

# mospheric The Weekly News

October 24, 2011

#### **UPCOMING MEETINGS**

#### Monday, October 24 \*\*TODAY\*\*

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

#### Thursday, October 27

• Undergraduate Committee, CIVL 2201 (9 a.m.)

#### **EAS SEMINAR**

Thursday, October 27, at 3:30 p.m. in CIVL 1252:
"Interaction between tectonic and surface processes - Examples from the St Elias Range and the Eastern Himalaya." Eva Enkelmann, University of Tuebingen

Refreshments at 3 p.m. in CIVL 2201 For more information, see the EAS online calendar.

#### **OUR RECENT PUBLICATIONS**

Chaubey, I., K. Cherkauer, M. Crawford, and B. Engel, 2011: Multi-scale sensing and modeling framework: integrating field to continental scale. *The Bridge*, 41(3): 39-46. Invited Article, Published by the National Academy of Engineering.

Cibin, R., I. Chaubey, and B. Engel. 2011. Watershed scale impacts of corn stover removal for biofuel on hydrology and water quality. *Hydrological Processes*, DOI: 10.1002/hyp.8280.

Sun, W. Y. and O. M. T. Sun, 2011: A modified leapfrog scheme for shallow water equations." Computers & Fluids, 52, 69–72.

#### RECENT PRESENTATIONS

Chaubey, I., 2011: Sustainability assessment of bioenergy crop production, landscape changes, and ecosystem response. *Presented at EPA-Office of Research and Development, Las Vegas. October* 12, 2011.

Gerald H. Krockover, Professor Emeritus of Earth and Atmospheric Science Education, "Math/Science Achievement via the Science Quest Grant Program," United States Department of Defense Education Activity (DoDEA), October 13, 2011, Santa Monica, CA.

# INDIANA GETTING SEISMIC NETWORK TO MONITOR QUAKES

Hersh Gilbert and Robert Nowack led a group of EAS students to watch the installation of an Earthscope seismic station near Kentland, Indiana on Wednesday,



Click image for larger view

October 19. This is one of 23 seismic stations to be deployed in Indiana starting this fall. These new stations will provide new observations of crustal and upper mantle structure in this area. Additionally, they will be very important for seismic hazard monitoring in Indiana. The story was also featured in the Chicago Tribune.

#### **CRESPO RECEIVES NATIONAL SCHOLARSHIP**

Juan Crespo recently received the Hispanic Scholarship Fund award, making him only one of 12 students from across the country to receive this accolade.

Juan is a junior in atmospheric science with minors in math and political science and does research here and at the University of Michigan. He is a Supplemental Instruction leader, Science Ambassador, PUMA club officer, and is involved in the Science Multicultural Programs. Read more...

# FACULTY: OPPORTUNITY TO DRAMATICALLY IMPROVE AN UNDERGRADUATE COURSE!

The IMPACT program seeks to change the learning culture on the West Lafayette campus to become more student-centered. Read more...

#### **BASICS OF SERVICE LEARNING**

#### Tuesday, Oct 25, 1:00-2:30 p.m. in BRNG 2275

This workshop will explore the fundamentals of service-learning at Purdue. