Weeks Lecture

Speaker list - Fall 2011

<table>
<thead>
<tr>
<th>Date</th>
<th>Speaker</th>
<th>Faculty Sponsor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thursday, Oct 6, 2011: Noon</td>
<td>Steve Silliman, Notre Dame Darcy Lecture (Host: Bahr)</td>
<td></td>
</tr>
</tbody>
</table>

"National Ground Water Association 2011 Darcy Distinguished Lecture"

**DR. STEVE SILLIMAN**

University of Notre Dame

****All the lectures are open to Everyone****

**Thursday, Oct 6th, 2011, 8-9 AM, Weeks Hall – 140**

Characterization of a Complex, Sole-Source Aquifer System in Benin, West Africa

The Godomey wellfield is the sole source of freshwater for Cotonou, Benin. The Cotonou/Calavi area is the largest population center in Benin, with an estimated population of between 1.5 and 2 million people. Located
directly on the Atlantic coast, this population center is also bordered by the southern and western shores of a
large, shallow lake. Groundwater wells serving this population are located about 6 km north of the Atlantic
coast and as close as 1 km to the western shore of the lake. With most production wells located within
partially confined portions of this complex aquifer system, this water resource is threatened by contamination
from saltwater intrusion (both from the lake and the ocean) and anthropogenic activities.

Collaboration among scientists and students from the United States and Benin has allowed development of
increasing insight into the hydrogeology of this important coastal aquifer system. Research efforts discussed
in this presentation include numerical modeling, hydraulic testing, water quality characterization, and
electrical resistivity surveys. Discussion of a number of technical and social/cultural issues encountered
during this research effort illustrates the value of close cooperation with in-country collaborators, including
those from both the technical and social science disciplines.

Thursday, Oct 6th, 2011, 12:05 - 1 PM, Weeks Hall –140

Development of Reliable Hydrologic Data Sets in Difficult Environments: Case Studies
from Benin, West Africa

Reliable hydrologic data are critical for sound hydrogeologic analyses and for the subsequent policy decisions
based on those analyses. However, obtaining such data sets in the face of limited budgets and limited access to
field sites can be a daunting challenge, particularly in rural regions in developing countries. Experience in
Benin demonstrates that such challenges are best met through close collaboration with a number of in-
country entities (universities, local populations, government agencies, and NGOs) and integration of
hydrologic expertise with political, social, and cultural considerations.

This presentation focuses on a series of case studies from Benin directed at developing data sets involving: (1)
regional water quality, (2) temporal variation in nitrate contamination in rural groundwater wells, and (3)
temporal variation in hydraulics and water quality related to saltwater intrusion as well as anthropogenic
contamination in coastal areas. This presentation demonstrates both the value of statistical analysis in the
design and implementation of sampling plans in these difficult environments, as well as the power of close
collaboration with in-country colleagues and local populations.

Friday, Oct 7, 2011:
"Eight hundred million years that changed the world: Contingent drivers of environmental change across the Archean-Proterozoic transition"

Friday, Oct 14, 2011:
Terry Plank, Columbia University/LDEO (Host: Singer)

Friday, Oct 21, 2011:
Local Speaker

Friday, Oct 28, 2011:
Chongxuan Liu, Pacific Northwest National Lab (Host: Huifang Xu)

Friday, Nov 4, 2011:
Steve Wesnousky, U.Nevada-Reno Tectonics Institute (Host: DeMets)

Friday, Nov 11, 2011:
Greg Hirth, Brown University (Host: Bonamici)

Friday, Nov 18, 2011:
Sumit Chakraborty, MSA (Host: Valley)
Friday, Dec 2, 2011:
Jessica Blois, UW-Madison (Host: Peters)

Friday, Jan 27, 2011:
Department Welcome Back

Friday, Feb 03, 2011:
Peter Wilf, Penn State (Host: Geary/Peters)

Friday, Feb 10, 2011:
Greg Waite, Michigan Tech (Host: DeMets)

Friday, Feb 17, 2011:
Margaret Fraiser, UW-Milwaukee (Host: Peters)

Friday, Mar 9, 2011:
Aradhna Tripati, UCLA (Host: Carlson)

Friday, Mar 25, 2011:
Marin Clark, Univ Michigan (Host: Goodwin)

