

February 25, 2008

## THE HEAD'S PERSPECTIVE Energy, Sustainability, Protecting the Environment, and the Earth and Atmospheric Sciences

Future energy demands, sustainability and concerns about environmental impacts are common themes in the news, government and industry reports, and scientific studies. The scientific and technical issues related to these topics significantly involve the Earth and atmospheric sciences. Many faculty and students in EAS are involved in research, education and engagement associated with these issues. Three recent or upcoming events that might be of interest to you are:

### Grand Challenges for Engineering



The National Academy of Engineering recently announced its list of fourteen Grand Challenges for Engineering identifying challenges for the next century. The list, below, includes several challenges related to energy, the environment and the Earth and atmospheric sciences. More information on the NAE Grand Challenges is available at: <http://www.engineeringchallenges.org/>. The NAE news release for the Grand Challenges can be found at: <http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=02152008>.

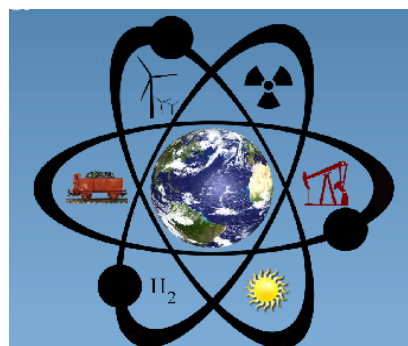
- Make solar energy economical
- Provide energy from fusion
- Develop carbon sequestration methods
- Manage the nitrogen cycle
- Provide access to clean water
- Restore and improve urban infrastructure
- Advance health informatics
- Engineer better medicines
- Reverse-engineer the brain
- Prevent nuclear terror
- Secure cyberspace
- Enhance virtual reality
- Advance personalized learning
- Engineer the tools of scientific discovery

### America's Energy Future



The National Academies Summit on America's Energy Future will be held March 13-14, 2008, National Academy of Sciences Building, Washington, DC. Speakers at the summit include distinguished representatives of government, industry, academia and research institutions. The list of speakers and topics is available at: [http://www7.nationalacademies.org/energysummit/energy\\_summit\\_agenda.html](http://www7.nationalacademies.org/energysummit/energy_summit_agenda.html). There will also be online video coverage of the presentations. More information on the summit can be found at: <http://www7.nationalacademies.org/energy/>.

### Purdue Pugwash Conference



The Purdue Pugwash Conference is scheduled for March 20-22 on campus. The theme for the conference is "Energy and the Environment: Powering the Future Responsibly". For more information, see: <http://pugwash.student-ops.purdue.edu/Conferences/Conference2008/Agenda.html>. The home page for Purdue Pugwash is: <http://www.purdue.edu/pugwash>.

## SEMINAR ANNOUNCEMENTS

**Thursday, February 28, at 3:30 p.m. in CIVL 1252:**  
"Seismotectonics of South-Central Alaska."  
Diane Doser, University of Texas El Paso

*Refreshments at 3 p.m. in CIVL 2201*

**Monday, March 3, at 11:30 a.m. in CIVL 3201:**  
"The Role of Organics in Aerosol-Cloud-Interactions." Barbara Ervens, NOAA Earth System Research Laboratory

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

## OUR RECENT PUBLICATIONS

Goetz, S. J., M. C. Mack, K. R. Gurney, and R. A. Houghton, 2007: "Ecosystem responses to recent climate change at Northern high latitudes: observations and model results contrasting Northern Eurasia and North America," *Environ. Res. Lett.*, 2, 0450312 (9pp), doi: 10.1088/1748-9326/2/4/045031, 2007 ("Best of 2007" for the ERL journal)

Gurney, K. R., et. al, 2007: "Research needs for finely resolved fossil carbon emissions," *EOS*, **88**, 542-543.

## NWS PRESENTATION

On Monday, February 25, Dan McCarthy of the Indianapolis National Weather Service Forecast Office, John Gordon of the Louisville NWSFO, and several other high-level NWS people will be at Purdue to give a presentation on "Leadership, the NWS, and what it takes to get a job."

