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

**Weeks Lecture**

*Speaker list – Spring 2012*

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Carl Jacobson, IOWA State (Host: Goodwin)

JOB OPENINGS:

- **Saudi Aramco's Exploration and Producing Advanced Research Center (EXPEC ARC)** seeks a scientist to manage and grow their stable isotope geochemistry laboratory
- **The University of Texas at San Antonio** is seeking a karst hydrogeologist to join the faculty in the Department of Geological Sciences at the associate professor or professor level.
- **The Department of Geological Sciences at the University of Saskatchewan**, is accepting applications for a chair at the Assistant or Associate Professor level in the area of environmental geochemistry
- **Victoria University of Wellington** seeking outstanding candidates who will complement and enhance our existing strengths in sedimentology, geophysics, geochemistry, volcanology, structural geology, and petrology,
- **UC Berkeley Seismological Laboratory**: Six new research and technical positions
- **Postdoctoral Fellowships - Department of Terrestrial Magnetism**
- **Post-doctoral Research Associate Program in Geological Sciences, Brown University**
- **Fulltime, 9 month, Assistant/Associate Professor, Department of Geosciences, College of Earth, Ocean, and Atmospheric Sciences at Oregon State University in Corvallis, Oregon**
- **The Office of Fellowships is offering an Interdisciplinary Postdoctoral Fellowship in the area of stable isotope sciences**
- **Surface Scientist position available within the Surface Analysis Laboratory at Micron Technology in Boise, Idaho.**
- **The University of Otago is New Zealand's top-ranked university for research quality-Lecturer in Chemical Oceanography**
- **Faculty Position - Global Change Ecology -Virginia Commonwealth University**
JOB OPENINGS:

Saudi Aramco's Exploration and Producing Advanced Research Center (EXPEC ARC) seeks a scientist **to manage and grow their stable isotope geochemistry laboratory**. At present, the lab has two Thermo Fisher mass spectrometers (a Delta Plus XP and a Delta V Advantage), an Isolink CNH GC-combustion system, a Flash elemental analyzer, a Gas Bench II device and a thermal conversion elemental analyzer. These are being used to measure isotope ratios of C, H and N in natural gas, C in crude oil/bitumen/kerogen, C and O in carbonate rocks and H and O in formation waters. The manager will be expected to prepare and run samples within tight project deadlines, train and supervise technical staff, maintain the instruments and ensure the quality of all analytical data. As we are currently working on improved techniques for analyzing drilling mud gas and fluid inclusion gas, an interest in methods development is important. Candidates should have a B.S. or higher degree in science, an excellent command of English and strong diagnostic/trouble-shooting experience with stable isotope ratio instrumentation. Favorable consideration will be given to individuals with interpretive experience, report-writing skills and some knowledge of Isodat script language. The position is in Dhahran, Saudi Arabia, and is expected to filled by summer 2012. EXPEC ARC has over 250 scientists working in geophysics, geology, reservoir engineering, computational modeling, production and drilling technology. Together we provide advanced technical services to Saudi Aramco's upstream operations, carry out cutting-edge research, develop innovative technologies and test those technologies in some of the largest, most productive oil and gas fields in the world. Interested candidates should e-mail a statement of interest and their resumé to peter.jenden@aramco.com.

The University of Texas at San Antonio is seeking a karst hydrogeologist to join the faculty in the Department of Geological Sciences at the associate professor or professor level. Stable isotope facilities includes: Thermo Finnigan Delta Plus XP, Conflo III, TC/EA, Gasbench II, and Costech EA. Full details of the position can be found at: [http://utsa.edu/geosci/positions.html](http://utsa.edu/geosci/positions.html)

Review of applications begins Dec. 15 and will continue until the position is filled.

The Department of Geological Sciences at the University of Saskatchewan, is accepting applications for a chair at the Assistant or Associate Professor level in the area of environmental geochemistry, with particular focus on mine waste and decommissioning. The successful candidate will join a University with a strong commitment to water research. There are significant opportunities for collaboration with faculty in other Departments and Colleges, especially the College of Engineering, where a senior IRC chair in this research area will be located.

