The Weekly News

February 27, 2012

**Upcoming MEETINGS**

Every Monday
- EAS Gold Mine Committee, CIVL 2201 (Noon)

Monday, February 27
- EAS Undergraduate Committee Meeting, CIVL 2201 (9:00)

Tuesday, February 28
- WISP - “Organization and Time Management”, CIVL 2201 (12:00-1:00) – Bring your PUID. Lunch will be served. RSVP to Qianwen Luo at 40690 or e-mail: luo43@purdue.edu

**RECENT EAS PUBLICATIONS**


**RECENT EAS PRESENTATIONS**

Dev Niyogi was an invited participant at the 2nd WMO International Conference on Indian Ocean Tropical Cyclones and Climate Change in New Delhi, India. He gave a lead talk titled ‘Role of land surface processes on landfalling tropical cyclones’.

H.J. Melosh gave a Colloquium at the University of Chicago on Friday, 2/17/2012, entitled, “Tiny worlds of ice and grit: Results from NASA’s Most Recent Comet Missions”.


**CAMPUS WIDE SEMINARS**

Office of Institutional Equity, Marcus Soutra, “Understanding Learning Disabilities and ADHD: The Journey to Educational and Personal Empowerment,” Thursday, March 1, 2012, 4:30-5:30pm, Beering Hall, Room 2280 (flyer attached).

Agronomy, Crop, Soil and Environmental Science, Cliff Johnson, “Environmental Impact of Oil Sands Mining: How the Clay Particle Beat the 10^5 Ton Per Hour Process,” Monday, Feb. 27, Lilly 2-425. (See attachment for information) (3:15 pm – for pre-visiting, coffee, refreshments)

Nobel Laureate Elinor Ostrom, “Confronting Challenging Collective Action Problems,” Monday, April 16th, 3:30 p.m., Fowler Hall.

Elinor Ostrom, an American political economist and distinguished professor at Indiana University, is the 2009 Nobel Prize winner in Economic Sciences, which she shared with Oliver E. Williamson, for “her analysis of economic governance, especially the commons.” She is the first woman to win the prize in this category. Her work is associated with the new institutional economics and the resurgence of political economy. In her talk, “Confronting Challenging Collective Action Problems”, she will discuss how informal institutions can provide new perspectives on three intractable problems that have confounded policymakers for decades: climate change, food security, and women’s rights. (See attached flyer)

**FROM THE PROVOST OFFICE**

**COMMON READING BOOK FOR 2012-2013**

The 2012-13 Common Reading Program book will be, “The Boy Who Harnessed the Wind: Creating Currents of Electricity and Hope” by William Kamkwamba and Bryan Mealer. Should your office, department, or college be interested in purchasing copies of the book, the deadline for ordering books is Thursday, March 1st. (See attached for contact, price and details).
CROSSROADS GEOLOGY CONFERENCE

The Crossroads Conference will be held in Bloomington, IN, March 30-31, 2012. It is a Midwest-based conference that focuses on undergraduate and graduate student research. There will be several keynote addresses from various faculty in the Big-Ten schools as well as representatives from industry to discuss employment opportunities. There are some funds available to help with travel costs. Abstract deadline is March 15, 2012. (See two attachments)

INDIANA ACADEMY OF SCIENCE

IAC is holding its 127th Annual Academy Meeting on March 10, 2012 at Purdue University. To register visit www.indianaacademyofscience.org

IUPUI – POSITION OPENING

The Department of Earth Sciences at IUPUI is hiring an Instrumentation and Academic Specialist to manage research instrumentation, provide departmental laboratory safety compliance, and support teaching. Applicants must have a M.S. degree or higher in earth science, environmental science, chemistry, biology or a related field. (See attached for more information).

