

GEOBULLETIN

JULY 25TH 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

Date	Speaker	Institution	Host
5-Sep-14	Harold Tobin	University of Wisconsin-Madison	Cardiff (F)
12-Sep-14	Brad Singer (tentative)	University of Wisconsin-Madison	Cardiff (F)
19-Sep-14			
26-Sep-14			
3-Oct-14			
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	
7-Nov-14			
14-Nov-14	Francis Macdonald	Harvard University	Peters (F)
21-Nov-14			
5-Dec-14	Larry Band	UNC-Chapel Hill (GSA Birdsell-Dreiss Distinguished Lecturer)	
12-Dec-14	NONE (AGU)		

JOB OPENINGS:

- [CZO post-doctoral position at the U. of Kansas](#)
- [Department of Earth Sciences at the University of Gothenburg - dynamic researcher to join the geology group](#)
- [The Earth Science Department at Rice University is looking to fill the position of Electron Probe Micro-Analyzer \(EPMA\) laboratory manager/ research scientist](#)
- [Project Associate-Instrumentation Services - Portable Programs -\(Socorro, NM\)](#)
- [Post-Graduate – Geological and Environmental Sciences](#)
- [Faculty Position in Geology, Johns Hopkins University](#)

GEOBULLETIN

JULY 25TH 2014

- Geologist, Minnesota Geological Survey
- Tenure Track Faculty Position –Petrology - The Department of Geology and Environmental Earth Science at Miami University
- Tenure Track Faculty Position –Geobiology - The Department of Geology and Environmental Earth Science at Miami University
- The Caltech Seismo Lab seeks a research scientist to carry out earthquake early warning (EEW) algorithm research,
- University of Hawaii PX² Beamline Scientist at Argonne
- Stable Isotope Laboratory Manager/Research Specialist - Carnegie Institution for Science in Washington, DC
- Postdoc Position at University of Rochester
- Origins Laboratory-Cosmochemistry/Geochemistry Postdoctoral Position Available - University of Chicago
- PhD opportunities in Canada – Call for candidates
- The Institute for Geosciences at the Faculty of Geosciences/Geography at the Johann Wolfgang Goethe-University Frankfurt invites applications

JOB OPENINGS:

CZO post-doctoral position at the U. of Kansas

Position Overview : A full-time research position in ecosystem ecology and biogeochemistry is available at the University of Kansas. We seek a dedicated individual to develop our understanding of how land use history, forest development, and climate can influence contemporary soil biogeochemical processes at the newly established Calhoun Critical Zone Observatory in South Carolina, USA. The successful candidate will:

- 1) Work at remote field sites in S.C. using established and emerging biogeochemical tools to investigate soil organic matter dynamics and their biological, geological, and chemical drivers throughout multiple, deep soil profiles;
- 2) Develop and implement well-controlled laboratory and modeling experiments to understand potential mechanisms driving biogeochemical fluxes currently observed in Calhoun's old growth and aggrading forests, and to estimate historical fluxes; and
- 3) Work interactively with a dynamic team of investigators at diverse career stages and representing multiple universities and research interests to build the field, lab, data and web infrastructure critical for Calhoun CZO long-term success, and serve as a liaison between the Calhoun CZO group at large and the Billings lab.

NOTE: This position requires travel for weeks at a time to remote field sites, conducting strenuous field work under primitive conditions for multiple days in a row including digging soil pits/auger deep soil wells, and lifting and carrying instrumentation weighing up to 50 pounds.

Job Description: Contribute to the Billings lab and the Calhoun CZO by:

GEOBULLETIN

JULY 25TH 2014

80% Collaboratively conduct field, laboratory, and modeling research activities to explore microcosm-, plot-, and ecosystem-scale biogeochemical fluxes at the Calhoun CZO and in the lab using Calhoun soils and proxies for microbial substrates; generate manuscripts publishable in top-quality, peer-reviewed journals and presentations for national and international conferences; and participate in proposal writing using data and ideas generated via these efforts

10% Supervise undergraduates and assist in the supervision of graduate students in the Billings lab

10% Contribute to database generation, website development in collaboration with project managers, lab group meetings, journal clubs, Departmental seminar attendance, and general lab up keep

Required Qualifications:

1. Ph.D. at the time of hire in ecosystem ecology, biology, environmental chemistry, geology, soil science or related field.
2. At least two years' experience quantifying biogeochemical fluxes related to soils such as gross and net nitrogen mineralization, decay of well-characterized soil organic matter compounds, and/or CO₂ efflux.
3. At least two years' experience in the application of stable isotopes for understanding soil and/or plant fluxes of carbon and/or nutrients.
4. Excellent written English communication skills as evidenced by previous publications and application materials.

