GEOBULLETIN
FEBRUARY 22, 2008

LECTURE SCHEDULE ---- All lectures (unless otherwise noted) are held on Fridays at 3:30 PM in AB20 (Laudon Lecture Hall). Coffee & cookies are served in the lobby starting at 3:15 PM. No more lectures scheduled for this semester.

SPRING 2008 WEEKS LECTURE SCHEDULE

February 22 ---- David Wesolowski ----- ORNL

GENERAL TALK: February 22, 2008 – Friday 3:30 PM – Room 140 – Weeks Hall

"Linking molecular and macroscopic properties of the mineral-solution interface"

This talk will summarize the efforts of a large, multi-disciplinary team applying advanced chemical imaging, computational and experimental approaches to studies of the interface between crystalline oxides and aqueous electrolytes. The effects of solution temperature and composition, and mineral surface structure on the molecular-level features of this complex nanoscale regime will be discussed, and linked with macroscopic manifestations of interfacial phenomena, such as surface charge, ion adsorption and transport of charged particles.

February 29 ---- Gene Hunt -----Smithsonian -----
March 7 ----- Francesca Smith ----- Northwestern ----
March 28 ------ Hold for AAPG
April 4 ----- Martin Saar ----- University of Minnesota -----
April 11 ------- Laurie Brown ---- University of Massachusetts ----
April 18 ------- Christopher Kim – Chapman University
April 25 ----- Board of Visitors' Meeting ---- date reserved ----
May 2 ------ Clark Johnson – University of Wisconsin
May 9 ----- Sean C. Solomon --------- DTM/Carnegie Institution of Washington -----

FALL 2008 WEEKS LECTURE SCHEDULE
September 12 ------ Steve Holland --- University of Georgia

POSITION OPENINGS:

LAMONT-DOHERTY EARTH OBSERVATORY OF COLUMBIA UNIVERSITY
REU SUMMER INTERN PROGRAM

Sponsored by the Columbia University Department of Earth and Environmental Sciences and the Lamont-Doherty Earth Observatory of Columbia University
Theme: Analyzing Global Databases
Program dates: June 4th - August 6th, 2008.
Now accepting applications for 2008 Summer Programs.
Application deadline is March 1, 2008
Visit the Department of Earth and Environmental Sciences website for detailed information.
http://eesc.columbia.edu

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ASSISTANT PROFESSOR IN MINERALOGY
DEPARTMENT OF EARTH SCIENCES, UNIVERSITY OF OTTAWA

The Department of Earth Sciences at the University of Ottawa invites applications for a non-tenure track Assistant Professor Position in Mineralogy starting July 2008, with a minimum fixed-term of 5 years. The candidate's specialty is open to any field related to mineralogy; a requirement for this position at Canada's premier bilingual university is the ability to teach courses in both English and French. The incumbent will teach three to four semester courses per year including undergraduate Optical Mineralogy course. The applicant will be encouraged to seek external funding, conduct independent research and supervise students' thesis projects. A PhD in Geology or any closely related field is required. An applicant close to completing a PhD may be considered.

The Department offers several undergraduate degree, MSc and PhD programs in Earth Sciences, and has a modern Teaching Microscopy Laboratory equipped with 18 research-quality petrographic microscopes and complete digital video system.

Appointment and salary
Starting date is July 1, 2008. A salary for Assistant Professor at the University of Ottawa ranges from $ 61,597/year to $85,194/year, and decided upon experience described in the Collective Agreement between the University and Association of Professors of the University of Ottawa.

The position may be extended after the fifth year. Furthermore, the Department is planning to advertise several tenure-track faculty positions in the coming years including one in the field of petrology/high-temperature geochemistry.

Application
An applicant should send a letter of application summarizing research interests and any teaching experience, a CV including a list of publications, and three names of references to the Department of Earth
Sciences, 140 Louis Pasteur, University of Ottawa, Ottawa, Ontario, K1N 6N5,Canada.
A review process will begin March 24, 2008.

