

Geological Engineering Update

By **Tuncer B. Edil**

Chair, Geological Engineering

Major changes are continuing to occur in the GLE faculty. Two new assistant professors joined the program on the engineering side. James Schneider from the Department of Civil and Environmental Engineering is an expert on foundation engineering and geotechnical subsurface characterization/in situ testing. He received his Ph.D. from the University of Western Australia. He will be teaching some of our core courses in the GLE curriculum. Jim Tinjum from the Department of Engineering Professional Development is an expert on geoenvironmental engineering and remediation of contaminated sites/waste materials. He will be offering continuing education courses relating to geo engineering. Kurt Feigl and Harold Tobin from G&G also joined the program last year and are showing great interest. We are pleased having these new faculty but still have a lack of senior faculty on the engineering side to provide leadership. GLE was given permission to search and screen a senior faculty member by Dean Peercy of the College of Engineering. However, just before we started the interviews of the applicants on the short list, he imposed a hiring freeze in view of the fiscal crisis. The implications of the fiscal crisis are yet unknown for the university and for GLE but of concern this year.

GLE enrollments dropped markedly in recent

years following the trends in other engineering branches and earth sciences. Some engineering branches such as civil engineering have recently rebounded from low enrollments. GLE enrollments show a lag but started to show signs of going up. For instance, the enrollment in GLE 171, Introduction to GLE, has increased even more this year nearly reaching the old levels. The job market for graduates in GLE remains at an all-time high, which reflects the strong nationwide demand for engineers (and the shortage of available engineers). Graduates have been receiving multiple offers with very competitive salaries. The dual GLE-Geology degrees that our undergraduates obtain also are extremely popular with employers.

Our graduate program remains strong and we have been able to add more students this year. Funding is strong but finding high quality applicants has been a problem for the last several years to fill all the positions. The trend seems to be changing as we also have a good crop of applicants this year.

Lynn Maertz who has been Program Assistant for GLE for a number of years retired. Most of her responsibilities were given to other staff in a new organizational scheme. We have Ellen Siebers, a part-time support person with the remaining day-to-day activities.

GLE would like to hear from you! Please let us know what is new in your life by emailing me at edil@enr.wisc.edu. ●

Weeks Lectures and Speakers of Opportunity in 2008

January 24, 25 – Bruce Simonson – Oberlin College – Sedimentology of banded and granular iron formations, and Precambrian spherule layers: unique archives of asteroid impact and early Earth history

February 14, 15 – Linda Hinnov – The Johns Hopkins University – The Astronomical Signal in the Green River Formation, and Assembling The Astronomical Time Scale for Earth History

February 22 – David Wesolowski – Oak Ridge National Laboratory – Linking Molecular and Macroscopic Properties of the Mineral-Solution Interface

February 29 – Gene Hunt – The Smithsonian Institution – Climate change and body size evolution in deep-sea ostracodes

March 6, 7 – Francesca Smith – Northwestern – Hydrologic and taxonomic controls on leaf wax lipid hydrogen isotope ratios, and Ecological effects of past global warming recorded in plant lipid carbon isotope ratios

March 28 – Ira Pasternack – EnCana Oil & Gas (USA) Inc. – Upper Cretaceous Tight-Gas Reservoirs of the Greater Green River Basin, Wyoming and Colorado, and, Upper Cretaceous Tight-Gas Reservoirs and Source Rocks of the Greater Green River Basin, Wyoming and Colorado

April 4 – Martin Saar – University of Minnesota – How small-scale features affect large-scale fluid flow from magma to karst: Is the total greater than the sum of its parts?

April 11 – Laurie Brown – University of Massachusetts – Earth Analogs for Martian Magnetic Anomalies

April 18 – Christopher Kim – Chapman University – Speciation of mercury using synchrotron radiation, and, Particle size effects on heavy metal concentration, distribution and availability in mine tailings

May 2 – Clark Johnson – University of Wisconsin-Madison – What is Astrobiology?

May 9 – Sean C. Solomon – DTM/Carnegie Institution of Washington – Exploring Mercury by spacecraft: Seeking clues to the formation and evolution of the inner planets

September 5 – Phil Brown, Bob Dott, Dave Mickelson – University of Wisconsin-Madison – The Geology of Wisconsin: An Overview

September 12 – Patrick McLaughlin – Wisconsin State Survey

September 19 – Henry Pollack – University of Michigan – Earth's Changing Climate: View from Underground

October 10 – Glenn Spinelli – New Mexico Tech – Sediment Strength and Deformation Affected by Silica Cementation in Nankai Trough, and Effects of Fluid Circulation in Subducting Crust on Seismogenic Zone Temperatures

October 17 – John Tarduno – University of Rochester – Motion of the Hawaiian hotspot

October 24 – Donald Mkhonto – University of Wisconsin-Madison – Modeling organic-mediated calcite morphology control as potential biosignatures

October 31 – Rick Law – VPI – Classic mylonites from the Moine thrust zone: strain, vorticity of flow and influence of recrystallization on crystal fabric development, and, Mountain building in the High Himalaya

November 7 – Peter Mozely – New Mexico Tech – Stable isotopic composition of carbonate cements in clastic marine sediment, and, Importance of microbes in calcite cementation of clastic sediment

November 14 – Steve Wojtal – Oberlin College – Near surface transpressional deformation along the southern San Andreas fault system

November 21 – Joe Licciardi – University of New Hampshire – Early Holocene and Little Ice Age moraines in the southern Peruvian Andes, and, New constraints on the glacial and volcanic history of Iceland derived from cosmogenic ³He exposure ages

December 5 – David Deamer – UC Santa Cruz – Procell evolution in the prebiotic environment and modern geothermal analogues

December 12 – Stephen Hasiotis – University of Kansas – Traces of life on land: Using ichnology to understand the diversity, distribution, and evolution of soil biota in the continental realm



Grad student Jennie Cook with her mother, Sally Cook, at the 2008 Spring Banquet where Jennie was awarded the Kenneth and Linda Ciriacks Distinguished Graduate Fellowship.