

October 29, 2007

ASTRONAUT AND FORMER STUDENT VISITS EAS



It was a pleasure to have the astronaut, Dr. Andrew Feustel, come and give a talk in EAS on Friday. He has been in the Astronaut Corps. since 2000 and was one of 16 of the 22 Purdue astronauts here for the Purdue homecoming festivities over the weekend. Dr. Feustel is a graduate from EAS and the

College of Science with his BS in 1989 and his MS in 1991, both in geophysics. He then went on to receive his PhD at Queen's University in Canada. After his PhD, he worked in the mining industry in Canada and then worked in exploration geophysics at the ExxonMobil Corporation. Dr. Feustel is only the second astronaut with degrees in the geological sciences, after Harrison Schmitt who was on the last Apollo mission to the Moon. He is also the only Purdue Astronaut not to have graduated in engineering.

His talk was entitled, "Manned Spaceflight and the 2008 Hubble Mission". During the presentation, he discussed the ongoing training that the astronauts do including preparation missions in semi-arid valleys in Antarctica and on the sea floor. He then described the future of manned space flight to the Moon and Mars and the importance and need for geoscientists in the exploration of other planets of the solar system. Finally, he described the upcoming space shuttle mission he will be on this spring to service and repair the Hubble space Telescope.

It was great to have Dr. Feustel back in the EAS department. We wish him well on his upcoming space shuttle mission this spring.



UPCOMING MEETINGS

Friday, November 2

- **Mandatory** Primary Promotion Committee Meeting (voting) for full professors only, CIVL 2201 (7:30 a.m.)
- **Mandatory** Primary Promotion Committee Meeting (voting) for tenured associate and full professors, CIVL 2201 (8 a.m.)

Please note that the University regulations state that, "Only those promotion committee members present for the entire discussion of a candidate's record shall be extended the privilege of voting."

Monday, November 5

- EAS Faculty Meeting, CIVL 3201 (11:30 a.m.)

SEMINAR ANNOUNCEMENTS

Thursday, November 1, at 3:30 p.m. in CIVL 1252:

"Potential Effects of Climate Forcing on Methane Cycling in Northern Peatlands: Stable Isotopic Evidence from Mesocosms and Natural Sites."
Jeffrey White, Indiana University

Refreshments at 3 p.m. in CIVL 2201

For more information, see the EAS online [calendar](#).

RECENT PRESENTATIONS

Terry West attended the Sixth Asian Conference on Geohazards in Engineering Geology held October 16-19 in Seoul, South Korea. He gave one of the Keynote addresses at the conference "Geologic Constraints and Geologic Hazards: An Overview of Engineering Geology Concerns". The conference was attended by two of his former Ph.D. students, Dr. Hyuck Jin Park and Dr. Jung Chan Choi. Both are geology professors at universities in South Korea. He also gave a seminar in Pusan for Dr. Choi's students.

OUR RECENT PUBLICATIONS

Napierski, J., J. Harbor, and Y. K. Li, 2007: Glacial Geomorphology and Geographic Information Systems. *Earth Science Reviews*, **85**, 1-22.

Andy Freed's most recent publication, Freed, Bürgmann, and Herring, Far-reaching transient

motions after Mojave earthquakes require broad mantle flow beneath a strong crust, *Geophys. Res. Lett.*, 34, doi:10.1029/2007GL030959, 2007, has been chosen by the editor in chief as an AGU Journal highlight. The summary below was distributed to interested news media in advance of the paper's publication and will appear in an upcoming issue of *EOS*.

Inferring crustal and mantle strength: Observations after a Mojave earthquake

The strength of Earth's outer layers, their ability to resist deformation, is an important factor in determining earthquake hazards in seismic zones. To study this, Freed, et al. sought to infer the strength of the lithosphere under California's Mojave Desert by treating local earthquakes as large rock deformation experiments. Using a wide-ranging network of GPS instruments spanning more than 200 kilometers from the epicenter of the 1999 Hector Mine earthquake, the authors found that a broad pattern of transient deformation occurred in the 7 years following the earthquake. These data were compared with predictions from numerical models of various postseismic relaxation mechanisms including viscous flow in the lower crust and upper mantle, rebound associated with crustal fluids, and afterslip. Only flow in the upper mantle below 40-km depth was able to generate the pattern of displacements seen at large distances. This comparison pointed to only one possible scenario: the mantle is weaker than the lower crust (a "crème brûlée" structure) and the mantle flows over a wide region rather than within a narrow shear zone beneath the fault.