NOTE: To be appointed at the Postdoctoral Researcher title, it is necessary to have the PhD conferred at the time of hire. Appointments made without a diploma or certified transcript indicating an earned doctorate are conditional hires and are appointed on an interim basis not to exceed 6-months. Upon verification of degree the appointment will be extended to its full duration.

Preferred Qualifications

1. Experience collecting [CO₂] and isotopic signatures of CO₂ using cavity ring-down spectroscopy, in field and/or lab conditions.
 2. Experience linking stable isotopic signatures of ecosystem carbon pools to measured flux rates.
- Duration of appointment: 3 years. Continuation is dependent on availability of funds and satisfactory performance.

Apply online at <http://employment.ku.edu/staff/1304BR>. Review of applications begins on September 14, 2014. Estimated start date is January 5, 2015.

KU is an EO/AAE. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability or protected Veteran status.

Department of Earth Sciences at the University of Gothenburg - dynamic researcher to join the geology group

We are seeking for a dynamic researcher to join the geology group at the Department of Earth Sciences at the University of Gothenburg. Although the focus is put on geochemistry, a broad range of expertise is desired, and I would like to stress to this group that expert knowledge e.g., on thermodynamic modeling, experimental petrology, field mapping, economic geology and/or crustal evolution is an important asset.

The department has some of the best geochemical facilities in Scandinavia, including a brand-new ICPMS (Agilent 8800QQQ) coupled to a NWR 213 laser ablation system, a second ICPMS for solution work, clean lab targeted for extension and a Hitachi SEM complete with a new detector and MLA software.

GEOBULLETIN

JULY 25TH 2014

Gothenburg is the second-largest city in Sweden, with a vibrant urban cultural scene as well as a staggering natural landscape just outside the city limits. We have a highly international faculty, while social benefits and family-friendly attitude is of the truly Scandinavian standard.

For detailed information and starting online application, please follow the link: http://www.gu.se/english/about_the_university/announcements-in-the-job-application-portal/?languageId=0&disableRedirect=true&id=19144&Dnr=627489&Type=E

For further information, feel free to contact me directly (zack@gvc.gu.se or +46 31 7862801). Please be advised that application deadline is August 18.

The Earth Science Department at Rice University is looking to fill the position of Electron Probe Micro-Analyzer (EPMA) laboratory manager/ research scientist to oversee the operation of a new 5-spectrometer JEOL JXA-8530F Field Emission Electron Microprobe. The Electron Microprobe Lab Manager/Staff Scientist will:

- Maintain and operate a new JEOL JXA-8530F Field Emission Electron Microprobe
- Train and assist researchers and students in the use of the instrument
- Provide support for external academic and industrial users of the instrument
- Maintain and develop analytical standards
- Manage the instrument usage schedule, billing, and the facility website
- Coordinate all vendor service for the instruments
- Additional responsibilities may include development of new analytical protocol

Experience analyzing geological and/or other industrial materials by EMPA is essential. Some experience maintaining an electron microprobe is preferable but not a requirement. The instrument will to be on a JEOL service contract and some amount of on-the-job training is expected.

Eligible job candidates are expected to hold an M.S. and/or a Ph.D. degree in geoscience and other related disciplines involving materials research. To apply, candidates should go to –

https://jobs.rice.edu/applicants/jsp/shared/position/JobDetails_css.jsp?postingId=179224

and attach a cover letter, CV, statement of research interests, and names/contact information of three references. Application review will begin on September 1, 2014, and will continue until the position is filled. The expected start date for the position is January 1, 2015.

