Welcome back to campus for the Spring 2012 semester, and Happy New Year to EAS students, staff, faculty and alumni! I hope that you had a happy holiday season and semester break and that the new semester and year will be exciting, productive and enjoyable for you. 2011 was an exceptional year for EAS in many ways, and so it is exciting to imagine what we will achieve in 2012!

This semester we are delighted to welcome Dr. Chris Andronicos as a new Associate Professor in EAS. Dr. Andronicos is joining us from Cornell, and earned his B.S. in Geology from the University of New Mexico and his PhD from Princeton University. His research focuses on understanding how the deep crust deforms and evolves petrologically and makes use of a wide range of techniques in structural geology, metamorphic petrology and geophysics. In addition to his research, Dr. Andronicos is focused on increasing minority participation in the sciences.

Later this month a large number of EAS faculty and students will be attending the American Meteorological Society annual meeting in New Orleans. EAS will be hosting an alumni and friends reception at the AMS meeting on Tuesday, January 24, 2012 from 6:30 – 8:30 pm in the Chequers Room at the Hilton New Orleans Riverside Hotel (see attachment). This is one of several alumni, student and faculty events we hold each year in association with professional conferences – other upcoming events include the Association of American Geographers meeting in New York in February, the Society of Exploration Geophysicists meeting in Las Vegas in November, the Geological Society of America meeting in Charlotte in November, and the American Geophysical Union meeting in San Francisco in December. These are great opportunities to network, learn, and renew friendships, so I hope you can attend at least one of these events.

The first part of the spring semester is an important period for the recruitment of new graduate and undergraduate students. Potential new students will be visiting the department as part of their process of deciding which university is the best fit for their interests and career aspirations. If you are asked to meet with potential new students, please take some time to help them learn about what EAS has to offer and the possibilities here. We are very excited about the group of students who have expressed an interest in EAS and their potential to enhance and benefit from what EAS has to offer.

Finally, please be sure to highlight the EAS weekly seminar on your calendar (Thursdays, 3:00 pm reception in CIVL 2201, 3:30 pm lecture in CIVL 1252). This is a great opportunity to meet your EAS colleagues and fellow students, to learn more about the cutting edge of many different areas of EAS research, and to meet with outside experts. Some of the speakers this semester will be candidates in our current search for an additional faculty member in planetary sciences, and there will be additional special seminars for candidates in the climate modeling faculty search, so this is a great opportunity to help select and recruit exceptional new members of our community.

**Upcoming MEETINGS in January**

**Every Tuesday**
- EAS Gold Mine Committee, CIVL 2173 (Noon)

**Wednesday, January 18**
- Undergraduate Committee, CIVL 2201 (9:00 am)

**Monday, January 30**
- EAS Faculty Meeting, CIVL 3201 (11:30 am)

**Upcoming EAS SEMINAR**

Spring 2012 EAS Seminars will begin next week

**Thursday, January 19, 2012, at 3:30 p.m. in CIVL 1252:** "Using Earthquakes as Large Rock Squeezing Experiments." Andy Freed, EAS, Purdue University

Refreshments at 3:00 p.m. in CIVL 2201
ALUMNI INVOLVEMENT

EAS Alumnus and NASA Astronaut **Drew Feustel** helps recruit new students at our booth at the annual conference of the American Geophysical Union that was held in December 2011 in San Francisco.

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RECENT EAS PRESENTATIONS

**M. Petrenko**, R. Kahn, M. Chin, T. Kucsera, A. Soja, Harshvardhan, **Using spaceborne aerosol observations to constrain biomass burning emission source strength in the GOCART model**, MISR Data Users Science Symposium, California Institute of Technology, Pasadena, CA, December 13-14, 2011

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RECENT EAS PUBLICATIONS


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RECENT EAS GRANTS

Alex Gruhovsky and Ernie Agee were awarded an NSF grant of $279,434 to examine “*Taming Complexity of Mesoscale Dynamics with Low order Models*”.

