

**GEOBULLETIN**  
**SEPTEMBER 26<sup>TH</sup> 2014**

\*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 Wednesday.

**WEEKS LECTURE – FALL 2014**

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Date	Speaker	Institution	Host
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**WEEKS LECTURE**



**Patricia Gregg**

*University of Illinois - Urbana-Champaign*

***Sep 26<sup>th</sup>, 2014, Friday, 3:30 PM, Room AB20 - Weeks Hall***

**Title:** The Mechanics of Triggering Catastrophic Caldera-Forming Eruptions

**Brief Description:** Catastrophic caldera-forming super-eruptions, such as those produced by Yellowstone, Long Valley, and Toba volcanoes, are among the greatest geologic hazards on Earth. These eruptions result in widespread regional devastation and can have a global climate impact. While great advancements have been made in understanding how large silicic reservoirs

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develop and evolve, the mechanics of triggering their evacuation remains a highly debated topic. In this presentation, I will review the current state of our understanding of caldera forming systems and present new thermomechanical models that seek to answer the critical question: How are super-eruptions triggered?

3-Oct-14	Rusty Riese		Cardiff (F)
10-Oct-14	Patrick Fulton	UC Santa Cruz	Tobin (F)
17-Oct-14	NONE (GSA)		
24-Oct-14	Tomochika Tokunaga	University of Tokyo	Wang/Hart
31-Oct-14	Jay Zambito	WGNHS	Carroll (F)
7-Nov-14	Jessi Meyer		Cardiff (F)
14-Nov-14	Francis Macdonald	Harvard University	Peters (F)
21-Nov-14	Rusty Riese		
5-Dec-14	Larry Band	UNC-Chapel Hill (GSA Birdsell-Dreiss Distinguished Lecturer)	Wang/Bahr
12-Dec-14	NONE (AGU)		

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### **JOB OPENINGS:**

- [Tenure-Track Assistant Professor - Geosciences - The University of Arkansas](#)
- [Postdoc position in Earth Materials and Hydrogeology at Utrecht University](#)
- [Visiting Assistant Professor in Petrology, UC Davis](#)
- [Postdoc position available-Control of Crystal Nucleation on Surfaces](#)
- [Temple University two tenure-track faculty positions in GEOMATERIALS](#)
- [Full professor position, experimental geophysics at ISEI, Misasa, Japan](#)
- [The Western Mexico Centre for Seismology and Vulcanology of the Universidad de Guadalajara at Puerto Vallarta, Jalisco, Mexico, offers three postdoctoral positions for exploration geophysics](#)
- [Assistant Professor of Earth and Planetary Sciences, Washington University In St. Louis](#)
- [Earthquake Associate Position -Swiss Re - US - NY – Armonk](#)
- [Postdoctoral Research Assistant required, Durham University, U.K.Seismic tomography](#)
- [Assistant Professor Structural Geology and Tectonics – University of Missouri](#)

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- [Assistant Professorship in Geochemistry - New Mexico Institute of Mining and Technology](#)
- [Postdoctoral Scholar Positions in Geodynamics – Caltech](#)
- [Head of Department, Tectonophysics – GNS Science, Wellington, New Zealand](#)
- [Head of Department, Volcanology – GNS Science, Taupo, New Zealand](#)

### JOB OPENINGS:

#### **Tenure-Track Assistant Professor - Geosciences - The University of Arkansas**

**Job Number:** Y15928

**Job Title:** Tenure-Track Assistant Professor - Geosciences

**Department:** Geosciences

**Location:** The University of Arkansas is a nationally competitive student-centered research university with a RU/VH Carnegie Classification. It is the flagship campus of the University of Arkansas system. The Department of Geosciences offers bachelors and masters degrees in geology and geography, and a doctoral degree in Geosciences. It also participates in two interdisciplinary graduate programs, Space and Planetary Sciences and Environmental Dynamics.

