
6th International Conference on Structures in Fire

AWARDS & HONORS

This year marks the 100th anniversary of the Department of Civil and Environmental Engineering (CEE). A celebration dinner, attended by 160 alumni, faculty, staff, and friends of the department, was held on October 30, 2009. Viewing the CEE centennial commemorative booklet are (left to right) Sam Castronovo (MS ’70, PhD ’97), Bill Saul (chair of the CEE department from 1990-1995), and Mackenzie Davis (CEE professor emeritus and author of the booklet). View the commemorative booklet (PDF).
The New Farm Lane: Bridge to the Future Becomes a Reality
CEE associate professor Thomas Maleck, Hilary Owen (MS Civ Egr ‘99), and Sarah (Nolf) Binkowski (MS Civ Egr ‘98) stood in amazement in the middle of Farm Lane looking at the just-completed “Bridge to the Future” entrance to the MSU campus. As students in the late 1990s, Owen and Binkowski worked on the project’s feasibility study. Full story

Michigan State Collaboration Spawns Robotic Fish to Monitor Water Quality
Nature inspires technology for an engineer and an ecologist at Michigan State University. They’re developing robots that use advanced materials to swim like fish to probe underwater environments. Full story

College of Engineering Awarded $5.5 Million in American Recovery and Reinvestment Act Grants
As part of the federal government’s nearly $800 billion American Recovery and Reinvestment Act (ARRA), more than $15 billion is being awarded to research institutions nationwide by a variety of federal funding agencies. More than $5.5 million has been awarded to 11 College of Engineering researchers. Full story

Grant Exposes Teachers to Research, Translates Excitement to Classroom
An MSU program to advance precollege science and engineering education has received a $500,000 grant from the National Science Foundation as part of the American Recovery and Reinvestment Act (ARRA). Full story

Center for Engineering Education Research Established at MSU
The College of Engineering at Michigan State University has established the Center for Engineering Education Research (CEER) @ MSU. Full story

MSU and Motorola Foundation Partner to Inspire Tomorrow’s Innovators
A $50,400 Innovation Generation grant from the Motorola Foundation will help bring middle school and high school students and teachers into MSU research labs this summer. Full story

Student News & Accomplishments

Solar Car Racing Team Optimistic about Upcoming Competition
The MSU Solar Car Racing Team is making progress toward its goal of racing a solar car. This past summer, the team made a great leap forward as it took a solar-powered vehicle to the Formula Sun Grand Prix in Texas. Full story

A Beach Adventure with a Mission
Gabrielle (Gabby) Kleber, a chemical engineering and materials science junior from Clarkston, Mich., spent this past summer on beaches around the world, studying and collecting data on marine debris. Full story

Alumni & Development News

Engineering Alumni Receive MSU Alumni Association Awards

Shanker Balasubramaniam Named IEEE Fellow
Shanker Balasubramaniam, professor of electrical and computer engineering, has been named a fellow of the Institute of Electrical and Electronics Engineers, Inc. (IEEE).

Associate Dean Rosenberg Honored with ASME Education Award
Ronald C. Rosenberg, professor and associate dean for special initiatives, received the Yasundo Takahashi Education Award from the Dynamic Systems and Control Division (DSCD) of the American Society of Mechanical Engineers (ASME).

Jung-Wuk Hong Receives Young Investigator Award
Jung-Wuk Hong, assistant professor of civil and environmental engineering, has been selected to receive a grant from the Air Force Office of Scientific Research (AFOSR) Young Investigator Research Program (YIP).

Alex Liu Wins NSF CAREER Award
Alex Liu, assistant professor of computer science and engineering, has received an NSF CAREER Award for his project "Towards High Performance Policy Evaluation."

Ajit Srivastava Named Fellow of the American Society of Agricultural and Biological Engineers
Ajit K. Srivastava, chair of the Department of Biosystems and Agricultural Engineering, has been named a fellow of the American Society of Agricultural and Biological Engineers (ASABE).

Satish Udpa Named University Distinguished Professor
Lynn Bechtel (BS Mech Egr ’91), Gerald Reuben DeJean, II (BS Elec Egr ’00), and the Demmer family were among those honored at the MSU Alumni Association Grand Awards Ceremony held on Thursday, October 15, 2009. Full story

Computer Science Alum Appointed to Top Post at SPSS
Deepak M. Advani (BS Comp Sci ’86) has been appointed to head SPSS Inc., a predictive analytics and statistics company newly acquired by IBM for $1.2 billion. Headquartered in Chicago, the company has 1200 employees. Full story

Sixth Annual College of Engineering Alumni Awards Banquet
The College of Engineering recognized nine individuals who have brought honor to the college through their professional achievements, both professional and philanthropic, at the annual spring banquet at the Kellogg Hotel and Conference Center in May. Full story

Eleventh Annual GOLD Club Breakfast
The 11th annual College of Engineering GOLD Club reunion breakfast was held June 5, 2009, in MSU’s Kellogg Hotel and Conference Center. Members of the class of 1959 received 50-year pins in honor of their membership in the GOLD Club as “Graduates of Lasting Distinction” (having graduated 50 years ago). Full story

Baldwin Carr (BS Chem Egr ’50) Receives Purple Heart Medal
Baldwin Carr (BS Chem Egr ’50), who died as a Chinese prisoner during the Korean War, posthumously received the nation’s oldest military decoration – the Purple Heart combat medal – in a campus ceremony on September 29, 2009. Full story

Class Notes

Read about College of Engineering alumni accomplishments, awards, and updates.

Satish Udpa, dean of the College of Engineering, has been named a University Distinguished Professor in recognition of his achievements in the classroom, laboratory, and community.

Currents Magazine Wins Award in Gallery of Superb Printing
Currents Magazine, the MSU College of Engineering alumni magazine, has won the Gold Award in the Gallery of Superb Printing, Detroit Club of Printing House Craftsmen, in recognition of superb printing in the magazine category.

Hassan Khalil Named Faculty Mentor of the Year
Hassan K. Khalil, MSU University Distinguished Professor of electrical and computer engineering, received the Faculty Mentor of the Year Award from AGEP: Alliances for Graduate Education and the Professoriate.

Sachin Patil Joins BMC Neurology Editorial Board
Sachin Patil, a visiting assistant professor in the Department of Chemical Engineering and Materials Science, recently joined the editorial board of BMC Neurology.