NSF has awarded a new grant to Gabe Bowen (PI), Chris Miller, and Eric Riggs to support their project, *Collaborative Research: Integrated Training for Continental Ecology (ITCE): Bridging Scales and Systems with Isotopes*. The $2,155,000 award in combination with a $2,187,000 award to collaborators at the University of Utah, will provide training and network building opportunities to more than 150 graduate students and postdocs over five years, preparing future generations of ecologists to use existing and new isotopic data streams from regional to continental scale ecology programs. Data and model synthesis efforts will greatly increase the accessibility of existing large scale isotopic datasets and data analysis tools within and beyond the ecological research community to further help develop the discipline of macrosystem biology.

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GLOBAL FACULTY DEVELOPMENT

**Center for Instructional Excellence (CIE)**

CIE’s ultimate purpose is to assist instructors, who wish to do so, in transforming their courses into unique, realistic, global, learning experiences and opportunities for our students. To that end, CIE has developed a handout (attached) with initial suggestions and recommendations designed to help instructors get started on the process to internationalize their courses.

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TEST OF PURDUE ALERT SYSTEM

**From Provost Tim Sands**

A test of the Purdue Alert System (sirens, email alerts, and text messages) is scheduled for January 12 at approximately 10 AM. It is a golden opportunity to increase awareness among our students and staff of emergency preparedness procedures on campus.

I am writing to ask you to take time during your classes that day to conduct a safety briefing with your students in each classroom where you teach. This briefing should cover the Purdue Alert System, where to shelter, exit routes from the classroom, your gathering point outside the building, and ways to get more information. Materials have been prepared for you to use for this purpose and can be found at: [www.itap.purdue.edu/tlt/faculty](http://www.itap.purdue.edu/tlt/faculty) under the Safety Briefing header. Should we ever need to use these procedures they will only be effective if the Purdue family knows how to respond. We are counting on those of you in the classroom to help our campus emergency plan team to get the word out.
WELCOME – JYOTHI THIMMAPURAM
Core Director for the NEW
Bioinformatics Service Center

Jyothi came to us from the University of Illinois where she was Director of the BioInformatics for the last three years. She earned her PhD in Physiology and Molecular Biology at the University of Illinois, her MS in Plant Breeding and Genetics and a BS in Agriculture in India. We are excited to have Jyothi with us.

Jyothi would like you to know…
- Bioinformatics Core is now open
- Jyothi can provide consultation (and a letter of support) for your grants, experiments, data…
- Contact jyothit@purdue.edu via email to make an appointment
- We are in the process of setting up computing resources and hiring people
- We are continuing to seek input from the campus community on what kind of services they would like to see offered

Jyothi has an office in Yong Hall and Whistler so please e-mail to schedule an appointment.

ENERGY SYSTEM / POLICY SEMINARS
The Energy Center is pleased to announce The Energy Systems/Policy-Seminar Series for the spring of 2012. We are pleased to welcome many speakers campus wide to the series and look forward as they share their knowledge and research experience. A broad range of research topics related to energy system/policy will be covered: bio-fuel, energy sustainability, thermolectric, hybrid vehicles, carbon tax, wind energy, electricity pricing, and jet fuels. The biweekly series will begin on January 12 and conclude April 26, 2012. The brown bag seminars will take place @ 11:30 am every 2nd and 4th Thursday in Potter Fu Room 234. Titles and presenter names along with dates are given in the attachment.

SANDIA FELLOWSHIP – 2012 ANNOUNCEMENT
The Colleges of Engineering and Science are pleased to invite applications for the 2012 Sandia National Laboratory Excellence in Science and Engineering Fellowship program. Two fellowships will be awarded to support doctoral studies at $40k/year, with initial funding from August 2012 – July 2013. Read more…

RESEARCH SCHOLARSHIP
ThinkSwiss offers scholarships for a research stay in Switzerland. It supports highly motivated and qualified U.S. undergraduate and graduate students to do research at a public Swiss university or research institute for two to three months. The scholarship is open to students of all fields. The monthly stipend is approximately USD $1,000 and more details are listed on their website http://www.thinkswiss.org/us-swiss-exchange/research-scholarship. The website states that insurance is not provided as part of the program. If there are successful applicants, then the Study Abroad Office would help students to get Purdue’s required insurance. Next application deadline: March 2012

GSA STUDENT OPPORTUNITIES
The following information from the Geological Society of America (GSA) may be valuable to you in your student career, or for those who have graduated within the last two years. See attached for complete information and links.

