

GEOBULLETIN
SEPTEMBER 19th, 2008

The GeoBadger Alumni Reunion

From Baraboo to Mars – GeoBadgers in the Field

September 25-27, 2008
Weeks Hall, Madison, WI

http://www.geology.wisc.edu/news_events/reunion08/

9th Annual Diversity Forum 2008
BEYOND PLANS AND PROMISES:
ACTIVE LEADERSHIP FOR THE FUTURE
September 23, 2008

Register or request accommodations at
<http://www.diversity.wisc.edu/forums.php>
or 608-265-2257

Keynote by Dr. Eduardo Bonilla-Silva of Duke University
8:00 a.m. – 3:30 p.m.

Memorial Union

FREE – Everyone is Invited!

- First Nations focus
- poster sessions
- interactive breakout sessions

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.

FALL 2008 WEEKS LECTURE SCHEDULE

September 19 ----- Henry Pollack --- University of Michigan
FRIDAY, Sept. 19th at 3:30 PM, AB20 WEEKS HALL
"Earth's Changing Climate: View from Underground"

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Abstract: *Subsurface temperatures comprise an independent archive of past surface temperatures that is complementary to both the instrumental record and other climate proxies. An analysis of subsurface temperatures at hundreds of sites around the globe has yielded a 500 year reconstruction of the surface temperature. This reconstruction confirms the unusual warming of the twentieth century revealed by the instrumental record, but suggests that the cumulative change over the past five centuries exceeds estimates from climate proxies. The resolution of this difference involves an understanding of air-ground thermal coupling and dendrochronologic data processing.*

- September 26 ----- Reserve for Alumni event and BOV
- October 3 -----
- October 10 ----- Glenn Spinelli --- New Mexico Tech
- October 17 ----- John Tarduno --- University of Rochester
- October 24 ----- Donald Mkhonto - UW
- October 31 ----- Rick Law – VPI
- November 7 ----- Peter Mozely – New Mexico Tech
- November 14 ----- Steve Wojtal – Oberlin College
- November 21 ----- Joseph Licciardi --- University of New Hampshire
- November 28 ----- Thanksgiving Recess
- December 5 ----- David Deamer
- December 12 ----- Stephen Hasiotis
- December 19 -----

Here is a program for undergrad scholarships.
http://es.epa.gov/ncer/rfa/2009/2009_gro_undergrad.html

POSITION OPENINGS:

- JOIN KINROSS GOLD! Grads can apply for the Generation Gold Program and gain valuable experience and training w/ attractive compensation and benefits. Summer internships are available for undergrads.
- 6 jobs to offer at the GFZ German Research Centre for Geosciences within a national wide project dealing with CO2 storage .
- The Department of Geosciences at Denison University invites applications from candidates with a background in mineralogy, petrology and high-temperature geochemistry for a tenure-track position (assistant professor) to begin in Fall 2009.
- The Department of Geology at the University of South Florida seeks a Visiting Assistant Professor in Geochemistry for 2009.
- The University Of Western Australia-Lecturer (Ref: 2519) -Metamorphic Petrology/Geochemistry, School Of Earth And Geographical Sciences -5 year appointment with further employment dependent on funding and progress
- The Department of Geology & Geophysics at Louisiana State University invites applications for two tenure-track Assistant Professor positions to begin Fall semester 2009
- Postdoctoral openings at Lawrence Livermore Laboratory, including experimental geophysics, hydrology, seismology, and atmospheric research areas
- A 3 year postdoc research position here working with me on fracture issues related to natural gas production in the Rockies.
- Picarro would like to hear from potential applicants for the following Applications Specialist position. The Applications Specialist will play a crucial role in applications and methods development for isotopic ratio analysis of a variety of samples using Picarro's novel Wavelength Scanned Cavity Ringdown Spectroscopy (WS-CRDS) system.
- Seeking a full-time Associate Editor to work in our Washington, DC, or Cambridge, UK office
- Tenure-track Position in Solid Earth Sciences -Department of Earth and Environmental Sciences, University of Waterloo
- Associate Lecturer / Lecturer In Geology - Department Of Applied Geology -Curtin University Of Technology, Western Australia
- A vacant 3 year post-doctoral position in mineral physics - University of Cambridge Department of Earth Sciences
- The Department of Geology and Geophysics at the University of Wyoming invites applications for a tenure-track faculty position in the broad field of isotope geology.
- A new Professor level position in Metamorphic Geology will be available from September 2009 at Toulouse, France.
- Interested in conducting fundamental scientific research to integrate atmospheric, earth, and energy sciences in support of defense and global security? What about solving problems of national importance through the exploration and development of new technologies?
If so, the Atmospheric, Earth, and Energy Division (AEED) in the Chemistry, Material, Earth and Life Sciences Directorate has several openings for postdoctoral staff members that may interest you...
- Postdoctoral Fellow, Volcanism in the Arctic System INSTAAR, University of Colorado at Boulder and National Center for Atmospheric Research (NCAR), Boulder

POSITION OPENINGS:

JOIN KINROSS GOLD!
Grads can apply for the Generation Gold Program and gain valuable experience and training w/ attractive compensation and benefits. Summer internships are available for undergrads.
Additional information available in the department office. Interested students should contact generationgold2008@kinross.com and request information well in advance of the Nov. 5 application deadline.

