

GEOBULLETIN

MARCH 13TH, 2009

Geobulletin is distributed weekly, on Friday 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 Wednesdays.

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.

Mar. 13 - None Scheduled

Mar. 20 - Spring break

Mar. 27 - Leigh Royden (MIT) (SPONSOR: DEMETS)
"Uplift, Evolution and Geodynamics of the Tibetan Plateau"

Apr. 3 - Stephanie Prejean (USGS Anchorage) (SPONSOR: THURBER)

Apr. 8 - Peter Cook, CSIRO, NGWA Darcy Lecturer
"Environmental Tracers in Modern Hydrogeology: Reducing Uncertainty in Ground Water Flow Estimation"

Apr. 10 - Joe Stoner (Oregon State University) (SPONSOR: CARLSON)
"Climatic implications of abrupt geomagnetic change"

Apr. 17 – Dept. of Geology and Geophysics – Board of Visitors Spring Meeting

Apr. 24 - Susanne Janecke (Utah State University) (SPONSOR: DEMETS)
"Reorganizing plate boundaries, evolving basins, pseudotachylite, detachment faults, and crossing strike-slip faults: Southern California"

May 1 - Laurent Charlet (Univ. Grenoble) (SPONSOR: SAHAI)

May 8 - Peter Visscher (SPONSOR: RODEN)
"Microbial mechanisms forming modern marine stromatolites - Using the present to predict the past"

ANNOUNCEMENTS

Strengthening Your Geoscience Program: A Practical Workshop with Ideas and Examples -- June 2-4, 2009
College of William and Mary, Williamsburg, VA

Application DEADLINE: April 3, 2009

This workshop will provide an opportunity to focus on how to strengthen your geoscience program. We will draw on strategies and examples from past workshops to develop practical solutions to the challenges facing participants' departments. Workshop sessions will focus on topics including the following:

- student recruitment
- curriculum-
- co-curricular programs

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- preparing the geoscience workforce
- program assessment
- and departmental leadership and management.

The program will also include discussions of how colleges and universities in a region might work together.

Teams of participants from a department are encouraged.

The operational costs of the workshop as well as double-occupancy rooms and some meals will be covered by a grant from the NSF for up to two members of each departmental team. Participants or their home institutions must provide transportation to and from the workshop.

For more information or to apply for the workshop, visit the workshop website:

http://serc.carleton.edu/departments/program_revision/overview.html

For this workshop, we would like just ONE application from your department/team. You may fill out the form as a team, or designate one member of your team to apply for all of you.

http://serc.carleton.edu/departments/program_revision/application.html

We will ask each department team accepted for the workshop to submit an essay about the department's strengths and challenges, a description of the department's planning process, and a summary of the most recent departmental review (internal and/or external).

Finally, if you are heading into a departmental review and/or assessment of your program (or just finishing one), this would be a great workshop.

I also encourage you to take a look at the workshop we just finished on Assessing Geoscience Programs: Theory and Practice

http://serc.carleton.edu/departments/program_assessment/program.html

We have a growing collection of assessment instruments (e.g., examples of senior and alumni surveys, rubrics for assessing student work, and so forth.

http://serc.carleton.edu/departments/program_assessment/instruments.html

The Building Strong Geoscience Departments Program is sponsored by the National Association of Geoscience Teachers, the American Geological Institute, the Geological Society of America, and the American Geophysical Union.

Veterans Memorial Scholarship

The Rocky Mountain Association of Geologists Foundation will again grant a \$2500 award to a graduate student in geology who is an active member of the United States Armed Forces, a reservist, or an honorably separated veteran. A pdf version of the application form can be downloaded from [www.rmag.org/RMAG Foundation/Veternas' Memorial Scholarship/ Application](http://www.rmag.org/RMAG_Foundation/Veterans_Memorial_Scholarship_Application.pdf).

Applications must be submitted electronically to laura.wray@williams.com by mail to: Laura L. Wray

RMAG Foundation Chair
3747 South Jasmine Street
Denver, CO 80237

Application deadline is April 3, 2009.

Subject: Graduate summer internships in volcano seismology

The University of Alaska Fairbanks (UAF) announces the availability of paid summer internships for U.S. graduate students from U.S. universities in seismology, crustal deformation, igneous petrology, and physical volcanology. Successful applicants will become members of a US-Russia-Japan team comparing the response of crustal magma systems to catastrophic decompression at

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Bezymianny and Shiveluch Volcanoes, Kamchatka, Russia, and Mount St Helens, Washington. The project is part of the National Science Foundation's program, Partnerships in International Research and Education (PIRE), which seeks to introduce US graduate students to internationally collaborative science.