GSA Membership—Students and Recent Graduates, renew now or join for calendar year 2012.
GSA Journals—Free online access for Students and Recent Graduates.
GSA Student Research Grant Programs—applications are being accepted, most deadlines are 1 February 2012.
GeoCorps™ America—Paid, Short-Term Geoscience Positions on America’s Amazing Public Lands—Applications are being accepted, deadline is 1 February 2012.
2012 GSA Section Meetings / Mentor Programs
GSA/ExxonMobil Awards—Deadlines to apply are in March and April.
GeoVentures—Explore Hawaiian Volcanoes
2012 GSA Annual Meeting in Charlotte, North Carolina

CALLING ALL UNDERGRADUATES!
Are you looking for a PAID summer research internship?? Visit www.orau.org/ornl for information on the Science Undergraduate Laboratory Internship program – select Oak Ridge National Laboratory (ORNL) as your first choice lab! Summer internship dates are June 4- August 10! You must be a US Citizen or PRA enrolled at an accredited institution with a 3.0 GPA or higher and have competed at least one year as a matriculating undergraduate
student at the time of applying. **Apply now – deadline is Tuesday, January 10!**

The **Science Undergraduate Laboratory Internship (SULI) program** encourages undergraduate students to pursue science, technology, engineering, and mathematics (STEM) careers by providing research experiences at the Department of Energy (DOE) National Laboratories. You must be a US Citizen or PRA enrolled at an accredited institution with a 3.0 GPA or higher and have completed at least one year as a matriculating undergraduate student at the time of applying. For general information, contact ornledu@orau.org.

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**A NOTE FROM OUR ACADEMIC COUNSELOR**

**Go Green in the City of Paris**

Purdue is one of 10 universities in the US that have been asked to participate in the program. The 25 best teams will be flown out to Paris to compete against teams in eight different countries. Last year’s winners kept a blog of their adventures, which you can read here: [http://blog.gogreeninthecity.com/](http://blog.gogreeninthecity.com/). Take the opportunity to create an idea for intelligent energy management. Energy has become scarce, expensive and is undergoing a technology revolution. Increasing needs for electrical power must be balanced with social progress and environmental protection. **Deadline for submitting your entry to the competition is March 1, 2012. Pre-register now to get all the latest updates; full competition details and rules at [www.gogreeninthecity.com](http://www.gogreeninthecity.com)**

**Internship in Weather and Climate**

SOARS offers up to 4 years of summer research experience, strong mentoring, funding for conferences, tuition support, and graduate school preparation. Their mission is to increase the diversity of the atmospheric and related sciences. Each summer SOARS participants conduct original research at the National Center for Atmospheric Research (NCAR) (or labs at other SOARS sponsors). SOARS includes students from groups that are historically under-represented in the sciences, including Black or African-American, American Indian or Alaska Native, Hispanic or Latino, female, first-generation college and students with disabilities. Application deadline: **February 1, 2012.** [www.soars.ucar.edu](http://www.soars.ucar.edu).