Fayetteville, nestled in the Ozarks of Northwest Arkansas, is part of a metropolitan area of about 500,000 people that retains its small, college-town atmosphere. The area is a rapidly growing metropolis spurred by opportunities with national companies including Wal-Mart, Tyson, Inc., and J.B. Hunt. The quality of life is high and it's a great place to work, play, and raise a family.

**Posted Date:** 09/24/ 2014 **Closing Date:** 11/03/2015 4:30 p.m.  
(or until position filled)

**Description:** The Department of Geosciences, University of Arkansas-Fayetteville invites applications for a 9-month appointment as a tenure-track assistant professor with an anticipated start date of August 2015. We are seeking an outstanding individual in the broad areas of basin analysis and/or upper crustal/brittle structural geology. Additional knowledge of subsurface reservoir characterization techniques, such as 3D seismic interpretation, geochemistry, or digital well log analysis is considered favorable for this position. The specific research focus has some flexibility, depending upon comparative strengths of the applicants. Applicants must demonstrate ability and commitment to develop an independent externally funded research program as well as the potential for collaboration and synergism with ongoing research in the Department of Geosciences (<http://geosciences.uark.edu>). The successful applicant will be an integrated scholar capable of meeting departmental goals in independent research, advising graduate-research, and teaching--and will have a strong commitment to teaching at all levels. Teaching expectations include advanced courses in sedimentary basin analysis, upper division courses in the area of the applicant's expertise, and participation in the required summer field course in Montana. All Ph.D. requirements must be completed at the time of the appointment.

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**Where To Apply?** Review of applications will begin November 4, 2015 and continue until the position is filled. Applicants should submit their curriculum vitae, brief statements of research and teaching interests, and the names, addresses, and contact information for at least three professional references. Electronic submission (preferred) to [liner@uark.edu](mailto:liner@uark.edu) or

Dr. Christopher Liner  
Basin/Structure Search Committee Chair  
216 Ozark Hall  
Fayetteville, AR 72701

The University of Arkansas is an Affirmative Action/EOE institution committed to achieving diversity in its faculty and staff. We encourage applications from all qualified candidates, especially individuals who contribute to diversity of our campus community. The University welcomes applications without regard to age, race, gender (including pregnancy), national origin, disability, religion, marital or parental status, protected veteran status, military service, genetic information, sexual orientation or gender identity. All applicant information is subject to public disclosure under the Arkansas Freedom of Information Act and persons must have proof of legal authority to work in the United States on the first day of employment.

### **Postdoc position in Earth Materials and Hydrogeology at Utrecht University**

Postdoctoral Researcher Sustainability (1.0 fte)

Utrecht University has recently established a new strategic research program on Sustainability, focusing on the themes of Water & Climate and Energy & Resources. In a key initiative within the program, the Faculties of Science (Departments of Chemistry and Physics & Astronomy) and Geosciences (Department of Earth Sciences) are linking their research in the Energy and Resources sector, addressing both upstream and downstream aspects of the resources supply chain. The Faculty of Geosciences is looking for a postdoctoral researcher with expertise in micro/nanoscale modelling, and who is familiar with or has an interest in imaging 3D pore networks in geo materials, solid catalysts, and nanomaterials in general. Applicants should have experience in the use of numerical simulations of fluid flow, solute transport and/or crystallization phenomena in micro/nanoporous media (e.g., using CFD packages such as OpenFOAM ) within a high performance computing environment. The relevant expertise in parallel programming with a suitable high level programming language such as C, Fortran and/or C++ should also be demonstrable. The successful applicant will closely collaborate with another postdoctoral researcher (Faculty of Sciences) who performs related experimental/observational work and should have the ability to work as a member of a team. As a highly motivated ntist you can apply modelling to characterize 3D pore structures and processes in nanomaterials, with the aim of understanding fluid and gas migration, sorption and reaction processes. Materials of interest range from gas shales and coals to mineral catalysts, such as zeolites and clays, fault rocks and rare earth host rocks. Also of central interest are hybrid (organic/ inorganic) model systems structured on multiple length scales from the atomic/nano to granular , for applications in enhanced oil/gas recovery, gas separation, CO2 capture and storage, water desalination, supercapacitor energy storage, solar energy harvesting (photo catalysis) and blue energy, for example. You are expected to bring expertise in one or more of these areas and to be able to bridge the molecular, to meso- and macroscopic (material property) length scales. You must be fluent in written and spoken English and able to communicate with coworkers in the two Faculties involved.