Friday, Apr 13, 2011:
BOV

University of Southampton Ocean and Earth Science, National Oceanography Centre Southampton
The National Oceanography Centre Southampton (NOCS) represents an unparalleled investment in marine and Earth science and technology in the UK. It opened in 1995 in a purpose-built waterfront campus in a collaboration between the University of Southampton and the Natural Environment Research Council. The Centre houses around 500 staff. The University component comprises about 120 staff, 600 undergraduate and 200 postgraduate students. Further information can be found at http://www.southampton.ac.uk/oes/. Across the University, we have strong links with biologists, chemists, engineers, physicists and medics.
We have a diverse range of excellent laboratory and seagoing facilities. The Centre provides a unique intellectual environment for conducting world-class research and for training the next generation of scientists for a wide range of careers. To achieve a step change in the breath of our
research activity, during the next 12-18 months we plan to recruit up to ten academic staff across a range of disciplines. Up to two of these posts will be at Chair level (Ref **; salary from **), up to three will be at Reader/Senior Lecturer level (Ref **; salary **- **), and the majority will be at Lecturer level (Ref **; salary **-**). Chair (full professor) candidates should be widely recognized as established international leaders in their research field. Readership/Senior Lecturer (equivalent to tenured associate professor) candidates should also be international leaders in their field but will be at an earlier career stage. At Lecturer level (equivalent to tenure-track assistant professor), we are interested in recruiting early-career individuals with growing international reputations for research excellence and with the ambition to become international leaders in their fields.

Coast and Shelf Oceanography
We expect to make up to three appointments in this area, including one at a senior level. The senior appointment will have the opportunity to play a leading role in the development of the University's new Maritime and Marine Institute. Areas of interest include sediment dynamics; coastal and shelf morpho-dynamics; shelf, coastal and estuarine oceanography; engineering solutions to coastal change; socio-economics and the coastal zone.

Marine Biology/Biological Oceanography
We seek a marine biologist/biological oceanographer to join a dynamic group of biologists and ecologists working in areas spanning marine ecology, molecular biology, marine biogeochemistry and marine biotechnology. We invite applications from applicants in any area of marine biology including pelagic ecology of metazoans, fisheries biology, marine biotechnology or marine microbiology of the water column and sediments.

Organic Geochemistry
We seek applications from those with established expertise in organic geochemistry in its broadest sense. We wish to develop strength in areas including but not limited to, palaeoclimate and palaeoceanographic reconstruction, biogeochemical cycles, novel marine compounds with biomedical application, petroleum geochemistry, kerogens, soil, peat and coal, and environment and pollution. We seek to complement our existing strengths by recruiting a potential world-leader who will develop organic geochemistry research at NOCS.

Sedimentology/Earth Surface Processes
We seek candidates with expertise in sedimentology and/or earth surface processes. Applications are welcomed from scientists with proven academic experience and research ability (including those with applied and industrial experience). We seek candidates working in areas including but not limited to: clastic sedimentology, dynamic stratigraphy, quantitative geomorphology, morphotectonics, Quaternary science, palaeoclimatology, basin evolution, hydrocarbon exploration.

Palaeomagnetism
We seek candidates with established expertise in palaeomagnetism, with research interests that include geomagnetic field behaviour, geochronology, tectonics, environmental magnetism, and technique development. Candidates should be keen to develop dynamic collaborations with one or more of the following Research Groups: Palaeoceanography and Palaeoclimate; Geochemistry; Geology and Geophysics; Coastal Processes.

Ocean Biogeochemistry
We seek a marine scientist to join the interdisciplinary world leading Marine Biogeochemistry research group at NOCS. We particularly seek candidates with a strong chemical research focus but...
welcome candidates with other backgrounds, including microbial biogeochemistry. We expect the appointment to make full use of the opportunities for collaboration at NOCS with e.g. sensor developers, geochemists, and biological and physical oceanographers.

Atmospheric Science
We seek candidates with recognized expertise in the atmospheric component of the climate system. We aim to develop a strong profile in climatically important facets of atmospheric science such as experimental and theoretical aspects of atmospheric dynamics, atmospheric chemistry, and atmosphere-ocean interactions. We particularly seek candidates with a research profile that may build on or complement our established oceanographic research.

Science of the Cryosphere
We seek candidates with established expertise in the cryospheric component of the climate system in its broadest sense. We aim to develop strength in all aspects of the cryosphere including, but not limited to, ice-sheet/ice-shelf modeling, ice-ocean-climate modelling, modern observation (in situ and/or remote sensing) and palaeo-reconstruction of ice-sheet and glaciological processes, ice-core climate reconstructions, and glacio-geomorphology and -geochronology.

Natural Hazards
We seek candidates with established expertise in natural hazards and risks. We aim to develop research in areas including, but not limited to, tropical and extra-tropical storms (including surges), hydrological cycle extremes (flooding and droughts), volcanic eruptions, earthquakes, and tsunamis. We particularly welcome applications from candidates with well-developed links to the reinsurance industry.

Geoengineering
We have opportunities for multidisciplinary scientists interested the assessment or development of Geoengineering approaches to tackle the consequences of elevated concentrations of atmospheric CO2. This could entail a Solar Radiation Management and/or Carbon Dioxide Reduction approach or a wide range of carbon capture and storage options (e.g., deep saline aquifers, mineral carbonation). We value linkages with the petroleum, mining and other industries; experience in public engagement and acceptance, national and transnational governance of Geoengineering approaches; and the Monitoring, Verification and Accounting of carbon capture and storage.