We do have 6 jobs to offer at the GFZ German Research Centre for Geosciences within a national wide project dealing with CO2 storage and we would like you to apply or distribute this offer further. The joint research project lighthouse CLEAN CO2 Largescale EGR in the Altmark Natural gas field is planned as a scientific program accompanying the „Enhanced Gas Recovery“ (EGR) project within the second largest natural gas field in Europe the Altmark gas field. Within the framework of the investigation, use and protection of the underground the following jobs will be filled: Research Scientist, Geophysicist or Physicist, Chemist or

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Geochemist, Research Scientist or Public Relation Manager, and 2 PhD positions.

Job Vacancies in the CLEAN Altmark Project

The Helmholtz Centre Potsdam GFZ German Research Centre for Geosciences is the national Research Centre for Geosciences in Germany and a member of the Helmholtz Association.

The joint research project lighthouse CLEAN – CO₂ Large-scale EGR in the Altmark Natural gas field is planned as a scientific program accompanying the „Enhanced Gas Recovery“ (EGR) project within the second largest natural gas field in Europe – the Altmark gas field. Furthermore, this project will be a major step forward towards large-scale onshore storage of CO₂ and to support in that way the definition of national and international standards. Within the framework of the investigation, use and protection of the underground the following positions will be filled: The Section 5.1 "Environmental Geotechnique" in Department 5 "Geoengineering" invites applications for a position as **Research Scientist** to support the project coordinator to implement and document this national joint project in cooperation with 16 institutions from industry and academia.

Tasks:

Beside project management own scientific work with the focus on integrated monitoring concepts is expected. In the context of the project reports, scientific presentations and publications need to be delivered.

Qualifications:

- Master in geology, geophysics, physics, chemistry, biology or engineering and PhD.
- Experience in the implementation and coordination of scientific projects.
- Experience in the field of resources management, reservoir management or mining.
- Good command of English language.

Salary according to TVöD 13/14 depending on qualification. Duration of the position is initially limited until the 30.06.2011.

Contact: Prof. Dr. Frank Schilling (frank.schilling@gfz.potsdam.de) Further, the Section 5.1 "Environmental Geotechnique" in Department 5 "Geoengineering" invites applications for a position as **Geophysicist or Physicist** for the scientific management of the seismic monitoring at the location Altmark. This project is closely linked to further projects of CO₂ storage at GFZ.

Tasks:

Project coordination of active and passive seismic monitoring (VSP/MSP and microseismic monitoring) and processing and interpretation of VSP/MSP measurements. In the context of the project reports, scientific presentations and publications need to be delivered.

Qualifications:

- PhD or equivalent and a strong background in Earth Sciences, geophysics, physics.
- Experiences in performing and interpretation of seismic measurements in particular borehole measurements like Vertical Seismic Profiling (VSP) and Moving Source Profiling (MSP).
- Computer and programming skills.
- Good command of English language.

Salary according to TVöD 13/14 depending on qualification. Duration of the position is initially limited until the 30.06.2011.

Contact: Dr. Rüdiger Giese (ruediger.giese@gfz.potsdam.de) Further, the Section 5.1 "Environmental Geotechnique" in Department 5 "Geoengineering" invites applications for a position as **Chemist or Geochemist** for the scientific support and development of chemical modules for computer programs applied for coupled numerical reservoir simulations.

Tasks:

Comparison of chemical modules connected to computer models for coupled simulation of deformation, fluid flow, heat transfer, transport and chemical reactions. Development of up scaling methods to transfer laboratory results to the reservoir scale. In the context of the project reports, scientific presentations and publications need to be delivered.

Qualification:

- Master in chemistry, geochemistry, geophysics, physics, engineering oder mathematics preferably with PhD.
- Experience with geochemical processes of water rock interactions.
- Experience in application of geochemical simulation programs..
- Programming skills
- Good command of English language.

Salary according to TVöD 13/14 depending on qualification. Duration of the position is initially limited until the 30.06.2011.

Contact: Dr. Michael Kühn (michael.kuehn@gfz.potsdam.de) Further, the Section 5.1 "Environmental Geotechnique" in Department 5 "Geoengineering" invites applications for a position as **Research Scientist or Public Relation Manager** for the leadership of the information centre at the CLEAN/Altmark site.

Tasks:

The activities cover the conception and setting up of the information centre as well as the production of descriptive exhibits and brochures in close cooperation with the scientists of the entire joint project CLEAN Altmark. Coordination of the installation of an internet-based, virtual information platform to educate the public about the Altmark project in particular and the EGR technology and CO₂ storage in general.

