**THE HEAD’S PERSPECTIVE**

Welcome back to Purdue, and to the Department of Earth, Atmospheric, and Planetary Sciences – we are officially EAPS students, faculty, and staff now! In another summer change, we now occupy space in HAMP (the building formerly known as CIVL).

I hope that you had an enjoyable and productive summer and that you are looking forward to another exciting academic year. I would like to extend a special welcome to all the new members of the EAPS community. We have 20 new graduate students, 28 new undergraduate students, and 2 new post-docs and visiting scholars for the Fall 2012 semester.

The 2011-12 academic year was exceptionally productive for the department; it is great to see students completing their programs of study and then facing hard choices about which job or graduate school program to accept! Although there are challenges in the job market, an EAPS degree continues to be a very strong foundation for success in a rewarding career – and this is highlighted in a recent AGI report (http://www.agiweb.org/workforce/currents.html). Our alumni continue to help with leads and opportunities for jobs, as well as providing invaluable support with advice and through funding for scholarships and special programs in the department. We are very fortunate to have such an engaged and supportive group of alumni.

EAPS faculty, students and staff continue to thrive, as indicated by publications in leading journals, major national and international awards, grant funding, and promotions. Many congratulations to our faculty who were promoted this summer, Associate Professor Mike Baldwin and Associate Professor Hersh Gilbert.

An important change we began last year, and are continuing this year, has been to increase the number of undergraduate students involved in our teaching assistants program for lower division classes. The initial response has been very positive, from the students involved as TAs and from the students in the classes. This fall we are launching a new class “Teaching Internships” to provide students with a mentored introduction to being a teaching assistant in the department.

The 2011-12 academic year is upon us, and in terms of the larger university environment it is clear that there is considerable excitement and speculation about the priorities our new president will bring to Purdue next January. I predict continued strong efforts to enhance the “Learning Beyond the Classroom” emphasis at the college level, a much stronger push for international initiatives in discovery, learning and engagement at the university level, and growing opportunities and support for blended, online and other innovative learning models. At the national level there is strong interest in many EAPS themes, including issues of sustainability, environmental change, natural hazards, energy sources and security, and strategic materials.

It should be an exciting year for us all!
Jon Harbor

**Upcoming MEETINGS**

**Friday, August 24, 9:30 am – 5:00 pm in CIVL 2201**
Alexandria Johnson, Midwest Cloud Forum.

**Tuesday, September 14, 3:00 – 5:00 pm, CIVL 3201**
EAPS Faculty Meeting

**Friday, September 7, 8:15 – 9:15 am, CIVL 2173**
Executive Committee Meeting

**RECENT EAPS PUBLICATIONS & PRESENTATIONS**


Grace Conyers presented a poster, “Landscape ecology and the end of antiquity: the archaeology of deforestation in south coastal Turkey” at the Geomorphic Processes and Geoarchaeology From Landscape Archaeology to Archaeotourism Conference in Moscow – Smolensk, Russia, August 22, 2012.
34th International Geological Congress, Brisbane, Australia – 5-10 August 2012

(1) Global consequences of large Archean impacts – Jay Melosh (Keynote)
(2) Earth history visualization system – James Ogg
(3) Geologic Time Scale 2012: overview – James Ogg

Geologic Time Scale 2012 – James Ogg
GNS Science (New Zealand geological survey); Lower Hutt, New Zealand. 23 July 2012
(2) Geologic Time Scale 2012 – James Ogg
Geoscience Australia (Australia geological survey); Canberra, Australia. 1 August 2012

EAPS FACULTY PARTICIPATED IN A LOW-ROPES COURSE TO BEGIN THE FALL 2012 SEMESTER WITH AN EMPHASIS ON ENHANCING TEAMWORK AND COMMUNICATION SKILLS! August 15, 2012

EAPS PROFESSOR NAMED INTERIM LEADER OF SCIENCE STUDENT DIVERSITY ORGANIZATION
Congratulations to Chris Andronicos!!