Qualifications

You should have (or be about to obtain) a PhD degree in Earth or materials sciences, physics/chemistry, applied mathematics, computational engineering or computer science, with experience pore network/properties modelling and

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upscaling, ideally with experience or interest in quantitative image analysis, 3D imaging techniques, such as FIB SEM, electron or X-ray tomography, confocal microscopy, spectroscopy, and/or experimental materials research.  
Offer

The appointment will be for a period of two years extending up to 31 Dec 2016 at the latest. Possibilities for prolonging the position will be investigated but cannot be guaranteed. The gross monthly salary depends on experience (€2,427 and maximum €4,462 per month). Employment conditions are based on the Collective Labor Agreement of the Dutch Universities. The salary is supplemented by a holiday bonus of 8% and an end of year bonus of 8,3% per year. We also offer a pension scheme, partially paid parental leave and flexible.

Employment conditions(see terms of employment). The research group will provide the candidate with necessary support on all aspects of the project.

### About the organization

Utrecht University has great ambitions for its teaching quality and study success rates. This also applies to its clear research profiles which are centered around four themes: Sustainability, Life Sciences, Youth & Identity, and Institutions. Utrecht University plays a prominent role in our society and contributes to finding the answers to topical and future societal issues. Within the Faculty of Geosciences, the Department of Earth Sciences comprises a strong international staff guiding more than 100 PhD students and postdoctoral researchers, and includes a thriving Earth Materials cluster with a world class research profile. The academic programs of both faculties reflect recent developments in today's society.

### Additional information

For informal enquiries, contact Chris Spiers:

c.j.spiers@uu.nl.

### Apply

Applications should include a statement of motivation, an overview of research interests and relevant experience, your curriculum vitae, and the names of at least two referees (with email addresses).

The application deadline is 01/11/2014

### **Visiting Assistant Professor in Petrology, UC Davis**

TEMPORARY VISITING ASSISTANT PROFESSOR IN PETROLOGY

Department of Earth & Planetary Sciences, University of California, Davis

The Department of Earth & Planetary Sciences at the University of California, Davis, invites applications for a Visiting Assistant Professor to conduct research and teach undergraduate and graduate courses during the 2014-15 academic year with the possibility of renewal through academic year 2015-16 depending on programmatic need. Candidates must possess a Ph.D. or equivalent degree in geology or a related field. Preference will be given to candidates who have a background in experimental petrology. The successful applicant will be expected to demonstrate the interest in and ability to conduct research in petrology and teach three quarter-long courses in the areas of mineralogy, petrology and/or general geology. The selected candidate will have access to existing experimental and analytical facilities to conduct petrology research and will have the opportunity to lead graduate-level seminars on topics of research interest.

The annual salary for this position is \$61,100. To apply, submit a cover letter, CV, statements of research and teaching interests, and the names and addresses of at least three references electronically to: [gel-merits@ucdavis.edu](mailto:gel-merits@ucdavis.edu). For more information about the department, see <http://geology.ucdavis.edu>. Questions concerning submission of application materials should be directed to Val Ludovina ([valudovina@ucdavis.edu](mailto:valudovina@ucdavis.edu)). This position will be "open until filled," however for full consideration, completed application materials should be submitted by October 15, 2014.

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UC Davis is an affirmative action/equal employment opportunity employer and is dedicated to recruiting a diverse faculty community. We welcome all qualified applicants to apply including women, minorities, individuals with disabilities, and veterans.