Qualification:

- Master and PhD in geosciences, geoengineering or journalism preferably with relation to reservoir engineering or reservoir geophysics.
- Experience in the coordination of joint projects.
- Scientific experience and advanced presentation skills.
- Good command of English language.

Salary according to TVöD EG 14.

Duration of the position is limited from 01.09.2008 to 31.08.2011. Contact: Prof. Dr. Frank Schilling (frank.schilling@gfz.potsdam.de)

The Section 5.2 "Geothermics" in Department 5 "Geoengineering" invites applications for a **PhD position (m/f)** for the development and field testing of a new thermal borehole measurement technique in order to investigate the transport behaviour of gases and fluids within the reservoir rock.

Tasks:

Design of a combined fiber-optic and electrical logging cable. Plan and perform laboratory tests and field experiments. Carry out and interpret borehole temperature measurements. Carry out coupled thermohydraulic simulations. In the context of the project reports, scientific presentations and publications need to be delivered.

Qualifications:

- Diploma or masters degree in geophysics, geology (with a strong focus on applied geosciences), or a related field
- Experience in borehole logging and heat and fluid transport
- Interest in field and laboratory work, as well as numerical simulation
- Ability to work in an interdisciplinary team.

Payment: EG 13 TVöD

Working hours: 19.5 hours/week

Duration: until 30.6.2011

Contact: Dr. Jan Hennings (jan.hennings@gfz.potsdam.de)

The Section 3.2 "Deformation and Rheology" in Department 3 "Geodynamics" invites applications for a **PhD position (m/f)** for the investigation of microseismicity induced by storage of CO₂.

Tasks:

The successful candidate is invited to perform active research on microseismicity induced during storage of CO₂. The investigation performed by him or her aims at analyzing microseismicity data acquired by a downhole seismic array. Objectives of the programme include identifying hypocenter locations of microseismic events, analysis of source characteristics and cluster analysis. Further tasks include analysing the spatiotemporal evolution of seismicity as well as determining faulting mechanisms and their inversion for the stress tensor. In the context of the project reports, scientific presentations and publications need to be delivered.

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Qualifications:

- Diploma or masters degree in geophysics or physics with strong background in seismology.
- Experience in the analysis of fully digitized waveforms.
- Programming skills for processing of seismological data desirable (preferably C, MATLAB).
- Willingness to participate in geophysical field campaigns and to work in an interdisciplinary team.

Payment: EG 13 TVöD

Start: 2009-01-01

Duration: 2 years (with the option of a one year extension)

Working hours: 19.5 hours/week

Contact: Prof. Dr. Dresen (dre@gfz.potsdam.de) or PD Dr. Bohnhoff (bohnhoff@gfz.potsdam.de)

The Department of Geosciences at Denison University invites applications from candidates with a background in mineralogy, petrology and high-temperature geochemistry for a tenure-track position (assistant professor) to begin in Fall 2009. We seek a broadly trained scientist to teach Physical Geology, Earth Materials, Igneous/Metamorphic Petrology and other courses that complement our program. The ideal candidate should be committed to teaching excellence in a liberal arts setting, have a strong field background, have broad interests beyond their specialty, and be able to provide a balance of classroom, field and laboratory experiences for our students.

A Ph.D. at the time of appointment is required. Denison is a highly selective liberal arts college strongly committed to, and supportive of, excellence in teaching and active faculty research that involves undergraduate students.

All application materials will be handled electronically at <https://employment.denison.edu>.

Please include a letter of application; statements of your approaches to teaching and research in a liberal arts setting; a vita; academic transcripts; and contact information for three references.

Please contact Dr. Tod Frolking, Department of Geosciences, Denison University, Granville, OH 43023; (740) 587-6217; frolking@denison.edu for more information about the position. Application materials should be posted by October 15, 2008 for full consideration. We

encourage early applications, we would like to meet with candidates attending GSA, October 6- 8, and invite finalists to campus in early November. Denison University is an Affirmative Action, Equal Opportunity Employer. In a continuing effort to diversify our Campus

Community, we strongly encourage women and people of color to apply.

The Department of Geology at the University of South Florida seeks a Visiting Assistant Professor in Geochemistry for 2009. We particularly seek applicants who specialize in aqueous and/or environmental geochemistry, although different geochemical backgrounds and expertise will be considered. We are interested in individuals who incorporate field and laboratory experience in their present research and can integrate this knowledge into both graduate and undergraduate classes. Although the focus of the position is on teaching courses in aqueous geochemistry, we anticipate that the successful applicant will continue to pursue their research as well as interact with existing faculty members. Analytical facilities in Geology include, but are not limited to, an ICP-OES, AFS and a newly established ICPMS and IRMS laboratory with a full-time research technician. A PhD at the time of employment is preferred; we anticipate searching for a tenure-earning position in this discipline during 2009-2010, pending budgetary approval.