STANFORD GRADUATE SCHOOL OF BUSINESS SUMMER INSTITUTE FOR ENTREPRENEURSHIP (SIE)

A rigorous 4-week program providing Masters, PhDs, and post-docs from top universities worldwide the unique opportunity to build the analytical and practical skills critical to business management and entrepreneurship. (http://gsb.stanford.edu/sie) Applications will close on March 15, 2012. (See attached for more details and contact information)

OPPORTUNITIES FOR UNDERGRADUATES

Discovery Learning Research Center Internships

The Discovery Learning Research Center offers several undergraduate internship programs which are open to all majors. There are both full-time summer and part-time fall internships available. Informational Callouts will be held in REC Rm. 226 from 3:30-4:30 on February 27 and 28.

Online applications will be accepted until March 8, 2012. Details: http://www.purdue.edu/discoverypark/learningcenter/

- Discovery Park Undergraduate Research Internship (DURI)
- Cancer Prevention Internship (CPIP)
- Interns for Indiana (IfI)
- Interns for Entrepreneurship

DURI and CPIP applicants must be full-time undergraduates with 30+ credits and a GPA of 3.0 or higher. All applicants must be full-time undergraduates with 60+ credits and a minimum 2.8 GPA to qualify.

FEBRUARY BIRTHDAYS!!!
7th - Mike Baldwin
14th – Andrei Gabrielov
15th – Yuch-Ning Shieh
28th – Brenda Beitler-Bowen
28th – Terry Wade

MARCH BIRTHDAYS!!!
9th – Ki-Hong Min
11th – Elizabeth McNie
17th – Greg Michalski
21st – Larry Braile
24th – Megan Sapp Nelson
26th – Joseph Francisco
27th – Dongbin Xiu
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 EAS website at [www.purdue.edu/eas/](http://www.purdue.edu/eas/) and Click on News to access active links as needed. Material for inclusion in the newsletter should be submitted to Wanitta Thompson ([thompsow@ purdue.edu](mailto:thompsow@ 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](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](http://calendar.science.purdue.edu/eas/seminars).
Marcus Soutra, Think Different Ambassador and Managing Director of Project Eye-to-Eye, was diagnosed with dyslexia and ADHD at a young age and spent most of his childhood feeling stupid, misunderstood, and ashamed of his learning disability. Over time, Marcus grew to understand that his learning disability was, in fact, not going to determine his fate— and after finding success in school, he chose to devote his life to paving the path for all students to find success in their education.

During his presentation, Mr. Soutra will walk the audience through his journey of educational and personal change, providing a new understanding of LD/ADHD and “learning” itself. At the core is a message of personal empowerment, academic success, and educational revolution for people who think differently. The presentation also will provide students and educators alike with practical, accessible, hands-on tips for academic success.

Mr. Soutra’s presentation made possible by a grant from Google

Please register at the link provided on the presentation title above. This event is free and open to the public. To request an accommodation due to a disability, please contact the Office of Institutional Equity before the program begins at 494-7253 (voice), 496-1343 (TTY) or equity@purdue.edu.
Environmental impact of oil sands mining: How the clay particle beat the $10^5$ ton per hour process.

Cliff Johnston
Agronomy Department, Purdue University

The oil sands deposits in northern Alberta have become the focus of intense interest in recent years. Bitumen and crude oil production are currently at levels that are substantial on an international scale. In fact, these deposits are estimated to contain more crude oil reserves than any country in the world except for Saudi Arabia. At the same time, there are many complex issues related to environmental and health impacts of oil sands development. The debate of the merits and risks of oil sands development has become highly adversarial this year in the context of the KeystoneXL pipeline project. An overview of these issues will be presented along with some discussion about the unique challenges related to the role of clay minerals in the oil sands industry.
Confronting Challenging Collective Action Problems

How informal institutions can provide new perspectives on three intractable problems that have confounded policymakers for decades:

climate change  •  food security  •  women’s rights

April 16, 2012
3:30 pm
Fowler Hall
Free and open to the public

Elinor Ostrom, an American political economist and distinguished professor at Indiana University, is the 2009 Nobel Prize winner in Economic Sciences, which she shared with Oliver E. Williamson, for “her analysis of economic governance, especially the commons.” To date, she is the first woman to win the prize in this category. Her work is associated with the new institutional economics and the resurgence of political economy.