The staff scientist will be eligible to apply for external research funding and the position will provide opportunities for conducting independent research using the EPMA as well as other facilities available at Rice. Other existing facilities at Earth Science and Rice include ICP-MS (with laser) facility for trace element and isotopic analyses, piston cylinder and multi anvil devices for synthesis of high P-T samples, FTIR, Raman, SEMs, TEMs, XRDs, XPS for various sample characterization, as well as wide range of computational facilities.

For further information and queries, contact Rajdeep Dasgupta (Rajdeep.Dasgupta@rice.edu).

Rice University is an Equal Opportunity/Affirmative Action Employer.

GEOBULLETIN

JULY 25TH 2014

Project Associate-Instrumentation Services - Portable Programs -(Socorro, NM)

The Incorporated Research Institutions for Seismology (IRIS, www.iris.edu) Instrumentation Services group focuses on facilitating the collection of high-quality geophysical data. We seek a Project Associate to help fulfill this mission, specifically relating to the portable seismographic instrumentation programs centered at the PASSCAL Instrument Center (passcal.nmt.edu).

The Project Associate will work closely with the Portable Program Manager to analyze scientific, technical, and logistical (scope, budget, scheduling) information for projects associated with the PASSCAL and Polar Program activities. The individual will organize the procurement of new equipment, work with seismological data and software tools on special tasks, present project data in formal reports and at various community workshops and meetings, and prepare and edit content for IRIS web pages. The Project Associate will routinely interact with scientists within the IRIS community as well as the staff at the PASSCAL Instrument Center. An important aspect of this position will be to develop and execute a Quality Assurance System for portable operations, interacting with other branches of IRIS Instrumentation and Data Services during this process. This position will provide a unique opportunity to broadly utilize scientific skills and knowledge to manage a wide range of activities associated with portable seismology.

The ideal candidate will have a combination of training and/or experience in: seismology, logistics management, seismological software/tools, basic web authoring, and scientific/technical writing. Familiarity with SEED metadata, data quality assessment, instrumentation, and basic field operations are vital. A graduate degree in geology, geophysics, or equivalent experience, and excellent verbal, written, and interpersonal skills are required. The candidate must be able to work effectively and collegially with the IRIS team and the broader earth science research community.

We offer a competitive salary and excellent benefits. Candidates should submit a letter of interest, resume highlighting pertinent work experience, and the names and contact information for at least two references. To apply, these should be sent electronically to hr@iris.edu with the subject line "Portable Project Associate".

Information also available here:

http://www.iris.edu/hq/employment/job/instrumentation_services_project_associate_for_portable_programs

Applications close on 7/28.

Post-Graduate – Geological and Environmental Sciences

Through the Oak Ridge Institute for Science and Education (ORISE), the Department of Energy's National Energy Technology Laboratory (NETL) seeks a motivated recent post-graduate (MS and PhD) interested in being part of a collaborative, interdisciplinary research team in the geologic and environmental sciences focus area researching rare earth elements. NETL's Office of Research and Development (ORD) conducts research to advance the clean production and efficient utilization of domestic energy resources.

For more information, please visit <http://www.ornl.gov/netl/open-projects/projects.html>.

GEOBULLETIN

JULY 25TH 2014

Faculty Position in Geology, Johns Hopkins University

The Department of Earth and Planetary Sciences at Johns Hopkins University invites applications for the first of several anticipated tenure-track faculty positions in geology. The position will be filled at the Assistant Professor level, starting as early as Fall, 2015. The successful candidate will be expected to develop an internationally recognized and externally funded research program, to help develop and participate in undergraduate and graduate teaching, and to supervise graduate student research. A Ph.D. is required in the Earth Sciences or a related discipline; post-doctoral experience is desirable. Possible areas of geologic research include, but are not limited to, quantitative geomorphology, volcanology, tectonics and dynamics, petrology and mineralogy, critical-zone science, and studies of the early Earth that complement the research interests of recent hires in planetary science, paleoecology, light stable isotope geochemistry, and landscape hydrology. We are particularly interested in approaches combining geologic field methods with complementary laboratory, theoretical or remote sensing approaches.