NAGT PRESIDENT

On Sunday, October 28, 2007, at the annual meeting of the Geological Society of America in Denver, Colorado, Eric Riggs officially began a one-year term as President of the National Association of Geoscience Teachers (NAGT), the premier national association advancing geoscience education research and teaching, and publishers of the *Journal of Geoscience Education*.

CYBERCRIME AND COPYRIGHT INFRINGEMENT

Recently, in ITaP's 'Cybercrime and Copyright Infringement' presentation, a Purdue student named Amber spoke about her experience of being sued by the Recording Industry Association of America (RIAA). She ended up paying \$4,000. Amber was interviewed by Channel 18 and there is a link on their website at:

<http://www.wlfi.com/Global/story.asp?s=7212543>.

WEBCT VISTA 3 TO BLACKBOARD VISTA 4 MIGRATION

ITaP's Teaching and Learning Technologies (TLT) estimates there may be approximately 1,000 classes which need to be migrated to Blackboard Vista 4 before the end of the 2007 fall semester.

Instructors who still need to request migrations on the West Lafayette Academic Campus can request these at:

<http://www.itap.purdue.edu/tt/ecourses/staff.cfm>.

(Click the link 'Migrate a section from WebCT Vista 3 to Blackboard Vista 4'.)

To check the results once a class has been migrated, login to Blackboard Vista at:

<http://www.itap.purdue.edu/tt/blackboard/index.cfm>.

Additional information can be found at the above Blackboard link and in "IDC Tips & Techniques" at:

<http://www.itap.purdue.edu/tt/idc/tips/current.cfm>.

HOG ROAST AND BONFIRE

Everyone is invited for a hog roast and bonfire at the Granger's house this Saturday, November 3. We will take the pig off the spit around 5:30 p.m., and the bonfire will go into the night. Please bring a side dish to share and/or something to drink. Chairs are also helpful. Kids, dogs, and families are more than welcome. The house is at 3025 State Road 25 West, in Shadeland. We hope to see you there.

EQUAL ACCESS/EQUAL OPPORTUNITY BRIEFINGS

There is an expectation that all faculty, staff, and graduate students attend one of the EA/EO Briefings offered by the Affirmative Action Office.

Check the website below for further information. Once on the site, there will be two links, one for faculty/staff and the other for students.

<http://www.purdue.edu/humanrel/aao/EqualAccessEqualOpportunityBriefing.shtml>

For your specific site, there will be a listing of several session dates and times. For graduate students, the College of Science has set up specific dates to attend, but you may attend any session. You will be asked to click on a link at the bottom of the list to register for an EA/EO Briefing session. You will then be asked to submit your first and second choice of session times. A registration confirmation will then be sent to you via email.

A NOTE FROM OUR ACADEMIC COUNSELOR

Convo Vouchers

Undergraduate students can pick up a voucher to purchase a ticket (for \$10) for the following performances in November. Vouchers are available in MATH 231.

Yamato	Nov. 1	Elliott Hall
Stefon Harris	Nov. 17	Loeb
Russian American Kids Circus	Nov. 18	Loeb

Career Development Reminders

The FBI

On **October 31**, 6:30 p.m. in STEW 218C. A Purdue Alumna will talk about her experiences in getting hired and working for the FBI and the federal government.

High Tech Job Fair

Wednesday, **October 31** in the PMU Ballrooms, 10:30 a.m. – 4 p.m. Indiana companies that are filling full-time and internship positions. The full-time positions are for December 2007 or May or August 2008 graduates with BS, MS, or PhD degrees from **Science**, Agriculture, Engineering, Management, and Technology.

Indiana Multicultural Job Fair

Friday, **November 2**, 2007 from 10:00 a.m. - 3:00 p.m. Indiana Convention Center - Indianapolis. More information at: <http://www.jobfairs.iupui.edu/>. Professional dress and resumes.

Upcoming Career Opportunities

“Grad School Fair”

Wednesday, **November 7**, is the Purdue University Graduate and Professional School Fair sponsored by the Purdue Science Student Council (PSSC) and the Purdue Liberal Arts Student Council (LASC). This once-a-year event is an opportunity for recruiters from graduate institutions to promote their graduate programs, and it gives undergraduate students an opportunity to explore their options after graduation. This event is **FREE** for all students, who are welcome to come and go as they please anytime between 11:30 a.m. and 3:30 p.m.; enter through the North Ballroom in the PMU.