One of EAPS newest professors, was named interim President of the Society for the Advancement of Chicanos and Native Americans in Science (SACNAS).

VPR Internal Funding Opportunities

The VPR Office opened up some internal funding opportunities. The research equipment and incentive grant programs can be found at:
http://www.purdue.edu/research/vpr/rschdev/fund_main.php

The three areas are:
Request for Incentive Grant Proposals – letter of intent due 9/6
Laboratory Research Equipment Program - letter of intent due 9/5

ONLINE COURSES ON ATOMIC FORCE MICROSCOPY OFFERED BY PURDUE PROFESSORS

The atomic force microscope has accelerated work in STEM disciplines, but understanding the proper application of the atomic force microscope (AFM) challenges even experienced researchers and graduate students. Purdue professors are addressing the need through five-week AFM courses offered online for the first time this fall. The courses will cover static and dynamic methods and provide instruction on a widely used AFM simulation tool. The material will be covered in a full-semester, three-credit course on campus including a term project, as well. For more information:
http://nanohub.org/newsletter/articles/online-courses-on-the-fundamentals-of-atomic-force-microscopy-offered
A scientific overview video is online:
https://www.youtube.com/watch?feature=player_embedded&v=rsN_gLuf1tI

PURDUE UNIVERSITY FACULTY AND STUDENTS

You are invited to attend an interdisciplinary conference to be held at Purdue this Sept. 6-8 and to provide you with a coupon code that will enable you to attend the conference for free.

The conference organizers, Professors Michael Bergmann and Patrick Kain of Purdue’s Department of Philosophy, have arranged for leading scholars in Philosophy, Cognitive Science, and Religious Studies to come together to address questions under the heading of “Challenges to Religious and Moral Belief: Disagreement and Evolution”’. (Please see the conference website for more details and information)
www.knowinginreligionandmorality.com/conference.html

The conference registration fee is waived for all those with a PUID, but only if they register online before Aug. 24, 2012 and use this coupon code: PU100 (please note that this coupon code is for Purdue faculty and students only), go to www.conf.purdue.edu/knowing and follow the instructions at the bottom of the page.

There is an additional cost for those wanting to attend the conference banquet. Brian Besong, RA for “Challenges” Conference, Dept. of Philosophy, Purdue University; knowing@purdue.edu
The goals of the EAPSI program are to provide students with first-hand research experiences in Australia, China, Japan, Korea, New Zealand, Singapore or Taiwan towards an introduction to the science, science policy, and scientific infrastructure of the respective location plus an orientation to the society, culture and language. The primary goals of EAPSI are to introduce students to East Asia and Pacific science and engineering in the context of a research setting, and to help students initiate scientific relationships that will better enable future collaboration with foreign counterparts. [http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5284](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5284)

There are scores of host universities, some which you will recognize as Purdue partners. The direct link follows for convenience. [http://www.nsf.gov/od/oise/eapsi-host-lists-all.jsp](http://www.nsf.gov/od/oise/eapsi-host-lists-all.jsp)

Please note that Cyndi Lynch, Purdue Graduate School, is the coordinating official for this program. The application deadline this year is Nov. 8, 2012.

**NSF GRADUATE RESEARCH FELLOWSHIP PROGRAM (GRFP)**

**Application Deadline(s):** (submitted by 8 p.m. Eastern Standard Time):
- November 13, 2012 - Engineering; Computer and Information Sciences and Engineering; Materials Research;
- November 14, 2012 - Mathematical Sciences; Chemistry; Physics and Astronomy;
- November 16, 2012 - Social Sciences; Psychology; STEM Education and Learning;
- November 19, 2012 - Life Sciences; Geosciences

**Eligibility Criteria**
Fellowship applications must be submitted by the prospective Fellow. Applicants must register with Fastlane ([https://www.fastlane.nsf.gov/fastlane.jsp](https://www.fastlane.nsf.gov/fastlane.jsp)) prior to submitting an application. Confirmation of acceptance in an NSF-approved graduate degree program is required at the time of Fellowship acceptance, by May 1, 2013. Prospective Fellows must enroll in an accredited United States university, college, or non-profit academic institution of higher education offering advanced degrees in science and engineering by Fall 2013.