Opportunities exist for the successful candidate to forge research ties with other parts of the Johns Hopkins community that are active in the Earth and Planetary Sciences, including the Departments of Geography and Environmental Engineering, Civil Engineering, Materials Science and Engineering, and the Applied Physics Laboratory. There are excellent opportunities for additional collaborations within the Baltimore-Washington region, including with the Carnegie Institution, the Smithsonian Institution, the U.S. Geological Survey, the University of Maryland, and NASA Goddard Space Flight Center.

Applications must be submitted electronically using Interfolio (<https://apply.interfolio.com/25307>) and must include a cover letter, a curriculum vitae, statements of research and teaching interests, and the names and complete contact information of at least three references. Questions concerning submission of application materials should be directed to Kristen Gaines (kgaines@jhu.edu). Other requests for information may be directed to Professor Dimitri Sverjensky, Search Committee Chair (sver@jhu.edu). Review of the applications will begin October 15th, 2014 and will continue until the position is filled.

Johns Hopkins University is an equal opportunity/affirmative action employer, and actively encourages interest from minorities and women.

Geologist, Minnesota Geological Survey

Date: July 16, 2014
Classification & Title: 8351 Assistant Scientist
Supervisor: Dr. Tony Runkel, Chief Geologist

Overview:

This position supports senior scientific staff and provides an opportunity to develop the skills and understanding necessary to create geologic maps, particularly maps of glacial sediment. The employee may be asked to spend considerable time traveling, mostly in Minnesota, including working outdoors and at physical tasks. There is also a component of office-based tasks including examination of rock and sediment samples; entering, viewing, and manipulating data in geographic information systems; plotting and analyzing surface and subsurface data; and creating geologic maps or maps derived from geologic data.

Essential Functions: Distribution of time amongst these activities will vary with the projects the organization undertakes, and with the seasons.

GEOBULLETIN

JULY 25TH 2014

Field-based data collection (as much as 50% of job)

- Find, describe, and sample exposures of rock and sediment
- Record rock or sediment properties and location of observations
- Operate Giddings soil probe to collect subsurface samples
- Attend and supervise drilling operations and collect subsurface samples
- Collect (or assist with collection) of geophysical data

Data Manipulation (as much as 50% of job)

- Enter data in digital databases and geographic information systems
- Graph or plot data for analysis
- Manipulate data in geographic information systems
- Prepare field samples for examination or analysis
- Review literature pertinent to topic and location of current project

Analysis and Reporting (as much as 40% of job)

- Compile field observations, remotely sensed data, and analytical data to develop geologic maps
- Prepare maps, charts, illustrations, and text that describe and explain geologic settings

Minimum/Essential Qualifications:

- Must be able to lift 50 pounds, and be comfortable working in the outdoors in all seasons.
- Broad background in geology.

Preferred Qualifications:

- A Master's degree in geology, including field camp
- Experience with geographic information systems
- Experience or training in glacial geology
- Attention to detail, organized, able to work independently and in teams.

*The employer reserves the right to change or add duties to this position as long as the changes and/or additions are consistent with the job classification.

Tenure Track Faculty Position –Petrology - The Department of Geology and Environmental Earth Science at Miami University

The Department of Geology and Environmental Earth Science at Miami University invites applications for a tenure-track faculty position at the Assistant Professor level, beginning August 2015. Applicants must have a Ph.D. degree at the time of appointment. The successful applicant will be expected to teach effectively at the undergraduate and graduate levels, supervise student research at the undergraduate, M.S. and Ph.D. levels, initiate and maintain a vigorous, externally-funded research program, and provide service to the university.

We seek a candidate who is undertaking significant field and/or laboratory-based research in igneous and/or metamorphic petrology. The particular research emphasis, for example igneous/metamorphic processes, crust-mantle evolution, experimental petrology, or ore-forming processes, should complement current program strengths indicated below.

The successful applicant will join an active department that consists of 13 faculty members, 3 research/technical staff members, 125 undergraduate and 35 graduate students. The department maintains active research programs in geomicrobiology, geomorphology, geophysics, hydrogeology, igneous petrology, isotope geochemistry, low-temperature geochemistry, mineralogy, paleoclimatology, sedimentology and stratigraphy, structural geology, tectonics, volcanology, and Quaternary geology. The department also maintains modern teaching,

GEOBULLETIN

JULY 25TH 2014

research, and instrumentation laboratories, and portable instrumentation in support of the above. Please visit www.miamioh.edu/geology for additional information.