The ideal student participant will be at an early or middle stage of her or his PhD program, be physically and mentally prepared for rigorous field investigations under difficult conditions, and have a strong interest in international collaboration and understanding. It is also desirable that the student's major advisor share an interest in the research and, although not a requirement, that the work can become a component of the student's PhD program. Complete announcement and application forms can be obtained at <http://gps.alaska.edu/PIRE> and by contacting the relevant science team leaders below. The deadline for application is March 1. Selections will be made by March 15. As required by the NSF, the competition is open only to US citizens or US permanent residents.

Seismology

Michael West (west@gi.alaska.edu)

Geodesy

Jeff Freymueller (jeff@giseis.alaska.edu)

Petrology/Volcanology

Pavel Izbekov (pavel@gi.alaska.edu)

POSITION OPENINGS:

- The College of Lake County is a progressive two-year community college located in suburban Chicago in northeastern Illinois - Instructor, Earth Science
- The Department of Earth & Planetary Sciences at Washington University in St. Louis is hiring a full-time research scientist to oversee a new stable isotope biogeochemistry facility
- PhD Position: Climate reconstruction in African Great Lakes region during the last millenium
- U.S. Geological Survey (USGS) Position Available -- Chemist/Physical Scientist
- GeoSciences: Edinburgh Materials and Micro-Analysis Centre (EMMAC) Research Fellow
- The Faculty of Geosciences at Ruhr-University Bochum (Department of Geology, Mineralogy, and Geophysics) seeks to appoint a junior-professor (W1) (approximately equivalent to the rank of an assistant professor / lecturer) in Petrology
- The U.S. Geological Survey (USGS) Florida Integrated Science Center in St. Petersburg, Florida (FISC-St. Pete), is recruiting highly motivated scientists in the field of coastal geology.
- Position Outreach-Forest Minerals Program Leader - Bridger-Teton National Forest - Pinedale, Wyoming

POSITION OPENINGS:

POSITION: Instructor, Earth Science

STARTING DATE: August 2009

DESCRIPTION OF POSITION: Responsibilities for this position include teaching a variety of courses in geology, such as, Physical Geology, Environmental Geology, Field Geology and Oceanography. Courses are taught both day and evening primarily at the Grayslake campus. Other required faculty duties include participation of Science Outreach Program, academic advisement to students, curriculum development, and service on college committees

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- QUALIFICATIONS REQUIRED:** Master's degree in Geology, demonstrated success and academic experiences with diverse populations and diverse teaching methods.
- QUALIFICATIONS DESIRED:** Knowledge of geology and oceanography; teaching experience in Physical Geology, Environmental Geology, Oceanography, Field Geology, and Historical Geology; experience with GIS and alternative delivery methods to include online and/or hybrid course delivery.
- CONDITIONS OF EMPLOYMENT:** This is a full-time, tenure-track faculty position. Salary placement is commensurate with education and experience. The minimum 2009-2010 nine-month base salary ranges from \$44,005 with a master's degree to \$57,240 with a doctorate in the subject field. Because health insurance participation is mandatory for new faculty and health insurance premiums are deducted from the base salary, each new faculty member receives a flexible compensation allowance of \$5,700 per academic year in addition to the base salary. This amount is intended to defray the cost of single medical insurance coverage. Optional contract for the summer session offers potential for significantly greater earnings. Faculty may be assigned to campuses other than Grayslake.
- THE COLLEGE:** The College of Lake County is a progressive two-year community college located in suburban Chicago in northeastern Illinois, with a student enrollment of more than 16,000. Dedicated to excellence in teaching and learning, the College provides access to higher education, supports outreach to the community, and ensures accountability and continuous improvement. The College is committed to responding to the needs of its diverse community. The College offers courses in both day and evening at the Grayslake Campus, the Lakeshore Campus, the Southlake Campus, and other locations within the county as well as offering courses in various formats including offering courses online. Faculty are critical to the active governance structure at the College and opportunities to engage in activities outside the classroom are important to the professional development of individuals and the institution.
- APPLICATION PROCEDURES AND DEADLINES:** For full consideration, applicants are expected to submit a completed application form, current resume, cover letter, three (3) letters of recommendation, and official transcripts of all degrees by **April 10th, 2009**.
- For an application form, please visit our website www.clcillinois.edu. The College of Lake County is an equal opportunity employer and has a strong commitment to the principle of diversity. In that spirit, it seeks a broad spectrum of candidates including minorities, women, and people with disabilities.
- *Applicants who will earn a Master's degree by June 2009 will be considered.