Ostrom is the Arthur F. Bentley Professor of Political Science and Senior Research Director of the Workshop in Political Theory and Policy Analysis at IU in Bloomington. She also is founding director of the Center for the Study of Institutional Diversity at Arizona State University in Tempe.

She is a member of the American Academy of Arts and Sciences, the National Academy of Sciences, and the American Philosophical Society.

For More Information
Visit www.purdue.edu/discoverypark/dls/  |  Contact Cindy Ream: cram@purdue.edu  |  765-494-0015

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Discovery Lecture Series
Lilly Endowment Inc.
College of Liberal Arts
Global Policy Research Institute
Global Sustainability Initiative
Purdue Climate Change Research Center
To: Faculty and Staff of Purdue University, West Lafayette

Dear Colleagues,

Purdue University launched a Common Reading Program ([http://www.purdue.edu/commonreading](http://www.purdue.edu/commonreading)) three years ago to help establish academic expectations and engage students prior to their first day of classes. The year-long program is a collaborative effort sponsored by the Provost Office, Purdue Libraries, and the Office of Student Access, Transition, and Success Programs.

I am pleased to announce that the 2012-13 Common Reading Program book will be *The Boy Who Harnessed the Wind: Creating Currents of Electricity and Hope* by William Kamkwamba and Bryan Mealer. This book was chosen by a committee of students, faculty, and staff for its ability to engage the University community in discussion and inquiry relevant to student, University, and societal values. In my mind it fits perfectly with the goals of our strategic plan to launch tomorrow's leaders, promote discovery with delivery, and meet global challenges. I believe students, faculty, and staff alike will find this book interesting, fascinating, engaging, and inspiring. To learn more about William, his windmill, and his story I'd encourage you to take a few minutes and watch this video: [http://www.youtube.com/watch?v=arD374MFk4w](http://www.youtube.com/watch?v=arD374MFk4w)

All incoming new students for the 2012-13 academic year will receive a free copy of the book during the summer orientation program (STAR) and will participate in programs related to the book throughout the year. I'd like to encourage the entire Purdue community to participate in this common experience along with the new students. I hope faculty will consider using *The Boy Who Harnessed the Wind* in their courses and that co-curricular offices will incorporate it in their programs and events.

Should your office, department, or college be interested in purchasing copies of the book at the program's negotiated bulk rate ($3.99 each), please contact Connie Washburn at washburn@purdue.edu or 42451 with your order. The deadline for ordering books is **Thursday, March 1st**. If you have questions about the program, want to be involved, or are interested in using the book in a course, please feel free to contact Jared Tippets, Director of Student Access, Transition and Success programs at jtippets@purdue.edu.

Sincerely,

Tim Sands

*Executive Vice President for Academic Affairs and Provost*
**Dear Purdue University,**

On behalf of the students in the Department of Geological Sciences at Indiana University, I would like to extend an invitation to Purdue University to participate in the 11th Annual Crossroads Geology Conference at Indiana University. This conference is a student-organized event featuring research presentations by graduate and undergraduate students in the geological and environmental sciences. In previous years, we have had participants from several universities and industry representatives from different companies and fields of expertise. This year we hope to have the most diverse Crossroads Conference to date.

The Rho Chapter of Sigma Gama Epsilon (SGE) and IU’s Student Chapter of the American Association of Petroleum Geologists (AAPG) will host this year’s conference March 30th and 31st.

The conference is open to any students to present their research in an oral or poster presentation. It is a great opportunity for students to gain experience presenting to professional and academic audiences. There will also be representatives from various industries, including oil/gas and environmental consulting firms. Small, need-based travel grants will be awarded to students for gas and lodging. There are also monetary prizes for best graduate and undergraduate presentations. If you have any students who may be interested in attending please contact us and we will provide additional information. The abstract deadline is March 15th and a preliminary schedule of events will be sent by February 17th.

We are excited and hopeful that you will choose to participate in the 100% student-run Annual Crossroads Geology Conference. This conference offers students from the Midwest the opportunity to collaborate with peers and professionals and explore different career paths in the geosciences. Your participation will help make this year’s conference the most successful yet.