Miami University's Oxford Campus, with nearly 15,000 undergraduate and over 1,800 graduate students, is located in a small-town setting adjacent to the Cincinnati and Dayton urban areas. More information on Miami and on the department may be obtained via <http://www.miamioh.edu> and <http://www.miamioh.edu/geology>.

Interested candidates should submit letter of application, curriculum vitae, statement of teaching philosophy, statement of research plans and unofficial copy of transcripts (submitted as "other") to www.miamiujobs.com/applicants/Central?quickFind=53705; candidates should arrange to have three letters of recommendation sent to PetrologySearch@miamioh.edu. Screening of applications begins September 14, 2014 and will continue until the position is filled. Appointment effective August 17, 2015.

Miami University, an equal opportunity/affirmative action employer with smoke- and tobacco-free campuses, is committed to a multicultural environment and strongly encourages applications from minorities, females, veterans and individuals with disabilities. Miami's Annual Security and Fire Safety Report with information on campus crime, fires, and safety may be found at: <http://www.MiamiOH.edu/campus-safety/annual-report/index.html>. Hard copy available upon request. Employment will require a criminal background check according to University guidelines.

Tenure Track Faculty Position –Geobiology - The Department of Geology and Environmental Earth Science at Miami University

The Department of Geology and Environmental Earth Science at Miami University invites applications for a tenure-track faculty position at the Assistant Professor level, beginning August 2015. Applicants must have a Ph.D. degree at the time of appointment. The successful applicant will be expected to teach effectively at the undergraduate and graduate levels, supervise student research at the undergraduate, M.S. and Ph.D. levels, initiate and maintain a vigorous, externally-funded research program, and provide service to the university.

We seek an outstanding candidate who is undertaking significant field and/or laboratory-based research in Geobiology. The particular research emphasis, for example paleobiology/paleontology, high-resolution biostratigraphy, paleobiogeochemistry, paleoecology, or paleoclimatology, should complement current program strengths indicated below. It is anticipated that this new position will enable us to address important questions pertaining to the interactions between life and Earth through geologic time.

The successful applicant will join an active department that consists of 13 faculty members, 3 research/technical staff members, 125 undergraduate and 35 graduate students. The department maintains active research programs in geomicrobiology, geomorphology, geophysics, hydrogeology, igneous petrology, isotope geochemistry, low-temperature geochemistry, mineralogy, paleoclimatology, sedimentology and stratigraphy, structural geology, tectonics, volcanology, and Quaternary geology. The department also maintains modern teaching, research, and instrumentation laboratories, and portable instrumentation in support of the above. Please visit www.miamioh.edu/geology for additional information.

Miami University's Oxford Campus, with nearly 15,000 undergraduate and over 1,800 graduate students, is located in a small-town setting adjacent to the Cincinnati and Dayton urban areas. More information on Miami and on the department may be obtained via <http://www.miamioh.edu> and <http://www.miamioh.edu/geology>.

Interested candidates should submit letter of application, curriculum vitae, statement of teaching philosophy, statement of research plans and unofficial copy of transcripts (submitted as "other") to www.miamiujobs.com/applicants/Central?quickFind=53702; candidates should arrange to have three letters of recommendation sent to GeobioSearch@miamioh.edu. Screening of applications begins September 14, 2014 and will continue until the position is filled. Appointment effective August 17, 2015.

Miami University, an equal opportunity/affirmative action employer with smoke- and tobacco-free campuses, is committed to a multicultural environment and strongly encourages applications from minorities, females, veterans and individuals with disabilities. Miami's Annual Security and Fire Safety Report with information on campus crime,

GEOBULLETIN

JULY 25TH 2014

fires, and safety may be found at: <http://www.MiamiOH.edu/campus-safety/annual-report/index.html>. Hard copy available upon request. Employment will require a criminal background check according to University guidelines.

California Institute of Technology -Seismological Laboratory-Pasadena, CA -Research Scientist, #14303SP

The Caltech Seismo Lab seeks a research scientist to carry out earthquake early warning (EEW) algorithm research, and participate in continued development of the demonstration EEW earthquake monitoring system. We seek applicants who like to work in a team and to apply their seismological research and computer programming skills to develop and implement new technologies for innovative real-time earthquake data processing. This is a temporary full-time position that is eligible for full staff benefits.

