

COLLEGE OF SCIENCE, ENGINEERING AND TECHNOLOGY
February 2008
GOOD NEWS

BIOLOGICAL SCIENCES

Dr. Brock McMillan, Professor, presented an invited seminar entitled, "Effects of a plant invasion on non-game wildlife" at Brigham Young University.

CHEMISTRY AND GEOLOGY

Drs. Mary Hadley and Jeff Pribyl, presented "Moving away from Lecturing-- Creating Student Centered Classrooms," at the Realizing Student Potential - ITeach Conference 2008, Minneapolis Community and Technical College, February 29, 2008.

Drs. Mary Hadley, Chemistry Professor, and Stewart Ross, Director of Center for Excellence in Teaching and Learning presented "From Lecture to Team-Based Learning: How to Energize and Improve Student Learning in Your Classes," at the Realizing Student Potential - ITeach Conference 2008, Minneapolis Community and Technical College, February 29, 2008.

COMPUTER SCIENCE

Dr. Furman Haddix, Assistant Professor, has authored a paper entitled "AN ORDER DEGREE ALTERNATOR FOR ARBITRARY TOPOLOGIES", which has been accepted for publication by *Parallel Processing Letters*, June 2008.

Manning, Anna M., **David J. Haglin** and John A. Keane, "A Recursive Search Algorithm for Statistical Disclosure Assessment," *Data Mining and Knowledge Discovery*, vol 16 no 2, pp. 165-196, 2008.

ELECTRICAL AND COMPUTER ENGINEERING AND TECHNOLOGY

Dr. Gale Allen, Associate Professor, has had two papers accepted for publication and presentation at the 2008 ASEE IL/IN Section Conference being held at Rose-Hulman Institute of Technology April 3-5, 2008. The titles of the papers are "Concept Learning Experiment in Electronics" and "DSP Communications Experiment".

Qun Zhang, C. Ma, and E. V. Keuren, "Confinement Analysis in Symmetric and Asymmetric Nanoscale Slab Slot Waveguides," submitted to OSA Topical Meetings: Integrated Photonics and Nanophotonics Research and Applications (IPNRA) 2008, under review.

C. Ma, **Qun Zhang**, and E. V. Keuren, "Modeling and confinement analysis of an asymmetric slab slot waveguide," submitted to OSA Optics Express, under review.

C. Ma, **Qun Zhang**, and E. V. Keuren, "Hybrid integration of conventional waveguide and slot waveguide," submitted to OSA (Optical Society of America) Optics Letters, under review.

Qun Zhang and M. Imran Hayee, "Symmetrized SSF scheme to control global simulation accuracy in fiber optic communication systems", IEEE Journal of Lightwave Technology, volume 26, issue 2, pp. 302-316, 2008

Dr. Qun Zhang, Assistant Professor, was awarded a 2008 Summer Research Dissemination Grant - Performance Analysis and Design of Raman Amplifier Assisted Optical Communication Systems with a fund of USD 5000.

INFORMATION SYSTEMS AND TECHNOLOGY

Dr. Christophe Veltsos, Assistant Professor, has successfully passed the exam portion to become a Certified Information Systems Auditor. The CISA is a globally accepted standard of achievement in information systems (IS) audit, control and security.

In March 2008, Dr. Christophe Veltsos qualified as a GIAC Certified Forensics Analyst (GCFA). This certification demonstrates that Dr. Veltsos has the knowledge, skills, and abilities to handle advanced incident handling scenarios, conduct formal incident investigations, and carry out forensic investigation of networks and hosts.

MATHEMATICS AND STATISTICS

A paper entitled "On Fiedler- and Parter-vertices of acyclic matrices" by Dr. In-Jae Kim, Assistant Professor, has been accepted for publication in the *Journal of Linear Algebra and its Applications*. This joint paper with Dr. Shader, at the University of Wyoming, is available on the website of the journal. (Doi: 10.1016/j.laa.2007.12.022).

Dr. Pavel Kitsul, Professor, is invited to visit Italy in May - July 2008 to deliver a course on Stochastic Processes at the Ph.D. school of University of Padua, one of the oldest universities in Europe.

PHYSICS AND ASTRONOMY

Dr. Hai-Sheng Wu, Professor, was invited to give a talk at the 2008 MnSTA Chemistry/Physics Conference at the Science Museum of Minnesota in St. Paul on Friday, February 22, 2008. The title of the talk was "Recent Progress on Thin Film Solar Cells".

CSET

We are pleased to announce a generous gift of \$250,000 from the Minnesota Corn Growers/Corn Research and Promotion Council, Shakopee, MN for the new Automotive Engineering Emissions Laboratory.

Fagen Engineering of Granite Falls, MN has recently given our college a generous gift for the new Automotive Engineering Emissions Laboratory.

The annual Rube Goldberg Competition took place on Friday, February 29, here at the MSU Ballroom. Thirty-five teams of enthusiastic students from sixteen different high schools in southern Minnesota and northern Iowa attended this event which asks the students to design and build a complicated machine to perform a simple task. This year the task was to have a "frog" leap over another "frog" and land on a lily pad. All participants received a T-shirt commemorating the event. The five finalist teams each received a plaque. The winner of the event was a team from Maple River High School.