

INSIDE THIS ISSUE:

<i>Congar Cruiser II</i>	2
<i>Formula SIUE Car</i>	2
<i>Research Awards</i>	2
<i>MESA Program</i>	3
<i>Acting Dean's Message</i>	4

Just the facts:

For Fall 2005

- Undergraduate student enrollment: 869
- Graduate student enrollment: 208
- Total Enrollment: 1,077
- Total Faculty: 51
- 149 undergraduate degrees were awarded in 2004-005.
- 92 graduate degrees were awarded in 2004-2005.

HASAN SEVIM CHOSEN TO HEAD SCHOOL OF ENGINEERING

Dr. Hasan Sevim has been appointed as the new Dean of the School of Engineering. He comes from Southern Illinois University Carbondale where he was Associate Dean of the College of Engineering and Professor of Mining Engineering. He will start August 16.

Dr. Sevim received the Master of Science in 1978 and Doctor of Engineering Science in 1984 from Columbia University. He earned his Bachelor of Science from the Technical University of Istanbul, Turkey, in 1974.

Born in 1950 in a small village in Kayseri, Turkey, Sevim's family moved to Istanbul when he was five. There he obtained a quality high school education at the legendary "Galatasaray Lisesi."

Dr. Sevim joined SIUC in 1984, becoming a full professor in 1994 and Associate Dean in 2000. Besides teaching, Dr. Sevim served as a consultant to the United Nations Development



Hasan Sevim, comes to SIU Edwardsville from SIU Carbondale, where he was Associate Dean of the College of Engineering since July 2000.

Program; a program evaluator for the Accreditation Board for Engineering (ABET); and a member of the Society of Mining, Metallurgy, and Exploration Inc. since 1976.

While at SIUC, Sevim received his department's outstanding teacher award five times. On leaving SIUC, Sevim said, "It's not easy to leave 23 years behind, although I'm going to a sister institution, which I think makes it a little easier."

William P. Osborne, Dean of SIUC's College of Engineering, said Sevim's appointment is an opportunity for collaboration between the two engineering schools.

"Hasan is a very, very, capable person who is going to make a great dean."

Sevim is the father of two sons: Ulas, a materials engineer for Intel, and Baris who has a bachelor's in finance from SIUC.

ENGINEERING BUILDING HOSTS A GREEN ROOF EXPERIMENT ON ITS ROOF

Green Roof Environmental Network (GREEN) has installed a green roof research experiment on one of the Engineering Building's roofs.

The Green Roof installation is part of an effort to evaluate green roof performance. The

Green Blocks™ are provided by Green Roof Blocks™, a subsidiary of St. Louis Metalworks. The plants and growing medium are supplied by Jost Greenhouses.

Plant growth, roof coverage, and thermal characteristics

will be evaluated for the next two years.

SIUE is collaborating in the Green Roof experiment with GREEN, Green Roof Blocks™, The University of Georgia, and The University of Missouri at Columbia. (Cont. on p. 3)

SOLAR CAR COUGAR CRUISER II CRUISES FORWARD!

A team of 46 students from all SOE disciplines designed and built the Cougar Cruiser, a solar car that qualified for the 2005 North American Solar Challenge race.

A dozen members of the previous team are quietly working to design and build the Cougar Cruiser II.

Using donations of light-weight, high-strength carbon fiber, molds will be made at fabricating facilities from two local corporations. These donations are worth approximately \$100,000.



Concept Design for the Cougar Cruiser II

The team is using two University Excellence in Undergraduate Education grants totaling \$23,000 for fabrication of the suspension, brakes, and steering and to purchase the solar array.

Two major items still needed are a new wheel motor and controller costing about \$20,000 and a 5 kwh lithium-ion polymer battery pack with protection circuitry costing about \$18,000.

Cougar Cruiser II is more streamlined and lighter weight, shedding almost 750 pounds. The team is confident they can win the stock class next time out!

Students gain invaluable practical experience and teamwork skills from the FSAE contest.



Students working on the Car.

STUDENTS DESIGN AND BUILD FORMULA CAR

Formula SIUE is a student organization consisting primarily of mechanical engineers. Its purpose is to de-

sign and build a racing car for the annual Formula Society of Automotive Engineers (FSAE) contest in Detroit, Michigan.

Students do all the design and fabrication of the open cockpit, open wheel racing car. It is powered by a motorcycle engine.

The racing car will be entered into the contest and compete against other schools from across the na-

tion and around the world. It will be critiqued in areas such as acceleration, endurance, and cost effectiveness.

Students gain invaluable practical experience and teamwork skills from the FSAE contest. The car is funded through donations and fundraising projects.

Formula SIUE represented the School of Engineering in the competition May 17–20.

AWARD WINNING ENGINEERING STUDENTS

Six undergraduate engineering students will be completing projects of a caliber that usually is expected of graduate students.