Inquires and electronic applications should be addressed to estchair@uottawa.ca

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University Teaching and Research Position (limited to 6 years) [Akademische Rätin/Akademische Rat auf Zeit (A13)]

The position is available from 2 April, 2008, initially for three years, and renewable for a further three years, subject to a positive evaluation. The successful candidate will have the benefits associated with the German Civil Service.
Candidates should have a doctorate, a good track record of publications and have broad interests in Geosciences with a focus on **Experimental and Analytical Mineralogy. Preference will be given to candidates with experience with transmission electron microscopy.**
The successful candidate will be expected to conduct independent research and also to apply to research funding bodies for grants to further support their work. Ideally, the candidate's research will lead to collaborative projects with other members of the Institute.
The successful candidate will be responsible for teaching B.Sc.- and M.Sc.-level courses 4 hours per week during the semester), as well as assisting in the supervision of postgraduate students.

The Institut für Mineralogie is well equipped with experimental facilities including piston-cylinder apparatus, hydrothermal high pressure and gas mixing furnaces. A multi-anvil high P,T apparatus will be installed during 2008. Atomic Force Microscopy is available for in situ studies of crystal growth and dissolution in aqueous solutions. Analytical facilities include electron microprobe, excimer laser ablation ICPMS, and ZEISS LIBRA energy-filtered TEM, JEOL 3010 TEM with GIF, and scanning electron microscopes. The Centre for Geochronology within the Institute has extensive mass spectrometry facilities. The Institute has close collaboration with the Institutes of Geology, Planetology and Physics through the Interdisciplinary Centre for Electron Microscopy and Microanalysis (ICEM). Further information about the facilities and research in the Institute can be found on the homepage :

http://www.uni-muenster.de/Mineralogie/

The University seeks to increase the proportion of female members in the faculty and therefore urges interested female candidates to apply. In case of equal qualifications, preference will be given to disabled applicants.

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Postdoctoral Associate in Seismology/Crustal Deformation Studies of the Yellowstone

The University of Utah invites applications for a postdoctoral associate in seismology and/or geodetic imaging and related dynamics of the Yellowstone hotspot and its active magmatic-tectonic system. We are interested in a scientist to conduct research on such topics as earthquake source properties, integration of EarthScope GPS and strainmeter data with earthquakes and volcanic manifestations, volcano-fault stress
interactions, deformation modeling, geodynamics, etc. A rich source of data is available from the University of Utah Yellowstone seismic network as well data from the EarthScope PBO GPS and borehole strainmeter arrays and the USArray seismic network (see www.uusatrg.utah.edu and www.seis.utah.edu).
Interaction with students, faculty and with the Yellowstone Volcano Observatory (a partnership of the Univ. of Utah, the USGS, and Yellowstone National Park) as well as participation in earthquake response and
interpretation needs is expected. Computing experience with the Linux/ Unix operating system is required.

Applicants must have a Ph.D. in geophysics or closely related field. Appointment will be for one-year beginning summer 2008 or negotiable, with continuation contingent upon performance and funding. Applicants should email Robert B. Smith, rbsmith@earth.utah.edu):
1) A letter of Application including a statement of research interests and how the applicant is qualified to conduct the above research,
2) A current curriculum vitae, and
3) Names and email addresses of three persons who can provide recommendations for the candidate. Applications will accept until the position is filled. The University of Utah is an equal opportunity Employer.

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Assistant Professorship in Analytical Geochemistry,
Geological Sciences, Indiana University, Bloomington

The Department of Geological Sciences at Indiana University, Bloomington, invites applications for a tenure-track faculty appointment at the Assistant Professor level specializing in analytical geochemistry. We seek an individual whose research centers on the use of multi-collector ICPMS to address fundamental questions in the geosciences. Preference will be given to candidates whose interests complement existing departmental expertise in areas of isotopic and molecular geochemistry, hydrogeology and mineralogy, and strengthen and augment current research programs in studies of the evolution and history of Earth and/or planetary systems. Our instrumental laboratories for biogeochemistry and analytical and

environmental geochemistry will move to a new multidisciplinary science building scheduled for completion in June 2009,
which has space designated for an ICP-MS facility. Review of applications will begin on March 1, 2008 and will continue until a suitable candidate is recruited.
All enquiries and applications should be addressed to
Simon Brassell, Professor and Chair, Department of Geological Sciences,
Indiana University, Bloomington, IN 47405-1403
(simon@indiana.edu).

