GeoBulletin is distributed weekly, by E-mail. Contributions are requested! If you have a news item, a request, an announcement etc. email it to geodept@geology.wisc.edu or leave it at the office, Room 225 by Noon on Monday.

**Weeks Lecture**

*Speaker list – Spring 2012*

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**Friday, Feb 10, 2012:**

Greg Waite, Michigan Tech (Host: DeMets)

Dr. Gregory P. Waite
Michigan Technological University

**Friday, February 10th, 2012, 3:30 PM, Weeks Hall - Room AB20**

**Volcanic Conduit Dynamics: A Multidisciplinary Approach to Modeling Low-Frequency Volcanic Seismicity**

The interaction of multiphase fluids with the volcanic conduit produces a variety of measurable low-frequency seismic signals. Tremor and long-period earthquakes (0.5-5 Hz frequency) result from fluid migration and/or convection, and resonance in fluid-filled conduits. Modeling of so-called, very-long-period earthquakes (60-10 s period) suggests they result from conduit deformation associated with mass advection or large pressure changes. Both LP and VLP earthquakes are commonly repetitive so a complete description of their source processes may explain fundamental characteristics of magmatic fluid transport. However, source models derived from waveform
inversion typically leave abundant room for speculation about the role of volatiles. In order to better constrain the models, we are collecting infrasound and ~1 Hz SO2-emission data together with broadband (60 s - 50 Hz) seismic data at several active volcanoes. The additional data streams provide important constraints on the mechanisms responsible for low-frequency seismicity. As an example, the plot shows the correlation between the occurrence of very-long-period earthquakes (7 spikes in the blue filtered vertical channel seismogram) and variations in SO2 emission (red dots) during gas puffing at Fuego Volcano Guatemala. Each dataset offers a quantitative estimate of the amount of gas responsible and the timing is used to constrain details about the path the gas took through the top of the conduit. In this case, we attribute the VLP events to gas accumulation on a time scale of 5 minutes and release through a system of cracks on a time scale of less than a minute. In other cases, infrasound data have helped to constrain the mechanism of long-period events and tremor. I will discuss our seismic modeling and interpretation using multiple data streams and the implications for eruptive styles at Fuego Volcano and others.

Friday, Feb 17, 2012:
Margaret Fraiser, UW-Milwaukee (Host: Peters)

Friday, Feb 24, 2012:
Matt Hurtgen, Northwestern (Host: Peters)

Friday, Mar 9, 2012:
Aradhna Tripati, UCLA (Host: Carlson)

Friday, Mar 16, 2012:
Emile Okal, Northwestern University (Host: Tobin)
Friday, Mar 25, 2012:
Marin Clark, Univ of Michigan (Host: Goodwin)

Friday, Apr 13, 2012:
BOV

Friday, Apr 20, 2012:
Steve Holbrook, Univ of Wyoming (Host: Tobin)

Friday, Apr 27, 2012:
Tim Masterlark, U. Alabama (Host: Feigl)

Friday, May 4, 2012:
Carl Jacobson, IOWA State (Host: Goodwin)

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AEG (Association of Engineering Geologists) Club Meeting

Upcoming Events:
- February 21, 2012 at 6pm, location TBD
  o Bill Wuellner, P.E. from CGC, Inc. will discuss a local Madison project he is working on.
- March 6, 2012 at 6pm, location TBD
  o Eric Bahner, P.E., D.GE. from Edward E. Gillen Co. will give a presentation on soil nailing.
- Coming soon!
  o Field trip to a local Madison project with the geotechnical firm SES, Inc. We may be able to witness a blasting event! The trip will probably occur on a Friday afternoon. Email aeg@cae.wisc.edu if interested.

