

# ***GEOBULLETIN***

## ***November 23, 2007***

**FALL 2007 LECTURE SCHEDULE** ---- All lectures (unless otherwise noted) are held on **Fridays at 3:30 PM in AB20 (Laudon Lecture Hall)**. Coffee & cookies are served in the lobby starting at 3:15 PM.

November 30 --- Jim Butler --- Kansas Geological Survey ----- 2007 Darcy Lecturer

### **SPRING 2008 WEEKS LECTURE SCHEDULE**

February 1 ----- Kate Freeman ----Penn State -----

February 8 ----- Neil Shuban ---- University of Chicago -----

February 15 --- Linda Hinnov ---- The Johns Hopkins University -----

February 22 ---- David Wesolowski ----- ORNL -----

February 29 ---- Gene Hunt -----Smithsonian -----

March 7th ----- Francesca Smith ----- Northwestern ----

March 28 ----- Carel J. van Oss ----- SUNY-Buffalo ----

April 4 ----- Martin Saar ----- University of Minnesota -----

April 11 ----- Laurie Brown ---- University of Massachusetts ----

May 2 ----- Board of Visitors' Meeting ---- date reserved ----

May 9 ----- Sean C. Solomon ----- DTM/Carnegie Institution of Washington -----

### **GEOCLUB**

Bake sale remnants remain in the office for your eating pleasure. Needless to say the project was very successful.

### **POSITIONS AVAILABLE ---- FURTHER DETAILS EITHER ON THE WEB OR IN THE OFFICE**

**Pennsylvania State University** ---- The Departments of Energy and Mineral Engineering (EME) and Geosciences seek to hire two joint tenure-track Assistant Professors in the area of Geologic Carbon Sequestration with a preferred starting date of July 1, 2008. These positions are part of a large initiative to hire 24 new faculty members at the University to advance energy-related research and education activities under the umbrella of the Penn State Institutes of Energy and the Environment (PSIEE). In particular, seeking candidates whose research falls into one or more of the challenging areas of engineering and geoscience associated with the introduction and fates of carbon-bearing fluids in the subsurface environment, as addressed in the following areas:

**Basin Analysis and Modeling.** The development of process models for the stratal architecture, sedimentary facies, and stratigraphic stacking patterns is needed to define and characterize sequestration targets. Areas of expertise include sequence stratigraphy, integration of geological, geochemical and geophysical data to define depositional sequences and facies, and integrated reservoir studies.

**Formation Characterization and Imaging.** Three-dimensional seismic data analysis through time (4D) allows the unraveling of subsurface structure and the temporal evolution of reservoir fluids,

stress state, and flow properties such as fracture density, porosity and permeability distribution. Advances in 4D formation imaging are needed for monitoring and performance assessment of CO2 storage.

Fluid-Rock Interactions. Effective sequestration will be promoted by characterization and modeling fluid trap and seal evolution, and process-based understanding of the transmission, transformation, and trapping of fluid and solid components within the subsurface. Experimental and modeling expertise may include formation evaluation, petrophysics, fluid mechanics and kinetics applied to water-rock-hydrocarbon-CO2 mixtures.

Outstanding candidates who creatively apply theoretical, observational, and/or experimental approaches are encouraged to apply. Applicants should have a doctoral degree in petroleum engineering or geosciences and demonstrate a distinguished record of scholarship and potential for developing a vigorous externally funded research program at Penn State. Review of applications will begin February 1st, 2008 and will continue until a suitable candidate is found. Applications should include a complete vita, a statement outlining teaching and research interests, and names and addresses of four or more references. Send application materials to: Joint Search-Committee Chair, 503 Deike Building, The Pennsylvania State University, University Park, PA 16802. Members of the two academic departments will be at the Fall AGU meeting. Please e-mail Teresa Craig (<<mailto:tcraig@geosc.psu.edu>>tcraig@geosc.psu.edu) to schedule a meeting. For more information on the Departments of EME and Geosciences, PSIEE and the Penn State energy initiative, go to <http://www.geosc.psu.edu> <http://www.eme.psu.edu>, <http://www.geosc.psu.edu>, and <http://www.psiee.psu.edu> ----- <http://www.psiee.psu.edu>, <http://www.psiee.psu.edu/publications/EnergyReport.pdf>

**Cornell** ----- Postdoctoral Position. The Department of Earth and Atmospheric Sciences seeks a postdoctoral research associate to conduct research on active deformation related to the earthquake cycle, magma movements, and/or mountain building. Specific tasks include the analysis of space geodetic data (InSAR and GPS) and numerical modeling focused on the central Andes with Dr. Pritchard and/or the Pacific Northwest with Dr. Lohman. A completed Ph.D. in geophysics or a related field is required. Will begin reviewing applications on Dec. 15, 2007, and anticipate a start date between Jan. and Sept. 2008. The position is for one year and is renewable, contingent on funding and performance. Please send a curriculum vitae, publication list, statement of research interests, and the names of at least three professional references to: Matt Pritchard, Snee Hall, Cornell University, Ithaca, NY, 14853 or [mp337@cornell.edu](mailto:mp337@cornell.edu).

**The University of North Carolina at Pembroke** invites applications for a tenure-track position in the Department of Geology & Geography at the Assistant Professor level beginning August 15, 2008. Seek applicants in any area of the environmental geosciences. Secondary expertise in GIS is desirable. The Ph.D. is required at the time of appointment. Visit the website ([www.uncp.edu/geo](http://www.uncp.edu/geo)). Applications should include curriculum vitae, cover letter, statements of teaching philosophy and research interests (1 page each), and contact information for three references (address, e-mail, telephone) to Search Committee, Attn: Dr. Martin B. Farley, Department of Geology & Geography, University of North Carolina at Pembroke, Pembroke, NC 28372; [martin.farley@uncp.edu](mailto:martin.farley@uncp.edu). Review of applications will start on December 5, 2007 and will continue until the position is filled.

