EAPS SEMINARS
No Seminar this week – Happy Thanksgiving

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EAPS PRESENTATIONS

Professor Indrajeet Chaubey gave a keynote address titled “Ecohydrologic impacts of land use, land management, and climate change in the Midwest USA” at 2013 China-US Annual Workshop on Environmental Health and Green Development. Gatlinburg, TN. November 18.

Professor Jon Harbor, gave a presentation in the Department of Geography and Geology, National University of Mongolia, Ulaanbaatar, on November 21 entitled “Reconstructing spatial and temporal patterns of paleoglaciation in central Asia”.

On Behalf of Prof. Qianlai Zhuang, PhD graduate student Zhenong Jin gave a talk, entitled “Effects of Permafrost Dynamics on Carbon Dynamics in Northern High Latitudes” to the 50th Permafrost Workshop, held at Purdue University on November. 15th.

Professor Qianlai Zhuang delivered an oral presentation, entitled "Incorporating the effects of permafrost dynamics into a dynamic vegetation model to improve the estimation of vegetation distribution and carbon cycling in northern high latitudes during the 21st century" to the International Biogeography Society, IBS Special Meeting, Nov. 15-18, Montreal, Canada.

EAPS IN PURDUE TODAY

EARTH, ATMOSPHERIC AND PLANETARY SCIENCES ALUMNUS GIFT CREATES FIRST ENDOVED CHAIR

WEST LAFAYETTE, Ind. - Stephen R. Brand, a Purdue University earth, atmospheric and planetary sciences alumnus, and his wife, Karen, have given a gift to create the department’s first endowed chair. The Stephen and Karen Brand Endowed Chair will be used to recruit a researcher in the area of unconventional energy resources to the Department of Earth, Atmospheric and Planetary Sciences.

"From an energy perspective, exploration of unconventional resources in oil and gas is where the future is headed," Stephen Brand said. "We hope this chair will help Purdue capitalize on its strengths in geology and engineering to build and expand knowledge in this emerging area to help solve the energy problem and offer students the opportunity to learn in-demand skills that will set them apart from other graduates."

Unconventional resources is a term used for oil and gas extracted through methods other than conventional oil wells and includes the alternative energy sources of shale gas, shale oil, petroleum from tight sands and coal, Brand said.

"Breakthroughs in the areas the Brand chair will study are the world’s best hope for affordable, plentiful energy and economic uplift," Purdue President Mitch Daniels said. "We must invest in research to find other ways to create the energy we need. The Stephen and Karen Brand Endowed Chair will provide the platform from which Purdue can grow into a leader in maximizing these new possibilities in concert with new industry and government partners."
“The Brands’ generous gift will have a huge impact on the transformational energy research that goes on in the College of Science,” said Jeffrey Roberts, the Frederick L. Hovde Dean of the College of Science. “The field of unconventional energy is an important and attractive area for our students to explore. This chair will help them along their journey.”

Stephen Brand earned master’s and doctorate degrees in geology from Purdue in 1973 and 1976, respectively. He also was named an outstanding alumnus by Purdue’s Department of Earth, Atmospheric and Planetary Sciences in 2010 and a distinguished alumnus by Purdue’s College of Science in 2013.

He began his career in 1976 with Phillips Petroleum Company, which would later become ConocoPhillips, as a geologist for exploration and production. He rose through the ranks and eventually served as president of Australasia, then vice president of worldwide exploration and business development for exploration and production, and senior vice president of technology (R&D). During his tenure as senior vice president of technology, programs were developed and initiated in nanotechnology, algae biofuels, low carbon hydrogen, organic solar cells, carbon dioxide capture technology and dieselization.

Brand is currently a member of the SM Energy and BPZ Energy Board of Directors, an advisory board member and senior executive adviser for Welltec, and a science advisory board member for Glori Energy. He also is a member of the Accenture Global Energy Board, the Biofuels Technical Review Panel of the National Renewable Energy Laboratory and the Technology Task Group Chair for the recently completed National Petroleum Council’s Advancing Technology for America’s Transportation Future study.