Good News for Field Geologists

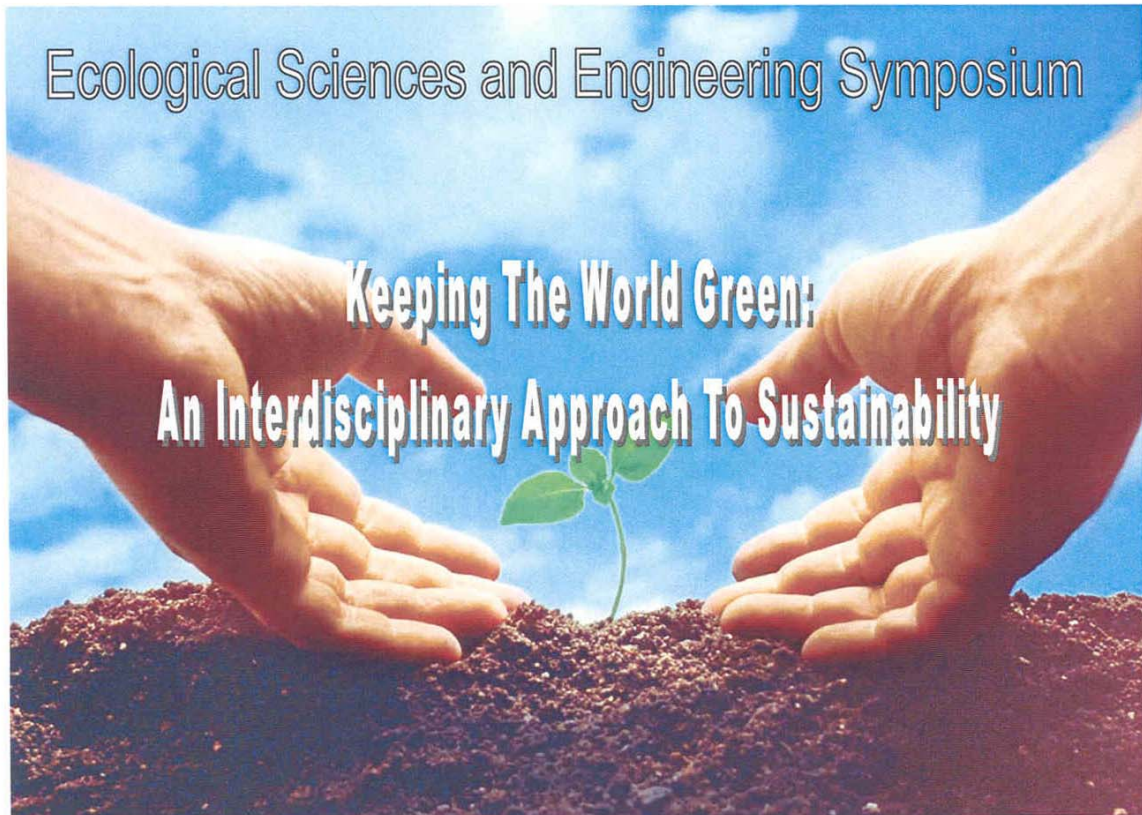
NASA will be looking for field geologists for the astronaut program.

Nancy

ABOUT THIS NEWSLETTER:

This weekly newsletter will be the place to look to keep up with departmental happenings, announcements (seminars, student group events, scholarship and award deadlines, departmental committees), job and grant opportunities, and anything else you need to know about the department. It should cut down on the glut of email and other forms of separate announcements – **if it is in the newsletter, we assume you know about it** and no other reminders are needed. Past issues will be available on our department web site (www.purdue.edu/eas/). Material for inclusion in the newsletter should be submitted to Gina Richey (grichey@purdue.edu) by **Friday noon** of each week for inclusion in the Monday newsletter.





Graduate Student Environmental Research Poster Presentation and Competition

November 9th, 2007

STEW 218 1:30-3:30 PM

Submit poster abstracts to environment@purdue.edu by November 1st, 2007

\$250 1st Place, \$150 2nd Place, \$75 3rd Place

For information about the symposium, invited speakers, and abstract
instructions: www.purdue.edu/DP/ese/symposium

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