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### **Postdoc position available-Control of Crystal Nucleation on Surfaces**

Research Project: Control of Crystal Nucleation on Surfaces

This position is one of two postdoctoral positions funded by a £1 million Engineering and Physical Sciences Research Council (EPSRC) grant to study crystal nucleation from vapour, from liquid and from solution on surfaces. State-of-the-art techniques will be used to fabricate nanoscale surface features such as pits, grooves and trenches with undercuts. The project will relate the density and rate of crystallisation of different substances to the type of feature and will use these findings to establish criteria for the design of good nucleants, or crystallisation promoters. The breadth of the experiments will establish the extent to which optimisation of nucleation by surface features differs between vapour, liquid and solution and the differences between systems of simple organic molecules, water, and inorganic salts (electrolytes).

You will work as part of a collaborative team involving researchers from the School of Physics and Astronomy, the School of Chemistry and the School of Earth and Environment. You must hold, or have submitted a thesis for an experimental PhD degree (or equivalent) in Physics, Chemistry, Materials Science, or a related discipline, and have experience in experimental research on crystallisation. The ability and willingness to travel overseas and attend conferences is also essential.

The University of Leeds' commitment to women in science has been recognised with a national accolade. The University has received the Athena Swan Bronze Award in recognition of our success in recruiting, retaining and promoting women in Science, Engineering and Technology (SET). The Faculty of Environment are in the process of preparing an application for an Athena Swan award to recognise our commitment and work in these areas.

The University also offers family friendly policies including generous maternity and paternity leave; full details of the policies can be found here <http://hr.leeds.ac.uk/homepage/4/policies>.

University Grade 6 (£25,513 to £30,434 p.a.) or University Grade 7 (£31,342 to £37,394 p.a.) depending upon qualifications and relevant experience. The salary spine point is subject to external funding conditions which will limit the starting salary to £31,342 p.a.

For informal enquiries, please contact Dr Hugo Christenson, email [h.k.christenson@leeds.ac.uk](mailto:h.k.christenson@leeds.ac.uk)

Closing Date: October 19, 2014

Ref: ENVEE1010

Click here for further information about working at the University of Leeds  
<[www.leeds.ac.uk/info/20025/university\\_jobs](http://www.leeds.ac.uk/info/20025/university_jobs)>

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**Temple University two tenure-track faculty positions in GEOMATERIALS**

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The Department of Earth and Environmental Science is entering a period of growth with a newly launched Ph.D. program. To move toward that goal, the department seeks to fill two tenure-track faculty positions to begin in August 2015. One of the positions will be in the area of GEOMATERIALS. See separate advertisement for REMOTE SENSING position. Exceptional candidates holding a Ph.D. are encouraged to apply at any level (assistant, associate, or full professor).

Of particular interest are GEOMATERIALS applicants with a focus on energy as well as earth science, and with expertise in mineralogy and petrology that crossover to material science. The candidate should investigate crystalline, glassy, or melt geomaterials with a goal of understanding the atomic-scale characteristics that lead to macroscopic properties in earth sciences. The individual is expected to use a combination of field or experimental based data collection and modeling approaches. This appointment will complement existing expertise on the properties of nano-minerals and geochemistry within EES as well as materials research conducted through super-computing, engineering, chemistry, and physics utilizing a variety of in place instrumentation and the newly formed Temple University Energy Frontier Research Center.

Mentoring of undergraduate and graduate students and securing external funding are expected. Applicants must have a Ph.D. in a relevant science or engineering discipline, and will be expected to teach undergraduate courses for majors in Geology and Environmental Science such as mineralogy and petrology as well as graduate courses related to their research.

Applications should include a CV, statement of teaching goals, a research plan, names and addresses of at least three references, and selected reprints. Instructions for uploading applications materials are at: <http://ees.cst.temple.edu/>. Send a letter of intention to apply and any inquiries to Nicholas C. Davatzes, Chair, Search Committee, [davatzes@temple.edu](mailto:davatzes@temple.edu). We request application material be submitted by December 1, 2014. Temple University is a state-related, research-intensive university with an undergraduate enrollment of more than 27,000 and nearly 10,000 graduate and professional students. More information on our department is available at <http://www.temple.edu/geology/>. Temple University is an equal opportunity, equal access, affirmative action employer committed to achieving a diverse community (AA, EOE, M/F/D/V). The department specifically encourages applications from women and minorities.