Isotope Biogeochemistry Research Scientist

The Department of Earth & Planetary Sciences at Washington University in St. Louis is hiring a full-time research scientist to oversee a new stable isotope biogeochemistry facility under the direction of Assistant Professor David Fike. Laboratory research focuses on analysis of carbon and sulfur isotopes in modern and ancient systems (additional information at: <http://biogeochem.wustl.edu>). The laboratory will include two gas source mass spectrometers (Delta V and MAT 253), specifically configured for high-precision sulfur (SO₂) and carbon (CO₂) isotope analysis, and associated peripherals.

The successful candidate will be an integral part of the research group. Expected activities include: improving extraction/purification and/or developing novel applications for carbon/sulfur isotope mass spectrometry; operation and maintenance of mass spectrometers and associated peripherals/vacuum lines; training and day-to-day oversight of undergraduate students; and lab safety. Active participation in original research is encouraged. Salary will be commensurate with experience.

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Applicants should have obtained a Ph.D. in isotope geochemistry (or related field) with prior experience using/maintaining gas source mass spectrometers. This is a non-faculty academic position not on the tenure track.

Washington University is an EO/AA Employer. To apply, please send cover letter, CV and names of 3 references to dfike@levee.wustl.edu. Application review will begin April 15, 2009 and will continue until the position is filled.

PhD Position: Climate reconstruction in African Great Lakes region during the last millenium

A 3-year PhD position funded by the French Agency for Atomic Energy (CEA) is available at the Laboratoire des Sciences du Climat et de l'Environnement, Gif-sur-Yvette (South of Paris, France). The position is to be filled by autumn 2009. Supervisors will be Christine Hatté (LSCE) and David Williamson (CEREGE, Aix-Marseille, France).

The research project focuses on both organic and isotopic geochemistry and modelling to reconstruct last millenium environmental changes around Massoko Lake (Tanzania). Additional information is available on:

http://www-instn.cea.fr/Publication_Sujet.php?idSujet=939&langue=uk&lang=EN&id_rubrique=140

Precondition for the application is a master 2 or equivalent certificate in climatology, geochemistry, geology or We are looking for a person with a strong commitment to independent research. Experience in stable isotope geochemistry, organic geochemistry, statistics and/or inverse modeling are beneficial. Good language skills in English are required for Non-French applicants.

Applications including the common documents (CV, letter of intent, certificates, letters of reference) should be sent until **April 1st, 2009** electronically to:

Christine Hatté christine.hatte@lsce.ipsl.fr **David Williamson** davwill@cerge.fr

U.S. Geological Survey (USGS) Position Available -- Chemist/Physical Scientist

The USGS, Central Energy Resources Team, is soliciting interest from qualified individuals for one Chemist/Physical Scientist position in Lakewood, Colorado. Successful applicants will have qualifying education and expertise in the concepts, principles, and practices of physical and analytical chemistry, mass spectroscopy, gas chromatography, elemental analysis, and high vacuum technology. Knowledge of petroleum/coal geology/geochemistry is highly desirable. He/she will be responsible for the operation and maintenance of three continuous flow (CF) stable isotope ratio mass spectrometers (IRMS) and related peripherals necessary to acquire stable isotopic data. The incumbent must additionally develop new techniques and procedures with an emphasis on compound-specific gas-chromatography (GC)-IRMS for stable carbon and hydrogen isotopes. Candidates must be able to work as part of an analytical laboratory team, and exchange technical information related to sample analysis, data interpretation, and QA/QC with analysts and other research scientists.

Applications (resume and application questions) for this vacancy must be received on-line via USAJOBS BEFORE midnight Eastern Time (Washington, D.C. time) on the closing date of this announcement. If you fail to submit a complete on-line resume, you will not be considered for this position. Requests for extensions will not be granted. If applying on-line poses a hardship for you, please speak to someone in the Servicing Personnel Office listed on the announcement PRIOR TO THE CLOSING DATE. For assistance and questions contact the Office of Human Resources at 303-236-9586 or hdorsey@usgs.gov.