You will carry out independent research to develop and improve seismic EEW algorithms, using regional seismic waveforms and parametric data and participate in deployment of both single station and finite source EEW algorithms and evaluate EEW performance to optimize system performance and improve algorithms. Additionally you will participate in writing reports, proposals, and publications and give oral reports as needed to meet project goals. The successful candidate will have MS degree or PhD and 5 or more years of related work experience. You must have experience in analyzing seismic waveforms, computer skills such as experience in high-level programming (C, C++, or Java), and be fluent in LINUX, command-line scripting and have some experience with web-applications. Requires ability to develop and implement EEW algorithms using tools such as Matlab.

To apply to this outstanding opportunity please apply on line at: <https://jobs.caltech.edu/postings/2061>

EOE of Minorities/Females/Protected Vets/Disability

University of Hawaii PX² Beamline Scientist at Argonne

Px² Beamline Scientist/Compres Researcher

University of Hawaii NSF/COMPRES-sponsored project "Partnership for eXtreme Xtallography (PX²)" is looking to fill a regular, full time, non-civil service position, located at the Advanced Photon Source (APS) in Argonne, Illinois. Continuation of employment is dependent upon program/operational needs, satisfactory work performance, availability of funds, and compliance with applicable Federal/State laws.

DUTIES:

- Design, build and maintain the state of the art instrumentation for the PX² project;
- Support user program in high pressure science at the PX² facility;
- Participate in project-related procurement, construction, commissioning and reporting;
- Build a user community for the new facility;
- Work closely with the project PI, staff of the APS host institution, GSECARS, and the COMPRES Technology Officer at Argonne in identifying, designing and implementing new experimental infrastructure for state of the art science at PX²;
- Build his/her own internationally competitive research program supported by extramural funds and utilizing facilities at available at PX² and the Hawaii Institute of Geophysics and Planetology;
- Perform other duties as assigned.

PRIMARY QUALIFICATIONS:

GEOBULLETIN

JULY 25TH 2014

EDUCATION/TRAINING: Ph.D. in high pressure research, mineralogy, crystallography, condensed matter physics, solid-state chemistry/spectroscopy or closely related field.

EXPERIENCE: Track record demonstrated by publications in crystallography, spectroscopy, or synchrotron radiation related research;

ABIL/KNOW/SKILLS: Knowledge, considerable experience and understanding of synchrotron-related experimental techniques, computer programming, scientific instrumentation development, design and control; Excellent interpersonal, communication and presentational skills; Ability to interact effectively and diplomatically with staff and facility users at all levels; Ability to design, plan, organize, and implement projects and tasks within an allotted timeframe;

SECONDARY QUALIFICATIONS: Project management experience; Successful track record in applying for federal funding; Python and/or IDL programming experience; Hands-on experience with laser spectroscopy and laser heating.

INQUIRIES: For more information about the position, please contact Grace Furuya (808) 956-8344<<tel:%28808%29%20956-8344>>, gfuruya@soest.hawaii.edu<<mailto:gfuruya@soest.hawaii.edu>>.

HOW TO APPLY: All applications need to be submitted through the RCUH website. Please go to www.rcuh.com<<http://www.rcuh.com>>, click on "Employment"; select "Apply" and navigate to "See Job Announcements and/or Apply for a Job." The Job Opening ID for this position is 14326. You must submit the following documents online to be considered for the position: 1) cover letter, 2) resume with full publication list, 3) salary history, 4) names and contact information of 3 professional references, 5) copy of degree(s)/transcript(s)/certificate(s). All online applications must be submitted/received by the closing date (11:59 P.M. Hawaii Standard Time/RCUH receipt time) on August 8, 2014. RCUH is EEO/AA Employer.