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### **Full professor position, experimental geophysics at ISEI, Misasa, Japan**

Inviting applications for a full professor position in Experimental Geophysics division, Misasa, Okayama University, Japan.

For more information, see link below. <http://www.misasa.okayama-u.ac.jp/eng/>

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### **The Western Mexico Centre for Seismology and Vulcanology of the Universidad de Guadalajara at Puerto Vallarta, Jalisco, Mexico, offers three postdoctoral positions for exploration geophysics**

The Western Mexico Centre for Seismology and Vulcanology (Centro de Sismología y Volcanología de Occidente, SisVOc) of the Universidad de Guadalajara at Puerto Vallarta, Jalisco, Mexico, offers three postdoctoral positions for exploration geophysics. Successful candidates must have a Ph.D. in exploration geophysics, preferentially on seismic, electric, or magnetotelluric methods. Experience on exploration in geothermal environments is highly recommended.

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The candidate duties range from field work, data processing, teaching at graduate level, tutoring of graduate students, to research activities.

SisVOc is a research center with special focus on western Mexico. Located in an international touristic beach destination, SisVOc offers an invaluable opportunity of living and working with high standards.

Successful candidates are expected to involve in current projects and programs at the Center:

- Master Degree Program in Geophysics. The Center offers a M.Sc. Program in geophysics. With about 20 active students and it is expected to grow in the next years. Successful candidates must get involved in teaching and tutoring graduate students.

- The seismological network of Jalisco (RESAJ). SisVOc has under construction a permanent seismological network covering Jalisco region. It is expected that the network will be completely running by the first half of 2015. It will consist of 35 permanent seismological stations. Accepted candidates will collaborate in the field work and data processing of RESAJ.

- SisVOc is a member of the consortium CEMIE-Geo (Mexican Center for Innovation in Geothermal Energy). It is expected that the successful candidates work actively in geophysical exploration, mainly with seismic and magnetotelluric techniques.

- Ceboruco and Colima volcanoes monitoring. SisVOc has under monitoring Ceboruco and Colima volcanoes in the states of Nayarit and Jalisco, Mexico. Active collaboration is expected of candidates for field work, data processing

The positions are available for one year with an extension to an additional year based on academic performance. Salary is \$ 280,000 Mexican pesos (~\$ 22,000 USD) a year.

A knowledge of Spanish language or a strong will of learning it is desirable.

Applications are open until November 15, 2014, and positions will start on January, 2015. Candidates can send their resume, a Letter on Intention and two recommendation letters to [sisvoc@cuc.udg.mx](mailto:sisvoc@cuc.udg.mx).

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### **Assistant Professor of Earth and Planetary Sciences, Washington University In St. Louis**

The Department of Earth and Planetary Sciences at Washington University in St. Louis invites applications for a tenure-track Assistant Professor in high-T geochemistry, isotope geochemistry, or cosmochemistry. The ideal candidate will combine analytical and theoretical approaches to study the chemical and isotopic evolution of Earth, other terrestrial planets, and/or small bodies of the Solar System. The successful candidate will be responsible for developing a vigorous, externally funded research program, teaching a range of undergraduate and graduate courses, writing for publication, advising students, and university service.

We seek individuals who will enhance existing strengths in geochemistry and cosmochemistry, petrology, and solid-earth geophysics. Candidates must have a Ph.D. with a focus in high-T geochemistry, isotope geochemistry, cosmochemistry, or a related field, at the time of appointment. A wide range of instrumentation is available in the EPS

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department including a Neptune Plus multicollector ICP-MS, Cameca 7f-geo SIMS, and many other related and supporting analytical facilities. The appointment includes membership in the McDonnell Center for the Space Sciences, a world-class intellectual cluster in the field of space sciences.