Initial research funding will be provided by Syncrude, but the successful candidate will apply for an NSERC Associate Industrial Research Chair, and to develop a vigorous, externally funded research program. We seek candidates with a demonstrated record of research addressing fundamental problems in environmental geochemistry who are also committed to quality undergraduate and graduate teaching. A reduced teaching load will be defined at appointment, although teaching in our core undergraduate program will be required. Candidates must have a Ph.D., an established reputation for research, a demonstrated ability to secure research funding and experience with teaching and research supervision.
The College of Arts & Science offers a dynamic combination of programs in the humanities and fine arts, the social sciences and the sciences. There are over 8,000 undergraduate and graduate students in the College and 325 faculty, including 12 Canada Research Chairs. The College emphasizes student and faculty research, interdisciplinary programs, community outreach and international opportunities.

The Department of Geological Sciences in the Division of Science has 16 full-time faculty, including two Canada Research Chairs, two endowed research chairs, one of which is a senior Industrial Research Chair and excellent analytical, and computing facilities. For detailed information about the Department, applicants are encouraged to visit www.usask.ca/geology/.

The University of Saskatchewan is located in Saskatoon, Saskatchewan, a city with a diverse and thriving economic base, a vibrant arts community and a full range of leisure opportunities. The University has a reputation for excellence in teaching, research and scholarly activities and offers a full range of undergraduate, graduate, and professional programs to a student population of about 20,000. The university is one of Canada's leading research-intensive universities.

Applications, including résumé, statement of research interests and teaching philosophy, and three letters of reference, should be sent to:

Search Committee
Department of Geological Sciences
College of Arts & Science
University of Saskatchewan
114 Science Place
Saskatoon, SK S7N 5E2, Canada
Email: jim.merriam@usask.ca
Fax: 306-966-8593

We will begin reviewing applications after January 20, 2012.

The University of Saskatchewan is committed to employment equity. Members of designated groups (women, people with aboriginal ancestry, people with disabilities and visible minorities) are encouraged to self-identify in their applications. All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority.

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Victoria University of Wellington seeking outstanding candidates who will complement and enhance our existing strengths in sedimentology, geophysics, geochemistry, volcanology, structural geology, and petrology, and who will develop new or maintain existing research and teaching relationships with the Wellington-based Crown Research Institutes. Research interests may include, but are not limited to, energy or mineral resources, basin dynamics, and tectonics or geodynamics.

The successful candidate will be expected to build a vigorous and innovative, externally-funded research program involving graduate students and to participate actively in a comprehensive undergraduate curriculum that spans the breadth of fundamental earth sciences.

The School has a well-funded and diverse Earth Science research program. Facilities available in the School include a world-class geochemistry facility, electron probe microanalysis, luminescence dating, fission track thermochronology, GIS, multichannel seismic reflection equipment and a set of 20 Reftec seismographs for earthquake recording.
Members of the Earth Sciences programme work closely with researchers in Antarctic Research Centre and the Geography programme including joint supervision of graduate students.

Applications close 17 February 2012

Victoria University of Wellington is an EEO employer and actively seeks to meet its obligations under the Treaty of Waitangi.

For more information and to apply online visit [http://vacancies.vuw.ac.nz](http://vacancies.vuw.ac.nz)

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**UC Berkeley Seismological Laboratory: Six new research and technical positions**

**Research of the earthquake source, development and implementation of earthquake early warning**

The UC Berkeley Seismological Laboratory (BSL) is pleased to announce six new positions, including post-doctoral and permanent positions. These positions are all to work with the earthquake source physics and earthquake early warning group lead by Prof Richard Allen. The group is working to better understand the physics of large magnitude earthquakes and to develop methodologies for earthquake early warning. The implementation of these methodologies will be tested on California’s real-time geophysical networks, where we will evaluate their current and likely future performance. Earthquake early warning is the rapid detection of earthquakes underway, estimation of the ground shaking hazard they pose, and warning of people in harm’s way. The successful applicants will work on a variety of projects related to early warning and real-time operations at the BSL. These will likely include research of the early phases of rupture nucleation and propagation, the development of seismic- and geodetic-based methods for rapid earthquake characterization, the use of new types of geophysical networks including MEMS-type sensors, the development of delivery tools to provide the warning, and the engagement of warning users.

