

COLLEGE OF SCIENCE, ENGINEERING AND TECHNOLOGY GOOD NEWS FOR FEBRUARY 2002

AUTOMOTIVE AND MANUFACTURING ENGINEERING TECHNOLOGY

Professor Kirk Ready presented preliminary research results for MSU's Ethanol-Diesel Research Project at the Ag-Expo in Morton, MN, on January 23, 2002 and in Willmar, MN, on January 28, 2002. The research is funded by a grant from the Minnesota Corn Research and Promotion Council. *Dr. Bruce Jones and six AET seniors* are also involved in the project, which includes fuel economy, emission, cold start, drive-ability and fuel testing of four Ethanol-Diesel fuel blends. The project will conclude this June.

BIOLOGICAL SCIENCES

Madsen, J.D. and Charles H. Welling. Eurasian watermilfoil (*Myriophyllum spicatum* L.). LakeLine, Spring 2002, in press.

Madsen, J.D. and Wendy Crowell. Curlyleaf pondweed (*Potamogeton crispus* L.) LakeLine, Spring 2002, in press.

Xiong, F.S., *Ruhland, C.T.* and T.A. Day. Effects of solar ultraviolet-B radiation on growth of *Colobanthus quitensis* at Palmer Station, Antarctica. Submitted to Global Change Biology.

Convey, P., Pugh, P.J.A., Jackson, C., Murray, A.W., *Ruhland, C.T.*, Xiong, F.S. and T.A. Day. Response of Antarctic terrestrial microarthropods to multifactorial climate manipulation over a four-year period. Submitted to Ecology.

Krenz, J.D., and P.A. Verrell. Integrity in the midst of sympatry: does sexual incompatibility facilitate the coexistence of metamorphic and paedomorphic mole salamanders? In Press. Journal of Zoology

Research grant awarded to *Krenz, J.D. & B.R. McMillan*. 2002. Estimating the distribution and abundance of wild turkey, *Meleagris gallopavo*, in southern Minnesota. Minnesota Department of Natural Resources. \$24,343.

COMPUTER AND INFORMATION SCIENCES

Dr. Mahbubur Rahman Syed, Professor, is a co-editor of the proceedings (ISBN: 1-56555-243-1) of the International Conference on Simulation and Multimedia in Engineering Education held during January 27-31, 2002 in San Antonio, Texas. The other editor of the proceedings is Prof. Marco Roccetti from the University of Bologna, Italy. The conference proceedings is published by the Society for Modelling and Simulation International (www.scs.org). *Dr. Syed* also attended the above conference and presented a paper on 'Secure Online Learning based on Mobile Agents' co-authored

by faculty from Nanyang Technological University, Singapore and IBM T J Research Center, NY. He was also invited to chair a session in the conference.

ELECTRICAL AND COMPUTER ENGINEERING AND TECHNOLOGY

Dr. Bill Hudson, Associate Professor, applied for and was awarded 25 licenses for AutoDesk Inventor (drawing pkg.).

Midwest Wireless has donated eight phones for Junior Design activities.

On February 1, a group of our students toured LSI Logic in Bloomington, MN. Interested students were able to take part in an E-mentoring program matching engineers with students.

The ECET Department has received a donation of six trolling motors from MinnKota, which will be used in Junior Design projects.

INTERIOR DESIGN AND CONSTRUCTION MANAGEMENT

Dr. Carl Egan, Director of IDCM, delivered a paper on "Internet Delivery Method of Education" at an international scientific conference sponsored by the University of Russian Academy of Education. The theme of the conference was "The National Doctrine of Education in Context of World Experience." It was held in Moscow from January 16-18, 2002. Dr. Egan was the only one to represent a U.S. university. Speakers/scientists from seven other countries participated.

Scott Fee, Assistant Professor in Construction Management, will be using Compaq IPAQ hand-held devices to have students in Computerized Scheduling and Estimating (IDCM 414) manage information via web-based applications, online information management platforms, and wireless hardware equipment. Students will also be exposed to simulations where they will be able to gather and input data they collect in the field, as well as receive just-in-time information that will help them estimate, order materials, or schedule. Funding is provided by a Congressional grant to MSU.

The JSTOR database provides web-based access to full text version of journal articles in the humanities, social sciences, and sciences. *Professor Scott Fee* will have students access JSTOR through the Ucompass Educator IMS platform to conduct original research for papers in Mechanical and Electrical Systems as well as other classes.

Grant opportunities were provided through Project JSTOR, "a regional grant project to strengthen digital library use and scholarly research, with funding provided by The Bush Foundation and the Andrew W. Mellon Foundation".

MATHEMATICS AND STATISTICS

Dr. Francis T. Hannick, Professor, will present a workshop on Hands-On Experience with Numerous Activities for the Elementary School Mathematics Curriculum at the

Southern Regional Conference of the National Council of Teachers of Mathematics in Oklahoma City on February 21.

Dr. Namyong Lee, Assistant Professor, received a travel grant for PIMS 6th Industrial Problem Workshop, which will be held at the University of British Columbia, Vancouver, Canada. The grant will cover the whole transportation and room/board for a week-long conference this summer. Dr. Lee will present a talk at the workshop in mathematical modeling and scientific computation.

We are also happy to have a visiting professor, Dr. Sunwoo from Konkuk University, Korea. Dr. Sunwoo will be here at this February, 2002 and will stay at MSU for a year to conduct a joint research with Dr. Lee on the approximation theory.

Dr. Kil S. Lee and Dr. Mary Ann Lee, Professors of Mathematics, were awarded an Eisenhower Grant in the amount of \$44,949 to support a Summer Institute in Mathematics for elementary school teachers.

MECHANICAL AND CIVIL ENGINEERING

Nick Ellenberger, a junior in the Department of Mechanical and Civil Engineering, was awarded a \$1,750 scholarship by the American Consulting Engineers Council of Minnesota for academic year 2002-2003.

PHYSICS AND ASTRONOMY

On Saturday, February 2, MSU hosted the Science Olympiad, a regional competition for high school students from our service area. The event consisted of teams from area high schools competing in various science-related events in order to have fun, learn science and hopefully advance to the state Science Olympiad contest. Dr. Ed Borchardt, Professor of Physics, was co-organizer of the event. This is the third year that MSU has hosted the Science Olympiad.