“I wanted to repay the department that provided me with not only a top-of-the-line technical education to thoroughly analyze various types of problems, but also with the tools to creatively and pragmatically solve problems and apply that knowledge,” he said. “I credit Purdue professors’ guidance and the educational philosophy at Purdue with helping me develop a critical thought process that allowed me to fully comprehend, analyze and solve the problems I would face in the future, which was essential to my career development.”

Brand was born in Owatonna, Minn., and earned his bachelor’s degree in geology from the University of Minnesota, Duluth, which also has recognized him as a distinguished alumnus. The Brands currently live in Houston.
The deadline for the online application is November 30, 2013. Detailed pr
ogram information, including online applications, instructions on ho
w to apply and a list of participates laboratories, is available on the
RC Research Associateship Programs Website. More detailed information
and an online application can be found at www.nationalacademies.org/rap.

Questions should be directed to the NRC at 202-334-2760 (phone) or rap@nas.edu.

Applicants should contact prospective Adviser(s) at the lab(s) prior to the application deadline to discuss their research interests and funding opportunities.

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NATIONAL PHYSICAL SCIENCE CONSORTIUM
Graduate Fellowship in the Physical Sciences

The National Physical Science Consortium (NPSC) is a unique partnership of industry, government and higher education. NPSC helps its partners to recruit, identify, select, and support outstanding U.S. doctoral students. The Fellowship Program of the National Physical Science Consortium (NPSC) is again open for receipt of applications. NPSC offers two programs.

1. The Traditional NPSC Program provides a two-phase, six-year fellowship. Initial support is for two or three years, depending on the employer-sponsor. If the student makes satisfactory progress and continues to meet the conditions of the award, support may continue for a total of up to six years. Students typically apply while seniors in college.

2. The Dissertation Support Program provides support while the graduate student conducts dissertation research. Students should apply in the year prior to the beginning of their dissertation research program, but not until they can describe their research at least in general terms.

To learn more and to apply online, go to www.npso.org. The deadline for the online application is November 30, 2013.
2014 COLLEGE OF SCIENCE GRADUATE STUDENT INTERNATIONAL TRAVEL AWARDS
For full time PhD student travel between January 1, 2014 and June 30, 2014. Two or three awards ranging from $600-$800 for international travel will be awarded. Deadline: December 2, 2013. See attached flyer for additional information.

UNDERGRADUATE AND GRADUATE STUDENT INFORMATION

2014 SUMMER TERM INTERNSHIP/FELLOWSHIP OPPORTUNITIES
The Office of Science / Office of Workforce Development for Teachers and Scientists (WDTS) is pleased to announce that it is accepting applications to its 2014 Summer Term internship/fellowship opportunities at Department of Energy (DOE) Laboratories. These competitive, paid internships, are for 10 weeks during the Summer Term (May to August timeframe), and include support for travel and housing.

The three programs accepting applications are:

- Science Undergraduate Laboratory Internship (SULI). More information about SULI and access to the online application can be found at http://science.energy.gov/wdts/sulil
- Community College Internships (CCI) More information about CCI and access to the online application can be found at http://science.energy.gov/wdts/cci/
- Visiting Faculty Program (VFP). More information about the VFP and access to the online application can be found at http://science.energy.gov/wdts/vfp/

Applications for these three programs must be completed and submitted online by 5:00 PM ET on January 10, 2014 (including all required application materials and recommendations).

A Note from Our Academic Counselor

The Department of Energy (DOE) Scholars Program is now accepting applications for Summer 2014. Visit http://orise.orau.gov/doescholars for more information or to apply. Deadline is January 12, 2014.

The DOE Scholars Program offers unique opportunities that introduce students or post-graduates to the agency’s mission and operations. Participants in the DOE Scholars Program gain a competitive edge as they apply their education, talent and skills in a variety of scientific research settings within the DOE complex. Appointments are available in a variety of disciplines at participating DOE facilities nationwide.

