

**GEOBULLETIN**  
**MARCH 26<sup>TH</sup>, 2010**

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 236 by Noon on Monday.

**Weeks Lecture**

**Speaker list - Winter/Spring 2010**

Date	Speaker	Faculty sponsor
Apr. 9	- OPEN	
Apr. 16	- John Craddock	GOODWIN CONFIRMED
Apr. 23	- OPEN	
Apr. 30	- John Eiler	VALLEY CONFIRMED
Apr. 30	- BOV/spring banquet	
May 7	- Emily Brodsky	FEIGL CONFIRMED

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**2010 Geologic Photo Contest**  
Sponsored by the Undergraduate Geo Club

- What:** A photo contest for you to show off that plethora of geology related photos to people who actually care.
- Who can participate:** Anyone and everyone
- How long does this go on:** Submissions must be in by April 25<sup>th</sup> 2010
- Official Rules:** You may only enter 2 photos per category, ten photos total. All submissions must have the accompanying information:  
Name of photographer, Category, Subject (what are you or who are you photographing), When, Where the photo was taken.
- Categories:**
- Close up of geologic feature
  - Black and White
  - Group Photo
  - Landscape
  - Other – geology related – (Lab photos)

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**\*How to Submit a photo:**

Please submit all photos electronically through e-mail. Please only submit one e-mail per category which can contain both submissions for that category. Please title the Subject line of your e-mail with your last name and the category in which you would like to submit. Make sure you have all the accompanying information with your submission (Name of photographer, Category, Subject (what are you or who are you photographing), When & Where.). This information can either be in the body of the e-mail or in an attached text file. We will not accept submissions without this information (have to give credit where credit is due). Submissions can be sent either to Reba Heiden at [rmheiden@wisc.edu](mailto:rmheiden@wisc.edu) or Lynsey Spaeth at [lspaeth@wisc.edu](mailto:lspaeth@wisc.edu).

**Prizes:**

At the end of the semester, all photos will be displayed publicly in Weeks Hall and will be judged based on category criteria through a voting process held in the beginning of May.

Prizes are yet to be determined; however winning photos will be combined into an annual calendar or poster calendar and sold for the holiday season through GeoClub. Winners will receive a calendar at no cost.

\*Prize donations, for the contest, will be greatly appreciated.

**\*Please be aware that by submitting a photo you agree to the public display and free usage of the photo by the UW Undergrad GeoClub.**

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Subject: Need a few volunteers

Looking for a very few (~3-4) volunteers this may to help deploy Texan Instruments for an active source project with CSIS Barcelona in the Atlas Mountains, Morocco. And are shooting a refraction profile from the northern Sahara to approximately Fez. This is part of a CD project called PICASSO, if you'd like more details, Alan Levander can supply some information.

We cover all the costs, of course.

The approximate dates are April 25-May 14.

**Contact Alan Levander <[alan@rice.edu](mailto:alan@rice.edu)>**

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**JOB OPENINGS**

- [GIA Laboratory-Laboratory Technician Position in Identification/Research Department](#)
- [Lectureship in Isotope Geochemistry -Lancaster University - Lancaster Environment Centre \(LEC\)](#)
- [The Gemological Institute of America seeks an Instrumentation Specialist/Metrologist](#)
- [Director's Postdoctoral Fellowships - Argonne National Laboratory](#)
- [2010 Argonne Named Fellowships](#)
- [Postdoctoral Research Seismologist - Hawaiian Volcano Observatory](#)
- [Postdoctoral Fellow in stable isotope analysis of tree-rings](#)
- [Research Fellow: Geochemical and Isotopic Tracers of Groundwater-Surface Water Interaction -School of Geosciences, Monash University\(Melbourne Australia\)](#)

**JOB OPENINGS**

**GIA Laboratory-Laboratory Technician Position in Identification/Research Department**

The Identification/Research Department at the GIA Laboratory in New York invites applications for laboratory technicians. The laboratory seeks individuals to perform routine gemological work and advanced gemological testing in support of Identification

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Services. The successful candidate will support other gemologists and researchers by working as a team on the analysis, identification, and investigation of gem materials. The laboratory technician will be expected to assist with data collection and interpretation by independently operating various analytical instruments, including an infrared spectrometer, X-ray fluorescence spectrometer, UV-visible spectrometer, and Raman spectrometer. Responsibilities will include helping maintain testing equipment.