Ocean Sensor Development
NOCS has established itself as a world leader in sensor development, with projects ranging from the building of systems to measure nutrients and carbonate chemistry in the oceans to the fabrication of probes to investigate the chemistry of sub-Antarctic glacial lakes. We seek a talented and ambitious researcher to expand our activities in this area. In addition to the first-class facilities within NOCS, the individual will also have the opportunity to build on our strong links with colleagues in Electronics and Computer Science in the design and fabrication of integrated micro-devices and sensors.

Reaction Transport Modelling
We seek quantitative scientists with expertise in reactive tracer transport modeling and experience in the quantitative description of the advection and exchange of heat, fluid and material in diverse geological environments. Interests could include, but are not restricted to, magma-melt reactions, sedimentary diagenesis, waste disposal (including nuclear), acid mine drainage, carbon sequestration, metamorphism, hydrothermal exchange and mineralization.
Candidate Evaluation
You must have a PhD at the time of appointment and a proven ability to publish innovative, high-quality research. Emphasis will be placed on your track record of publications and grant capture commensurate to career stage and your ability to develop a dynamic, externally funded research program with an international profile. We welcome your application if you pursue fundamental research or if you have the potential to develop applied research and closer links with industry. You will have a commitment to excellence in undergraduate education, including field training oceanography, marine biology or earth science, and a desire to engage in doctoral student supervision by capitalizing on the opportunities presented by our large Graduate School. We are also interested in receiving expressions of interest from early-career scientists for a research fellowship scheme to be advertised later in 2011.

Application Process
Enquiries should be directed to Professor Tim Minshull, Head of Ocean and Earth Science (tmin@noc.soton.ac.uk<mailto:tmin@noc.soton.ac.uk>). When applying for a position, please submit your curriculum vitae, concise statements of research interests and aspirations and teaching philosophy and interests, and the names and contact details of at least three referees to www.jobs.soton.ac.uk<http://www.jobs.soton.ac.uk/> quoting the relevant reference number and identifying one of the above areas of interest, with an electronic copy to Prof. Minshull. The application deadline is 7th November 2011. Please quote the relevant reference numbers in all correspondence.

The University of Southampton is an exciting and supportive place to work. We offer highly competitive salaries and benefits packages – including a final salary pension scheme and generous holiday allowance. There is also access to excellent sport and leisure facilities and the opportunity to develop your career in a friendly and professional environment.

NATIONAL SCIENCE FOUNDATION EAST ASIA AND PACIFIC SUMMER INSTITUTES FOR U.S. GRADUATE STUDENTS - 2012 APPLICATION NOW OPEN

(Link: www.nsfsi.org)

The National Science Foundation (NSF) East Asia and Pacific Summer Institutes for U.S. Graduate Students (EAPSI) is a flagship international fellowship program for developing the next generation of globally engaged U.S. scientists and engineers knowledgeable about the Asian and Pacific regions. The Summer Institutes are hosted by foreign counterparts committed to increasing opportunities for young U.S. researchers to work in research facilities and with host mentors abroad. Fellows are supported to participate in eight-week research experiences at host laboratories in Australia, China, Japan (10 weeks), Korea, New Zealand, Singapore and Taiwan from June to August. The program provides a $5,000 summer stipend, round-trip airfare to the host location, living expenses abroad, and an introduction to the society, culture, language, and research environment of the host location.

The 2012 application is now open and will close at 5:00 pm proposer’s local time on November 9, 2011. Application instructions are available online at www.nsfsi.org. For further information concerning benefits, eligibility, and tips on applying, applicants are encouraged to visit www.nsf.gov/eapsi or www.nsfsi.org.
NSF recognizes the importance of enabling U.S. researchers and educators to advance their work through international collaborations and the value of ensuring that future generations of U.S. scientists and engineers gain professional experience beyond this nation's borders early in their careers. The program is intended for U.S. graduate students pursuing studies in fields supported by the National Science Foundation. Women, minorities, and persons with disabilities are strongly encouraged to apply for the EAPSI. Applicants must be enrolled in a research-oriented master's or PhD program and be U.S. citizens or U.S. permanent residents by the application deadline date. Students in combined bachelor/master degree programs must have matriculated from the undergraduate degree program by the application deadline date.

The first Summer Institutes began in Japan in 1990, and to date over 2,400 U.S. graduate students have participated in the program.

Should you have any questions, please contact the EAPSI Help Desk by email at eapsi@nsfsi.org or by phone at 1-866-501-2922.