Stable Isotope Laboratory Manager/Research Specialist - Carnegie Institution for Science in Washington, DC

The Stable Isotope Laboratory in the Geophysical Laboratory at the Carnegie Institution for Science in Washington, DC has an opening for a full time Laboratory Manager/Research Specialist. The lab is comprised of one Thermo Delta V Plus IRMS system coupled to a CE NC2500 elemental analyzer and one Thermo Delta XL Plus IRMS system coupled to a TC/EA. Funding is in place to purchase a second elemental analyzer. Responsibilities include general management and oversight of day-to-day operation of these facilities, training of postdocs and other visitors to the lab, and instrument maintenance. The Stable Isotope Lab supports the research of the Carnegie Staff Scientists and their collaborators within the disciplines of high-pressure experimental geochemistry and petrology, organic geochemistry, astrobiology and cosmochemistry. Participation in research and the development and application of analytical techniques to meet research goals is expected, and the opportunity for independent research is available and encouraged.

Minimum qualifications:

A M.S. in Earth Science with experience in operation of IRMS systems is required.

Desired qualifications:

A Ph.D. in Earth Science and direct experience in gassource, stable isotope mass spectrometry is preferred.

To submit an application, **go here** (<https://jobs.carnegiescience.edu/jobs/stable-isotope-laboratory-managerresearch-specialist/>). Only complete applications submitted via the Carnegie Institution of Washington website will be considered. Applications should include a cover letter outlining experience, a CV, and contact information for at least three references.

GEOBULLETIN

JULY 25TH 2014

The prospective researcher will be working at the Geophysical Laboratory, Carnegie Institution of Washington in Washington, DC. The Carnegie Institution of Washington is an equal opportunity employer. All qualified applicants will receive consideration for employment and will not be discriminated against on the basis of gender, race/ethnicity, protected veteran status, disability, or other protected group status.

Postdoc Position at University of Rochester

The University of Rochester Ice Core Laboratory is inviting applications for a post-doctoral research associate. Our research group specializes in measurements of ultra-trace gas concentrations and isotopes in polar ice cores, with a focus on advancing the scientific understanding of atmospheric chemistry, climate and carbon cycle processes. <http://www.ees.rochester.edu/people/faculty/petrenko_vasilii/index.html>. We also conduct regular field expeditions to remote areas of Greenland and Antarctica <<http://rochestericelab.wordpress.com>>. This postdoctoral position is fully funded by the Packard Foundation Fellowship for Science and Engineering, and the start date and duration of the position are negotiable. The successful candidate would be encouraged to develop their own project, as well as work on a second project aimed at reconstructing past variations in abundance of atmospheric hydroxyl radicals.

The University of Rochester is a highly ranked research university, and Rochester's cultural, educational, and recreational assets consistently place the city in the top 10 places to live within the U.S.

To apply, please submit the following materials by August 15, 2014: 1) a cover letter highlighting why you would be a good fit for our research group in terms of your background as well as new skills you would bring, 2) CV, 3) PhD thesis abstract, 4) a short proposal (2 pages maximum, including any figures and references) describing a possible research project you would like to carry out at U Rochester, 5) contact information of 4 people who could provide a letter of recommendation. All materials should be submitted via email to Vasilii Petrenko at vpetrenk@ur.rochester.edu.

Origins Laboratory-Cosmochemistry/Geochemistry Postdoctoral Position Available - University of Chicago

The Origins Laboratory of the Department of the Geophysical Sciences and the Enrico Fermi Institute at the University of Chicago (originslab.org) seeks applicants for a postdoctoral researcher position in isotope geochemistry-cosmochemistry. Although different backgrounds will be considered, experience in clean laboratory procedures and multicollector inductively coupled plasma mass spectrometry (MC-ICPMS) techniques is especially desirable. The main themes that are being developed are (i) mass-dependent isotope variations for tracing geo-bio cycles and igneous processes, (ii) stable isotope anomalies for characterizing the heterogeneity of the nebula and identifying new presolar phases, and (iii) radiogenic isotopes for constraining early solar system chronology. Completion of the Ph.D. is required. Initial appointment is for one year, renewable up to 2 times contingent upon good progress. Applications must be received by July 31, 2014; applications received after this date may be considered if the position is not filled.

A resume and the names of three references should be sent to Nicolas Dauphas (dauphas@uchicago.edu). The University of Chicago is an Affirmative Action/Equal Opportunity Employer

PhD opportunities in Canada – Call for candidates

GEOBULLETIN

JULY 25TH 2014

Applications are invited for PhD positions to start in the fall 2014 or early 2015. ArcTrain is a program funded by the Natural Sciences and Engineering Research Council (NSERC) of Canada in partnership with the German Research Foundation (DFG).