A B.S. or M.S. in geology, physics, chemistry, materials science, or a related field is required. A background in mineralogy or earth sciences is preferred. Please submit a cover letter and resume to:

Attn: Human Resources

[NYrecruiters@gia.edu](mailto:NYrecruiters@gia.edu)

Visit [www.gia.edu](http://www.gia.edu) for further information about GIA.

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**Lectureship in Isotope Geochemistry -Lancaster University - Lancaster Environment Centre (LEC)**

**Ref: A044 Salary: £31,671 - £35,646**

**Closing Date: 23 April 2010**

As part of an ongoing programme of investment and development, LEC wishes to make 4 new academic appointments to respond to a range of emerging global challenges and to further strengthen current levels of investment in key areas of excellence and impact:

The Lancaster Environment Centre (LEC) is one of the largest centres of its kind in Europe, bringing together academics from across Lancaster University, together with scientists from the Natural Environment Research Council's Centre for Ecology and Hydrology, the Environment Agency and a growing community of business partners onto the University campus.

The quality of our international research, evidenced by a very successful outcome to the 2008 RAE is mirrored by the quality of our teaching and the commitment to ensure our work impacts well beyond traditional academic boundaries.

This post spans our Environmental Geosciences and Catchment and Aquatic Processes themes. The successful applicant will bring knowledge of the application of isotope geochemistry to earth surface processes and/or biogeochemical cycling. They will contribute to multidisciplinary undergraduate and postgraduate programmes.

As with the other posts in this latest round of development, we are keen to use this post to broaden our established research excellence, maintain and grow our undergraduate and postgraduate taught portfolio, consolidate the department's international strategy (with emerging foci in Brazil and China) and better exploit less traditional income streams in addition to continued strong participation in research council response mode and thematic programmes.

Informal inquiries may be made to the Head of Department and Director of LEC, Professor Graham Harris, tel. 01524 510520, email [g.p.harris@lancaster.ac.uk](mailto:g.p.harris@lancaster.ac.uk)

For further information and to apply online, please visit: <http://hr-jobs.lancs.ac.uk/Vacancy.aspx?ref=A044>

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The Gemological Institute of America seeks an Instrumentation Specialist/Metrologist (or Measuring Devices Specialist) to supervise the performance of our 3-D non-contact measurement devices and other measuring devices, and to plan, organize, and conduct research for the purpose of resolving measuring challenges of the Institute. The job location is in New York, New York. This position requires a Bachelor in engineering, science or equivalent. A good background in testing and measuring as well as calibration of devices based on analysis of data is needed. Strong computer skills are expected. Some international travel is required.

Please submit a cover letter and resume to:

Attn: Human Resources

[NYrecruiter@gia.edu](mailto:NYrecruiter@gia.edu)

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Visit [www.gia.edu](http://www.gia.edu) for further information about GIA

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**Director's Postdoctoral Fellowships - Argonne National Laboratory**

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Candidates for the Director's Postdoctoral Fellowships are selected based on their research and academic accomplishments, and the strength of their research proposal. They will collaborate with Argonne scientists and engineers on existing programs and on new initiatives. All applicants must identify an Argonne employee (sponsor) who will write the nomination memo and present your case in front of the Postdoctoral Committee. The sponsor could be someone who is already familiar with your research work and accomplishments through previous collaborations or professional societies. If you have not yet identified an Argonne sponsor, visit the detailed websites of the various [Research Programs](#), [Research Divisions](#), and [Project Descriptions](#).

The candidates' application packages are reviewed by the Postdoctoral Committee. The deadlines to receive all the application materials are February 8, June 21, and September 13, 2010. Fellowships are awarded for a one-year term, with possible renewal for second year. The 2010 Fellowship carries a stipend of \$78,000 per annum.