***********************************************************

JOB OPENINGS:

- **KENT STATE UNIVERSITY** - ASSISTANT/ASSOCIATE PROFESSOR IN ENVIRONMENTAL MINERALOGY
- **GEORGIA SOUTHERN UNIVERSITY** -University System of Georgia - Assistant Professor of Geology
- The Origins Laboratory of the Department of the Geophysical Sciences and Enrico Fermi Institute at the University of Chicago seeks applicants for a postdoctoral researcher position in isotope geochemistry-cosmochemistry
- The Keck Science Department, which houses the biology, chemistry, and physics faculty for Claremont McKenna, Pitzer, and Scripps Colleges (three of the five undergraduate Claremont Colleges), seeks a Physical Geographer
- Faculty Positions in Sedimentary Geology, Geological Sciences, Indiana University, Bloomington
- Tenure-Track Faculty Position in Sedimentary Geology/Low-Temperature Geochemistry - Iowa State University
- Natural Resource Technology, Inc. (NRT) is seeking an entry-level candidate (0 to 2 years) with a BS/MS degree in environmental engineering, hydrogeology, or environmental science
- The Institute of Environmental Science and Technology (ICTA) at the Universitat Autònoma de Barcelona (UAB) invites applications for a Fellowship in Marine Palaeoclimatology of 16 Months for an Experienced Researcher (ER) at the Post-Doctoral Level
- The Faculty of Science at the University of Helsinki is announcing one open tenure-track position in GEODYNAMIC MODELLING at the Institute of Seismology under the Department of Geosciences and Geography
- The Geology Department at Southern Illinois University Carbondale invites applications for a postdoctoral fellowship in petrology
- Position Opening: Museum Specialist (Geology) - The Department of Mineral Sciences at the Museum of Natural History in Washington, D.C
- Position title: (Post Doc) Research Associate - North Carolina State University
JOB OPENINGS:

KENT STATE UNIVERSITY -ASSISTANT/ASSOCIATE PROFESSOR IN ENVIRONMENTAL MINERALOGY

The Department of Geology at Kent State University seeks to hire an Environmental Mineralogist at the tenure-track Assistant or Associate Professor level for the Fall semester, 2012. The successful candidate must possess the Ph.D., have a strong background in the geological sciences, and be able to interface well with other faculty working in a variety of related specialties. Specific research interests are open and may include any of the broad range of how mineral properties and surfaces and their growth and dissolution processes interact with the environment from the atomic scale to the global scale. Examples of research areas may include clay mineralogy, soil chemistry, geomicrobiology, chemistry of water-sediment or water-rock interactions, acid mine drainage, chemical weathering, and environmental nano- and microparticles and their interactions with metals or microbes. Responsibilities will include teaching undergraduate and graduate courses in earth materials and environmental mineral processes; advising M.S. and Ph.D. candidates; developing a strong, externally funded research program; and instruction of an introductory geology course including Environmental Geology or Physical Geology.

The Department has 14 full-time faculty members, ca. 100 undergraduates and 30 graduate students, and is well-equipped for research in hydrology, hydrogeology, oceanography, limnology, aqueous geochemistry, sedimentary processes, and engineering geology. Current Faculty in these areas are presently involved in research in oceanography, limnology, paleolimnology, wetlands and surface water-groundwater interactions, climate change, landform development and landsliding, and engineering geology. The department supports both applied and basic geologic research. Equipment for analytical work in geochemistry includes XRD, graphite-furnace-AA and ICP spectrometers, and a Dionex Ion Chromatograph. Additionally, there are laboratories for wet chemistry, hydrogeology, and engineering geology, an SEM unit with EDAX, and an XRF. There are excellent opportunities for cooperative research and teaching within the Department and opportunities to interact with faculty members in Biology, Chemistry, and Chemical Physics. Review of applications will begin on November 15, 2011 and continue until the position is filled. For more information see http://www.kent.edu/geology. Applicants should send their curriculum vitae, statement of research and teaching interests, and contact information of three references to Dr. Daniel Holm, Chair, Department of Geology, Kent State University, Kent OH 44242. dholm@kent.edu; Fax 330-672-7949.

Kent State University is an Affirmative Action/Equal Opportunity Employer and encourages applications from candidates who would enhance the diversity of the University's faculty.

********

GEORGIA SOUTHERN UNIVERSITY -University System of Georgia -Assistant Professor of Geology—Search #64640
Allen E. Paulson College of Science and Technology
Department of Geology and Geography

The Department of Geology and Geography in the Allen E. Paulson College of Science and Technology invites nominations and applications for the position of Assistant Professor of Geology. Georgia Southern University (www.georgiasouthern.edu), a member institution of the University System of Georgia and a Carnegie Doctoral/Research University, is one of Georgia’s premier universities. A residential university serving nearly
20,000 students in fall 2010, Georgia Southern is recognized for providing all of the benefits of a major university with the feeling of a much smaller college. Founded in 1906, the University offers more than 100 campus-based and online degree programs at the baccalaureate, master’s, and doctoral levels through eight colleges. In 2011, Georgia Southern was named the fourth most popular university in the country by U.S. News & World Report’s “Top 20 Most Popular Universities.” The nearly 700-acre park-like campus is located in Statesboro, a classic Main Street community near historic Savannah and Hilton Head Island.