Being selected as a DOE Scholar offers the following benefits:

- Career possibilities with the nation’s leading sponsor for scientific research
- Opportunities to learn from top scientists and subject matter experts
- Stipends of up to $650 per week (depending on academic status)
- Travel arrangements to and from appointment site

Applicants must be US Citizens and undergraduates, graduates or post-graduates of an accredited college or university. The program is open to majors in: Engineering; Physical Sciences; Environmental Sciences; Computer Science and Information Technology; Physics; Business; Policy; Program Management; Mathematics; Statistics; Safety and Health; Accounting and Finance; Law; Communications; and other related areas. Want to learn more about the DOE Scholars program? E-mail doescholars@orise.orau.gov or visit http://orise.orau.gov/doescholars.

Space Camp Internship Opportunity
Inspire future astronauts, fighter pilots and engineers of tomorrow. Crew Trainers lead teams of young people and adults through their Space Camp, Aviation Challenge Camp and Robotics Camp Experience at the U.S. Space & Rocket Center where Crew Trainers work with guests and trainees to experience firsthand the past, present and future of America’s space program and coach trainees through astronaut, aviation and robotics training experiences. They accept current students and recent graduates.

Requirements:
- Open availability
- Be available for at least six months after training
- Must be 20 years old by date of hire
- Minimum one year’s experience working with youth
- Have a desire to learn and teach space, aviation and robotics

How to Apply:
Submit a complete application including:
- Online application
- College transcript with at least 30 completed college credits (Unofficial transcripts are accepted)
- Three letters of reference from professional acquaintances (coach, mentor, professor, manager, etc. Letters from family member and friends will not be accepted)
- Successful completion of the Space Camp Crew Trainer Training Program

Contact Information:
U.S. Space & Rocket Center
One Tranquility Base
Huntsville, Alabama 35805
1-800-637-7223, ext. 7112
www.spacecamp.com (see attached flyer)
November Birthdays

James Ogg – 25th
Paul Shepson – 29th

HAPPY THANKSGIVING!

IMPORTANT NOTICE ABOUT THIS NEWSLETTER
This newsletter is 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 EAPS 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 Terri Moore (terri@purdue.edu) by 5:00pm Thursday 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 EAPS 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, etc., see our departmental calendar at http://eaps.purdue.edu.
Rivers, Past and Present: Sediments, Stratigraphy, and Geomorphology
Chris Fielding (University of Nebraska-Lincoln),
Jim Best (University of Illinois at Urbana-Champaign),
jeri.fox@illinois.edu; jimb.best@uiuc.edu

Cenozoic Stratigraphy of the Great Plains
Greg Ludvigson (University of Kansas), Jon Smith (University of Kansas), Robert M. Joeckel (University of Nebraska-Lincoln),
gludvigson@kgs.ku.edu; jsmith@kgs.ku.edu; rjoeckel3@unl.edu

Vertebrate Paleontology from the Appalachians to the Rockies
Shane Tucker (University of Nebraska-Lincoln),
George Corner (University of Nebraska-Lincoln),
Robert M. Joeckel (University of Nebraska-Lincoln),
stucker3@unl.edu; rcorner1@unl.edu; rjoeckel3@unl.edu

Frontiers in Geomicrobiology and Biogeochemistry
Karrie A. Weber (University of Nebraska-Lincoln),
kweber2@unl.edu

Structure, Tectonics and Geologic Evolution of the North American Interior
Caroline M. Burberry (University of Nebraska-Lincoln),
Robert M. Joeckel (University of Nebraska-Lincoln) and
Jessie T. Korus (University of Nebraska-Lincoln),
cdburberry2@unl.edu; rjoeckel3@unl.edu; jkorus3@unl.edu

Carbonatites and Other Alkaline Rocks
Richard M. Kettler (University of Nebraska-Lincoln),
Philip Verplanck (USGS) and Benjamin Drenth (USGS),
rkettler1@unl.edu; pvl@usgs.gov; bdrenth@usgs.gov