Interested individuals should send a letter of application, curriculum vitae, statement of teaching and research interests, and names and contact information of at least four references to Prof. Brad Jolliff, Geochemistry Search Committee Chair, Washington University, Campus Box 1169, 1 Brookings Drive, St. Louis, MO 63130, or via e-mail: [geochem\\_search@levee.wustl.edu](mailto:geochem_search@levee.wustl.edu). Women and minority candidates are encouraged to apply. Washington University is an equal opportunity/affirmative action employer. Employment eligibility verification required upon employment. Applications will be considered until the position is filled, but priority will be given to those received by November 15, 2014.

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### **Earthquake Associate Position -Swiss Re - US - NY - Armonk**

Start date: Summer 2015

Swiss Re has a job opening for an earthquake specialist via our graduates@swissre program. The position is open for a recent (<2 years) masters or Ph.D. graduate in civil/structural engineering or geophysics, with broad knowledge and understanding of how to quantify earthquake hazard and risk. An ideal candidate will combine strong technical abilities and communication skills with an ability to work as part of a team. Further details about the company, job and graduates@swissre program are provided in the official link as follows:

[https://entry.swissre.com/sap/bc/erecruiting/posting\\_apply?param=cG9zdF9pbmN0X2d1aWQ9M0M0QTkyRUQ4M0MwMUVENDhDRUVDNjIwRkJKFRDhDODUmY2FuZl90eXB1PSZwb3N0aW5nX3RleHQ9eWVz&sap-client=100](https://entry.swissre.com/sap/bc/erecruiting/posting_apply?param=cG9zdF9pbmN0X2d1aWQ9M0M0QTkyRUQ4M0MwMUVENDhDRUVDNjIwRkJKFRDhDODUmY2FuZl90eXB1PSZwb3N0aW5nX3RleHQ9eWVz&sap-client=100)

Applicants are encouraged to apply as soon as possible, Please apply via the official channel, but I can try to answer specific questions via e-mail at [Iain\\_Bailey@swissre.com](mailto:Iain_Bailey@swissre.com).

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### **Postdoctoral Research Assistant required, Durham University, U.K.Seismic tomography**

Applicants are invited to apply for a Postdoctoral Research Assistant position, to work with Prof. Gillian R. Foulger and Dr. Bruce R. Julian as part of the EC funded Project MED-SUV - MEDiterranean SUPersite Volcanoes. The Durham University contribution to MED-SUV will investigate the structure and time-varying structure of Mt. Etna. The project will use earthquake- and explosion data gathered in recent years to conduct seismic tomography and time-varying tomography, with the aim of creating a time-dependent structural model of Mt. Etna. The MED-SUV project involves a consortium of scientific and industrial partners as well as public agencies with long experience covering the entire volcanic risk management cycle, from observations to public communication. The partners bring critical infrastructure, world-class monitoring networks, laboratories, computer facilities and diverse expertise. Full details of the project can be found on the website <http://www.med-suv.eu>. In Durham the research focus will be assembling existing data, combining data of diverse kinds, reformatting, quality controlling, and rejecting outliers. Tomography inversions will be performed, using existing programs, and the results will be plotted and assessed. We will liaise closely with other members of the MED-SUV consortium, including close collaboration with scientists specialising on Mt. Etna. We will prepare joint papers for publication. The post requires a PDRA with prior experience in seismic tomography, familiarity with the UNIX or LINUX operating systems, and an ability to program in C, AWK

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and the Generic Mapping Tools (GMT) package. The appointment will be for up to 1 year.

### Requirements

Candidates should have a Ph.D. in geophysics, preferably seismology, or a related subject, and research experience in seismic tomography. Familiarity with the UNIX or LINUX operating systems, and an ability to program in C is required. Knowledge of AWK and the Generic Mapping Tools (GMT) package are desirable.