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JOB OPENINGS:
Western Washington University invites applications for a tenure-track Assistant Professor whose interdisciplinary research and teaching specialties connect tectonics/structural geology and surface processes. The appointment will begin effective September 16, 2012. The ideal candidate will enhance our existing strengths in field geology, geomorphology, geophysics, and tectonics, and contribute to the development of emerging departmental directions in engineering geology and geohazards research. Some examples of desirable research directions include influences of tectonic processes on landform evolution, rock/soil mechanics, or surficial deformation/seismic hazards associated with active plate margins. Candidates must have a PhD in an
appropriate Earth Science field at the time of appointment; teaching/research specialty in tectonics + surface processes; ability to teach Structural Geology, Introduction to Geology, and Field-based courses (such as a portion of Field Geology or a section of a field-taught Structure course); ability to develop high-quality undergraduate teaching program; ability to establish externally-supported research program; ability to involve students in research; ability to contribute to graduate (MS) degree program; and excellent understanding of fundamental physical principles and processes and a demonstrated ability to apply that understanding in field-based and quantitative ways to important problems in the Earth sciences. Preferred qualifications include post-doctoral experience; college-level teaching experience; ability to teach GIS, Engineering Geology, or Geophysics/Geodynamics; and ability to work with a diverse student body. Interested candidates must apply online. To see full position description and log in to WWU's Electronic Application System for Employment (EASE), please go to https://jobs.wwu.edu/JobPostingsBrowse.aspx?CatID=85. Applications need to include a cover letter outlining your teaching and research experience and accomplishments with specific reference made to the required and preferred qualifications described above. The application should also include a C.V., graduate school transcripts, statements describing teaching and research philosophy and effectiveness, as well as goals and plans for teaching and research at WWU. The names and contact information for letters of reference from four persons familiar with the candidate’s research and teaching must be provided; one of these references must be from outside the applicant’s current institution. Review of all application materials will begin on Feb 17, 2012; position is open until filled. Questions regarding this position should be directed to the search committee chair, Elizabeth Schermer (schermer@geol.wwu.edu) or the Geology Department chair, Bernie Housen (bernieh@wwu.edu). WWU is an EO/AA employer and encourages applications from women, minorities, persons with disabilities and veterans.

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Metrologist position available in GIA Laboratory - New York City

GIA Laboratory in New York invites applications for a metrologist position. The laboratory seeks an individual with suitable technical background to implement, test, train, maintain, and to monitor the performance of equipment and instrument for measurement of all types of gem stones. Major responsibilities include non-contact dimension and angle measurement, color measurement, gem stone fluorescence measurement, as well as maintenance of other equipment such as optical microscopes. Other responsibilities may also be assigned.

A B.S. or M.S. in materials science, geology, physics, chemistry, or a related field is preferred.

We offer competitive salaries, excellent benefits, a pleasant working environment, and are committed to workplace diversity. If you are interested in applying, please send your resume, cover letter and salary requirements to: nyrecruiter@gia.edu. We thank all applicants for their interest. Unfortunately due to the volume of responses, only candidates under consideration will be contacted. No phone calls or faxes please. For more information about GIA please visit our website at http://www.gia.edu. GIA is an Equal Opportunity Employer

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Faculty Search: Assistant/Associate Professor of Geoscience & Chemistry, University of Connecticut

The Center for Integrative Geosciences and the Department of Chemistry at The University of Connecticut, Storrs, invite applications for a joint tenure-track Assistant Professor appointment to begin August 2012. Appointments at the Associate Professor level will be considered
for extraordinarily well-qualified candidates. We seek candidates who combine expertise in solid earth materials, low-temperature geochemistry, and earth-surface processes. Possible interests include, but are not limited to, mineral-fluid interactions (e.g., applications in hydrogeology, geochemical cycles) and geochemistry (e.g., applications in isotope geochemistry, geochronology, paleoclimatology).

Minimum Qualifications: A PhD in Geoscience or a related field; capacity to incorporate a course on Earth Materials, including mineralogy and petrology, into an interdisciplinary, undergraduate Geoscience curriculum; demonstrated record and vision for excellence in research and publication. Equivalent foreign degrees are acceptable.

Preferred Qualifications: Capacity to teach in the Environmental Chemistry program; research interests complementing and bridging existing programs in Geosciences and Chemistry, including low-temperature geochemistry and earth-surface processes; post-graduate research experience; demonstrated excellence in teaching; demonstrated ability to contribute through research, teaching, and/or public engagement to the diversity and excellence of the learning experience.