Funding for all the positions is available beginning January 1, 2012, positions will be open until filled. Additional information about the positions, including the timeline for application evaluation, will be posted on the BSL webpage as it becomes available:

[http://seismo.berkeley.edu/seismo.positions.html](http://seismo.berkeley.edu/seismo.positions.html)

To learn more about the early warning project and these positions at BSL please talk to one of the following at the upcoming AGU meeting: Richard Allen, Roland Bürgmann, Doug Dreger, Peggy Hellweg, Ingrid Johanson, Doug Neuhauser.

The six positions are:

1. **Researcher.** This fulltime staff research position is directed toward the development of seismic methodologies for early warning. This is a primarily a research position and will also involve some management of the early warning project. Applicants should have a PhD in geophysics and additional postdoctoral experience is preferred. More details will be posted on the BSL website as they become available.

2. **Academic Program Manager.** This fulltime staff position is focused on development of the BSL Earthquake Research Affiliates (ERA) Program ([http://seismo.berkeley.edu/ERA](http://seismo.berkeley.edu/ERA)). The successful applicant
will interface with existing ERA members and develop new members. He/she will help guide real-time earthquake information product development, and there is also the possibility of participating in the research and implementation if appropriate. It is anticipated that the successful applicant will have a PhD in science, if not in geophysics. More details will be posted on the BSL website as they become available.

3. Postdoctoral Fellow in real-time geodesy. This postdoctoral fellowship is focused on the use of real-time GPS data for the purpose of real-time earthquake information products including earthquake early warning. In addition, up to 25% of the time can be spent on independent research projects. The initial appointment will be for one year. Reappointment for a second and possibly third year is expected but dependent on satisfactory progress. The review of applications will start January 1, 2012, and continue until the position is filled. Applicants should send a letter detailing their research interests and a CV to applications@seismo.berkeley.edu. Questions about the position should be sent to the same email address.

4. Postdoctoral Fellow in the physics of large earthquakes. This postdoctoral fellowship is focused on study of the physics of large magnitude earthquakes and extraction of key parameters for rapid earthquake information products including earthquake early warning. In addition, up to 25% of the time can be spent on independent research projects. The initial appointment will be for one year. Reappointment for a second and possibly third year is expected but dependent on satisfactory progress. The review of applications will start January 1, 2012, and continue until the position is filled. Applicants should send a letter detailing their research interests and a CV to applications@seismo.berkeley.edu. Questions about the position should be sent to the same email address.

5. Junior Programmer Analyst. A fulltime staff position to support the earthquake early warning project and related real-time operations. More details will be posted on the BSL website as they become available.

6. Senior Programmer Analyst. A fulltime staff position to support the earthquake early warning project and related real-time operations. More details will be posted on the BSL website as they become available.

The specific responsibilities of all the positions are negotiable, and interested applicants should contact Prof. Richard Allen (rallen@seismo.berkeley.edu) to discuss interests. If you would like to receive additional email notifications as position details and application deadlines become available send email to applications@seismo.berkeley.edu.

Postdoctoral Fellowships - Department of Terrestrial Magnetism
The Carnegie Institution of Washington anticipates openings in the Department of Terrestrial Magnetism for postdoctoral fellows in one or more of the fields of geophysics, geochemistry, cosmochemistry, planetary science, and astrobiology. Details on DTM research staff, laboratory facilities, and ongoing research can be found at www.dtm.ciw.edu under “Research.” Fellowships are normally renewable for a second year. Applications should include a curriculum vitae, description of thesis research, list of publications, and a short (2-3 page) statement of research plans for the fellowship period, plus three letters of recommendation to be sent directly to DTM by those familiar with your work. Completed applications are due 15 January 2012. Women and minority candidates are especially encouraged to apply. AAE/EOE.