New Insights into the White River Chronofauna
Clint Boyd (South Dakota School of Mines),
clintboyd@stratifit.org

Quaternary Time Machine: Methods and Analyses of Soils and Sediments to Reveal Secrets of Past Environments
Maja Sipola (University of Iowa) and
M. Kathryn Rochefford (University of Iowa),
maja-sipola@uiowa.edu; kat-rochefford@uiowa.edu

Advances in Invertebrate Paleontology, Taphonomy, and Ichnology: Insights from the North American Midcontinent and Beyond
James R. Thomka (University of Cincinnati) and
Rebecca L. Freeman (University of Kentucky),
thomkajr@mail.uc.edu; rebecca.freeman@uky.edu

Quaternary Evolution of the Central Lowlands and Great Plains
Charles W. Rovey III (Missouri State University) and
J. Elmo Rawling, III
jppope@nwmissouri.edu

Applications of Optically Stimulated Luminescence Dating in Quaternary Studies
Joel Q. Spencer (Kansas State University) and
Paul R. Hanson (University of Nebraska-Lincoln),
joelspen@ksu.edu; phanson2@unl.edu

The Midcontinent Rift System and Beyond: New Developments in Central North American Precambrian Geology
Benjamin J. Drenth (USGS), G. Randy Keller (University of Oklahoma), and
Joshua M. Feinburg (University of Minnesota),
bdreth@usgs.gov; gkeller@ou.edu; feinberge@umn.edu

APPLIED GEOMORPHOLOGY: ENVIRONMENTAL, ENGINEERING, HYDROGEOLOGY, GEOFACIES AND EXPLORATION GEOPHYSICS
Terry West (Purdue University),
twest@purdue.edu

CULTURAL GEOLOGY: CAPITOL BUILDINGS, HERITAGE STONE, PARKS, AND MORE
Joe Hannibal (Cleveland Museum of Natural History) and
Nelson R. Shaffer (Indiana Geological Survey),
jhanniba@cmnh.org; shafferne@indiana.edu

Undergraduate Research poster session, sponsored by the Council on Undergraduate Research, Geoscience Division
Robert Shuster (University of Nebraska-Omaha),
rshuster@unomaha.edu

Pennsylvanian Cyclothems and Stratigraphy of the Midcontinent and Illinois Basins
John P. Pope (Northwest Missouri State University),
pjppope@nwmissouri.edu

Geoscience Education for K-16: Novel Approaches and Current Research
Katie Lewandowski (Eastern Illinois University) and
Mindi Sears (University of Nebraska-Lincoln),
kilewandowski@eiu.edu; msears2@unl.edu

REMEMBER: There will be general discipline sessions as well! All of the geosciences will be represented.
AGI/Schlumberger Fellowship in Geoscience Communication

The American Geosciences Institute is accepting applications for the AGI/Schlumberger Fellowship in Geoscience Communication. The successful candidate will play a leading role in AGI’s Critical Issues program, a new initiative to improve the understanding and use of geoscience information by decision makers at federal, state, local, and individual levels.

This program is part of AGI’s Center for Geoscience Education and Public Understanding; more information is available at http://geocntr.org/critical-issues/.

About the Fellowship
The fellowship offers a superb opportunity to link the geoscience community and our understanding of the Earth to decision-making processes throughout the country.

Primary duties and responsibilities will include:
- Convincing decision makers at all levels of the relevance and importance of geoscience information
- Creating information products that will enable decision makers to find, understand, and use geoscience information when making decisions on critical issues
- Fostering communication between geoscientists and decision makers via forums, webinars, social media, and other channels
- Providing regular status reports on fellowship activities and achievements

The fellowship is a 6-month appointment, based at AGI headquarters in Alexandria, VA. The fellowship carries a stipend of $4,000 per month.

Qualifications
The successful candidate will be a highly creative communicator who is proficient in traditional and new media and can deliver geoscience information effectively and efficiently to targeted audiences. We seek applicants with excellent writing and graphical skills who have experience in web content development and social media, in addition to a broad geoscience background. Enthusiasm and team spirit are essential. Candidates should have completed or be currently pursuing a Master’s or higher degree.