To apply, send a letter of interest, curriculum vita, statements of teaching and research goals, as well as the names and e-mail addresses of three referees to: Peter J. Harries, Search Chair, Department of Geology, University of South Florida, 4202 E. Fowler Ave., SCA 528, Tampa, FL 33620-5201. Applications will be accepted through November 10, 2008. For additional information, contact Peter Harries (harries@cas.usf.edu) or visit www.cas.usf.edu/geology. USF is an AA/EEO institution. Women and minorities are strongly encouraged..

THE UNIVERSITY OF WESTERN AUSTRALIA-LECTURER (REF: 2519)
METAMORPHIC PETROLOGY/GEOCHEMISTRY
SCHOOL OF EARTH AND GEOGRAPHICAL SCIENCES

5 year appointment with further employment dependent on funding and progress

Salary range: Level B \$71,957 - \$85,450 p.a.

Closing date: Friday, 17 October 2008.

The School of Earth and Geographical Sciences is seeking a highly motivated geoscientist in the areas of metamorphic petrology and geochemistry. The School emphasises an integrated global perspective on issues posed by the earth and its environment and has an international reputation for research and teaching in geology and geophysics, geography and soil science.

The successful candidate will be expected to conduct research at the highest level, lead field excursions, attract research students, apply for external research funds, contribute substantially to undergraduate and postgraduate teaching, and to supervise Honours, MSc and PhD students. Applicants must have a doctoral qualification or equivalent scholarly attainment in Geoscience and the strong motivation to deliver both high level fundamental and applied research. The candidate is expected to work effectively in a team environment within the School and its numerous research centers. Candidates are expected to provide a strong and innovative teaching portfolio in metamorphic petrology and geochemistry and the propensity to increase the level of Honours and PhD studies the fields of metamorphic petrology, geochemistry and geochemical modeling.

For further information regarding the position please contact the Head of School, Professor Peter Cawood on +61 8 6488 3422 or email peter.cawood@uwa.edu.au.

Additional information on the School of Earth and Geographical Sciences can be obtained from the website <http://www.segs.uwa.edu.au/>.

Benefits include generous superannuation and leave provisions and fares to Perth (if applicable) for appointee and dependants along with a removal allowance. These and other benefits will be specified in the offer of employment.

APPLICATION DETAILS: The position description follows. Written applications quoting the reference number, personal contact details, qualifications and experience, along with contact details of three referees should be sent to Director, Human Resources, The University of Western Australia, M350, 35 Stirling Highway, Crawley WA 6009 or emailed to jobs@uwa.edu.au by the closing date.

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The Department of Geology & Geophysics at Louisiana State University invites applications for two tenure-track Assistant Professor positions to begin Fall semester 2009.

Geochemistry: We seek geochemists who work on fundamental processes and mechanisms, and the evolution of isotopic and geochemical systems. Analytical approaches include, but not limited to, non-traditional stable isotope systems, innovative mass spectrometric techniques, or radioisotopic chronometry. Geochemists whose research programs may utilize our Class 100/1000 ultraclean laboratory and/or wet-chemistry/stable-isotope (TIMS) facilities are encouraged to apply.

Sedimentary Geology: We are looking for a sedimentary geologist who studies sedimentary processes and the evolution of sedimentary systems. Research may include modern and/or ancient examples. The successful candidate will be expected to teach and undergraduate course in sedimentation and depositional environments. Applicants whose research program can utilize our Landmark/Petrel laboratory, geoprobe, and/or microscopy laboratory are encouraged to apply.

Two interrelated focus areas: "Evolution of Sedimentary Systems" and "Earth Materials and Solid Earth Processes" have been developed within the LSU Department of Geology and Geophysics to enhance existing strengths of the Department and allow the Department to interface synergistically with other academic units at LSU. See www.geol.lsu.edu for more information regarding these focus areas, faculty, facilities, and research programs.

The successful applicant must have a Ph.D. at the time of appointment and postdoctoral experience is preferred. The new faculty members are expected to contribute to our undergraduate and graduate teaching programs, and develop courses in their areas of specialization. Development of a strong research program, including supervision of graduate student research, active publication in highly ranked journals, and the generation of external funding, is required. Interaction with other faculty within the Department and across the University is strongly encouraged.

Interested persons should send a copy of their vita, a statement of their research and teaching interests, and the names, postal and e-mail addresses, and phone numbers of at least three references to: Faculty Search Committee, Department of Geology and Geophysics, Louisiana State University, Ref. Log ##### (Geochemistry) or Ref. Log ##### (Sedimentary Geology), Baton Rouge, LA 70803. The review process will begin November 1, 2008. The search will continue until a suitable candidate is found.

LSU is the Flagship University of Louisiana, a public and comprehensive institution serving the State and the entire nation with an enrollment of approximately 30,000 students. LSU is ranked in the top tier for "Best National Universities" in the U.S. News & World Report's 2009 edition of America's Best Colleges. LSU places a strong emphasis on nationally recognized research competitiveness as outlined in its "National Flagship Agenda" (www.lsu.edu/flagship).