ArcTrain offers the opportunity to join a network of internationally renowned researchers on a program which aims at developing professional skills through its international and interdisciplinary components. Students are offered a number of workshops and special courses, participation in research expeditions, and 4-12 months residency in a Canadian or German partner institution other than the one the student is enrolled in. Students will also be offered to attend a 'Floating University' in the North Atlantic or Arctic Ocean on Canadian and German research vessels.

Selected PhD Topics:

- **Iceberg calving and ice melange rheology**
Main supervisor: Christian Schoof (University of British Columbia)
- **Quantification of lateral exchanges of heat and salt between boundary currents and the Central Labrador Sea**
Main supervisor: Barry Ruddick (Dalhousie University)
- **The Greenland Ice Sheet during past interglacial periods**
Main supervisor: Shawn Marshall (University of Calgary)
- **Radioactive, radiogenic and light isotope signatures of subarctic rivers from eastern Canada**
Main supervisor: Claude Hillaire-Marcel (University of Québec in Montréal)
- **Paleoecology of the continental margins of northeastern Canada based of algal remains**
Main supervisor: André Rochon (University of Québec in Rimouski)
- **Productivity, ventilation and acidification of Labrador Sea in response to climate and atmospheric CO₂ changes**
Main supervisors: Anne de Vernal, Claude Hillaire-Marcel (University of Québec à Montréal) and Alfonso Mucci (McGill)

Note : The above list is not exclusive. Other research topics related to ArcTrain could be proposed with the support of an ArcTrain member (see <http://www.arctrain.ca/index.php/en/our-team/faculty>).

Funding of \$21,000/year is offered for a total duration of 4 years. Descriptions of projects, procedure to apply and other information on ArcTrain are available at www.arctrain.ca. To discuss the projects or to propose a subject related to ArcTrain, please contact the supervisor(s), ArcTrain member(s) or ArcTrain coordinator (coordinator@arctrain.ca).

The Institute for Geosciences at the Faculty of Geosciences/Geography at the Johann Wolfgang Goethe-University Frankfurt invites applications for a **Wilhelm Heraeus Endowed Professorship (W3) for Geophysics (with emphasis on Petrology)**

Research will involve the investigation of physical, petrological and geochemical processes occurring in the Earth's mantle and crust. Possible directions of inquiry can include the role of volatiles in geodynamic processes, melting in different tectonic regimes, phase relations, recycling of crust into the mantle. Research should be complementary to the expertise existing in Frankfurt and focus on the application and development of physical, micro-analytical and/or

GEOBULLETIN

JULY 25TH 2014

geochemical methods with the potential coupling to high-pressure experiments to solve fundamental problems of the Earth's interior. Facilities at the Institute for Geosciences are perfectly suited for such investigations (for further details, please see www.ifg.uni-frankfurt.de/48934943 ausstattung). The successful candidate is expected to become actively involved in the Bachelor and Master of Geosciences programs, particularly in the fields of Geophysics and Petrology, additionally in Geochemistry and Mineralogy.

The successful candidate should be able to exhibit international competitive research experience, demonstrated by an accumulation of projects and publications. He/she will collaborate closely with already existing teams of the institute, possesses didactical skills as well as skills in personnel management. The applicant should provide a clear concept to establish interdisciplinary collaborative research projects with other faculty members in Geosciences and Physics, and possibly in other fields within the university.

The designated salary for the position is based on "W3" of the German university scale or equivalent. For further information regarding the general conditions for professional appointments, please see: <http://www.uni-frankfurt.de/aktuelles/ausschreibung/professuren/index.html>

Academics with an excellent record in research and teaching are invited to submit their applications accompanied by the usual documents (including CV, description of previous funding, publication list, teaching activities, statement of teaching and research interests) up to **August 1st, 2014** to the **Dean of the Faculty of Geosciences/Geography, Altenhöferallee 1, 60438 Frankfurt, Germany** or by e-mail to dekanat-geowiss@em.uni-frankfurt.de.

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