

**COLLEGE OF SCIENCE, ENGINEERING AND TECHNOLOGY
OCTOBER 2007**

GOOD NEWS

BIOLOGICAL SCIENCES

Day T.A., Zhang E.T. and C.T. **Ruhland**. (2007) Exposure to solar UV-B radiation accelerates mass and lignin loss of *Larrea tridentata* in the Sonoran Desert. *Plant Ecology*. 193: 185-194. (December)

The Beta Beta Beta (TriBeta) National Biological Honor Society has approved the establishment of a charter to the MSU Department of Biological Sciences. TriBeta is a society dedicated to improving the understanding and appreciation of biological study and extending boundaries of human knowledge through scientific research. A ceremony establishing the charter, as well as the induction of new members, will be on November 28. Forty-five undergraduates, four faculty members, and one administrator will become members. Dr. Marilyn Hart is the faculty advisor for the MSU TriBeta charter.

Dr. Marilyn Hart will present *Immunolocalization Studies in Murine Myocardium Defective in Attaching Thin Filaments to Z-lines* at the American Society of Cell Biology Annual Meeting, Dec. 1-5, 2007, Washington, DC.

Mahoney, Alison M. and R.R. Kowal. "Three new varieties of *Packera paupercula* (Asteraceae, Senecioneae) in midwestern and southeastern North America" was accepted for publication in *NOVON*. It will appear in volume 18, 2008.

ELECTRICAL AND COMPUTER ENGINEERING AND TECHNOLOGY

Dr. Qun Zhang submitted an NSF collaborative research proposal on Simulation Accuracy Control in Fiber Optic Communications with Dr. Imran Hayee from the University of Minnesota Duluth and Dr. Alan Willner (President, IEEE LEOS) from the University of Southern California. MSU is the lead institution.

Qun Zhang and Han-Way Huang, "Using Gaussian approximation for performance evaluation in optical DPSK systems", submitted to Optical Fiber Communication Conference (OFC) 2008

Drs. Bill Hudson and Vincent Winstead recently met with Prof. Mohan of the University of Minnesota to discuss the adoption of power systems/electronics/drives courses into the ECET department's curriculum.

Dr. Winstead recently submitted two abstracts for consideration for the annual ASEE (American Society for Engineering Education) conference in 2008.

Dr. Winstead also recently submitted two grant proposals for funding from MnDOT (Minnesota Department of Transportation). The first related to the development of a robotic message painting system and the second, a joint proposal with members of the St. Anthony Falls Laboratory (affiliated with the University of Minnesota), related to active monitoring of scour erosion. Each proposal requests roughly \$50,000.

INFORMATION SYSTEMS AND TECHNOLOGY

Dr. Christophe Veltsos attended TechnoForensics 2007, a three-day conference on computer forensics, digital evidence and e-discovery, held at the National Institute of Standards and Technology in Gaithersburg, MD. The conference is the leading gathering of forensic practitioners from law enforcement, industry and academia.

INTERIOR DESIGN AND CONSTRUCTION MANAGEMENT

The Construction Management Student Association raised over \$6,300 during the 6th Annual CMSA Golf Classic at North Links Golf Course on September 14, 2007.

Dr. Scott Fee presented a paper entitled "Sustainable Construction Practices: Contractors' Awareness and Participation" at the Royal Institution of Chartered Surveyors Construction Building Research (COBRA) International Conference in Atlanta on September 7, 2007.

Dr. Fee also presented a talk entitled "Eden Campus: Africa's First Green Business School" at the South Central College Global Connections Conference on September 28, 2007.

MATHEMATICS AND STATISTICS

Dr. Francis T. Hannick presented a workshop on Hands-On Experience With Numerous Activities For the Elementary Math Curriculum at the Fall Conference of the South Carolina Council of Teachers of Mathematics in Greenville, South Carolina on October 25, 2007.

Dr. In-Jae Kim gave a talk entitled "Trees with distinct eigenvalues for distinct diagonal entries" at the Mathematical Association of America-North Central Meeting hosted by Bemidji State University, MN from October 19 to October 20, 2007.

A paper entitled "Classification of trees each of whose associated acyclic matrices with distinct diagonal entries has distinct eigenvalues" by Dr. In-Jae Kim, has been accepted by Bulletin of the Korean Mathematical Society. The work of Dr. Kim on this joint paper with Dr. Shader from the University of Wyoming was in part supported by a Faculty Research Grant.

Dr. Gary Rockswold coauthored *Intermediate Algebra with Applications and Visualization, Third Edition*. This textbook is published by Addison-Wesley

Publishing Company, Boston. His coauthor, Terry Krieger, is a former MSU graduate student who currently teaches at Rochester Community College.

Dr. Rockswold gave the presentation *The Amazing Impact of Mathematics on Society* to over 200 mathematicians at the national AMATYC meeting in Minneapolis on November 2. An encore presentation was given on November 4. He has been invited to give this presentation at the Twentieth Annual International Conference on Technology in Collegiate Mathematics in San Antonio on March 7, 2008.

MECHANICAL AND CIVIL ENGINEERING

Dr. Aaron Budge was asked by the Minnesota Department of Transportation personnel to make a presentation at the 36th Annual Midwest Geotechnical Engineering Conference hosted by MN/DOT and sponsored by the Federal Highway Administration. The conference was held in Bloomington in late September. Representatives from Ohio, Michigan, Wisconsin, Iowa, Indiana, Missouri, South Dakota, Nebraska and Minnesota were involved. The presentation was entitled "Lessons Learned About Sample Disturbance on the I-15 Reconstruction Project."

PHYSICS AND ASTRONOMY

Dr. Russ Palma presented a paper entitled "Developing a Speaker Exchange Series between MSU Mankato and MAAPT Institutions" at the October 27 meeting of the Minnesota Area Association of Physics Teachers Conference at St. Cloud State University.

Dr. Paul Eskridge presented a research seminar to the Department of Physics & Astronomy at U.W. LaCrosse on Wednesday 10 October 2007. The title of the seminar was "Galaxy Evolution Up Close - Using Image Dissection to Study the Histories of Nearby Galaxies"

Dr. Eskridge had a paper accepted for publication in The Astronomical Journal. The paper citation is as follows: Eskridge, P.B., de Grijs, R., Anders, P., Windhorst, R.A., Mager, V.A., & Jansen, R.A., (2007) "Star Clusters in the Nearby Late-Type Galaxy NGC 1311," The Astronomical Journal. In press. (astro-ph/0710.3614).