On Sept. 10th & 11th, 2012, Michele Gutenkunst will be in the department interviewing M.S. and Ph.D. students interested in an Earth Science career with Chevron. If you are interested in an interview, send your current resume/CV, cover letter, and unofficial undergraduate and graduate transcripts to [mgutenkunst@chevron.com](mailto:mgutenkunst@chevron.com) by Friday, August 31.

In addition, on Monday, September 10th at 6:00PM in Room 2201/HAMP, Michele will present an Earth Science Careers Information Session to all interested students. After the presentation, Chevron will take the graduate students out for dinner at Puccini’s.

Job descriptions and qualifications are listed below and are also posted in Room 2279/HAMP. Candidates chosen for an interview will be notified on Sept. 5th. (See three attached flyers for more details)

**Chesapeake Energy Corp. Interviews September 14, 2012**

Chesapeake Energy Corporation will present an informational session on Thursday, Sept. 13th in Room 2201/HAMP at 5:30PM. All interested students are invited to attend. Food will be provided.

On Friday, September 14, Chesapeake Energy Corporation will be interviewing for their summer Internship program. These are full time, paid internships based in Oklahoma City, Oklahoma. (See attach flyer for more details)

**GEM GRAD LAB**

Purdue will be hosting a GEM GRAD Lab. GEM, it is a consortium of corporations and universities working together to provide funding for students interested in graduate school. This partnership promotes the participation of underrepresented groups in post-graduate science and engineering education and the technical workforce. The GEM GRAD Lab is provided at no cost to the students. Saturday, September 22nd, 1:00-6:00 pm. (See attached flyer)

You can register for the GEM GRAD Lab at: [https://egem.gemfellowship.org/events/ViewEvent.aspx?contextID=10065%20](https://egem.gemfellowship.org/events/ViewEvent.aspx?contextID=10065%20)

**AAPG STUDENT JOB FAIRS AND EVENTS FALL 2012**

[http://students.aapg.org/expo/index.cfm](http://students.aapg.org/expo/index.cfm)
A SYMPOSIUM ON THE INTERSECTION OF LITERATURE, MATHEMATICS, AND PHYSICS

BORGES AND THE SCIENCES, Wed. Oct. 3, 2012, STEW 214 ABCD, 9:30 am–12:00 pm; 1:30 pm–4:00 pm; Free Event, All Welcome.
http://masters.krannert.purdue.edu/borges-symposium/

NUMEROUS STUDENT AWARD OPPORTUNITIES

The American Meteorological Society has numerous student presentation competitions and awards at the AMS Annual Meeting, 6-10 Jan., 2013 in Austin, TX. Check out all the award opportunities at:
http://annual.ametsoc.org/2013/index.cfm/information-for/students/student-award-opportunities/

PURDUE NEWS

New Bus Route – on Monday, 7/16, the new CityBus 19 Inner Loop route began serving the Purdue community. For more information, click on link:
http://www.purdue.edu/newsroom/purduetoday/faculty_staff_news/2012/120712_CityBusLoop.html

For map: www.gocitybus.com/campusloop/19.html

AUGUST BIRTHDAYS!!

David Minton – August 5
Lucy Flesch – August 12
Terry West – August 15

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/ 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) 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.
CICP Faculty Commercialization Award  
Funded by the Central Indiana Corporate Partnership (CICP)

Nomination Form/Criteria

Purpose of the Faculty Commercialization Award

The Faculty Commercialization Award will involve a cash prize of $5,000, as well as official recognition at a major campus event and at the Inventor’s Recognition Dinner. The Award is offered in recognition of Purdue tenure-track faculty members and research scientists who have been most active and/or successful in their efforts to contribute directly to the commercialization of Purdue-generated/owned technologies. The award is intended as an official acknowledgement of the importance of technology commercialization by Purdue faculty, as well as its relevance for preeminence in the Discovery, Learning and Engagement priorities of the University.