The presentation is open to ALL students, and will be held from 4:30 to ~6 p.m., in CIVL 2201.

All are invited to join and talk more with Dan, John, and others over snacks/dinner after the presentation (location TBA).

This 3rd NWS Road Show promises to be informative and entertaining. And, this is one of the few recruiting opportunities offered, so don't miss out. Please Come!

## RECENT PRESENTATIONS

Eric Riggs gave an invited talk on Friday, February 15, 2008 in the Curriculum & Instruction department's Career and Technical Education seminar series. The title of the talk was "The Benefits of Field-Based Teaching for Earth Science Teacher Education".

## UPCOMING MEETINGS

**Friday, February 29**

- EAS Executive Council, CIVL 2173 (9 a.m.)

## CHANGE TO IT REQUEST TICKET SYSTEM

The College of Science has recently established a centralized service request management system for use by departments. Earth and Atmospheric Sciences will be moving to the new CoS RT system on Monday, February 25th.

There will be no change in the method used to request support. Please continue to send e-mail to [eas-itap@purdue.edu](mailto:eas-itap@purdue.edu). However, the reply address and case number email response will be from the new CoS RT ticket management system. (If you have submitted web requests to [eas-webmaster@purdue.edu](mailto:eas-webmaster@purdue.edu), then you have seen responses from the new CoS RT ticket management system.)

**Please note:** If you contact ITaP directly by sending email to [itap@purdue.edu](mailto:itap@purdue.edu) or calling the Customer Service Center at 44000, the email response to your service request will continue to be from ITaP's Remedy server.

Cases that are currently open in the old system will continue to be handled by the old system until they are resolved, or until March 10, whichever comes first. If you have any questions, please e-mail [eas-itap@purdue.edu](mailto:eas-itap@purdue.edu). As a reminder, support requests should be sent to [eas-itap@purdue.edu](mailto:eas-itap@purdue.edu) and not to individual EAS Technology staff members. Website requests should be sent to [eas-webmaster@purdue.edu](mailto:eas-webmaster@purdue.edu).

## HYPOCENTER PATCHING SCHEDULED

The EAS Technology Staff have scheduled a routine patch cycle for hypocenter during Spring Break. All hypocenter services, including file sharing and printing, will be unavailable from 6 a.m. until 8 a.m. on Tuesday, March 11.



## DOES ANYONE KNOW THIS YOUNG FUTURE EAS FACULTY MEMBER?

(Small hint... these pictures are from the blizzard of 1978.)



WHO?



## A NOTE FROM OUR ACADEMIC COUNSELOR EPICS Spring Callout

**Monday, February 25** at 6:30 p.m. in the ARMS Atrium. EPICS (Engineering Projects in Community Service) is a service learning program that was initiated at Purdue. Undergraduate students in engineering and other disciplines earn academic credit for long-term team projects that solve technology based problems. You learn how to interact with each other and with customers in deploying a product for a local community agency and help even the most disadvantaged members of the community. All majors are welcome; projects are multi-disciplinary. EPICS students gain skills in communication, analytical thinking, teamwork, and professional ethics.

If you are planning to attend the **NWS** presentation in EAS on Monday evening, you could still attend the EPICS callout after the **NWS** event is done in CIVL.

### Creating an Effective Research Poster

**Friday, February 29** at 4 p.m. in SC 239. Presentation given by Sonny Ramaswamy - Associate Dean & Director of Agricultural Research Programs. Event is being held to help with the following symposium:

### Undergraduate Research and Poster Symposium

**Monday, March 31.** Viewing and judging from 2 – 7 p.m. in the PMU Ballrooms. Sponsored by the Colleges of Agriculture, Science, Technology, and Engineering: <http://www.science.purdue.edu/urps>. Deadline to apply is March 19.

### [Purdue Engineering Student Council Expo](#)

**February 25 - 27, 2008.** Main Job Fair is Monday, February 25 from 9 a.m. – 4 p.m. in the Purdue Memorial Union Ballrooms. Interview Days are Tuesday & Wednesday, February 26 & 27 from 9 a.m. - 4:30 p.m. in Stewart Center and the Purdue Memorial Union (time & place arranged by invitation).