Within this setting, the Department offers undergraduate degree programs in both geography and geology. In addition, the minor in GIS attracts students from a range of disciplines.

Position Description. Reporting to the Department Chair, the Assistant Professor of Geology position requires teaching, research, and service as well as a terminal degree. The successful candidate will have expertise in low-temperature or environmental geochemistry and may come from either specialty. The candidate will be selected based on their fit with the Department’s needs. The individual selected will teach advanced courses appropriate to their discipline, and will share responsibility for courses in environmental geology, physical geology, and associated laboratories. The position is a 9-month tenure-track appointment, and the salary is competitive and commensurate with qualifications and experience. Required Qualifications:

- A PhD in geology or a closely related discipline must be completed by the position starting date of August 1, 2012.
- Research specialty in low-temperature or environmental geochemistry.

Preferred Qualifications:
Other desirable qualifications include research interests in the Atlantic Coastal Plain, geoscience education, or GIS/remote sensing. Prior undergraduate teaching experience is preferred.

Screening of applications begins November 21, 2011 and continues until the position is filled. The preferred start date is August 1, 2012. A complete application consists of a letter addressing the qualifications cited above; a statement of research interests; a statement of teaching philosophy; a curriculum vitae; and the names, addresses, telephone numbers, and email addresses of at least three professional references. Other documentation may be requested. Only complete applications will be considered. Finalists will be required to submit to a background investigation. Applications and nominations should be sent to:

Dr. Charles H. Trupe, Search Chair, Search 64640
Department of Geology and Geography
Georgia Southern University
P. O. Box 8149
Statesboro GA 30460
Electronic mail: CHTrupe@GeorgiaSouthern.edu
Telephone: 912-478-0337

********

COSMOCHEMISTRY/GEOCHEMISTRY POSTDOCTORAL POSITION AVAILABLE
The Origins Laboratory of the Department of the Geophysical Sciences and Enrico Fermi Institute at the University of Chicago (http://geosci.uchicago.edu/~dauphas/OLwebsite/OLFrameset1.htm) seeks applicants for a postdoctoral researcher position in isotope geochemistry-cosmochemistry. Although different backgrounds will be considered, experience in clean laboratory procedures and multicollector inductively coupled plasma mass spectrometry (MC-ICPMS) techniques is especially desirable. The main themes that are being developed are (i) mass-dependent isotope variations for tracing geo-bio cycles and igneous processes,
stable isotope anomalies for characterizing the heterogeneity of the nebula and identifying new presolar phases, and (iii) radiogenic isotopes for constraining early solar system chronology. Completion of the Ph.D. is required. Initial appointment is for one year, renewable up to 2 times contingent upon good progress. Applications must be received by November 1, 2011; applications received after this date may be considered if the position is not filled. A resume and the names of three references should be sent to Nicolas Dauphas (dauphas@uchicago.edu). The University of Chicago is an Affirmative Action/Equal Opportunity Employer.

********

The Keck Science Department, which houses the biology, chemistry, and physics faculty for Claremont McKenna, Pitzer, and Scripps Colleges (three of the five undergraduate Claremont Colleges), seeks a Physical Geographer who is committed to excellence in teaching and who will develop a vibrant research program that fully engages undergraduate students. The appointment will be made at the Assistant Professor level to begin July 2012. Areas of interest include but are not limited to natural hazards, global land-use, geomorphology/climate interactions, and remote sensing. The new hire will be an integral participant in the Mellon Foundation-funded Claremont Colleges Intercollegiate Environmental Analysis Program (http://ea.pomona.edu/), which also includes faculty from Harvey Mudd and Pomona Colleges. Many Keck Science faculty actively participate in collaborative research projects with research groups at nearby colleges and universities, and such collaborations are welcomed for this position. Teaching responsibilities include participation in the introductory Environmental Science sequence, a course in natural resource geography, and an upper division course in the candidate's area of specialty. A Ph.D. and a record of scholarly publication are required. Postdoctoral experience is preferred.

Please apply online at https://webapps.cmc.edu/kecksci/faculty/ by uploading a cover letter, a curriculum vitae, a description of your proposed research, a statement of your proposed approach to teaching science in a liberal arts setting, and the names and e-mail addresses of three references. Inquiries regarding the position may be e-mailed to Professor Donald McFarlane at dmcfarlane@kecksci.claremont.edu. Additional information about the department may be found at www.kecksci.claremont.edu. Review of applications will begin October 17th, 2011, and the position will remain open until filled.

The Keck Science Department of Claremont McKenna, Pitzer, and Scripps Colleges is an equal opportunity employer. In a continuing effort to enrich its academic environment and provide equal educational and employment opportunities, the department actively encourage applications from women and members of historically under-represented social groups in higher education.