Appointment Terms: This is a full-time, 9-month appointment. Salary is competitive based on experience and qualifications. The successful candidate's primary academic appointment will be at the Storrs campus with the possibility of work at UConn's regional campuses.

To Apply: Please submit a curriculum vitae, letter of application, statement of research and teaching interests using Husky Hire (www.jobs.uconn.edu). In addition, please arrange for three confidential letters of recommendation to be sent to Mrs. Abigail Hastillo, University of Connecticut, Center for Integrative Geosciences, 354 Mansfield Road U-2045, Storrs, CT 06269-2045 or to geology@uconn.edu. Screening of applications will begin February 15, 2012 will continue until the position is filled. Please include the search number with all correspondence. The University of Connecticut encourages minorities, women, and people with disabilities to apply for this position.

This job posting is scheduled to close on 2/26/2012. The University of Connecticut is an EEO/AA employer.

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Biogeochemist/Environmental Geologist - Lakehead University, Thunder Bay Campus

Lakehead University, Thunder Bay Campus, invites applications for a tenure-track appointment in Geology at a rank commensurate with experience and qualifications. The appointment will commence on August 1, 2011.

All candidates will have a completed (or nearly completed) Ph.D. in Geology or a closely related field. The candidate will have a demonstrated strength in teaching and a record of research in the area of biogeochemistry, hydrology or environmental geology.

The successful applicant will contribute to Department offerings at both the undergraduate and graduate levels. These might include existing courses in hydrology, water resource science and environmental geology, as well as new courses in the applicant's area of expertise. An ability and willingness to teach courses outside of the main area of interest will be considered an asset. The successful applicant will also be expected to supervise honours theses and graduate students. The applicant is expected to conduct an active research program and to seek external financial support for this research.
The university is in the process of developing a Mining and Mineral Exploration Centre of Excellence and Innovation. The successful candidate will be expected to contribute to this initiative. The successful candidate may also be expected to apply for an Associate Industrial Research Chair under NSERC (see http://www.nserc-crsng.gc.ca/) within their first two years of appointment.

For further information, please contact Dr. Stephen Kissin, Chair of the Department of Geology, at (807) 343-8220 or stephen.kissin@lakeheadu.ca. Detailed information on our undergraduate and graduate programs is available at http://geology.lakeheadu.ca/.

Review of applications will begin on March 1, 2012 and continue until the position is filled. Applicants should submit a letter of interest, curriculum vitae, evidence of teaching effectiveness (such as a statement of teaching philosophy, teaching evaluations, course outlines), sample publications, and contact information for three referees to:

Dr. Rodney Hanley, Vice-President (Academic) and Provost Lakehead University
955 Oliver Road
Thunder Bay, ON P7B 5E1
Email: vpadm@lakeheadu.ca
Fax: (807) 343-8075

A completed Confirmation of Immigration/Citizenship Status should accompany your package. This form is available on our website at http://hr.lakeheadu.ca/pdf/immig.pdf.

Lakehead University is an equal opportunity employer.

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Baldwin-Wallace College - The Department of Biology & Geology is seeking an individual with a commitment to excellence in undergraduate teaching, student advising and directing undergraduate research to fill a tenure-track position in geology that will start August 2012. The College would like to make this position visible to applicants from a wide variety of backgrounds and our hope is that you will help us identify potential candidates for the position.

The position announcement will be available through Science Online, The Chronicle of Higher Education, a number of other venues and the College's website (http://www.bw.edu/resources/hr/jobs/).