### Purdue Research Park High-Tech Job Fair

**Tuesday, March 4, 2008** from 10 a.m. – 2 p.m. in the University Plaza Hotel at 3001 Northwestern Avenue, West Lafayette. The annual Purdue Research Park High-Tech Job Fair aims to connect the research park's more than 140 companies with quality applicants.  
<http://www.purdueresearchpark.com/fair/index.asp>

### Big Ten Conference Career Expo

**Friday, March 14** in Union Station, Indianapolis, 9 a.m. – 4 p.m. This event pairs students and alums from the Big Ten schools (of which there are 11) with over 100 companies; held in conjunction with the Big Ten basketball tournament. For registration and other information: <http://www.bigtencareerexpo.com/>.

### Summer Undergraduate Research Fellowships (SURF) Program

SURF is now accepting applications for the 2008 program: May 19 - August 1.

- Learn through a discovery based program
- Research under the guidance of a faculty member and a graduate student
- Receive pay to conduct research
- Attend sessions on research methodology, professional development, and graduate school
- Meet 200 potential new friends and research colleagues

Deadline for applications is **March 10**, 2008. To learn more go to [www.purdue.edu/surf](http://www.purdue.edu/surf). SURF Program, College of Engineering, Neil Armstrong Hall of Engineering, Room 2001, 701 W. Stadium Avenue, West Lafayette, IN 47907-2045, (765) 496-2349, [surf@purdue.edu](mailto:surf@purdue.edu).

### Research Experience for Undergraduates

June 1 – August 9, 2008 at Milwaukee School of Engineering

Milwaukee School of Engineering (MSOE), in Milwaukee, Wisconsin, is seeking college students to participate in an innovative research program that focuses on solid freeform applications in the aerospace, architectural, biomedical, biomolecular, manufacturing and electronics industries. They are seeking undergraduates from engineering, computer science and science-based curriculums. To be considered, students must have completed their sophomore year of an engineering, pre-engineering, computer science or science (physics, chemistry, biology, etc.) based curriculum; be enrolled in a university for the fall term; and be a full-time student with a cumulative GPA of 3.00 or greater. Applicants must be U.S. citizens or permanent residents of the United States. Women, minorities and individuals with disabilities are encouraged to apply. No experience in rapid prototyping is required. Funded by NSF.

To apply, send the following information to Ann Bloor, MSOE, 1025 N. Broadway, Milwaukee, Wisconsin 53202. Application materials must be received by **Monday, March 10, 2008**. Only complete applications will be reviewed; those require: A one-page cover letter, a one-page resume, a one-page statement indicating your interest in rapid prototyping & undergraduate research and why you should be selected as a participant, three (3) letters of reference (at least two from previous or current faculty), and university transcripts from each university attended. All participants receive a \$3,605.00 stipend and a travel allowance. On campus room and board is provided. Visit [http://www.msoe.edu/academics/research\\_centers/ru/](http://www.msoe.edu/academics/research_centers/ru/) for more information.

### Greenpeace

The Greenpeace Organizing Term (<http://www.greenpeace.org/got>) is a semester or summer long training packed with travel (international), developing leadership skills, and training in grassroots organizing, media, direct action, and campaign strategy. The focus of Greenpeace is to protect the planet. Applications are being accepted now for summer with a preference for first-year and sophomore students indicated.

### Convo Vouchers

The performances for the rest of the semester that are voucher-eligible are listed below. Vouchers can be obtained from MATH 231. Vouchers will entitle you to special, student-rate tickets (\$10).

Beakman Live!	March 7	7:00 p.m.	Loeb
Helsingborg Symphony Orchestra	April 1	7:30 p.m.	Elliott Hall
BJM Danse	March 26	7:30 p.m.	Loeb
Cherryholmes	April 17	7:30 p.m.	Loeb
Nancy			

### HAPPY BIRTHDAY!!!

Brenda Beitler-Bowen – February 28

Terry Wade – February 28