********

Faculty Positions in Sedimentary Geology, Geological Sciences, Indiana University, Bloomington

The Department of Geological Sciences invites applications for one or more tenure-track/tenured faculty positions. We seek a candidate whose research in sedimentary geology complements one or more of our current strengths in sedimentology, geobiology, geochemistry, and tectonics to fill the Robert R. Shrock Endowed Position in Sedimentary Geology at the Assistant or Associate level. Qualified candidates must have a PhD in a field related to sedimentary geology and an established record of excellence in research and teaching at the graduate and undergraduate level. Readiness to teach courses in depositional environments, petroleum geology, or structural geology is an advantage. In the case of an exceptional pool of candidates, a second hire into the Boyce Chair, also with access to endowed research funds, may be possible. Review of applications will begin November 15, 2011 and continue until the position is filled. Indiana University is an equal
opportunity/affirmative action employer, and encourages applications from women and minority candidates. Further details are available at http://geology.indiana.edu/department/sedsearch.html.

Please submit a letter of application, a current vita, and the names and addresses of three referees. All enquiries and applications should be addressed to:

Prof. David Polly,
Shrock Search Chair,
Department of Geological Sciences,
Indiana University,
Bloomington, IN 47405-1403

Tenure-Track Faculty Position in Sedimentary Geology/Low-Temperature Geochemistry - Iowa State University

The Department of Geological and Atmospheric Sciences at Iowa State University invites applications for a tenure-track faculty position at the assistant professor level to begin August 2012. The position will be in one of two broad areas: sedimentary geology or low-temperature geochemistry, with particular emphasis placed on research relevant to paleoclimatology, environmental geochemistry, or contaminant hydrogeology. An essential requirement is the potential of applicants to establish a successful, externally funded research program. Ideally that program would complement existing strengths in the department, including climate modeling, paleoclimatology, glaciology, hydrogeology, geophysics, economic geology, tectonics, and geoscience education. We also encourage interactions with researchers and faculty in other units on campus, such as Agricultural and Biosystems Engineering; Agronomy; Chemistry; Civil, Construction and Environmental Engineering; Ecology and Evolutionary Biology; Natural Resources Ecology and Management; the Iowa Water Center; the Leopold Center for Sustainable Agriculture; and the National Laboratory for Agriculture and the Environment. A commitment to excellence in teaching at the undergraduate and graduate levels is also essential. Information about the Department appears at: http://www.ge-at.iastate.edu/.

Candidates must hold a Ph.D. by the time of appointment. All applications must be submitted electronically at www.iastatejobs.com (search vacancy ID# 110650). Please be prepared to enter or attach a letter of application including concise teaching and research statements, curriculum vitae, and the names, addresses, e-mail addresses, and phone and fax numbers of at least three references.

The positions will remain open until filled. Full consideration will be given to those applications received by November 13, 2011. We encourage applications from minorities, women, veterans, and persons with disabilities. Iowa State University is an equal opportunity/affirmative action employer.

Natural Resource Technology, Inc. (NRT) is seeking an entry-level candidate (0 to 2 years) with a BS/MS degree in environmental engineering, hydrogeology, or environmental science. Our projects include investigation, remediation, and construction oversight at soil, groundwater, and sediment contamination sites; compliance and due diligence assessments; and environmental monitoring for clients such as power companies, industrial corporations, law firms, government, and industry research associations throughout the US. The successful candidate for this position will initially engage in collection and analysis of field data, construction/remediation oversight, and documentation. With experience, this candidate will assume responsibilities for proposals, project planning, and preparation of reports communicating NRT’s observations, evaluations, and conclusions. We routinely work in project teams, comprised of internal and external

- 12 -
members, because our projects often transcend multiple engineering and scientific disciplines. This teaming structure requires strong oral and written communication skills as well as the agility to transition from extended field assignments to the office environment. An ideal candidate works well independently and within a team environment. Position: Environmental Engineer, Hydrogeologist, or Environmental Scientist

Position Location: Pewaukee, Wisconsin
Position Start: Fall 2011 or Winter 2012
Position Classification: Full-time Salary

Essential Position Abilities
• Appropriately apply scientific and engineering principles and concepts to area of specialization; able to draw solutions from education and formal training. Experience an asset, but not required.
• Ability to conduct and direct measurements and sample collection including documentation of field tasks, data tabulation, and report preparation.
• Knowledge of federal, state and local environmental regulations and programs is an asset.
• Ability to participate in field assignments requiring travel through the US, primarily in the Midwest.

Basic Qualifications
• BS/MS environmental engineering, hydrogeology, or environmental science related fields.
• 0 to 2 years environmental consulting experience. Wisconsin and/or Illinois regulatory experience a plus.
• OSHA HAZWOPER 40-hour certification and current 8-hour refresher training an asset, not required.