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The Department of Geological Sciences at Indiana University invites applications for a full-time postdoctoral research position aligned with a NASA-funded project entitled "Shallow-Borehole Array for Measuring Greenland Emission of Trace Gases as an Analogue for Methane on Mars." We seek an individual with demonstrated expertise in stable isotope geochemistry and geomicrobiology who is interested in isotope systematics associated with methane cycling in permafrost environments. The Stable Isotope Research Facility at Indiana University (http://geology.indiana.edu/biogeochemistry/index.html) includes several gas-source mass spectrometers and a Nu Plasma II multi-collector ICP-MS, housed in a new 56,000 sq ft multidisciplinary research facility on the Bloomington campus. The initial appointment will be for one year, with the possibility of annual renewal for two additional years. Applicants must have completed a PhD in a relevant field at the time of appointment. Salary will be commensurate with appointment rank and experience. Please submit your application, including a full CV, a statement of research experience and research goals, and contact information for three references, to Professor Lisa Pratt (prattl@indiana.edu) or Professor Jeff White (whitej@indiana.edu)
Department of Geological Sciences, 1001 E Tenth Street, Bloomington, IN 47401. Review of applications will begin February 15, 2012 and continue until the position is filled. Preferred start date is April 1, 2012, but is negotiable. Indiana University is an Equal Opportunity/Affirmative Action Employer, Educator and Contractor, M/F/D and strongly committed to achieving excellence through cultural diversity. The university actively encourages applications and nominations of women, persons of color, applicants with disabilities and members of other underrepresented groups.

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The Seismic Research Centre of The University of the West Indies invites applications for the position of Research Fellow (Ground Deformation Specialist) at the Montserrat Volcano Observatory. The post is offered for one year, in the first instance, with prospects for extension.

Applicants must have a PhD in Earth Sciences or a related field at the time of appointment. The candidate should possess strong experience in geodesy. Evidence of strong mathematical/numerical skills is also essential. Experience in the use of volcano monitoring techniques and residential experience at a volcano observatory is highly desirable. In addition, experience in the use of InSAR would be an advantage.

The successful candidate will be an essential member of the team monitoring the ongoing eruption of the Soufrière Hills Volcano in Montserrat, with specific responsibility for undertaking monitoring and research in ground deformation at the MVO.

Application forms are available at: http://sta.uwi.edu/jobs/

Applicants should supply (a) a curriculum vitae (b) a statement of past achievement and future research interests and goals and (c) postage addresses, phone numbers, and email addresses of at least three references to:

The Campus Registrar, The University of the West Indies, St. Augustine, Trinidad, Trinidad & Tobago. Email: appointments@sta.uwi.edu and copied to Richard Robertson, Seismic Research Centre, The University of the West Indies, St. Augustine, Trinidad, Trinidad & Tobago. Email: richie.robertson@uwisismic.com

To receive full consideration, all materials must be received by 28 February, 2012. Intended starting date is 1 June 2012.

Applicants should note that the Montserrat Volcano Observatory (MVO) is currently jointly managed by the UWI Seismic Research Centre (SRC) and the Institut de Physique du Globe de Paris (IPGP). This means that the Caribbean’s only currently erupting volcano is under the watch of regional scientists and provides significant opportunities for advancing geoscience research in the region.

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The IRIS Undergraduate Internship Program (http://www.iris.edu/internship) is NOW accepting applications for our 2012 internship class. The deadline for students to apply is February 1, 2012.

As faculty, YOU are one of the primary way students first learn about the opportunity. To help you announce/invite student to the program we have assembled some useful resources including:
- Text to copy and paste for an email broadcast!
- A video clip and/or slideshow to show at the end of your next lecture!
The Department of Earth Sciences at Carleton University invites applications for a preliminary (tenure-track) appointment in isotope geochemistry at the rank of Assistant Professor beginning on July 1, 2012.

Applicants must have a Ph.D. in Earth Sciences, or be in the final stages of obtaining their Ph.D., have demonstrated excellence in teaching, research and scholarship, as reflected in publications. The successful candidate will develop an externally-funded, high quality research program; will be committed to effective teaching at the undergraduate and graduate level; and will contribute effectively to the academic life of the Department. Proficiency in English is a requirement.

The Department is particularly interested in candidates with demonstrated expertise, experience and research interests in the field of elemental and isotope geochemistry, who have expertise with TIMS, MC-ICP-MS, or LA-ICP-MS instruments, and who also are engaged in the development of new techniques and innovative application of isotopic systems.

Further information on the Department can be obtained at www.earthsci.carleton.ca and http://iggrc.carleton.ca

Please send application to: Chair, Department of Earth Sciences, Carleton University, 1125 Colonel By Drive, Ottawa, Ontario, K1S 5B6. Fax: 613-520-5613. Email: chair@earthsci.carleton.ca.