Please send applications to:
Department of Terrestrial Magnetism
Carnegie Institution of Washington
5241 Broad Branch Road, NW
Washington, DC 20015-1305
Attention: Fellowships Committee  
E-mail submission address: fellowships@dtm.ciw.edu

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Post-doctoral Research Associate Program in Geological Sciences, Brown University

The Department of Geological Sciences at Brown University invites applications for its postdoctoral research associate program. The Department seeks outstanding candidates in the field of Earth and planetary sciences, with preference given to applicants whose research addresses key questions in Earth composition, structure, dynamics, deformation and material properties. Postdoctoral associates are encouraged to pursue their own research interests, but close interaction with Brown Geological Sciences faculty is expected. Additional program information and a description of research and facilities in the Department can be found at http://brown.edu/Departments/Geology.

These competitive, institutionally-supported postdoctoral positions are awarded for a one-year period, with anticipated extension for a second year. The initial annual stipend is $53,500 and a research/travel fund of $5,000 is provided in each year.

Applications and reference letters should be emailed (in PDF format) to geopostdocsearch@brown.edu no later than January 9, 2012. Applications should include a brief proposal for the research to be carried out at Brown (with identification of a Brown faculty sponsor), a statement of research accomplishments, and a curriculum vitae. Applicants should also arrange for three letters of reference to be emailed separately. Decisions will be made in Spring, 2012, for a position start date as early as July 1, 2012. Applicants should have a recent Ph.D. or should be 2012 degree candidates. Completion of the Ph.D. is required by the time of the appointment.

Brown University is an equal opportunity/affirmative action employer. We encourage applications from minority and women scientists.

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Fulltime, 9 month, Assistant/Associate Professor, Department of Geosciences, College of Earth, Ocean, and Atmospheric Sciences at Oregon State University in Corvallis, Oregon. We seek an outstanding scholar who will develop a strong teaching, research and service program. The ideal candidate will integrate earthquake geology and active tectonic research with other disciplines, e.g. seismology, GPS-satellite geodesy, structural geology, tectonics and sedimentation, Quaternary age-dating techniques, regional tectonics, and remote sensing. The successful candidate is expected to teach graduate courses in his/her field of expertise and contribute to the undergraduate structural geology and field geology curriculum. The RS Yeats Endowment provides a substantial stipend for use in support of the endowed Professor's research, teaching, and service. Requires: Ph.D. in geology, geophysics, or a closely related field. Must demonstrate ability or significant potential for teaching excellence, be committed to educational equity in a multicultural setting, have a strong scholarly potential that includes an active research agenda, peer-reviewed publications, and ability to obtain external research funds. For complete position description and to apply, see http://oregonstate.edu/jobs (posting 0008277). For additional information please contact: Dr. John Dilles, Search Chair, (541) 737-1245, dillesj@geo.oregonstate.edu for full consideration, applications must be received by January 16, 2012. OSU is an AA/EOE.

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The Office of Fellowships is offering an Interdisciplinary Postdoctoral Fellowship in the area of stable isotope sciences. Research proposals must integrate the use of stable isotopes (2H/1H, 13C/12C, 15N/14N, and
18O/16O) into their specific research questions. Stable isotope analysis must comprise a significant portion of the research. The successful applicant will conduct analyses at one of the two Pan-Institutional isotope facilities (OUSS/MCI Stable Isotope Mass Spectrometry Facility in Suitland, MD or at the Smithsonian Tropical Research Institute, Panama City, Panama). Applicants interested in this fellowship are strongly encouraged to contact potential advisorshosts at any of the Smithsonian's various Museums and Research Units prior to proposal preparation and submission. Prior Isotope Fellows are not eligible. Please consult the research staff listed for the Museum, Research Units, and Offices at the links to Smithsonian Opportunities for Research and Study below.

Applicants must propose to conduct research in-residence for a period of 12 months, at least 4 months of which will be spent on-site at the MCI or STRI laboratory. Applicants must have completed or be near completion of the Ph.D. Recipients who have not completed the Ph.D. at the time of application must provide proof of completion of the degree before the fellowship begins. Please go to http://www.si.edu/research+study for details on the SI fellowship program. **Applications must be submitted by Jan 15, 2012.** Access to the online application system and information regarding the necessary materials can be found at http://www.si.edu/ofg/Applications/SIFELL/SIFELLapp.htm

For additional information on the OUSS/MCI Stable Isotope Mass Spectrometry Facility in Suitland, MD (http://si.edu/mci/irms/index.htm) please contact Christine France (francec@si.edu). For additional information on the Smithsonian Tropical Research Institute Mass Spectrometry Facility in Panama City, contact Ben Turner (turnerbl@si.edu).