Sincerely,

The Rho Chapter of Sigma Gama Epsilon and the AAPG Student Chapter at Indiana University

Luke Martin    David Riese    Justin Zabrecky
SGE Rho Chapter President    AAPG Student Chapter President    AAPG Treasurer
lukmarti@indiana.edu    djriese@indiana.edu    jpzabrec@indiana.edu
The Students of
Indiana University
Department of Geological Sciences
Presents
Crossroads Annual Geology Conference
March 30 & 31, 2012
- Poster and oral presentations
- Awards for best graduate and undergraduate presentations
- Travel grants awarded
- Opportunity to meet and greet with company representatives

Abstract deadline: March 15th
Submit abstracts to djriese@indiana.edu
POSITION DESCRIPTION

DATE: February 10, 2012

ORGANIZATION: Indiana University – Purdue University Indianapolis

DEPARTMENT: Earth Sciences

JOB TITLE: Instrumentation and Academic Specialist

REPORTS TO: Department Chair

POSITION NUMBER:

IUPUI CLASSIFICATION: PAE11

FLSA STATUS: Exempt

JOB SUMMARY:

The Department of Earth Sciences at IUPUI is hiring an Instrumentation and Academic Specialist to manage research instrumentation, provide departmental laboratory safety compliance, and support teaching. The primary purpose of this position is to provide assistance to the Department and faculty through oversight of the Earth Science research infrastructure, with particular focus on managing and maintaining the efficient operation of the Department’s instruments (e.g. GCs, HR-ICP-MS, GC-MS, gas-source irMS, ICP-ES, XRD, CHN analyzer, and computer interfaces). The Academic Specialist will provide general laboratory research support, such as user training, overseeing sample preparation and analyses, instrument trouble shooting, and instrument maintenance. Laboratory support also includes ensuring departmental and building safety by serving as a laboratory safety coordinator. In addition, this position will provide teaching support including maintaining the rock and mineral collections for course instruction as well as helping students to coordinate laboratory and field activities. Depending on the person’s qualifications, duties may include occasional course instruction in the Department of Earth Sciences and/or leading occasional fieldtrips. Finally, the Academic Specialist may be responsible for providing general departmental support by performing administrative and other miscellaneous tasks such as coordinating maintenance of vehicles, equipment and property. This is a full-time position, renewable on a 12-month basis. Analytical and instrumentation experience is required. Applicants must have a M.S. degree or higher in earth science, environmental science, chemistry, biology or a related field.

JOB SPECIFIC DUTIES PERFORMED: (Ordered by Importance)

Time (%)

60% 1. Research Support: Oversees overall operation and maintenance of research laboratories and equipment therein, particularly the upkeep and repair of major
instrumentation in the department. Provide assistance with the set up of new laboratories when needed, and assist with the purchase and acquisition of laboratory equipment and materials (Importance Weighting = 60%).

20% 2. **Teaching Support:** Assists professors with teaching Earth Sciences courses by maintaining order and function of the geology teaching labs, equipment, samples and materials to help the department provide the best academic experience to students. May occasionally provide course instruction and/or lead field trips in Earth Sciences. [ADA Essential Function] (Importance Weighting = 30%).

10% 3. **Departmental Safety, Equipment and Supplies:** Manages departmental inventory by supervising and coordinating maintenance of instruments, vehicles and equipment and by inspecting the laboratories in order to ensure that the department is adhering to required safety protocols and has all necessary equipment and supplies for research and teaching purposes. Coordinates safety training for all staff, graduate students and undergraduate lab assistants in order to ensure that all persons are operating in labs safely. Serves as Building Safety Fire Warden by ensuring the building is properly evacuated during drills and fire emergencies, acting as the emergency contact for the building, and attending annual campus meetings in order to maintain the safety of all peoples in the building in case of a fire emergency. [ADA Essential Function] (Importance Weighting = 5%).