NOTE: Representatives of the Department will be present at the 2008 GSA Annual Meeting in Houston and AGU Fall Meeting at San Francisco.

Postdoctoral openings at Lawrence Livermore Laboratory, including experimental geophysics, hydrology, seismology, and atmospheric research areas.

Andreas Kronenberg	Professor and Head
Department of Geology and Geophysics	Phone: (979) 845-0132
Center for Tectonophysics	FAX: (979) 845-6162
Texas A&M University	e-mail: kronenberg@geo.tamu.edu
College Station, TX 77843 U.S.A.	

Through the addition of high-quality Post Doctoral Research Associates, the Atmospheric, Earth, and Energy Division is building on its existing expertise in the following areas: atmospheric and climate modeling, CO₂ sequestration, geophysics, seismology and rock mechanics, geochemical modeling, fracture flow, and transport. The research conducted by the Post Doctoral Research Associates will focus on problems of national interest in the energy and environment areas.

We currently have several openings for Post Doctoral Research Staff Members in the following groups:

- **Hydrologic Sciences** – #007748 – Works in the development and application of computational models for simulating fluid flow in coupled atmospheric, surface, and subsurface hydrologic systems
 - **Experimental Geophysics** – #007668 – Supports LLNL's growing carbon storage program and conducts research in areas of specification including reactive and/or multiphase fluid flow in porous and fractured media
 - **Seismology** – #007714 – Specializes in computational seismology, forward and inverse calculations with 3D earth models, and broadband waveform analysis
 - **Atmospheric Flow, Transport, and Hazard Assessment / Climate and Carbon Science** – #007646 – Collaborates with a team of atmospheric and computer scientists to provide scientific support for a national operational atmospheric release emergency response system
- To view detailed position descriptions and apply for these opportunities, go to <https://jobs.llnl.gov> and search by job number as indicated above. When applying and prompted please mention where you saw this ad. LLNL is operated by the Lawrence Livermore National Security, LLC, for the U.S. Department of Energy, National Nuclear Security Administration. We are proud to be an equal opportunity employer with a commitment to workforce diversity.

A 3 year postdoc research position here working with me on fracture issues related to natural gas production in the Rockies. In addition, this position in its first year [and possibly beyond] has a teaching component. We have had good success in the past using these postdocs as great launching pads for a career in academics or industry.

The full position announcement, instructions as to how to apply, and related information, can be found at <http://jobs.usu.edu/applicants/Central?quickFind=53484>.

From this link applicants can also find information regarding the area, housing, etc.

The interview process might be a bit different, as I will be on sabbatical soon. It is likely that finalists will interview at Madison with me, and then come to Logan as well.

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Picarro would like to hear from potential applicants for the following position, also posted on

<http://www.picarro.com/about/careers/positions.php>

Applications Specialist

Description:

The Applications Specialist will play a crucial role in applications and methods development for isotopic ratio analysis of a variety of samples using Picarro's novel Wavelength Scanned Cavity Ringdown Spectroscopy (WS-CRDS) system. This technique provides high precision data with minimal calibration and sample preparation. This position reports to the Director of Marketing and encompasses working directly with scientists in academic, government and industrial laboratories, providing data from the Picarro product and supplying expertise in the field. In addition, this person will work internally with Picarro's R&D team in setting the goals for future generation products. We're seeking an individual who is comfortable and excited about working on the front-line of scientific contribution, and can work across traditional job boundaries.

Key Responsibilities:

- Conducting spectrometer demonstrations for prospective customers
- Working with scientists on emerging techniques and trends
- Publishing papers and articles in the field of WS-CRDS Isotopic ratio analysis
- Attending and presenting papers at scientific meetings and trade shows
- Developing requirements for next generation products
- Requires 25-35% travel, nationally and internationally

Qualifications:

- Minimum 2 years experience post-graduate isotopic ratio analyses with IRMS and/or CRDS instrumentation
- Strong communications skills are essential, both written and oral
- Fluency in basic analysis and presentation software (Excel, Powerpoint) required, programming capability with Matlab or other mathematical software preferred
- Must possess the ability to work across functional boundaries and organizational levels inside the company
- Ph.D. in Physical Sciences with emphasis on analytical instrumentation, preferably isotopic ratio analyses

Please send your resume to igreen@picarro.com.
Phone: (408) 962-3942

Associate Editor for Science

We are seeking a full-time Associate Editor to work in our Washington, DC, or Cambridge, UK office. We are looking for scientists with broad interests and experience with cutting-edge research spanning some or all of the following fields: solid state physics, applied physics, and mineral physics. Responsibilities include managing the review, selection, and editing of manuscripts, working with authors on revisions, soliciting reviews and special issues, and fostering contacts and communication with the scientific community. Candidates are expected to travel to scientific meetings. Postdoctoral experience and multiple publications are required, as is the ability to work constructively as a member of a team. Previous editorial experience is not necessary. Visit us at www.sciencemag.org and www.aaas.org. EOE. Nonsmoking work environment.