For further information on this message, contact Peter Marra, Smithsonian Migratory Bird Center, x31594 (VoIP), 202-633-1594 (non-VoIP), marrap@si.edu.

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**Surface Scientist position available within the Surface Analysis Laboratory at Micron Technology in Boise, Idaho.** This position involves the application of TOF-SIMS, XPS, XRR, and XRD to a variety of R&D and manufacturing support areas. For more details or to apply on-line, please see: https://micron.taleo.net/careersection/10000/jobdetail.ftl. XPS Surface Scientist - BOI27719

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**The University of Otago is New Zealand's top-ranked university for research quality-Lecturer in Chemical Oceanography-1100548 -DEPARTMENT OF CHEMISTRY**

Applications are invited for the position of Lecturer in any area of Chemical Oceanography. Candidates with interests that align with the Department's current strengths in analytical chemistry and biogeochemistry are particularly encouraged to apply. The primary criteria for appointment will be a demonstrated potential for excellence in research and a strong commitment to research-informed teaching.

The successful applicant will have a PhD degree and high-quality published research, and will be expected to establish an effective individual research programme in the Department, including seeking external funding support for research. The Department has considerable geochemical research infrastructure that will be available to the successful candidate. In addition to contributing to the teaching programme in their relevant specialist area of Chemistry, the successful applicant will also be expected to teach general Chemistry at the first-year undergraduate level.

Consideration will be given to the appointment of an exceptional candidate at the level of Senior Lecturer. Such a candidate would be expected to provide leadership in teaching and research.

Specific enquiries may be directed to Professor Lyall Hanton, Head of Department of Chemistry, Tel 03 479 7918, Email: lhanton@chemistry.otago.ac.nz
Applications will close on Monday, **12 December 2011**.

To see a full job description and to apply online go to:  [www.otago.ac.nz/jobs](http://www.otago.ac.nz/jobs)

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**Faculty Position - Global Change Ecology - Virginia Commonwealth University**

The Department of Biology at VCU invites applications for an ecologist specializing in the effects of global change at the ecosystem or landscape level. Special consideration will be given to applicants who can demonstrate a potential to collaborate with our current faculty. This is a nine-month, tenure-track position at the rank of Assistant Professor. Anticipated start date is August 16, 2012, contingent on funding.

The successful applicant will be expected to develop a productive, externally-funded research program and direct graduate students through the Ph.D. level. Primary teaching responsibilities will include related undergraduate and graduate courses. Postdoctoral experience is expected and demonstrated evidence of excellence in scholarship and teaching is required. In addition, applicants must have experience working in and fostering a diverse faculty, staff, and student environment or commitment to do so as a faculty member at VCU. Competitive start-up funds are available.

Virginia Commonwealth University has an enrollment of 32,000 students, including over 1,900 undergraduate and 75 graduate students in Biology. The Department of Biology ([http://www.has.vcu.edu/bio](http://www.has.vcu.edu/bio)) has 39 faculty members with diverse research interests in the following three areas of excellence: Cell Regulation, Evolution, and Ecological Processes and Applications. Additional research opportunities are available through the Center for Environmental Studies ([http://www.vcu.edu/cesweb/](http://www.vcu.edu/cesweb/)) and at the Rice Center, VCU's nearby field station on the James River ([http://www.vcu.edu/rice/](http://www.vcu.edu/rice/)).

Electronic submission of applications to: biology@vcu.edu is preferred, but hard copies of vitae, statements of research and teaching interests, and three letters of reference may be sent to: Stephanie Millican, Department of Biology, Virginia Commonwealth University, Richmond, VA 23284-2012. Closing date for receipt of applications is December 15, 2011.

Virginia Commonwealth University is an equal opportunity/affirmative action employer. Women, minorities, and persons with disabilities are encouraged to apply.

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

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