### Responsibilities

The successful candidate will work both independently and collaboratively under the supervision of Prof. G. R. Foulger and Prof. B. R. Julian, liaising with other PDRAs and students in the Department. The successful candidate will also work as part of the MED-SUV research team, producing original research within the project work packages. The appointee will i) establish a working structure of computer files; ii) gather and refine existing data, rendering them in suitable format for input into earthquake tomography inversion programs; iii) invert data using the seismic tomography programs provided; iv) display the results, v) participate in interpretation of the results; vi) liaise with MED-SUV collaborators to bring to fruition the results, and vii) prepare the results for publication. The successful candidate will also present the results at informal project meetings involving internal and external collaborators and present papers at national and international conferences.

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### Assistant Professor Structural Geology and Tectonics – University of Missouri

The Department of Geological Sciences at the University of Missouri invites applications for a tenure-track, Assistant Professor position beginning in August 2015 in the broadly defined area of Structural Geology and Tectonics. The successful candidate's research will ideally complement and expand upon one or more of the areas of departmental expertise in solid-earth processes including geodynamics, igneous and metamorphic petrology, neotectonics, and seismology. Completion of the PhD at the time of appointment is required. Applicants should be prepared to prove eligibility to work in the United States. The successful applicant will be expected to teach across the curriculum, i.e., introductory classes, advanced undergraduate courses, and graduate courses in his/her area of expertise. The applicant will also be expected to develop an active, externally funded research program and to direct graduate student research at the M.S. and Ph.D. levels.

Please apply on-line at: <http://hrs.missouri.edu/find-a-job/academic>

In addition to a curriculum vitae (CV), applicants should include a letter describing their geologic interests and qualifications for the position, a teaching portfolio, and a list of three references (including contact information). Items other than the CV should be uploaded in the Attachments section of the application system. Initial screening of applicants will begin October 1, 2014 and will continue until a suitable candidate is hired. Information about our department is available at: <http://geology.missouri.edu>. The University of Missouri is an EO/AA/ADA employer.

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### Assistant Professorship in Geochemistry - New Mexico Institute of Mining and Technology

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The New Mexico Institute of Mining and Technology (NMT) invites applications for a tenure-track assistant-professor position in Geochemistry. Applicants should have a Ph.D. in Earth Sciences, Environmental Engineering, or a related field at the time of appointment. We seek candidates with interests in igneous petrochemistry (especially volcanic rocks), metamorphic petrology, sedimentary geochemistry, geochemistry of ore deposits, or radiogenic isotope geochemistry. Potential for excellence in teaching and research are the most important qualifications.

Applicants should submit a letter of interest, resume, a statement of teaching and research interests, one representative publication, and the names of three references to Geochemistry Search, Human Resources, New Mexico Institute of Mining and Technology, 801 Leroy Pl., Socorro, New Mexico 87801. College transcripts will be required if selected to interview. Review of application material will begin on October 1, 2014. The search will remain open until the position is filled. Email applications are not accepted. New Mexico Tech is an equal opportunity/affirmative action employer.

For inquiries, contact the search committee chair, Fred Phillips ([phillips@nmt.edu](mailto:phillips@nmt.edu)). Read more about these positions on the AGU Career Center, search "Assistant Professors of Hydrology and Geochemistry."

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### **Postdoctoral Scholar Positions in Geodynamics - Caltech**

The Division of Geological and Planetary Sciences at the California Institute of Technology (Caltech) invites applications for one or more postdoctoral positions in the Seismological Laboratory. For one position we seek an individual who would link computational models of surface processes with lithosphere and mantle dynamics with an emphasis on North America. The goal of the work is the use of stratigraphic and rock uplift observations to better constrain mantle dynamics and sedimentary basin evolution. An individual with a geology background well versed in the development and use of computational software is preferred. For the other position we seek an individual to work on the development and application of: (1) forward and inverse approaches to understand the dynamics of plate motions; (2) models of the initiation of subduction; or (3) geodynamic models of the deep mantle linked to seismic observations and mineral physics experiments. A recent Ph.D. in computational geodynamics or a related discipline is required. Experience in finite element analysis, inversion and/or optimization and use of GPlates & GMT are highly desired; good programming skills in C, C++ or Python are essential. Initial appointments are for one year. Starting dates for these positions are flexible, and applications will be considered until filled. For additional information, please contact Prof. Michael Gurnis, [gurnis@gps.caltech.edu](mailto:gurnis@gps.caltech.edu). Applicants should send a CV, a brief statement of research interests and experience, and arrange to have three letters of recommendation sent electronically to Marcia Hudson at: [marcia@gps.caltech.edu](mailto:marcia@gps.caltech.edu).