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**Costa Rica**

Texas A&M University is again hosting a Research Experience for Undergraduates (REU) site funded by the National Science Foundation for 10 undergraduate students to conduct cutting-edge research in a transitional cloud forest in central Costa Rica. Specifically, the REU site provides a unique international opportunity for students to be immersed in the practice of active inquiry and research in:

1. **Ecophyodology:** feedback between forest vegetation and hydrology from the scale of an individual leaf to the entire stand
2. **Hydrology:** movement and distribution of water through the forest from above-canopy precipitation and cloud immersion, to stream and groundwater flow
3. **Meteorology and climatology:** spatial and temporal variation in precipitation, evapotranspiration and boundary layer structure from the scale of an individual stand to the entire watershed
4. **Soil Science:** structure and geochemistry of forest soil
5. **Biogeography:** distribution and structure of forest vegetation at various scales in the watershed

Successful applicants will receive all expenses paid trip to Costa Rica in addition to a $500 a week stipend. Further information about the program can be found at [http://costaricareu.tamu.edu/](http://costaricareu.tamu.edu/) and a description of the Soltis Center for Research and Education in Costa Rica can be found at [http://soltiscentercostarica.tamu.edu/](http://soltiscentercostarica.tamu.edu/). The application deadline is **January 31, 2012.**

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**January 2012 Calendar**

**January 16**  Martin Luther King, Jr. Day. No Classes. Events listed here: [http://diversity.purdue.edu/mlk/](http://diversity.purdue.edu/mlk/)

**January 16**  Last Day to ADD classes in myPurdue; you will need paperwork starting Jan. 17.

**January 17**  Registrar will cancel courses if fees not paid, confirmed, or deferred.

**January 23**  Last Day to DROP a class through myPurdue and without it appearing on your transcript. Paperwork needed starting Jan. 24 to drop a class.
HAPPY BIRTHDAY!!!
Harshvardhan – January 1
Qianlai Zhuang – January 2
Matt Huber – January 10
John Cushman – January 19
Alex Kubacki – January 28
Tom Tharp – January 28

IMPORTANT NOTICE ABOUT THIS NEWSLETTER
This newsletter will now be used as the primary information source for current and upcoming events, announcements, awards, grant opportunities, and other happenings in our department and around campus. Active links to additional information will be provided as needed. Individual email announcements will no longer be sent unless the content is time-sensitive. We will continue to include our publications, presentations and other recent news items as well. Those using paper copies of the newsletter should go to our newsletter archive on the EAS website at www.purdue.edu/eas/ and Click on News to access active links as needed. Material for inclusion in the newsletter should be submitted to Suzanne Zurn-Birkhimer (zurnbirk@purdue.edu) by Friday noon of each week for inclusion in the Monday issue. If it is in the newsletter, we assume you know about it and no other reminders are needed.

For answers to common technology questions and the latest updates from the EAS Technology Support staff, please visit http://www.purdue.edu/eas/info_tech/index.php.

Also, as an additional resource for information about departmental events, seminars, deadlines, etc., see our departmental calendar at http://calendar.science.purdue.edu/eas/seminars.
Plan to Join Us

Alumni and Friends Reception

Tuesday, January 24, 2012
6:30 - 8:30 pm

Hilton New Orleans Riverside
Chequers Room
Two Poydras Street
New Orleans, Louisiana

No RSVP required
Contact zurnbirk@purdue.edu for more information
The Global Faculty Development Program – Purdue University, West Lafayette

Purdue University’s increasing enrollment of international students presents a special opportunity to contribute to a globalized society. A significant number of international students provide an avenue for national students to experience globalization when traveling abroad is not possible for them. At the same time, the university has opportunity to lead the way in transforming the classroom to enhance the learning and cultural experience of global citizens.

It should be noted that not all topics or classes immediately lend themselves to a global experience or exchange. We propose that there are small modifications, as well as significant ones, that we can make in our classes and courses that foster a global experience for all students.

Mission Statement:

CIE’s Global Faculty Development mission is to assist Purdue instructors to be stewards in optimizing and transforming classroom teaching and learning by integrating global issues, activities and experiences into class content and learning objectives so that all students, international and national alike, have a venue for unique, realistic global experiences and global learning.

The Global Faculty Development Program values:

- Preparation of students for a global society includes integration of global issues into classroom learning.
- Effective, practical, and efficient instruction by faculty.
- Opportunities to prepare all students for a global society.
- Multiple forms of diversity and globalization.
- Influences occurring outside the classroom that significantly interact with student success in learning.