Applications should include a curriculum vitae, a cover letter, a teaching dossier, a statement outlining current and future research interests, and the names and addresses (including e-mail addresses) of three referees.

The deadline for applications is March 15, 2012. Canadians and permanent residents will be given priority.

This position is subject to budgetary approval.

As part of the Dept. of Energy's Energy Frontier Research Center "Nanoscale Controls on Geologic CO2", the Peter A. Rock Thermochemistry Laboratory at UC Davis has possible openings for postdocs and Ph.D. students to work on experimental calorimetric studies relevant to the fundamental issues in CO2 sequestration. This includes development of calorimetric methodology in the supercritical CO2 and CO2/H2O environment, stability of various carbonate phases, and modeling of phase equilibria. Experience in experimental techniques at high pressure and in thermodynamic calculations, as well as a strong geochemistry background are highly desirable. Please contact Prof. A. Navrotsky (anavrotsky@ucdavis.edu), preferably sending a CV, for further info.

The Incorporated Research Institutions for Seismology (IRIS) Program for Array Seismic Studies of the Continental Lithosphere (PASSCAL) has an opening for a 2012 summer student intern at the IRIS PASSCAL Instrument Center at New Mexico Tech. The duration of the internship is flexible (up to three months). If scheduling allows, the intern will also take part in the late May IRIS Education and Outreach Orientation Week at New Mexico Tech (www.iris.edu/hq/internship/about/orientation) in association with the IRIS Summer Undergraduate Internship program. We seek an advanced undergraduate or graduate student with...
seismic experiment design, field methods, seismograph electronics, and data processing interests. For general information, please visit www.passcal.nmt.edu, or contact PASSCAL Instrument Center Director Bruce Beaudoin (575-835-5070; bruce@passcal.nmt.edu). The internship includes a weekly stipend, living expenses, round-trip travel funds to Socorro, NM, and tuition support to cover NMT summer registration as a special graduate student. To apply, send a letter summarizing interests, college transcripts, and at least one appropriate letter of recommendation to: PASSCAL Summer Intern Committee, c/o Bruce Beaudoin, IRIS PASSCAL Instrument Center, New Mexico Tech, 100 East Rd., Socorro, NM 87801. For full consideration, materials must be received by April 6, 2012.

Details: The internship is designed for a student with a background in Earth Science who is interested in seismic field methods, electronics, and data processing. The IRIS/PASSCAL Instrument Center, funded by the National Science Foundation via the IRIS consortium, maintains and helps deploy large numbers portable seismographs (Reftek and Quanterra), broadband sensors (Streckheisen, Guralp, Nanometrics), portable telemetered networks, and high-resolution cable reflection systems (Geometrics) that are heavily utilized by the U.S. research community and international partners. The successful candidate will learn about the technology and maintenance of state-of-the-art seismic equipment, potentially assist in deployments in the US and overseas, and participate in seismic data processing under the direction of the Instrument Center Director and Staff. The intern will register as a special student for 6 credits of Directed Study (Geophysics 590) under the advisorship of PASSCAL Instrument Center P.I. and NMT Geophysics Professor Richard Aster. At least one week prior to the conclusion of the internship, the intern will submit a report not to exceed 15 pages summarizing tasks performed and observations/suggestions pertinent to PASSCAL program operations and future Education and Outreach efforts. The intern will be given a personal allowance of $575/week for tuition, fees, books, and living expenses. Transportation costs to and from New Mexico Tech will be reimbursed up to $3,500, as will room and board costs up to $1700.

For further information, please contact Bruce Beaudoin (see above) or Rick Aster (aster@ees.nmt.edu; 575-835-5924).