********

The Institute of Environmental Science and Technology (ICTA) at the Universitat Autònoma de Barcelona (UAB) invites applications for

• 1 Fellowship in Marine Palaeoclimatology of 16 Months for an Experienced Researcher (ER) at the Post-Doctoral Level

The fellowship is sponsored by the 7th Framework Programme of the European Community as part of the Marie Curie Initial Training Network “GATEWAYS”.

The ER fellowship is directed towards reconstructing the Late Pleistocene ocean circulation of the Agulhas Current regime off southern Africa and its relation to the climate variability in the Southwest Indian Ocean and beyond. We seek a candidate with expertise in either of the fields of stable isotopes (δ18O, δ13C) and trace element geochemistry (Mg/Ca, Cd/Ca) or radiogenic isotopes. For further information about the GATEWAYS project visit www.gateways-itn.eu

Eligibility. EC Marie Curie ITN recruitment and mobility regulations apply. Eligible for the ER fellowship at the ICTA/UAB are:

• Spanish nationals who have legally resided and had their main activity outside Spain and the EU (i.e., in a non-associated third country) for at least three of the last four years immediately prior to the appointment;
• Non-Spanish nationals who have not resided or carried out their main activity in Spain for more than 12 months in the 3 years immediately prior to the appointment (short stays such as holidays are not taken into account);
• Fellows who at the time of their appointment are within the first 5 years (full time equivalent) of their career, starting from the date when the degree was obtained that was required to embark on their doctoral programme.

Application documents. Applicants who fulfil the above criteria submit by email a letter of intent stating their interest in the GATEWAYS project; their Curriculum Vitae showing, amongst others, their University education background; the names, addresses, email and telephone numbers of two referees who the search committee can contact for letters of reference.

Contact. GATEWAYS Project Office, Universitat Autònoma de Barcelona, Institut de Ciencia i Tecnologia Ambientals, Cerdanyola del Vallès, Spain
Email: pr.gateways.itn@uab.cat

Deadline for applications is the 25th of October 2011
The Faculty of Science at the University of Helsinki is announcing one open tenure-track position in GEODYNAMIC MODELLING at the Institute of Seismology under the Department of Geosciences and Geography. The Department of Geosciences and Geography is the leading Finnish institute for research and teaching in the field. In addition to carrying out research and teaching in geology and geography, the Department conducts seismological research and performs public duties related to seismology. The Department has an overall budget of over seven million euros and employs a staff of more than 100, including 14 professors. The research conducted at the Department is based on active participation in national and international research and observation networks. The strengths of the Department of Geosciences and Geography and the Institute of Seismology include multidisciplinarity, modern laboratories and sounding materials as well as outstanding scientific research.

The appointee is expected to conduct internationally outstanding research. In addition, he or she is expected to take advantage of national and international research funding opportunities, participate in teaching and doctoral education provided at the Department and actively promote interaction between academia and society at large. The appointee should preferably be focused on the modelling of physical processes that shape the Earth, particularly numerical modelling of the geodynamic processes of the crust. He or she should preferably assemble a research team to conduct the said modelling, and utilise the existing high quality geoscientific observation data of the Department in his or her work. A good international partnership network is a prerequisite for the successful completion of this task.

The appointee will be part of the ECO Research Community operating at the Department. The ECO research group consisting of researchers and postgraduate students in geology and geophysics studies the formation and development of continents, tectonic movement and related magmatic activity, earthquakes and the formation of mountains, which are key factors in the formation of mineral resources and guide the processes that shape the climate and biosphere. The teaching duties of the assistant professor will be related to the teaching of dynamic processes and their modelling at the Division of Geology.

The starting salary will be EUR 4,000-4,900 a month depending on the applicant's qualifications and work experience.

Applications must be accompanied by the following English-language enclosures: a CV, a list of publications, a report on experience and merits relevant to the assessment of the applicant's teaching skills as well as other documents that may be relevant to the selection; or, alternatively, an English-language academic portfolio containing the above-mentioned documents and information (for instructions, see http://www.helsinki.fi/facultyofscience/vacancies/portfolio.pdf). In addition, applicants are expected to enclose with their application an English-language report (max. two pages) on how they intend to develop research in the field, if appointed.

Upon request from the Faculty, applicants should prepare to submit ten publications of their own choice to be sent to assessors after the application period. The publications must be submitted by email as PDF attachments. Applications must be addressed to the Registry of the University of Helsinki by email: hy-kirjaamo@helsinki.fi. Applications can also be sent by post to the following address: Registry of the University of Helsinki, P.O. Box 33 (Yliopistonkatu 4), 00014 University of Helsinki, Finland. The closing date for applications is 12 October 2011 at 15.45 local Helsinki time.

Further information about the position may be obtained from Professor Tapani Rämö, tapani.ramo@helsinki.fi, +358 9 191 50810, +358 40 526 0636.