Effective February 27, 2009, USAJOBS can be accessed at <http://www.usajobs.opm.gov>. Announcement numbers are CR-2009-0237, CR-2009-0238, CR-2009-0239, and CR-2009-0240. This is a full time permanent position (Chemist/Physical Scientist, GS-1320/1301-09/11/12) with a salary range of \$49,970-\$94,200 depending upon qualifications. The closing date is March 20, 2009.

U.S. Citizenship is required. USGS is an Equal Opportunity Employer. Technical questions related to this position may be directed to gsellis@usgs.gov.

GeoSciences: Edinburgh Materials and Micro-Analysis Centre (EMMAC) Research Fellow

Vacancy details

* Vacancy Reference: 3010426

* Department: GeoSciences

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- * Job Title: Edinburgh Materials and Micro-Analysis Centre (EMMAC) Research Fellow
- * Job Function: Academic
- * Job Type: Full Time
- * Live Date: 12-Feb-2009
- * Expiry Date: 17-Mar-2009
- * Salary Scale: £36,532 - £43,622
- * Internal job: No. Anybody can apply for this position.
- * Further Information: Further Information
- * Conditions Of Employment: View Conditions of Employment

The School of GeoSciences, one of the largest in the UK, is currently seeking a Research Fellow to support the School's and the Research Council's (NERC) Ion Microprobe Facility. You will be involved in developing new analytical techniques, teaching and supervising Facility users, assisting in the maintenance of the two Ion Microprobes that are part of EMMAC and undertaking research. You should have a PhD in a relevant science discipline and a proven research record. Knowledge of Ion Microprobe instrumentation is not required but experience in the maintenance, development and use of related or similar analytical equipment is essential. You will work closely with the existing EMMAC staff in providing an analytical service and develop their own research programme.

The Faculty of Geosciences at Ruhr-University Bochum (Department of Geology, Mineralogy, and Geophysics) seeks to appoint a junior-professor (W1) (approximately equivalent to the rank of an assistant professor / lecturer) in Petrology by October 1, 2009.

The successful candidate should have a Ph.D degree in a relevant field of science that was obtained not longer than five years ago. The position is not tenure track a priori, but possibility of getting tenure, subject to evaluation of performance, is not excluded. The Junior-professor will have a teaching obligation of four hours per week per semester at the B. Sc- and M. Sc levels within the Geoscience curriculum of the department. The candidate is required to be able to provide basic training in field work to students.

Research interest should preferentially cover some aspect of the quantitative investigation of large-scale processes in the Earth's interior with direct connection to field observations. It is expected that the successful candidate will be able to acquire external research funding. At the time of appointment, proficiency in German is a plus but not a requirement.

Ruhr-University Bochum seeks to increase the number of women in its faculty and thus explicitly invites applications from qualified women. We welcome applications from qualified academics with handicaps.

Applications should include a statement on current and planned research activities, teaching experience and a statement of teaching philosophy, a curriculum vita, and a list of publications. The deadline for application is April 30, 2009. Applications should be sent to Prof. Dr. Uta Hohn, Dean of the Faculty of Geosciences (Geowissenschaften), Ruhr-Universität Bochum, D-44780 Bochum. Email: geodekanat@rub.de

The U.S. Geological Survey (USGS) Florida Integrated Science Center in St. Petersburg, Florida (FISC-St. Pete), is recruiting highly motivated scientists in the field of coastal geology. We are looking for candidates who demonstrate strong potential to become scientific leaders in their field. Recent graduates and scientists with established research programs will be considered.

The USGS FISC-St. Pete (<http://coastal.er.usgs.gov/cfcg/>) supports an integrated science team of 120 geologists, oceanographers, geochemists, engineers, microbiologists, biologists, ecologists, physical scientists, hydrologists, technicians, interns, students, and administrative staff. The FISC-St.Pete office has a \$15 M annual budget primarily funded by five USGS Programs, including the Coastal and Marine Geology Program (<http://marine.usgs.gov/>), and multiple reimbursable projects. Our research facility consists of three buildings totaling more than 50,000 sq. ft. that are well equipped with state-of-the-art labs and outstanding field capabilities. We are located on the University of South Florida Bayboro Campus that provides ample collaboration opportunities with many partners: the USF College of Marine Science and Center for Ocean Technologies, USF St. Petersburg Department of Environmental Science and Policy, Florida's Fish and Wildlife Research Institute, NOAA National Marine Fisheries, and SRI International Marine Technology R&D Facility.