Suggestions for Transforming Classroom Teaching and Learning:

1. Identify your course goals, learning outcomes and objectives. Determine whether your course will be one in which optimizing the global experience can occur while meeting the goals, outcomes and objectives. Meet with other faculty or CIE staff members to best reap the benefit of this identification process. This process may well assist you in redesigning sections/parts of your course to better globalize it as you begin thinking about revising your syllabus to include globalization.

2. Consider developing and adding some aspect of global understanding in course content as a measurable learning objective to your syllabus.

3. Use your syllabus to address course expectations; include a welcoming discourse; consider adding a global mission; provide campus English proficiency resources.

4. Take time at the beginning of the semester to orient, prepare and “train” students on the importance of global knowledge and understanding.
5. Constantly communicate your guidelines for respecting and sharing of diversity and differences. Put these guidelines in your syllabus and repeat them in class.

6. Make yourself knowledgeable about the profile of your students, including country of origin and native language. Practice pronouncing names. Set up a special meeting between your international students and yourself. Ask them about themselves and seek their input on certain topics and in addition, clarify or reinforce course guidelines. A considerate instructor would also do this with national students.

7. To make your class a global experience for all your students, national and international alike, include assignments and activities for students that compare and contrast course content between different contexts, cultures or countries. To help you build a collection of examples, provide assignments where students individually submit examples from their own culture (Get their permission to use these examples in your current and future classes).

8. Design in-class activities where all students are required to interact with each other, especially cross-culturally, e.g., small group activities where you strategically assign diverse student participation.

9. Provide helpful tools for English second language (ESL) students such as Boilercast; post your lecture PowerPoint notes perhaps including blanks to be filled in during lecture time; publicize the learning objectives for each lecture; select the captions option on videos & etc.

10. Consider increasing short writing assignments that give international students time to reflect and assimilate answers to questions or problems. National students can use this same time to reflect and assimilate, as well. Bring samples of good answers to these questions or problems to class for students to self-evaluate their responses compared to the good answers you provide. Have students read and discuss each other’s answers.

11. Divide large writing assignments into smaller sub-assignments in order for students to use your incremental feedback to scaffold and progressively develop their ability to successfully complete the larger, full assignment.

12. In lecture:
   a. Use examples that are global in nature, e.g., childcare in Japan, Sweden, and USA.
   b. In lecture, repeat important concepts/ideas. Emphasize their importance.

13. Bring in guest speakers who are international and/or have international cultural expertise to enrich and contribute to student discussion and expand global understanding.

14. Use educational technologies that encourage student interaction, e.g., Hotseat for ubiquitous participation. Ask questions like, “What would this situation be like in your town, or native country?”

15. Use problem-based learning, e.g., problems from both the U.S. and other countries or cultures. Design assignments such that international and national students are required to engage with each other in discussion in order to develop solutions together.
16. Include international sources in your references and examples. Again, design assignments so that students can help you collect sources. Make use of international professional associations and websites.

17. Consider re-designing your course into a Service-Learning (SL) format. The opportunity for national and international students working together on a Service-Learning project not only impacts learning in significant ways, it also exposes students to the life-long practice of giving back in their communities. In addition, SL creates a venue for a high level of interaction among all students as they meet identified community needs. (*The Service-Learning coordinator in the Center for Instructional Excellence (CIE) is available for assistance.*)

18. Design learning teams that follow best practices for team success into your course.
   a. Have teams be small enough to insure interactions between international and national students. The number within teams will be dependent on your learning expectations.
   b. Pay special attention to the participation interactions in the teams. Encouragement of, or role modeling for participation is often necessary and considered good practice.

19. Consult with and share your experiences with CIE staff. This builds a shared knowledge and practice of sound teaching (pedagogy) for integrating global issues and perspectives into courses. This sharing is best achieved by:
   a. 1 on 1 consultation.
   b. Visiting the “Global Faculty Development” website (www.cie.edu/).
   c. Sharing your successes with the CIE staff.
   d. Seeking out and talking with other faculty on campus, thus striving to build collective wisdom on making the most of globalizing our courses.