Timeline for nomination(s) submission and Award Presentation:

Nominations (including self-nominations) for the annual Faculty Commercialization Award should be submitted by September 7, 2012 to:

John A. Schneider  
Assistant Vice President for Industry Research/Outreach  
Chair, Faculty Commercialization Award Committee  
Office of the Vice President for Research  
610 Purdue Mall  
Hovde Hall, Room 303  
W. Lafayette, IN 47907-2040  
E-mail: jas@purdue.edu  
Fax: 496-3829

Nominations can be sent electronically, faxed or sent campus mail.

The annual award is expected to be presented the end of October or early November 2012.

Selection Criteria(s) (Submissions must be prepared to address the following criteria, must be drafted in fonts not smaller than 12-pt., with not less than 1-inch margins all around, and must not exceed 2 pages in length.)

1. Award candidates must be tenure-track faculty members or research scientists of Purdue University.
2. Commercialization outcomes must be materially influenced by the inclusion of intellectual property, copyrights, or other creative works emerging from Purdue University tenure-track faculty or research scientists, and by the direct contributions or involvement of the faculty member or research scientist.
3. To what extent do the nominee’s commercialization activities advance the Discovery, Learning and Engagement objectives of the University?
4. To what extent do the nominee’s commercialization activities contribute, in rank order, to the economies and culture of Indiana, the USA, and to the other nations and societies of the world?
5. How commercially successful has/have been the nominee’s (or licensees’) business(s) through which the innovation(s) was/were brought to market?
Chevron Earth Science Recruiters visiting Purdue University’s Campus September 10th and 11th

- Chevron invites students interested in an Earth Science career to join us for an informational session Monday, September 10th at 6:00 pm
  - Following the info session, we invite you to join us for dinner at Puccini’s
- Chevron will be interviewing students interested in both Full-Time and Internships positions on September 10th and 11th
  - Please see job descriptions for more information and qualifications
  - If interested in obtaining an interview slot, please send the following documents to Michele Gutenkunst (mgutenkunst@chevron.com) by August 31st:
    - Resume
    - Transcripts (both undergraduate and graduate)
    - Cover letter
  - Candidates chosen for an interview will be notified on Sept. 5th and will be asked to sign up for an interview time slot at that time
Full Time Job Description – Earth Science  
Geologists / Geophysicists

Chevron Corporation is one of the world's leading integrated energy companies with subsidiaries that conduct business across the globe. The company's success is driven by the ingenuity and commitment of approximately 62,000 employees who operate across the energy spectrum. Chevron explores for, produces and transports crude oil and natural gas; refines, markets and distributes transportation fuels and other energy products and services; manufactures and sells petrochemical products; generates power and produces geothermal energy; and develops and commercializes the energy resources of the future, including biofuels and other renewables. Chevron is based in San Ramon, California.

Chevron is accepting online applications for the position of entry-level Geologists and Geophysicists located in:
- Bakersfield, California
- San Ramon California
- Covington, Louisiana
- Lafayette, Louisiana
- Houston, Texas
- Midland, Texas
- Moon Township, Pennsylvania

Geologists and Geophysicists may work at any of Chevron’s worldwide operations or Chevron Energy Technology Company*. Geologists and Geophysicists within Chevron are part of multi-disciplinary teams which vary in make-up but can include reservoir engineering, production engineering, simulation engineering, facility engineering and well engineering operations functions. These positions will provide technical geological or geophysical support and risk assessment for prospect generation, reserves recovery and major capital projects.

For most recent graduates, Chevron has a competency-based employee development program that includes two to three technical assignments in the first 5 years of your career supported by strong technical mentoring and comprehensive technical training. Mobility is encouraged as there are many opportunities for Chevron geologists and geophysicists to work in a variety of assignments at different locations, both domestic and international.