For consideration send a cover letter and resume, along with your salary requirements, to

AAAS
Human Resources Office, Suite 101
1200 New York Ave., NW
Washington, DC 20005
or, by email, to jobs@aaas.org or, by fax, to 202-682-1630 or feel free to contact me for additional information:

Brooks Hanson
bhanson@aaas.org
202 326 6506

**Tenure-track Position in Solid Earth Sciences -Department of Earth and Environmental Sciences
University of Waterloo**

The Department of Earth and Environmental Sciences at the University of Waterloo invites applications for a tenure-track position in the area of solid earth sciences at the level of Assistant to Associate Professor. Appointment at the Full Professor level may be considered under exceptional circumstances. We are seeking an outstanding candidate who will complement and enhance our existing strengths within a growing, dynamic solid earth science research program. We are especially interested in a candidate who is involved in field-oriented studies using multidisciplinary approaches from a regional to global perspective. Research interests may include, but not limited to, tectonics/geodynamics, metamorphic geology, geochemistry, applied mineralogy and geochronology. The successful candidate will be expected to build a vigorous and innovative, externally-funded research program involving graduate students and to participate actively in a comprehensive undergraduate curriculum that spans the breadth of the traditional and environmental earth sciences.

The Department of Earth and Environmental Sciences has a well-funded and diverse research program currently involving 22 full-time faculty, 7 research faculty, 35 research staff and over 100 Ph.D. and M.Sc. students. Further information about the Department can be accessed at <http://www.earth.uwaterloo.ca/>.

Evaluation of candidates will begin December 15, 2008 and continue until the position is filled. A complete application must include a full curriculum vitae, a statement outlining the nature of the research program and teaching philosophy, two to five recent publications and the names and contact information of at least three referees.

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The University of Waterloo encourages applications from all qualified individuals, including women, members of visible minorities, native people and persons with disabilities. All qualified candidates are encouraged to apply; however Canadians and permanent residents will be given priority. This appointment is contingent on funding. Applications should be directed to the Geology Search Committee Chair, Department of Earth and Environmental Sciences, University of Waterloo, Waterloo, Ontario, N2L 3G1, Canada (email: klalbrecc@uwaterloo.ca).

ASSOCIATE LECTURER / LECTURER IN GEOLOGY
DEPARTMENT OF APPLIED GEOLOGY
CURTIN UNIVERSITY OF TECHNOLOGY
WESTERN AUSTRALIA

Full-time, Fixed-term - 3 Years - \$49,104 to \$83,299 -Ref: 4483

The Department of Applied Geology at Curtin is seeking to appoint an Associate Lecturer or Lecturer to a three-year fixed-term position (with potential for further appointment depending on performance and funding). The post is based at Curtin's main Bentley Campus, 6 km south of the centre of Perth, and would be suitable for a recent PhD graduate, or a student expecting to complete his or her PhD in the near future. Teaching responsibilities will be primarily at first-year level and we encourage persons with expertise in any area of geoscience to apply. Effective communication skills are essential, and the successful applicant will be expected to contribute to the Department's research profile in his or her area of expertise.

The Department of Applied Geology is one of Australia's largest geoscience departments with over 25 teaching and research staff, 250 full-time equivalent students, and a high-impact research program that spans many areas of fundamental and applied geoscience and is supported by world-class facilities and equipment (see www.geology.curtin.edu.au for details).

Further details are available on-line at: <http://jobs.curtin.edu.au/positionview.cfm?positionid=14702> or from Ian Fitzsimons, Head of Department (contact details below).

Applications close on 22 September 2008.

University of Cambridge -- Department of Earth Sciences - 3 year post-doctoral position in mineral physics/geophysics

Applications are invited for a 3 year post-doctoral position (one year in the first instance, extendable for a further two years) to undertake research on a project funded by the Natural Environment Research Council on "Elastic anomalies and anelastic dissipation mechanisms associated with phase transitions in minerals". The project involves preparation of a range of oxides, chlorides, perovskites and natural minerals for measurements of their elastic properties as a function of temperature, mainly by Resonant Ultrasound Spectroscopy. The objective is to investigate the elastic anomalies and acoustic dissipation processes which occur in association with changes in crystal structure at phase transitions and to relate these to possible seismic anomalies and dissipation processes in the Earth's crust and mantle.

The successful candidate should have a Ph.D. in some experimental aspect of mineral physics/geophysics/solid state chemistry/solid state physics/materials science relating to the physical properties and structure of crystalline materials. Experience of elasticity measurements would be an advantage, but is not absolutely essential.

The salary scale is £25,888 - £33,780 depending on experience. The starting date is flexible within the next six months (up to ~March 2009).

Further information can be obtained from Prof. M.A.Carpenter (mc43@esc.cam.ac.uk), Department of Earth Sciences, Downing Street, Cambridge CB2 3EQ, U.K. Send application with CV, to be received in Cambridge as hard copy or as email attachment to Prof. Carpenter by 15 October 2008.