The Geology Department at Southern Illinois University Carbondale invites applications for a postdoctoral fellowship in petrology. The successful candidate will work with Dr. Justin Filiberto in NASA-funded efforts, focusing on analytical and experimental studies of martian basalt degassing as the source of 'acid fog' and of halogens in the soil. These efforts focus on volatile elements (specifically halogens) in planetary
magma, Martian meteorites, terrestrial analogs, and experimental studies, starting with analyses by optical microscopy and electron microprobe. The candidate will be encouraged to design and conduct their own research in petrology. Applicants must hold a Ph.D. in geology or a related field or show that they will complete all degree requirements by the time of appointment. The applicant must specialize in petrology or geochemistry; experience with planetary materials and/or experimental equipment is recommended. The position would be for one year, with possible extension up to four years depending on performance and funding.

Southern Illinois University Carbondale is a large, research-oriented institution situated in a pleasant small-town setting southeast of St. Louis. The Geology Department has a full-time faculty of 11 with about 70 undergraduate and 30 M.S. and Ph.D. students. For further information, please visit http://www.geology.siu.edu/.

Effective Date of Appointment: November 1, 2011.

Application Deadline: Review of applications will begin immediately and continue until the position is filled.

Application Procedure: Applicants should submit curriculum vitae, a statement of research interests, and the names and contacts of at least three referees to (email is preferred):

Dr. Justin Filiberto
Southern Illinois University Carbondale
Department of Geology, Mailcode 4324
1259 Lincoln Drive
Carbondale, IL 62901  Fax: 618-453-7393

SIUC is an Affirmative Action/Equal Opportunity employer that strives to enhance its ability to develop a diverse faculty and staff and to increase its potential to serve a diverse student population. All applications are welcomed and encouraged and will receive consideration.

********

Position Opening: Museum Specialist (Geology) --The Department of Mineral Sciences at the Museum of Natural History in Washington, D.C. has a position opening in our analytical laboratories. We are seeking a person to assist a small group of full time researchers engaged in the study of meteorites, mineralogy, volcanology, igneous and metamorphic petrology, experimental petrology and biomineralogy.

The duties of this position include sample preparation, fabrication of custom-designed parts and sample holders and assistance in the Analytical Scanning Electron Microscope and Electron Microprobe Laboratories. Preparation of thin sections and polished mounts of a wide variety of materials including Antarctic meteorites, rocks and experimental products is an essential part of this position. The position also includes basic machining and fabrication of parts from a variety of materials for use in the analytical and experimental laboratories. In addition, this person will serve in a backup role in our electron beam laboratories assisting users and troubleshooting hardware and software issues.

We are looking for self-motivated applicants with a background in geologic sciences and the ability to work well in an exciting workplace with many challenges. All applicants must apply online at the USAJOBS website. No other applications can be accepted.

To apply please go to (open to the public):
http://jobview.usajobs.gov/GetJob.aspx?JobID=102153641&JobTitle=Museum+Specialist+(Geology)&brd=38
76&vw=b&FedEmp=N&FedPub=Y&x=78&y=15&jbf574=SM03&AVSDM=2011-09-02+00%3a03%3a00

Or for persons with status (current or former Federal employees):
http://jobview.usajobs.gov/GetJob.aspx?JobID=102153593&JobTitle=Museum+Specialist+(Geology)&brd=38
76&vw=b&FedEmp=Y&FedPub=Y&x=78&y=15&jbf574=SM03&pg=2&re=3&AVSDM=2011-09-
02+00%3a03%3a00

Visit our website for more information about us:  http://mineralsciences.si.edu/ or contact Tim Rose (roset@si.edu), Analytical Laboratories Manager
Position title: (Post Doc) Research Associate - North Carolina State University

Essential responsibilities: Seeking an exceptional postdoctoral associate to conduct independent research in support of their core study areas of biomineralization and bioweathering. These topics include the interactions of microbial exudates (siderophores) with mineral surfaces and metals, and/or the microbially induced formation of minerals. Activities may include conducting traditional geochemical experiments, molecular modeling, electron and force microscopies, and/or cutting-edge spectroscopic techniques to better understand the fundamental mechanisms of biogeochemical processes. Opportunities exist to interact closely with a group of distinguished intramural and extramural collaborators. Related activities include laboratory work; supervising graduate students; data analysis; report, manuscript, and proposal preparation; and presentation of research at local, regional, and national meetings. More information about the soil biogeochemistry laboratory group can be found at the webpage: http://www4.ncsu.edu/~owduckwo/

Qualifications: A Ph.D. in chemistry, geochemistry, environmental engineering, geology, soil science, or a related discipline is required. The successful candidate should have the demonstrated ability to design experiments and conduct independent chemical research. Excellent written and verbal communication skills are essential. A strong publication record is highly desirable.

For more information and informal consideration: Please send a CV and cover letter to Owen Duckworth (owen_duckworth@ncsu.edu). Application materials will be accepted until October 15, 2011 or until a suitable candidate is found. The formal application procedure will be posted on the North Carolina State University website soon.

**********

********** HAVE A GREAT WEEKEND**********