Please submit a letter of application, and a complete vita, with contact information and the names of at least three referees. *Indiana University is an equal opportunity/affirmative action employer*, and encourages applications from women and minority candidates.

Edward M. Ripley
Professor of Geochemistry
Indiana University
1005 East Tenth Street
Bloomington,IN 47405
Tel.:812-855-1196
Fax.:812-8557961

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SUMMER UNDERGRADUATE RESEARCH 2008

Study the Earth's interior through Independent Research using state of the art facilities with Mineral Physics Institute

Program

- Ten week at Stony Brook University working on projects in High-pressure research or Earth Sciences, June – August, 2008
- Design experiments, collect and interpret results
- Present finding to other Scientists

Eligibility

- Undergraduate majoring in any of the physical sciences or mathematics
- 60 academic credits completed
- Interest in research career in Earth Sciences
- U.S. citizens or permanent resident

To Apply

Go to www.mpi.stonybrook.edu/summerscholars

Print and complete the application form
Include a personal statement, official transcript and two letters of recommendation

Mail to

MPI REU Summer Program
Mineral Physics Institute
Stony Brook University
Stony Brook, NY 11794 -2100

Evaluations begin upon receipt of application, Selections begin March 27, 2008

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GEOTIMES, the monthly news magazine of the earth sciences, is now accepting applications for its 2008 summer internship. We are looking for individuals, preferably with a geosciences background, who are interested in science writing and journalism. Based at the American Geological Institute in Alexandria, Va., the internship is 12 weeks long and includes a $3,500 stipend. Please pass the attached flyer and information along to your students. The announcement is also posted on our Web site at
http://www.geotimes.org/

We'd appreciate your help in getting the word out about this
Opportunity. Please contact me with any questions.

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Meg Sever
Managing Editor, Geotimes
American Geological Institute
email: kms@agiweb.org

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INSTRUMENTATION RESEARCH SCIENTIST

THE GEMOLOGICAL INSTITUTE OF AMERICA, LOCATED IN CARLSBAD, CALIF., seeks an experienced Research Scientist to develop optical spectroscopic instruments, and to plan, organize, and conduct research for the purpose of resolving industry issues and developing intellectual properties for the educational mission of the Institute. Requirements: Ph.D or M.S. in physics, chemistry, material science, geology, or similar field; strong background in spectroscopy, developing optical spectrometers and related applications; computer skills. Knowledge of optical parts from the Ocean Optics and Avantes is a plus.
Primary duties include:

- Develops optical spectroscopic instrumentation (e.g., absorption and luminescence spectrometers in the UV-Vis-IR region); assists in other instrument maintenance.

- Contributes to developing applications where these spectrometers are used for studying and documenting gem materials (diamond, ruby, sapphire, pearls, and others)
- Assists in organizing research efforts to develop new identification criteria for natural, treated, and synthetic diamonds / colored stones / pearls; collects analytical data on gem materials and contributes to production
- Leads and/or contributes to research projects to include, but not limited to, sample preparation, data collection protocols, analysis, interpretation, and publication; input into annual research plans, department budgets, and status reports.
- Provides research presentations and publications to other GIA departments and to the general jewelry industry.

Please submit your resume and salary requirements by e-mail to recruitergtl@gia.edu. To learn more about GIA, visit our website at www.gia.edu.

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Misasa International Student Intern Program 2008 at the Institute for Study of the Earth's Interior (ISEI), Okayama University, Misasa, Japan

1. Institute for Study of the Earth's Interior, Okayama University, Japan would like to invite applications for the 2008 International Student Intern Program

2. About the institute
The Institute for Study of the Earth's Interior (ISEI) is a leading institute equipped with state-of-the-art experimental and analytical facilities. Active researches are being conducted in the basic research areas of isotope and trace element geochemistry, high-resolution geochronology, and high-pressure and temperature materials science, aimed at understanding the origin, evolution and dynamics of the Earth. The institute is rapidly developing into an international research and educational center for solid earth sciences through the embarkation of the Center of Excellence for the 21st Century (COE-21) program (Program Leader: Professor Eizo Nakamura), sponsored by the Ministry of Culture, Sports, Science and Technology of Japan (MEXT) in 2003, and is now constantly the host of a significant number of leading and young collaborative researchers from worldwide. The institute is located in Misasa town, which is well known in Japan for its hot-spring spa. For more information about ISEI, please visit the following website:
http://www.misasa.okayama-u.ac.jp/