The Department of Geology and Geophysics at the University of Wyoming invites applications for a tenure-track faculty position in the broad field of isotope geology. This appointment will most likely be made at the Assistant Professor level beginning in August 2009.

We encourage applications from promising scientists that apply radiogenic and/or stable isotopes to problems in the fields of geologic or environmental processes, including but not restricted to topics as diverse as aqueous/environmental geochemistry, climate change, crustal and mantle petrogenesis, mineral deposits, paleoaltimetry, sedimentary provenance, and structural geology. The successful candidate will be expected to develop a research program in their field, and contribute to the graduate and undergraduate teaching missions of the Department of Geology and Geophysics.

The Department has strength in radiogenic isotopes and thermochronology, including laboratories with TIMS instrumentation and fission-track dating facilities. Furthermore, the Department supports a full range of aqueous analytical instrumentation, an electron microprobe, and SEM. Additional information on the Department Geology and Geophysics can be obtained at <http://home.gg.uwyo.edu>. There is a well-equipped University stable isotope facility with multiple IRMS linked to TC/EA, EA, GasBench, and other peripheral devices (<http://uwacadweb.uwyo.edu/sif/>).

Applications should include a statement of research and teaching interests, curriculum vitae, and the names and contact information for at least three individuals who can provide letters of evaluation. Review of completed applications will begin September 24, 2008. Send an electronic copy of your application to: Ms. Carol Pribyl at cpribyl@uwyo.edu; if you have additional application materials to send, please direct them to the Isotope Geology Search Committee, Department of Geology and Geophysics, University of Wyoming, 1000 East University Avenue, Dept. 3006, Laramie, WY 82071-2000.

The University of Wyoming is an equal opportunity/affirmative action employer.

A new Professor level position in Metamorphic Geology will be available from September 2009 at Toulouse, France.

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The initial deadline is the 14th of October (see below)

Research Profile : Metamorphic Geology

The candidate will conduct their research activities as part of the Geodynamics research group at University Paul Sabatier, Toulouse (LMTG UMR 5563 CNRS-Université Paul Sabatier-IRD see www.lmtg.obs-mip.fr). The research area will be the study of crustal orogens and or cratons. The candidate must be specialized in at least one of the following fields: metamorphic petrology, geochronology or structural geology. The research program will investigate the thermomechanical and possibly metallogenic evolution of Precambrian to modern mountain chains and the interactions between different crustal levels.

Teaching Profile :

The candidate will principally be involved in teaching general geology (mapping, field camps in sedimentary and metamorphic terrains) and in their field of specialty.

The procedure to apply for a Prof Position in France is as follows (as stolen from an old email of Alain Vauchez's email, (thanks!))

Selection of candidates is a two-step process:

1) To be considered for this Professor position, the candidate must hold a PhD, and have sufficient research and teaching experience (> 5 years) to be qualified by the French Ministry of Education and Research. The application information is available at:

<http://tinyurl.com/3418f3>

go to "démarrer" click on Antares (qualification), then follow the steps to fill the form.

The deadline for application for this qualification step is Oct. 14, 2008.

2) A University committee will be set up in April/May 2009 to evaluate and select the candidate, based on curriculum vitae, a statement of research and teaching interests, and interview.

Professor Position: This is a permanent research and teaching position, starting in September 2009. For a general description of recruitment at the professor level in France, see <http://www.education.gouv.fr/cid1059/professeur-des-universites.html>. Health care and pension program are included in the salary.

Interested in conducting fundamental scientific research to integrate atmospheric, earth, and energy sciences in support of defense and global security? What about solving problems of national importance through the exploration and development of new technologies?

If so, the Atmospheric, Earth, and Energy Division (AEED) in the Chemistry, Material, Earth and Life Sciences Directorate has several openings for postdoctoral staff members that may interest you. The postings listed below briefly describe the positions, however, please visit the AEED website at http://www-cmels.llnl.gov?url=about_cmels-atmospheric_earth_and_energy_division. The application process is to apply via LLNL's Jobs Page at <https://jobs.llnl.gov>. Your resume will then be reviewed by the hiring manager or PI hiring for the position.

Current Postings:

Job #007714

The Seismology Group within the Atmospheric, Earth, and Energy Division in the Chemistry, Materials, Earth and Life Sciences Directorate has an opening for a postdoctoral staff member to do original and independent research to support the Ground Based Nuclear Explosion Monitoring (GNEM) Program. We are seeking an individual with specialization in computational seismology, forward and inverse calculations with 3D earth models and broadband waveform analysis. Successful applicants will have access to the GNEM programs extensive seismic database and LLNL's high performance computing facilities. This position will report to the Seismology group leader and the GNEM Program leaders.