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Postdoctoral Research Fellow in Metal-Organic Interactions

The Geobiology Lab in the School of Earth Sciences at Melbourne University is seeking a Postdoctoral Research Fellow with experience in characterising physical and chemical relationships between organics and metals in a) organic-rich sediments, b) sedimentary ore deposits or c) similar metalliferous and organic-rich systems (e.g., associated with hydrothermal vents). The Fellow would work as part of a cross-disciplinary research team under the CSIRO Minerals Systems Flagship Cluster (also involving Curtin University as lead, Australian National University, and University of Western Australia) on problems at the interface of organic geochemistry and mineralogy. Experience in transmission electron microscopy and microanalysis, ion microprobe/TOF/protein mass spectrometry, or synchrotron-based spectroscopic techniques would be considered very helpful. The aim of this research is to develop our understanding of possible metal-organic interactions for enhanced metal recoveries in Au, Cu, Pb-Zn and U enriched mineral systems. Potential outcomes of this project include: development of new methodologies for characterising the state and structure of metals and minerals in organic-rich settings; a better understanding of organic-inorganic interactions in mineralizing systems; and identification of appropriate organic, inorganic and isotopic data for field validation and incorporation into thermodynamic modelling. The position will run for three years. Applications should include CV with at least two references and any reprints of recent publications would be welcomed. Please send all materials as a single PDF file to jmoreau@unimelb.edu.au, to whom questions may also be addressed. Applications are being reviewed currently.
University of Nice - Seeking a candidate in the broad area of seismology and high-performance computing. Particularly interested in candidates having a strong affinity with geodynamics who can reinforce interaction within Geoazur among these disciplines. This 'Chaire d'excellence' involves teaching duties in the departments of Geosciences and Physics (primarily in the new geophysics track at the Licence level, and in Master programs in Earth Science and Physics/astronomy), but at a reduced (50%) level compared to a regular enseignant-chercheur position. Candidates have a PhD, and competence in the area of wave propagation and/or inversion for the Earth's structure at different length scales and interpretation in terms of physical/mineralogical properties. They have already obtained the formal qualification to teach (see http://www.enseignementsup-recherche.gouv.fr/cid22646/page.html). Preferred qualifications include postdoctoral experience and a demonstrated ability to perform high quality research in the form of publications. We expect foreign candidates to be able to teach in French after a reasonably short period of adaptation. Following the French system for recruitment of civil servants, the position and its code will be published on Feb 23 on the Galaxie site (https://www.galaxie.enseignementsup-recherche.gouv.fr/ensup/candidats.html). Once one has obtained the code for this position from Galaxie, complete dossiers must be submitted before the deadline of March 27, 2012, on the recruitment site of the University of Nice http://recrutement-ec.unice.fr/. For more information please contact: Emmanuel Tric, director Geoazur, (tric@unice.fr), Chrystel Verati, head of department (verati@unice.fr), or Guust Nolet (nolet@geoazur.unice.fr, phone +33.4.92.94.26.32).

The Department of Geological Sciences and Engineering at Missouri University of Science and Technology (formerly University of Missouri-Rolla) invites applications for a full-time tenure-track position at the assistant professor level in Geology and Geophysics in the area of Neotectonics, Remote-Sensing, and Geodynamics to begin September, 2012. The successful candidate will be expected to develop an externally-funded research program integrated with excellence in teaching at both the graduate and undergraduate levels. Teaching responsibilities will include courses in Tectonics and Remote Sensing as well as others in the individual’s area of expertise. Specific research subfields of the successful applicant could include active deformation/geodesy/InSAR, morphotectonics/dynamic-topography, and crustal/mantle dynamics that can build on departmental strengths in Mechanical Earth Modeling, Tectonics, Geophysics/Seismology, and Natural Hazard Mitigation. The Department currently has 20 full-time faculty, and 320 undergraduate and 226 graduate degree-seeking students with established B.S., M.S., and Ph.D. programs in Geology & Geophysics, Petroleum Engineering, and Geological Engineering. Local area establishments with active research include the U.S. Geological Survey (Mid-continent Geospatial Mapping Center), Missouri Department of Natural Resources, and Fort Leonard Wood. Visit our department web pages for more information on faculty and research (http://gse.mst.edu/). Questions regarding this position should be directed to the chair of the search committee, Dr. John P. Hogan (jhogan@mst.edu).

A Ph.D. in Geology and/or Geophysics is required. The final candidate is required to provide an official transcript showing completion of the terminal degree listed in the application materials submitted. A copy of the transcript must be provided prior to the start of employment. In addition, the final candidate may be required to verify other credentials listed in application materials. Failure to provide the official transcript or other required verification may result in the withdrawal of the job offer.