3. About the program
The annual Misasa International Student Intern Program for advanced undergraduate (3rd to 4th year) and master's course students has been planned to promote international collaborative research and education. During the intern program, students will work closely with ISEI faculty members and their research groups on currently active research projects at ISEI. Researches at

ISEI generally fall into one of the following areas: (1) geochemistry and geochronology (including major and trace element, and isotope analyses of Earth and planetary materials using ICP-MS, TIMS, SIMS, XRF, etc.), (2) high-pressure experimental mineral physics (including high-pressure experiments using multi-anvil press, and phase equilibrium, electrical conductivity, elasticity and rheological property measurements), and (3) crystal chemistry and magmalogy (including high-pressure experiments using DAC/multi-anvil press/IHPV, and NMR/Raman/IR spectroscopic measurements of minerals, melts and fluids, MD simulations and first-principles calculations). Perspective applicants are encouraged to contact ISEI faculty member(s) for more information. It is hoped that through this program, the participants will acquaint themselves with the state-of-the-art research facilities and activities at ISEI, and gain first-hand scientific research experience. At the conclusion of the program, an intern symposium will be held for all the participants to deliver oral presentations of their work (in English).

4. Eligibility
The program is open to advanced undergraduate (3rd to 4th year) and master's course students majoring in earth sciences, physics, chemistry, materials sciences, or related fields, who have a strong interest in a career of scientific research. Students from either within or outside Japan, regardless of nationality, are eligible to apply. Communication skill in English is required.

5. Date and Period:
July 1 (Tue)-August 8 (Fri), 2008

6. Financial support
Travel expenses and daily allowance will be fully covered, and accommodation in the Misasa guesthouse will be provided.

7. Number of participants:About 15

8. Application procedure: The application form for the internship program is available from the following website.

http://www.misasa.okayama-u.ac.jp/MISIP/2008/index.html

9. Contact information
The application should be sent to:
Ms. Yoshiko Nakano, Secretary,
Institute for Study of the Earth's Interior
Okayama University
Misasa, Tottori, 682-0193 Japan
E-mail:coe@misasa.okayama-u.ac.jp
For inquires concerning the intern program, please contact Dr. Xianyu Xue, the program coordinator (xianyu@misasa.okayama-u.ac.jp) or any other ISEI faculty members.

TATSUKI TSUJIMORI tatsukix@misasa.okayama-u.ac.jp

ISEI, Okayama U.; Misasa, Tottori 682-0193, Japan
phone/fax: +81-858-43-3772 SkypeID: tatsukix

http://www.misasa.okayama-u.ac.jp/

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One-Year Faculty Position in Geology (Global Change/Environmental Geochemistry)

The Department of Geology at Bates College invites applications for a one-year sabbatical replacement position. The successful candidate must demonstrate potential for teaching excellence in a vigorous undergraduate program, welcome the opportunity for close interaction with serious students and share with other members of the department responsibility for general-education courses. The position is open to candidates whose work lies within the broad fields of environmental geochemistry and/or global change. Relevant instrumentation within the department includes an IRMS interfaced to an EA and GC, ICP-OES, and SEM-EDS; supporting facilities include a staff-supported computation and imaging center. Completion, or near completion, of a PhD in the earth sciences is required.
Review of applications begins March 15 and will continue until the position is filled. Please mail a letter of application, curriculum vitae, brief statement of teaching and research interests, copies of graduate and undergraduate transcripts and three letters of recommendation to:
Geology Search Committee R2489 c/o Bates College Academic Services
2 Andrews Rd., 7 Lane Hall
Lewiston, ME 04240
Bates College values a diverse college community and seeks to assure Equal Opportunity through a continuing and effective Affirmative Action program.

Posted: Feb. 11, 2008
Review Date: March 15, 2008

http://www.bates.edu/x173353.xml

********** **HAVE A TERRIFIC WEEKEND!** **********