10% 4. **General Department Support:** Provides departmental administrative support by handling miscellaneous responsibilities such as assisting with online course administration, supervising lab assistants, and handling miscellaneous departmental tasks in order to keep the office operating smoothly and up to the standards set by the chair. [ADA Essential Function] (Importance Weighting = 5%).

100%

**GENERAL DUTIES PERFORMED:**

5. **Organizational Citizenship:** Displays behaviors that positively contribute to both the organization and other individuals by being conscientious, helping others, staying aware of organizational issues, being courteous to others, contributing positively to the work atmosphere and accepting all other duties as assigned in order to promote job and Department performance.

6. **Teamwork:** Displays effective behaviors to achieve common goals by cooperating and working well with other staff and faculty, contributing team effort to the mission of the Department, and displaying flexibility for the common good in order to achieve team goals.

7. **Professionalism:** Displays professional standards by exhibiting appropriate interpersonal behavior towards others, behaving with integrity and competence,
being punctual and maintaining an excellent attendance record in order to maintain appropriate workplace decorum.

8. Communication: Conveys ideas/information and/or instructions to others effectively by actively listening, participating appropriately in meetings, and providing clear concise oral and written communication in order to keep others informed of new information in a timely manner and through an appropriate medium.

WORKING ENVIRONMENT OR CONDITIONS (Examples):

Physical Environment: The Academic Specialist’s job is located in the central office area of the Earth Sciences Department in the Science building. The Coordinator has his/her own workspace (i.e., desk, equipment, and filing compartments) in a secluded office. Moderate noise levels can occur due to hallway traffic. With the office door shut, however, the noise is minimal. These office conditions include a controlled temperature and sufficient lighting. This position is autonomous in nature and involves a mix of work outside the office (in labs), as well as maintenance, projects, and computer work within the office. This position requires the use of technology daily.

Social Environment: The Academic Specialist works autonomously most of the time but does interact with the Chair, faculty, staff and students. The social environment related to this position is moderately interactive as most of this role entails providing assistance to students and support to faculty. This position involves a moderate degree of supervision.

Work Conditions: Traditional work hours are from 8:00am to 5:00pm, including a 1-hour lunch. A good deal of flexibility exists for working hours as long as the expected weekly total is achieved and the major responsibilities are completed. There is some physical activity required within this position (lifting up to 50lbs.). The dress within the office is casual/business casual and professional attire is not required.

3 IMPORTANT O*NET KNOWLEDGES, SKILLS, ABILITIES, & WORK VALUES:

Closest SOC Title and Code: Environmental Science Teacher, Postsecondary (25-1053.00) and Educational, Vocational, and School Counselor (21-1012.00)

Three most important O*NET Knowledges, Skills, Abilities, and Work Values:

Knowledge: Education and Training, Earth Science, English Language
Skills: Critical Thinking, Complex Problem Solving, Active Listening
Abilities: Problem Sensitivity, Oral Expression, Deductive Reasoning
Work Values: Support, Achievement, Relationships

Closest Dictionary of Occupational Title and Code: Faculty Member, College or University (education) 090.227-010; Laboratory Manager (education) 090.164-010
The Stanford Graduate School of Business Summer Institute for Entrepreneurship (SIE) (http://gsb.stanford.edu/sie) are reaching out to the graduate student population with backgrounds in engineering, medicine, science, and humanities to inform them of the opportunity to spend a month at Stanford’s Graduate School of Business learning management skills critical to entrepreneurship and building a successful venture.

A rigorous 4-week program that provides Masters, PhDs, and postdocs from top universities worldwide the unique opportunity to build the analytical and practical skills critical to business management and entrepreneurship. The program is taught by Stanford Business School (GSB) faculty and utilizes a combination of lectures, team projects, small group discussions, guest speakers, and workshops to give participants a comprehensive understanding of the process of starting a new business venture. Venture capitalists, presentation consultants, and local entrepreneurs mentor participants throughout the program on how to formulate and effectively present a winning business plan. The program concludes with presentations of team-developed business plans to a panel of experienced venture capitalists from prominent Silicon Valley firms.

The application will close on March 15, 2012.

Arden Grady - Program Coordinator, SIE
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