20. Helpful resources for your students:
   a. Academic Success Center, Beering Hall of Liberal Arts & Education, Room 3268, Phone: 494-5569, Website: http://www.cla.purdue.edu/students/asc/
   b. Purdue Online Writing Lab, Heavilon Hall, Room 226, Phone: 494-3723, Website: http://owl.english.purdue.edu/
   c. Student Access, Transition and Success Programs: http://www.purdue.edu/sats

*For additional information and consultation on Global Faculty Development, please contact the Center for Instructional Excellence at 49-66422 or email Chuck Calahan at calahanc@purdue.edu*

*CIE: December 21, 2011*
Energy Systems/Policy – Seminar Series

Spring 2012

11:30 am to 1 pm (every 2nd and 4th Thursday)

Fu Room (#234), Potter Building

- January 12
  ‘DOE Center for Catalytic Conversion of Biomass to Biofuel’
  Maureen McCann, BIOL SCI

- January 26
  ‘Renewable Energy System and Energy Sustainability’
  Eugene Coyle, Fulbright Fellow, GPRI

- February 9
  ‘Thermoelectric System’
  Ali Shakouri, ECE and Brick Nanotechnology Center

- February 23
  ‘DOE Hoosier Heavy Hybrid Center of Excellence’
  Greg Shaver, ME

- March 8
  ‘Comparison of a Carbon Tax and Government Energy Mandates’
  Wally Tyner, AGECON

- March 22
  Wind Energy System
  Doug Adams, ME

- April 12
  ‘Quantify the Benefits of Demand-Side Energy Management Controllers under Dynamic Electricity Pricing’
  Jingjie XIAO/Andrew Liu, IE

- April 26
  ‘Prospects for Bio-Jet Fuels in US Commercial and Military Aviation’
  Daniel DeLaurentis, and Datu Agusdinata, AAE

Faculty contact: Joe Pekny, ChemE (pekny@purdue.edu); Dan DeLaurentis, IE (ddelaure@ecn.purdue.edu);
Wally Tyner, AgEcon (wtyner@purdue.edu)

Technical contact: sharma@purdue.edu  Administrative contact: wable@purdue.edu

Energy System/Policy seminar series Spring 2012; updated on 01/09/2012
1. GSA Membership
GSA Student and Recent Graduate Memberships (http://www.geosociety.org/members/student.htm) are incredible values. If you are not already a member of GSA, join (http://www.geosociety.org/members/) online now for calendar year 2012 to take advantage of benefits outlined in this message.

If you’re already a GSA member, please renew (http://www.geosociety.org/members) your membership for 2012.

2. GSA Journals
Student and Recent Graduate members get FREE online access to GSA’s premier journals (http://www.gsapubs.org) included with their membership—GSA Bulletin, Geology, Geosphere, Lithosphere, and the Journal of the Geological Society (of London) — over US $190 annual value.

3. GSA Student Research Grant Programs
GSA Student members have several ways to obtain funding to support their research:

Currently enrolled graduate students may apply for up to US $2,500 through the GSA Graduate Student Research Grants Program (http://www.geosociety.org/grants/gradgrants.htm). This program provides partial support of master’s and doctoral thesis research in the geological sciences for GSA graduate student members (GSA Recent Graduates are not eligible). Applications are being accepted now through 1 February 2012.

Looking for funding to support your desert studies? The Farouk El-Baz Student Research Award in Desert Studies (http://www.geosociety.org/grants) may be your resource. Applicants must be either in their senior year of their undergraduate studies or at the Masters or Ph.D. level. Applications are being accepted now through 1 February 2012.