Responsibilities for this position may include but are not limited to:

Geologic Skills: Successful geology candidates must be familiar with development geology work processes and have the ability to integrate seismic, well, and production data to evaluate reservoirs. Reservoir Management skills such as reservoir mapping, modeling and characterization must be demonstrated. The successful candidate also needs to be adept at volumetric, reserve and risk assessments. Formation evaluation and planning for and managing reservoir surveillance programs or new well, sidetrack and work over planning could also be expected job functions.

Geophysical Skills: Successful geophysical candidates must be familiar with geophysical tools (velocity, amplitudes, AVO modeling, rock physics, seismic processing, etc.) to assist earth scientists and engineers in prospect generation and reserves recovery. The candidate must keep abreast of new and emerging technologies, maintain close ties with geophysical vendors and intra-company technology networks and leverage when appropriate.

Required Qualifications:
- Students completing the last year of the requirements for their Masters or Doctorate program in geology, geophysics, geological engineering or related fields or individuals with a Masters or Doctorate degree in geology, geophysics, geological engineering or related fields with less than 2 years of directly related work experience.
- GPA – 3.0 or above
- Strong academic performance in core programs, communication, leadership, teamwork and problem-solving skills.

Preferred Qualifications:
- Masters or Doctorate students with specialties in the fields of geophysics, seismic data acquisition and processing, seismic velocity modeling, reservoir properties from seismic, carbonate and clastic stratigraphy and petrography, structural geology, field mapping, depositional systems, petrophysics and well log technologies, geochemistry, and basin, geostatistical and fluid flow modeling. These skill sets are needed for our Chevron Energy Technology Company. The Energy Technology Company provides project technical services, new technology development, and research and development activities for Chevron Corporation world-wide.
**Relocation Options:**
Relocation may be considered within Chevron parameters.

**Additional Application Instructions:**
Please submit your resume and unofficial Transcript(s) for review.

* Please note that this position involves Chevron Energy Technology Company technologies that are subject to export controls under U.S. law. Because of these U.S. export controls, Chevron Energy Technology Company will be unable to engage individuals who are (a) not U.S. citizens, permanent resident aliens, temporary resident aliens, applicants for temporary resident status, refugees, or asylees; and who are also (b) current or former citizens or permanent residents of a country that is subject to comprehensive trade sanctions under U.S. export control law. These embargoed countries are identified by the U.S. government. If both (a) and (b) apply, we regret that we will not be able to consider you for this position due to U.S. export controls.

EOE M/F/D/V
Intern Job Description – Earth Science
Geologists / Geophysicists

Chevron Corporation is one of the world's leading integrated energy companies with subsidiaries that conduct business across the globe. The company's success is driven by the ingenuity and commitment of approximately 62,000 employees who operate across the energy spectrum. Chevron explores for, produces and transports crude oil and natural gas; refines, markets and distributes transportation fuels and other energy products and services; manufactures and sells petrochemical products; generates power and produces geothermal energy; and develops and commercializes the energy resources of the future, including biofuels and other renewables. Chevron is based in San Ramon, California.

Chevron is accepting online applications for the position of Geologist and Geophysicist Interns located in:
- Bakersfield, California
- San Ramon California
- Covington, Louisiana
- Lafayette, Louisiana
- Houston, Texas
- Midland, Texas
- Moon Township, Pennsylvania

Geologists and Geophysicists within Chevron are part of multi-disciplinary teams which vary in make-up but can include reservoir engineering, production engineering, simulation engineering, facility engineering and well engineering operations functions. These positions will provide technical geological or geophysical support and risk assessment for prospect generation, reserves recovery and major capital projects. Mobility is encouraged as there are many opportunities for Chevron geologists and geophysicists to work in a variety of assignments at different locations, both domestic and international.