Scientific activities at FISC-St.Pete include: basic research in geology, hydrology, biology, ecology, and related sciences;

- evaluation of hazards including floods, droughts, hurricanes, and climate change;
- research on links between biodiversity, habitat, ecosystem processes, and health;

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- mapping of onshore and offshore benthic habitat and geologic framework;
- assessment of mineral resources and development of techniques for their discovery;
- development of technologies for collection and interpretation of Earth science data;
- collection and archival of data and information for a variety of uses and users;
- development of technology to process and distribute geospatial information;
- provision of scientific support for legislative, regulatory, and management decisions;
- cooperation with academia, industry, and other Federal, State, and local agencies.

The successful applicant will participate in a broad research program that addresses coastal response to natural and human-induced processes. Processes of particular interest include geologic and societal impacts of climate change, sea-level rise, and extreme storms (<http://coastal.er.usgs.gov/hurricanes/>). In addition to leading new efforts, the applicant will contribute to ongoing research at the USGS that is aimed at understanding geologic processes that drive environmental change, decline of coral reef ecosystems, geomorphology, geology, stratigraphic framework, and aggregate resources. Our program currently supports major national and international field research projects in the Gulf of Mexico, southeastern United States, and U.S. Virgin Islands. The program utilizes remote sensing (such as lidar) and GIS capabilities, high-resolution seismic profiling, side-scan sonar, and bathymetric surveys as well as development and application of marine and land-based sediment sampling techniques. The northern Gulf of Mexico is expected to be an important focus area for future efforts (<http://ngom.usgs.gov/>).

The successful applicant is expected to collaborate with other Federal and academic researchers and apply state-of-the art analytical methods, which may include both observation and modeling. Research results must be published in peer-reviewed journals and USGS reports. In addition to having significant scientific impact, research results should also impact a broad range of societal issues including, for example, management of coastal resources, land use, and geologic hazards.

How to apply:

Detailed vacancy requirements and application procedures can be found at USAJOBS.com. This position is being advertised concurrently under the following vacancy announcement numbers: [ER-2009-0103](#), [ER-2009-0104](#) and [ER-2009-0105](#) (e.g., <http://jobsearch.usajobs.gov/ftva.asp?seeker=1&JobID=78837770>). To be considered, applications must be submitted online by midnight Eastern Standard Time, February 27, 2009. This is an interdisciplinary position that is advertised as a 4-year term Research Geologist, Research Oceanographer, or Research Physical Scientist. Salary is \$67,613.00 to \$87,893.00 per annum (GS-1350/1360/1301-12). This position is being advertised as entry-level research at the Federal pay rate of GS-12, but exceptional candidates will be considered for a permanent position with a full promotion potential to GS-15.

POSITION OUTREACH-FOREST MINERALS PROGRAM LEADER

GS-401/801-11

BRIDGER-TETON NATIONAL FOREST - Pinedale, Wyoming

The Bridger-Teton National Forest will soon be re-advertising for a forest minerals program leader responsible for the operation of the Forest's minerals activities. This notification is being circulated to inform prospective applicants of the upcoming opportunity and to determine interest in the position. The location for this position is Pinedale, Wyoming. The successful applicant will work 50 percent for the forest and 50 percent for the Pinedale Bureau of Land Management. They will occupy offices at both Pinedale locations.

TOUR OF DUTY: Permanent, Full-time. **HOUSING STATUS:** No housing is available. **OUTREACH RESPONSE:** Interested applicants or those requiring further information should contact Steve Haydon at 307-739-5535 (shaydon@fs.fed.us). **Please send Steve an email if interested.**

ABOUT THE POSITION:

The position is responsible for the coordination of all forest minerals activities on the Bridger – Teton National Forest and specific minerals assignments from the BLM. Forest assignments include both our oil and gas program, gravel operations, required NEPA, and work on the forest plan revision team. BLM work includes NEPA, environmental review of activities, and other specific assignments. The position is a unique opportunity to work together with both organizations and help them both to implement their minerals programs. During field season, the incumbent will be required to spend some time in the field completing and coordinating projects. The position is located within the Engineering/ Minerals staff group of the forest.

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