**Candidate Eligibility:**

PhD requirements have to be completed by commencement of appointment. Candidates must have received their PhD recently.

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**How to Apply :**

Candidates must upload the following documents by clicking on the [application link](#).

- Research proposal (≤ 2 pages)
- CV, including list of publications, abstracts and significant presentations
- Graduate School Transcripts
- Cover letter (optional)

If you DO NOT have all of the required documents at this time, you may come back to your application and upload them later.

To come back into your application, click on the [application link](#):

1. Enter in your email address for Username.
2. Enter in your Password.
3. Click on the 'Edit Registration' link (located on the bottom of the dialogue box).
4. Edit/Add any other information to your profile:

Upload a document (to upload a document, it must be of '.doc' or '.pdf' file type; document names cannot contain 'special' characters such as '&,@,#, etc)

5. Click the 'Submit Registration' button to Apply.

Additionally, the package must contain:

- Nomination memo (≤ 2 pages) from Argonne sponsor (with copy to Division Director)

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- Three letters of recommendation from other than Argonne staff

These letters must be sent directly via e-mail to [Director-Postdoc@anl.gov](mailto:Director-Postdoc@anl.gov). Letters must be in a PDF file from the individual(s) with a signature on official letterhead. **In the subject line please include the name of the candidate.**

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**2010 Argonne Named Fellowships**

Candidates for the Argonne National Laboratory Named Fellowships must display superb ability in scientific or engineering research and must show definite promise of becoming outstanding leaders in the research they pursue.

Fellowships are awarded for a one-year term, with possible renewal up to three years. The 2010 Fellowship carries a stipend of \$78,000 minimum per annum with an additional allocation of up to \$20,000 per year for research support and travel. The Fellows, who will be competitively selected by a special fellowship committee, are given the freedom of associating with Argonne scientists in a research area of common interest.

**How to apply**

Your application requires the following documents:

- Nomination memo ( $\leq 2$  pages) from ANL sponsor (with copy to Division Director)
- Research proposal ( $\leq 2$  pages)
- Three letters of recommendation from other than Argonne staff
- CV
- List of publications, abstracts and significant presentations
- Graduate School Transcripts

The sponsor could be someone who is already familiar with your research work and accomplishments through previous collaborations or professional societies. If you have not yet identified an ANL sponsor, visit the detailed websites of the various [Research Programs](#), [Research Divisions](#), and [Project Descriptions](#).

**Send all application material to : [Named-Postdoc@anl.gov](mailto:Named-Postdoc@anl.gov) by Monday, November 15, 2010. In the subject line please include the name of the candidate.**

For your security, please **do not include** the following information in your CV:

Date of birth  
Place of birth  
Social security number

One application is sufficient to be considered for all Named fellowships.

The nominator and referees should send their letters directly via e-mail to [Named-Postdoc@anl.gov](mailto:Named-Postdoc@anl.gov). Letters must be in a PDF file from the individual(s) with a signature on official letterhead.

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**Postdoctoral Research Seismologist - Hawaiian Volcano Observatory**

Postdoctoral fellow, Center for the Study of Active Volcanoes (CSAV), UH Hilo (HI, USA), one-year appointment, to begin May 1, 2010, with renewal dependent on performance and availability of funds. The incumbent will be based at the United

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States Geological Survey's Hawaiian Volcano Observatory (HVO).

We seek a motivated individual to work with the HVO seismic group on a range of possible seismic/volcanic research projects that will integrate with and compliment ongoing HVO research topics and cataloging of seismic volcanic activity. These include, but are not limited to, identifying and characterizing volcanic tremor sources, real-time quantification of station quality and network status, algorithms for real-time earthquake location, joint infrasound and seismic processing, and imaging techniques to constrain three-dimensional seismological structure using broadband and short-period seismic data. HVO's ongoing seismic network upgrades will provide the opportunity to assist in the design and installation of new seismic stations and communication networks that are critical for real-time seismic data monitoring.