Responsibilities for this position may include but are not limited to:

**Geologic Skills:** Successful geology candidates must be familiar with development geology work processes and have the ability to integrate seismic, well, and production data to evaluate reservoirs. Reservoir Management skills such as reservoir mapping, modeling and characterization must be demonstrated. The successful candidate also needs to be adept at volumetric, reserve and risk assessments. Formation evaluation and planning for and managing reservoir surveillance programs or new well, sidetrack and work over planning could also be expected job functions.

**Geophysical Skills:** Successful geophysical candidates must be familiar with geophysical tools (velocity, amplitudes, AVO modeling, rock physics, seismic processing, etc.) to assist earth scientists and engineers in prospect generation and reserves recovery. The candidate must keep abreast of new and emerging technologies, maintain close ties with geophysical vendors and intra-company technology networks and leverage when appropriate.

**Required Qualifications:**
- Students pursuing their Masters or Doctorate degree in geology, geophysics, geological engineering or related fields.
- Strong academic performance in core programs, communication, leadership, teamwork and problem-solving skills.
- GPA – 3.0 or above

**Preferred Qualifications:**
- Masters or Doctorate students with specialties in the fields of geophysics, seismic data acquisition and processing, seismic velocity modeling, reservoir properties from seismic, carbonate and clastic stratigraphy and petrography, structural geology, field mapping, depositional systems, petrophysics and well log technologies, geochemistry, and basin, geostatistical and fluid flow modeling. The Energy Technology Company provides project technical services, new technology development, and research and development activities for Chevron Corporation world-wide.

**Relocation Options:**
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**Additional Application Instructions:**
Please submit your resume and unofficial Transcript(s) for review.
* Please note that this position involves Chevron Energy Technology Company technologies that are subject to export controls under U.S. law. Because of these U.S. export controls, Chevron Energy Technology Company will be unable to engage individuals who are (a) not U.S. citizens, permanent resident aliens, temporary resident aliens, applicants for temporary resident status, refugees, or asylees; and who are also (b) current or former citizens or permanent residents of a country that is subject to comprehensive trade sanctions under U.S. export control law. These embargoed countries are identified by the U.S. government. If both (a) and (b) apply, we regret that we will not be able to consider you for this position due to U.S. export controls.

EOE M/F/D/V
Chesapeake Energy Corporation Interviews
September 14, 2012

Chesapeake Energy Corporation will present an informational session on Thursday, September 13th in Room 2201/HAMP at 5:30PM. All interested students are invited to attend. Food will be provided.

On Friday, September 14, Chesapeake Energy Corporation will be interviewing for their summer Internship program. These are full time, paid internships based in Oklahoma City, Oklahoma.

You could be one of over one hundred summer interns on their OKC campus. Interns work within one of their geology teams (districts). In this role you will work closely with their talented geoscience staff on an applied "hands-on" technical project, with results presented directly to the team. This internship is designed to advance your professional growth, expose you to their high-tech industry, and exemplify the critical role geoscience careers play in CHK's success. Summer internship start and end dates are somewhat flexible, but typically span from May through early August. Online applications through the Chesapeake website are due by midnight on Monday, September 4.

Qualifications:
- Currently enrolled in an accredited college or university
- Current cumulative GPA of 2.8 or higher on a 4.0 scale
- Graduate students preferred

To apply for this position, please follow these 4 steps:
2. Search for “Purdue University” in the “Keywords” field.
3. Select the specific position that coincides with your major, then click “Apply.”
4. Create a profile and attach a resume and unofficial transcript.

Should you encounter any issues during the online application process please call 1-855-855-CHKU.
The College of Engineering at Purdue University is extremely proud to host the GEM GRAD Lab: Getting Ready for Advanced Degrees Laboratory. This fun event designed to inform….a FREE event with afternoon snacks and dinner provided.

Date: Saturday, September 22, 2012
Registration: 12:30 pm
Program: 1:00 pm–6:00 pm (Eastern Time)
Location: Stewart Center, Room 214/128 Memorial Mall/West Lafayette, IN

Who Should Attend: Any science/engineering undergraduate, graduate or working professional who is interested (or should be interested) in furthering their education in a STEM field.