

#### 4/9/09 -- Engineering Faculty Receive Awards

Four faculty members of the UND School of Engineering and Mines were selected to receive the first North Dakota Spirit Faculty Achievement Awards, which have been established by the University of North Dakota Foundation to recognize significant contributions by faculty in teaching, research, and service.

Joseph Hartman, Associate Professor, Geology and Geological Engineering, Darrin Muggli, Associate Professor, Chemical Engineering, Richard Schultz, Chair, Electrical Engineering, and Zhengwen "Zane" Zeng; Assistant Professor of Geology and Geological Engineering were presented the \$2000 awards at the annual Founders Day Banquet held at UND.



"The four faculty members selected for the ND Spirit Award this year are world class researchers who demonstrate an absolute commitment to excellence in teaching, said Dr. Hesham El-Rewini, Dean of the School of Engineering and Mines. "

Dr. Muggli's research includes a current NSF project in which TiO<sub>2</sub> nanotubes are synthesized to effectively destroy chemical warfare agents using UV irradiation from sources such as the sun. He also collaborates extensively with the SUNRISE research group's efforts to produce jet fuel and other products from crop oils. Dr. Muggli has received the UND Foundation/Lydia and Arthur Saiki Prize for Individual Excellence in Teaching (2007) and was voted the School of Engineering and Mines Outstanding Professor of the Year (2007).

Dr. Hartman's has diverse interests as the Department of Geology and Geological Engineering's (GGE's) paleontologist, and he brings his broad-ranging knowledge, perspectives, and energy to his classroom, graduate students, research interests and collaborators, and service activities. His students have projects concerning fossils and global and regional topics in the Williston Basin (North and South Dakota and Montana), Alberta, and India and have traveled with him around the country, Europe, and India for conferences and research. Hartman is a freshwater and terrestrial molluscan paleontologist but works routinely with other fossil groups and geologic problems in rocks of the late Mesozoic and early Cenozoic. Service to GGE, UND, and the public comes in the form of faculty advising the Association of UND Geologists (AUG) and Sigma Gamma Epsilon (SGE BZ) as well as committee work, serving as SGID counselor and fossil identifier, and assorted other endeavors.

Since joining UND in Fall 2005, Dr. Zeng's major accomplishments include building a petroleum research lab and an externally funded research program, supervising seven research projects, including a one million dollar project from US Dept of Energy, and serving as a co-principal investigator and founding deputy director of UND's Petroleum Research, Education, and Entrepreneurship Center (PREEC), a \$3 million dollar ND Center of Excellence project.

Dr. Schultz's teaching and research interests are in aerospace payload and sensor development, digital signal and image processing, embedded control systems, student-generated intellectual property, and technology entrepreneurship. Dr. Schultz is currently involved in the Unmanned Aircraft Systems (UAS) Center of Excellence at the University of North Dakota, an interdisciplinary research center that includes the John D. Odegard School of Aerospace Sciences, the School of Engineering & Mines, the College of Nursing, and the Department of Psychology. Within this center, Dr. Schultz helps supervise the design of unmanned aircraft system payloads and sensors, conducts research on the enhancement of digital surveillance video for automatic target recognition and tracking, and guides the development of sense and avoid technologies for unmanned aircraft. He has received grants from the Defense EPSCoR program, from the Department of Defense, Joint UAS Center of Excellence at Creech Air Force Base in Nevada, ND Department of Commerce, and the National Science Foundation.

Photo caption from left to right: Darrin Muggli, Richard Schultz, Hesham El-Rewini, Joseph Hartman, Zhengwen "Zane" Zeng