Qualifications: Ph. D. in geophysics. Experience with real-time seismic data processing systems, earthquake cataloging, digital signal processing, data visualization, or seismic imaging and tomographic techniques strongly desired. Experience with field deployment of digital seismic networks and the ability to participate in field station visits (e.g., able to lift and carry batteries, equipment, etc.) is also desired.

The position offers a stipend of \$5000/mo to qualified individuals. To apply: Please submit letter of application, resume, and documentation of status of Ph.D. degree along with names of three professional references to: Dr. Donald Thomas, CSAV, University of Hawai'i at Hilo, 200 W. Kawili St., Hilo, HI 96720-4096 ([dthomas@soest.hawaii.edu](mailto:dthomas@soest.hawaii.edu)).

For additional information please contact: Dr. Donald Thomas ([dthomas@soest.hawaii.edu](mailto:dthomas@soest.hawaii.edu)), Dr. James Kauahikaua ([jimk@usgs.gov](mailto:jimk@usgs.gov)), or Dr. Paul Okubo ([pokubo@usgs.gov](mailto:pokubo@usgs.gov)).

This position announcement will remain open until filled.

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### **Postdoctoral Fellow in stable isotope analysis of tree-rings**

With the project we aim to better understand stable isotope variations in tree-rings from extreme locations (near elevational and northern tree-lines). While mainly statistical methods have been used for climate reconstruction so far, it is understood that a correct representation of the isotope fractionation steps in trees can result in more reliable climate reconstruction. With this goal the successful candidate will be involved in lab- and field-work as well as evaluation and modeling of isotope data of various ecosystem compartments from soil to leaf to stem. Compound-specific isotope analysis will be applied to investigate fractionation steps within the plant and improve the understanding of the climatic information contained in various stem components.

Your profile -You have a PhD in physics, chemistry or environmental sciences and have worked with stable isotopes as a tool to decipher past climate signals from tree-rings or other archives. You have practical knowledge of isotope analysis as well as experience with data analysis and isotope models. Experience in compound-specific isotope analysis is a bonus.

For further information please contact: [matthias.saurer@psi.ch](mailto:matthias.saurer@psi.ch) or [rolf.siegwolf@psi.ch](mailto:rolf.siegwolf@psi.ch)

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### **Research Fellow: Geochemical and Isotopic Tracers of Groundwater-Surface Water Interaction School of Geosciences, Monash University (Melbourne Australia)**

A three year Postdoctoral Fellowship in the School of Geosciences, Monash University (Melbourne Australia) is available immediately as part of the National Centre for Groundwater Research and Training (NCGRT). The research involves the study of groundwater-surface water interaction and environmental issues in a coastal environment (coastal lakes, rivers, estuaries) at a range of temporal and spatial scales using a variety of geochemical and isotopic tracers (including major ions, stable isotopes, and radiogenic isotopes) coupled with physical hydrogeology. The project involves several staff members and students at Monash University and elsewhere in the NCGRT and offers ample opportunity for collaborative work. The aims of the broader project are to quantify the water balance in the coastal environment, to better understand nutrient and metal cycling in the intertidal zone, to assess issues associated with acid sulfate soil generation, and to assess the impacts of future environmental or landuse change on the groundwater and surface water.

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The successful applicant will have a PhD and experience in the application of isotopic and geochemical tracers to understand hydrological processes. They will also have experience in designing and carrying out field sampling programs, evidence of the ability to carry out collaborative research, good publication record relative to experience, and good communication skills.

Remuneration package: \$78,828 - \$93,609 pa Level B (includes employer superannuation of 9%)

This role is a full-time position, however flexible working arrangements may be negotiated. Monash offers a range of professional development programs, support for research, study and overseas work, generous maternity leave and flexible work arrangements.

Enquiries to [ian.cartwright@sci.monash.edu.au](mailto:ian.cartwright@sci.monash.edu.au) (please be careful and not reply to the ISOGEOCHEM list)

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