Job #007822

The Computational Physics Group within the Atmospheric, Earth and Energy Division (AEED) in the Chemistry, Materials, Earth and Life Sciences Directorate, has an immediate opening for a postdoctoral scientist to do original and independent research in one or more aspects of computational geophysics, geology, and basic energy sciences. The successful candidate will perform computational modeling and field studies utilizing state of the art geomechanical tools to study fault and fracture network activation in response to fluid injection into the subsurface. The successful candidate will have access to LLNL's extensive computer facilities, specialized laboratory facilities and field equipment. The postdoctoral scientist will report to the Computational Physics Group Leader within AEED.

Job #007646

The Atmospheric, Earth and Energy Division in the Chemistry, Materials, Earth and Life Sciences Directorate has openings for postdoctoral scientists to do original and independent research in one or more aspects of atmospheric science, including numerical modeling and parameterization of physical processes, atmospheric chemistry and aerosol processes, high performance computing, and /or field experiments. Areas of possible specialization include boundary-layer meteorology; wind resource characterization; atmospheric transport and dispersion modeling; meteorological data assimilation; numerical weather prediction at global, regional, mesoscale, and urban scales; flows in complex terrain; surface-atmosphere interaction; atmospheric chemistry and aerosol modeling; uncertainty quantification; and field experiments. Research personnel may also collaborate with a team of atmospheric and computer scientists to provide scientific support for a national operational atmospheric release emergency response system. Successful applicants will have access to LLNL's extensive computer facilities. These positions will report to the Atmospheric Flow, Transport and Hazard Assessment group leader or the Climate/Carbon Science group leader within the Atmospheric, Earth, and Energy Division.

Job #007668

The Atmospheric, Earth, and Energy Division in the Chemistry, Material, Earth and Life Sciences Directorate has an opening for a postdoctoral staff member to do original and independent research in the area of hydrogeology. Areas of specialization include reactive and/or multiphase fluid flow in porous and fractured media in support of LLNL's growing carbon storage program. Researchers may work in one or more of the following areas: computational modeling of pore-scale multiphase flow, transport and reaction processes; quantitative experimental imaging of pore-scale processes (e.g., X-ray microtomography). Successful applicant will have access to LLNL's extensive computing facilities and diverse laboratory facilities, including access to the Advanced Light Source at Lawrence Berkeley National Laboratory. This

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position will report to the group leader of the Experimental Geophysics group.

Job #007748

The Atmospheric, Earth and Energy Division has an opening for a postdoctoral staff member in the Hydrologic Sciences Group. The candidate will work in the development and application of computational models for simulating fluid flow in coupled atmospheric, surface and subsurface hydrologic systems. The position will emphasize the use of these models and simulation tools to understand, interpret, or influence complex behavior to water flow and water quality in and between surface and subsurface systems, especially as they may relate to regional climate interactions, carbon flux studies, or other terrestrial and urban hydrological processes. This position will report to the Hydrologic Sciences Group Leader.

Job Description: Postdoctoral Fellow, Volcanism in the Arctic System INSTAAR, University of Colorado at Boulder and National Center for Atmospheric Research (NCAR), Boulder

Supervisors: Gifford Miller (INSTAAR), Bette Otto-Bliesner (NCAR) Salary Range: \$55k - \$57k

This is a new, full-time, two-year term position with a start date of January/February 2009. Initial consideration will be given to applications received prior to Friday, Nov. 7 2008. Thereafter, applications will be reviewed on an as-needed basis.

Basic job functions:

Successful applicant will participate in a multi-national/multi- institutional interdisciplinary team focusing on the impact of volcanism on the Arctic System.

Duties include:

Conducts research using the NCAR Community Climate System Model (CCSM) and the Whole Atmosphere Community Climate Model (WACCM) to understand and predict climate impacts on the Arctic System from tropical and high-latitude explosive volcanism. Timescales include the Holocene, with possible extensions to the Last Interglaciation. Postdoctoral Fellow will be responsible for designing, running and analyzing ensembles of CCSM and WACCM simulations to assess the immediate impacts of stratospheric loading from explosive volcanism, and possible feedbacks that might lead to a change in state across the Arctic, particularly during the Little Ice Age and the early Holocene. Additional simulations may evaluate climate impacts of long-duration effusive eruptions. Research to be conducted in collaboration with PIs from NCAR and several US and international universities.

Requirements include:

Education and experience:

- o Recent PhD in atmospheric science, earth science, or related field.

Knowledge, skills and abilities

- o Experience working with large-scale climate models and/or large-scale climate- proxy data sets
- o Experience working with the impacts of volcanic aerosols on the climate system or volcanic signals in ice cores
- o Strong quantitative skills
- o Ability and keen interest in collaborative interdisciplinary research
- o Experience working in a UNIX computing environment
- o Proficiency in software diagnostic tools and experience in scientific computing
- o Demonstrated ability to work collaboratively and independently
- o Strong written and oral communication skills; strong publication record

For additional information contact:Gifford Miller gmill@colorado.edu or Bette Otto-Bliesner ottobli@ncar.ucar.edu

~ ~ ~ ~ ~ ~ ~ ~ **HAVE A GREAT WEEKEND!** ~ ~ ~ ~ ~ ~ ~ ~