Applications must include a letter describing interests and possible contributions to our programs, curriculum vita, statements of teaching and research goals, and the names and contact information of three referees. Applications received before 5:00 pm April 15, 2012 are ensured a full review. Open until filled.
All application materials including resume/vita, cover letter, reference letters, portfolio, etc., must include the position reference number in order to be processed and be electronically submitted to

Missouri University of Science and Technology
Human Resource Office
Position Reference Number #00031149 (Geoscientist)
using the following address: hrsinfo@mst.edu

Acceptable electronic formats that may be used include PDF and Word.

Missouri University of Science and Technology is an affirmative action/equal opportunity employer.

Missouri University of Science and Technology participates in E-Verify. For more information on E-Verify, please contact CHS at: 1-888-464-4218.

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Volcanic Hazard Modeller (Fixed Term - 3 years) - GNS Science and the University of Auckland

GNS Science and the University of Auckland co-lead a project to DEtermine VOlcanic Risk in Auckland (DEVORA). Auckland is New Zealand’s largest city and is underlain by a volcanic field. The most recent eruption was ca. 500 years ago, so a future eruption is very probable. The impacts of volcanic activity on the city have thus far not been well constrained and the objective of the DEVORA project is to better quantify the volcanic risk to the population, buildings, infrastructure and the economy. Over the last three years, work on the project has concentrated on better understanding the geological history of the Auckland Volcanic Field and investigating different hazard models. The next stage of the project is to transfer this knowledge into a risk model.

We are seeking a volcanic hazards modeller to facilitate integration of new hazard research being developed by the DEVORA team into a risk model. The ideal candidate will have a PhD in geology, volcanology or natural hazard modelling and have an interest in the application of natural hazards research to address societal issues. A probabilistic modelling background and some programming knowledge would be an advantage.

A critical requirement of the position is to be able to engage with key end users such as civil defence, so that the hazard and risk assessments are relevant to emergency management and planning specialists.

An understanding of Maori relationship and development issues would be beneficial.

If you are a team player with a ‘can do’ attitude, have an interest in Earth Sciences and want to work for a dynamic, progressive, multi-cultural organisation then GNS could be the place for you.

For more information, see the GNS Science website

https://vacancies.gns.cri.nz/

or contact Gill Jolly (g.jolly@gns.cri.nz)

Closing date is 26 February 2012.

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Postdoctoral Researcher in high-pressure mineral physics/geochemistry at Bayerisches Geoinstitut (University of Bayreuth, Germany)

This postdoc position, which can be filled for up to 5 years, is for a scientist who will investigate the partitioning of a range of elements between liquid Fe-alloys, silicate liquids and crystalline silicates up to the pressure-temperature conditions of the Earth’s core-mantle boundary. The position is funded by the European Research Council project “Accretion and Early Differentiation of the Earth and the Terrestrial Planets”. The successful candidate will work in a multidisciplinary team with expertise that covers planetary science, accretion modelling and cosmochemistry (see: [http://www.accrete.uni-bayreuth.de](http://www.accrete.uni-bayreuth.de)).

Experience of one or more of the following experimental/analytical techniques is desirable: laser-heated diamond anvil and/or multianvil experiments, transmission electron microscopy (TEM), focused ion beam (FIB) sample preparation, laser ablation ICPMS analysis, nano-SIMS analysis.

Applications, consisting of a CV, publication list, details of three referees and a statement of current and future research interests, should be sent to Prof. David Rubie (dave.rubie@uni-bayreuth.de), from whom further details can be obtained.

David C. Rubie email: dave.rubie@uni-bayreuth.de
Bayerisches Geoinstitut Tel: +49-921-553711 (office)
Universitaet Bayreuth +49-921-553700 (secretary)
D-95440 Bayreuth Fax: +49-921-553769
Germany
Bayerisches Geoinstitut Home page: [http://www.bgi.uni-bayreuth.de](http://www.bgi.uni-bayreuth.de)
ERC Project "ACCRETE": [http://www.accrete.uni-bayreuth.de](http://www.accrete.uni-bayreuth.de)

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