The Gladys W. Cole Memorial Research Award (http://www.geosociety.org/grants/postdoc.htm) supports research in geomorphology of semiarid and arid terrains in the United States and Mexico. The W. Storrs Cole Memorial Research Award (http://www.geosociety.org/grants/postdoc.htm) supports research in invertebrate micropaleontology. Both awards are given each year to GSA Members or Fellows between 30 and 65 years of age who have published one or more significant papers in geomorphology or invertebrate micropaleontology, respectively. Applications are being accepted now through 1 February 2012.

Did you know that several GSA Divisions (http://www.geosociety.org/grants/division.htm) offer grants for outstanding research? Now’s the time to make sure you’re a member of the Divisions that align with your geological interests.
4. **GeoCorps™ America**
Hunting down dinosaur tracks at Denali National Park; guiding visitors through a cave at Craters of the Moon National Monument; mapping springs in the Medicine Bow National Forest—these are just a few examples of the nearly 100 different paid, short-term geoscience positions offered during the summer of 2012 by the Geological Society of America’s “GeoCorps™ America” (http://rock.geosociety.org/g_corps/index.htm) program. Geoscientists of any level (undergraduates through retired professionals) are welcome to apply. Applications are accepted through 1 February 2012. For program details, please click the GeoCorps™ America link above. For questions or application assistance, please contact Matt Dawson, 303-357-1025, mdawson@geosociety.org.

5. **2012 GSA Section Meetings / Mentor Programs**
Plan now to participate in the GSA’s regional Section meetings, March–May 2012. Section meetings (http://www.geosociety.org/sections/meetings.htm) offer the perfect venue to present your research, consult with mentors, and connect with geoscientists in both your geographic and geological areas.

Take advantage of a GSA travel grant (http://www.geosociety.org/grants/travel.htm) to attend your regional Section meeting. See the flyer (http://images.magnetmail.net/images/clients/GEOSOCIETY/attach/IGC_FLYER3.pdf) for a special travel opportunity to the upcoming International Geologic Congress (IGC). Applications for IGC are being accepted soon—deadline to apply is 17 February.

Join the Roy J. Shlemon Mentor Programs in Applied Geoscience (http://www.geosociety.org/mentors/shlemon.htm) and/or the John Mann Mentors in Applied Hydrogeology Program (http://www.geosociety.org/mentors/mann.htm) and get a free lunch! Mentors from the applied geosciences provide advice and potential employment contacts to student attendees.

Submit an abstract (oral or poster - http://www.geosociety.org/meetings) — Don’t delay, most Sections’ abstract deadlines are in mid-January.

6. **GSA/ExxonMobil Awards**
The following opportunities are coming soon with deadlines to apply in March and early April (https://rock.geosociety.org/ExxonMobilAward/index.asp)

Seventeen undergraduate students will be selected for the Field Camp Scholar Award, and receive US $2,000 each to attend the field camp of their choice based on diversity, economic/financial need, and merit. The deadline to apply is 12 March 2012.

One field camp leader will receive the Field Camp Excellence Award, an award of US $10,000 to assist with the summer field season. This award will be based on safety awareness, diversity, and technical excellence. The deadline to apply is 12 March 2012.

The Bighorn Basin Field Award is an all expenses paid field seminar in the Bighorn Basin of north-central Wyoming emphasizing multi-disciplinary integrated basin analysis for
undergraduate students, graduate students and faculty. The deadline to apply is 2 April 2012.

7. GeoVentures – Explore Hawaiian Volcanoes
Join an exciting and enthusiastic group of students and teachers as they learn first-hand the wonders of active volcanism on the [Big Island of Hawaii](http://images.magnetmail.net/images/clients/GEOSOCIETY/attach/Hawaii2012FlyerFINAL4.pdf) between 25 July – 1 August 2012. For more information visit [www.geoventures.org](http://www.geoventures.org) and follow the links for students.

8. 2012 GSA Annual Meeting—Charlotte, North Carolina
The deadline is quickly approaching to [submit proposals for technical sessions](http://www.geosociety.org/meetings/2012) at the 2012 Annual Meeting. Proposals are being accepted through 10 January 2012.