GEOBULLETIN
SEP 11TH, 2009

Geobulletin is distributed weekly, by E-mail. Contributions are requested! Anything and everything (well almost) that you want to see in print. If you have a news item, a request, an announcement etc. email it to geodept@geology.wisc.edu. or leave it at the reception desk, Room 236 by noon on Mondays.

WEEKS LECTURE SCHEDULE DATES

Fall 2009

Sept. 11 (F) - Ed Brook (SPONSOR: Anders)

PROF. ED BROOK
DEPT. OF GEOSCIENCES
OREGON STATE UNIVERSITY
Friday, Sep 11th, 3:30 PM, Room 140, Weeks Hall

Past Gas: The ice core record of atmospheric methane and climate

Methane is a powerful greenhouse gas, and methane levels in the atmosphere have increased dramatically since the industrial revolution. Direct measurements of atmospheric methane extend back to the 1950's at best, so we rely on the ice core record for a longer view. That longer view reveals surprising variability on a variety of time scales. Abrupt variations in methane during ice ages have provoked argument about, and investigation of, the role of methane hydrates in abrupt climate change, and concern about stability of the hydrate reservoir. They have also stimulated thinking about abrupt changes in the global hydrological cycle. Methane variations during interglacial periods are equally interesting, and the subject of recent debates about the role of early humans in altering the atmospheric composition and climate. This presentation will review the current state of knowledge about these issues from the ice core perspective and discuss ongoing and future work.

Sept. 14 (M) - Ed Medley (SPONSOR: Herb)

DR. ED MEDLEY
2009 Richard H. Jahns Distinguished Lecturer in Engineering Geology

SPECIAL LECTURE
Monday, Sep 14th, Noon, Location (2305 Engineering hall)

The Least You Should Know About Characterizing Geological Chaos

Bimrocks (block-in-matrix rocks) are geologically complex mixtures of rocks and soils, such as melanges, fault rocks, and weathered rocks. Bimrocks present major challenges to geopractitioners because successful and economical characterizations of rock/soil mixtures are frustrated by their geological, spatial and mechanical variability. This Lecture presents broad concepts on characterization, design and construction in bimrocks that have been provocative, yet useful, to geopractitioners around the world.

Sept. 14, Monday, 3:30 p.m., AB20 Weeks Hall

The Comforts of Ignorance and the Benefits of Arrogance - Lessons of the Failure Kind for the Geopractitioner

Ignorance and arrogance are all too common in the design professions. It is comforting to not know what one does not know.
And, there are benefits to being arrogant: why waste time on having a colleague check your work if you know what you are doing? Why go through the pain of further education or professional development?
Why should engineering geologists talk to geotechnical engineers (and vice versa)? After all: "I know enough geowhatever to get by." But ignorance leads to blissful mistakes and arrogance results in occasional spectacular, famous and expensive failures. In this lecture a few lessons are offered, particularly to the engineering geologist/geotechnical engineer/environmental scientist who thinks he/she knows it all.

Sept. 18 (F) - Mark Zoback (SPONSOR: Chuck)
Sept. 25 (NOON F) Ian Dalziel (SPONSOR: Basil)
Sept. 25 (3:30 F) - Stephanie Prejean (SPONSOR : Cliff)
Oct. 2 (F) - Charlie Bacon (SPONSOR: Clark)
Oct. 9 (F) - Russ Vreeland (SPONSOR: Eric)
Oct. 16 (F) - OPEN
Oct. 23 (F) - Chris Marone (SPONSOR: Harold)
Oct. 30 (F) - Lorraine Lisiecki (SPONSOR: Anders)
Nov. 6 (F) - Scott Tyler (SPONSOR: Herb)
Nov. 13 (F) - Rob DeConto (SPONSOR: Anders)
Nov. 20 (F) - OPEN
Nov. 27 (F) - THANKSGIVING
Dec. 4 (F) - OPEN
Dec. 11 - Prof. Charles Geiger of Kiel University

JOB OPENINGS

- **Part-time Undergraduate Research Assistant** - Planetary Science Institute and University of Wisconsin
- **Tenure-Track Assistant Professor - Sedimentary Geology- Ilinois State University**

JOB OPENINGS

Part-time Undergraduate Research Assistant

Dr. Kimberly Kuhlman and Prof. Alan Carroll

Planetary Science Institute and University of Wisconsin

kim@psi.edu or carroll@geology.wisc.edu

We are looking for a student to assist with the characterization of particle size, shape and surface textures of terrestrial analog sediments using optical microscopy in preparation for the analysis of images returned from the MArs HandLens Imager (MAHLI) on the Mars Science Laboratory (MSL). The size and shape distributions of regolith particles contain a wealth of information concerning the history of geological processes and climate of Mars, such as wind and water activity that is expressed in sediment

transport and soil processes such as cementation, percolation and chemical weathering. Size, shape and textural information will also shed light on the provenance of sediments and can potentially provide clues to clast composition, particularly when data are used in conjunction with data obtained using other techniques. The successful student will characterize particle size, shape and surface textures of terrestrial analog sediments using high-resolution optical microscopy and the image analysis software packages, ImagePro Plus and ImageJ. The particle descriptions will then be analyzed for grain size and shape distributions using a variety of well-known numerical techniques, including Fourier shape analysis.

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Tenure-Track Assistant Professor-Sedimentary Geology-Ilinois State University

The Department of Geography-Geology at Illinois State University seeks applications for a tenure-track position at the rank of **Assistant Professor** with expertise in **Sedimentary Geology**. The preferred starting date is August 16, 2010. A Ph.D. in Geology or closely related field is preferred, but ABD candidates who will finish the dissertation before the time of appointment will be considered.

The Department seeks candidates with a strong potential for scholarly research, publication, and teaching in Sedimentary Geology. The successful candidate will be an integrated scholar with a strong commitment to teaching at all levels including coursework in general education, intermediate courses in Sedimentary Geology, and advance courses in his/her area of expertise (e.g. exploration geophysics, basin analysis, etc.). The ability to mentor students in our MS program in Hydrogeology and to participate in the instruction of our summer field geology course is desirable. Research experience with emphasis in Paleozoic cratonic strata or Pleistocene glacial sediments is desirable. The potential for a significant startup package exists.

Illinois State University is a research-intensive university with an annual enrollment of approximately 20,000 students. The university is located in the Bloomington-Normal metropolitan area of central Illinois with a population of approximately 150,000. The Department of Geography-Geology offers B.S./B.A. degrees in Geography, a B.S. degree in Geology, and an M.S.degree in Hydrogeology. Please send applications to Chair, Sedimentary Geology Search Committee, Department of Geography-Geology, Illinois State University, Normal, Illinois, 61790-4400, USA. Applications should include a cover letter, curriculum vita, statements outlining current and future research interests and teaching philosophy, three letters of recommendation, and all college and university transcripts. All materials must be received on or before **December 1, 2009**. No e-mail applications will be accepted. Inquiries about the application process should be directed to Dr. David Malone (dhmalon@ilstu.edu, 309-438-7643). Additional information about the department and the community can be found at www.geo.ilstu.edu. Filling this position is contingent upon budgetary approval.

Illinois State University is an Affirmative Action University encouraging diversity.

Undergrad looking for part-time lab assistant type job.
Please contact tietge@wisc.edu or 218-464-3473

~ ~ ~ ~ ~ ~ ~ ~ HAVE A GREAT WEEK END! ~ ~ ~ ~ ~ ~ ~ ~