Caltech is an equal employment opportunity and affirmative action employer and will, whenever possible, actively recruit and include for employment members of underrepresented minority groups, females, disabled veterans, other eligible veterans and otherwise qualified persons with disabilities. Caltech will hire, transfer, and promote based on the qualifications of the individual to ensure equal consideration and fair treatment of all. Caltech is a VEVRAA Federal Contractor.

<http://www.gps.caltech.edu/content/postdoctoral-scholar-positions-geodynamics>

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### **Head of Department, Tectonophysics – GNS Science, Wellington, New Zealand**

Are you an experienced leader in geophysics?

GNS Science is seeking a person who has both people leadership and scientific experience.

You will be responsible for a team of 26 staff with expertise in seismology, geophysics, geodesy, crustal geodynamics, earthquake and volcano deformation modelling, hazard assessment, and tsunami modelling. Scientists in the department work closely with the GeoNet Project, and are funded from natural hazards and plate tectonics core-funded research programmes, by the Earthquake Commission biennial grants programme and through Marsden Fund research grants. Through this research and linked technology transfer activity across the Natural Hazards Division we are working towards reducing the impact of natural hazards and making New Zealand more resilient.

The Head of Department is responsible for:

- Strategic leadership of the Department,
- Management of people, with an emphasis on creating a culture of high performance;
- Management of assets, intellectual property and information;
- Developing and maintaining excellent relationships with clients and stakeholders;
- Developing the Department's budget and tracking financial performance; and
- Contributing to and, where appropriate, leading research and consultancy projects.

To be successful in this role, you will bring:

- A PhD or equivalent postgraduate degree in earth sciences or a closely related discipline;
- Excellent people leadership and relationship management skills;
- Business acumen and the ability to identify and capitalise on new research and technology transfer opportunities; and
- An excellent track record of success in geological hazards research.

Applications close on 30 September 2014. For more information on both positions, see the website:

<https://careers.sciencenewzealand.org/gns-science/about-us>

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### **Head of Department, Volcanology – GNS Science, Taupo, New Zealand**

Are you an experienced leader in volcanology?

GNS Science is seeking a person who has both people leadership and scientific experience. You will be responsible for a team of 15 staff with expertise in volcano monitoring and research and volcanic hazard and risk assessment. Scientists in the department work on the GeoNet Project, and are funded from natural hazards core-funded research programmes, by the Earthquake Commission biennial grants programme and through other research grants. Through this research and linked technology transfer activity across the Natural Hazards Division we are working towards reducing the impact of volcanic hazards and making New Zealand more resilient.

# GEOBULLETIN

## SEPTEMBER 26<sup>TH</sup> 2014

The Head of Department is responsible for:

- Strategic leadership of the Department;
- Management of people, with an emphasis on creating a culture of high performance;
- Management of assets, intellectual property and information;
- Developing and maintaining excellent relationships with clients and stakeholders;
- Developing the Department's budget and tracking financial performance; and
- Contributing to and, where appropriate, leading research and consultancy projects.

To be successful in this role, you will bring:

- A PhD or equivalent postgraduate degree in volcanology or a closely related discipline;
- Excellent people leadership and relationship management skills;
- Business acumen and the ability to identify and capitalise on new research and technology transfer opportunities; and
- An excellent track record of success in geological hazards research.

Applications close on 30 September 2014.

For more information on both positions, see the website:

<https://careers.sciencenewzealand.org/gns-science/about-us>

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