Application Procedures
Interested candidates should submit:
- cover letter with the names and contact information of three references
- brief statement of purpose, which should outline why you are interested in the fellowship, what you would bring to the fellowship, and what you hope to gain from the fellowship (maximum 1,000 words)
- curriculum vitae

Please submit materials as a single Word document (.doc or .docx) or PDF (.pdf) using our online submission form: http://www.agiweb.org/gap/geocntr/fellowship/

All application materials are due on December 11, 2013. The starting date for the Fellowship will be based on the schedule of the successful candidate, but is expected to be around February 1, 2014.

Inquiries only to cipinfo@agiweb.org.

AGI is an equal opportunity employer and especially welcomes applications from women and minorities.
2014 College of Science Graduate Student International Travel Awards

Deadline: December 2, 2013
For travel between January 1, 2014 and June 30, 2014

~ 2 or 3 awards ranging from $600 to $800 for international travel will be awarded~

Prerequisites:
• must be a full-time PhD student
• must be making an oral or poster presentation at an international conference

Priority will be given to:
• travel to make an oral presentation at a conference
• attendance at an interdisciplinary conference
• students who have passed their prelims

To apply, please send electronically as one file:
• CV (2 page limit)
• brief summary of research (1 page limit)
• brief statement of purpose for attending conference specifying whether your presentation is oral or poster
• provide web link to conference
• with a letter of support from research advisor as a separate electronic document

Send applications to Ranae Wetli at rjwetli@purdue.edu
WHERE ARE THEY NOW?
Former Space Camp Crew Trainers work in leading industries all over the world!

- Marshall Space Flight Center
- Johnson Space Center
- Kennedy Space Center
- NASA Headquarters
- Boeing
- Lockheed Martin
- United Launch Alliance
- Northrup Grumman
- ATK
- Dynetics
- SpaceX
- Blue Origin
- Sierra Nevada
- Virgin Galactic
- Army
- Navy
- Air Force
- Marines
- Coast Guard

DARE to INSPIRE FUTURE astronauts, fighter pilots and engineers of tomorrow!

Are you fascinated by emerging technology in space exploration, aviation or robotics?

U.S. Space & Rocket Center
One Tranquility Base
Huntsville, Alabama 35805
ph 1-800-637-7223, ext. 7112
www.spacecamp.com

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YOU make all the difference!
Crew Trainers lead teams of young people and adults through their Space Camp®, Aviation Challenge Camp®, and Robotics Camp experience at the U.S. Space & Rocket Center®.

At the U.S. Space & Rocket Center, Crew Trainers work with guests and trainees to experience firsthand the past, present and future of America's space program at the most spectacular space attraction on Earth. Coach trainees through once-in-a-lifetime astronaut, aviation and robotics training experiences.

"I'm an aerospace engineer so I understand aerospace materials, but to be able to teach it so that others could understand it made me feel like a true leader."
- Robert Friedlein
Aerospace Engineer student at UAH

"Working at Space Camp had a very positive influence on me. I was able to strengthen my customer service skills and was provided with opportunities to learn, teach and work with a diverse group of colleagues."
- Andrew Gonzales
Millennium Engineering and Integration Company

"Space Camp has challenged me to use my critical thinking skills in a variety of avenues — from conceptual, to problem solving, to application — things I could not gain from a classroom."
- Latina Rivers
Ph.D Material Sciences student at UAH

REQUIREMENTS
- Open availability
- Be available for at least six months after training
- Must be 20 years old by date of hire
- Minimum one year experience working with youth
- Have a desire to learn and teach space, aviation and robotics

HOW TO APPLY
Submit a complete application including:
- Online application
- College transcript with at least 30 completed college credits (Unofficial transcripts are accepted.)
- Three letters of reference from professional acquaintances (coach, mentor, professor, manager, etc. Letters from family members and friends will not be accepted.)
- Successful completion of the Space Camp Crew Trainer Training Program