**University of Houston** ----- The Department of Geosciences is seeking applications to fill four tenure-track faculty positions and one visiting faculty position.

1). **Professor of Geophysics, Applied Seismology** ----- Will need an international reputation and strong record of research excellence to fill a position in Applied Seismology at the Associate or

Full professor level. Applicants should have extensive practical experience in the application of seismic methods, seismic processing and interpretation, a broad background in the geophysical sciences, and a distinguished national/international reputation for innovative applied and basic research in reflection seismology.

2). **Assistant/Associate Professor of Geology, Stable Isotope Geochemistry**

Tenure track faculty position at the Assistant or Associate Professor level. The applicant's specific research interests can include but are not limited to global climate change, paleopedology, paleoceanography, paleoclimatology, paleothermometry, chemostratigraphy, biogeochemistry and limnology. Particularly interested in applicants who can provide a bridge between newly expanded Atmospheric Science Program and long-established Geology and Geophysics programs.

3). **Assistant Professor of Geology or Geophysics, Geodynamics**

Tenure-track position at the assistant professor level in the broad field of Geodynamics. Seek applicants who address fundamental problems in Geology and Geophysics. Research interests may include the geodynamics of the mantle, crust, and surficial processes. Graduate teaching responsibilities may include graduate and undergraduate courses with a geodynamic focus including tectonics, basin analysis, geophysics or other areas of the candidate's specialty.

4). **Assistant/Associate Professor of Atmospheric Science, Mesoscale or Synoptic Meteorology**

---- Tenure-track faculty position in mesoscale or synoptic meteorology with interests in the tropical, coastal or urban meteorology. Either an experimentalist with a strong background in atmospheric observations or a numerical modeler experienced with regional climate or forecast modeling is desired. A Ph.D. degree in atmospheric science is required. The position is expected to be filled at the Assistant Professor level, but outstanding candidates at the Associate Professor level will also be considered. IMAQS is an atmospheric science research group composed of interdisciplinary researchers committed to perform measurement and modeling studies of the complex issues of air quality and climate change <http://www.imaqs.uh.edu>.

5). **Visiting Assistant Professor of Geology**

Seek a Visiting Assistant Professor of Geology to manage and co-direct the Geosciences Learning Center at the University of Houston. This position is renewable yearly for a period of up to three years based on satisfactory performance and annual personnel reviews. Responsibilities include managing the Learning Center, which is a tutoring and learning enhancement center for introductory geology classes in Physical Geology, Earth Systems, Historical Geology and Mineralogy. Duties also require coordinating graduate student teaching assistants and introductory labs, as well as teaching one physical geology lecture section per year. In addition, candidates are expected to carry on research in their field, seek external funding and maintain a strong record of peer-reviewed publication. Areas of interest that are broadly complimentary to current departmental research emphases in geochemistry/petrology, remote sensing /geoinformatics, sedimentology/paleontology, structure/tectonics and seismology are encouraged.

**Applications**

The successful candidates for these positions must demonstrate strong potential to maintain vigorous research programs, to sustain strong records of peer-reviewed publication and external funding, to advise and mentor undergraduate and graduate students, and contribute to the teaching mission of the Department at all levels. Candidates for all positions should submit: 1) a letter of application including statements of teaching and research interests, 2) a curriculum vitae, 3) three letters of references (letters must be received before the applications will be considered), and 4) an official Ph.D. graduate school transcript showing date of degree to:

Dr. John F. Casey, Chair,  
Department of Geosciences  
College of Natural Sciences and Mathematics  
Room 312 Science Research 1

University of Houston  
4800 Calhoun Rd.  
Houston, Texas 77204-5503.

Signed reference letters may be submitted by referees as attached files via email to [kbullick@uh.edu](mailto:kbullick@uh.edu). Further information can be obtained by viewing the departmental web page at <http://www.geosc.uh.edu/> or by calling the Department at (713) 743-3399. Candidate evaluations will begin January 15, 2008 and continue until the positions are filled. Expect to fill the positions by Sept. 1, 2008.

**Minnesota Department of Natural Resources** has a job posting of interest at:  
<https://statejobs.doer.state.mn.us/JobPosting/1997a623243085e13065e5c27fc4bb72/View>

Contact information as follows: Mineral Potential Section  
Division of Lands and Minerals  
Minnesota Department of Natural Resources  
Box 45, 500 Lafayette Road  
St. Paul, MN 55155-4045  
phone 651.259.5405  
fax 651.296.5939  
e-mail [dennis.martin@dnr.state.mn.us](mailto:dennis.martin@dnr.state.mn.us)

**The Johnson Company** ----- an environmental consulting company located in Montpelier, Vermont. Currently, the company is looking for a:

- Field technician: relevant B.S. or Associates degree, no or some relevant experience
- Entry level environmental engineer or scientist: relevant B.S. or M.S. degree, no or some relevant experience
- Mid-level environmental engineer or scientist: relevant B.S. or M.S. degree, 5 - 10 years of relevant experience

For more information about the Johnson Company projects visit: <http://www.johnsonco.com>

If interested, please send resume and/or contact information to: [nbr@jcomail.com](mailto:nbr@jcomail.com) Contact person: Noelia Báez Rodríguez, Staff Scientist ----- The Johnson Company ---- 100 State Street, Suite 600 ----- Montpelier, VT 05602 ---- ph: (802) 229-4600 ---- fax: (802) 229-5876 ----- email: [nbaez@jcomail.com](mailto:nbaez@jcomail.com) or [www.johnsonco.com](http://www.johnsonco.com)