Out of a total of 17 students named 2006-2007 Undergraduate Research Academy scholars five are engineers. The upperclassmen—juniors and seniors—will focus on a dimension that relates to their major area of study. URA students will work

closely with faculty and will be assisted by faculty mentors. This year's engineering scholars, topics and mentors are:

Jenna Toennies, Biological Sciences/Mechanical Engineering, Comparison of Feeding and Jumping in the Northern Leopard Frog, *Rana pipiens*, with mentors **Rick Essner**, assistant professor of Biological Sciences and **Majid Molki**, professor of Mechanical and Industrial Engineer-

ing;

Brittany Marron, Civil Engineering, A Comparison of Sentencing in Vehicular Homicides Resulting from Impaired and Non-impaired Driving, with mentor **Greg Luttrell**, assistant professor of Civil Engineering; **Ross Mead**, Computer Science, Impromptu Teams of Heterogeneous Mobile Robots, with mentor **Jerry Weinberg**, associate professor and chair of Computer Science; **Jon Sandifer**, Civil

MESA PROGRAM PROVIDES OPPORTUNITIES FOR AREA YOUTH

Area junior high students spent lab time creating an alarm device with the help of SIUE Engineering graduate students at a recent electrical engineering session of SIUE's Midwest Engineering and Science Association (MESA) Pre-College Program.

The MESA Program, sponsored by the School of Engineering under the guidance of **Ron Banks**, assistant to the dean, encourages under-represented ethnic minority students as well as economically disadvantaged majority junior high school students to pursue careers in science and engineering.

The MESA program does this by acquainting participants with required courses, helping them improve their test scores, and making them more competitive as prospective undergraduate science or engineering majors.

The program provides students with hands-on activities and role models. The sessions are conducted on selected Saturdays on the SIUE campus.



James F. Brown of East St. Louis, a senior in the SIUE School of Engineering, helps a student build an electronic alarm as part of the MESA program at SIUE.

Check out the School of Engineering's Giving Opportunities page at www.siu.edu/ENGINEER/eng_giving_greetings.html

GREEN ROOF EXPERIMENT (CONTINUED FROM PAGE 1)



The research project is coordinated by **Kelly Luckett**, president of Green Roof Blocks™ and is directed by **Dr. William Ratzlaff**, SIUE Environmental Sciences Program. Also involved are **Dr. Susan Morgan**, Dept. of Civil Engineering, and **Dr. Terry Yan**, Dept. of Mechanical

Engineering.

Green roofs use vegetation to help reduce energy consumption, storm water runoff, and increase the life of roof materials. In addition to different growing mediums, three different plant species and fertilizer applications will be evaluated.

Green roofs use vegetation to help reduce energy consumption, storm water runoff, and increase the life of roof materials.

AWARDS (CONTINUED FROM PAGE 2)

Engineering, Investigation into the Expected Angle of Lean of a Bicyclist Traversing a Horizontal Curve, with mentor **Greg Luttrell**, assistant professor of Civil Engineering; **David Wiatroluk**, Civil Engineering, Determining the Relationship Between Bicycle Tire Friction Factors and Surface Debris, with mentor **Greg Luttrell**, assistant professor of Civil Engineering.

Each award recipient works for two consecutive semes-

ters on the project and receives a budget of up to \$800, plus a personal monetary award, tuition assistance and graduation with honors. For more information on the programs through the Office of Undergraduate Assessment and Program Review, call (618) 650-2640.



We're on the web:
www.siue.edu/ENGINEER/

*Educating tomorrow's engineers,
computer science engineers, and
construction managers today.*

The mission of the School of Engineering is to provide excellent innovative engineering, computer science, and construction education to citizens of Illinois, the greater St. Louis metropolitan area, and representatives of the global community. The School focuses on strong undergraduate education and graduate programs that serve the needs of full-time students and employed professionals. The faculty conduct basic and applied research and outreach activities in partnership with others that contribute to technological advancement in our fields.

MESSAGE FROM THE ACTING DEAN



Bernard A. Waxman
Acting Dean

I'd like to take this opportunity to welcome you to the inaugural issue of the School of Engineering newsletter, *Details*. We hope that you find this issue interesting and that the regular publication of *Details* will keep you up-to-date with all the great things that are happening in Engineering at SIUE.

As you may know, the School of Engineering Dean for the last five and a half years, Paul Seaburg, retired last December. Since January, I have been serving as the Acting Dean. We have hired a new Dean, Dr. Hasan Sevim, who will be coming to SIUE on August 16. All of us are excited about Dean Sevim and his plans to build on our successes and to move us forward.

In this issue, you will learn about some of the exciting activities taking place within the School, for example, the Green Roof project taking place on one of the Engineering Building's roofs; the MESA Program for junior high kids; our progress on building a Formula Race Car and a new solar car, *Cougar Cruiser II*; and some of the research activities of our

students and faculty. All of this and much more is taking place within our School.

**Let us hear from you
so we can let other
alums know what
you are doing in this
newsletter!**

Email us at:
smacdou@siue.edu.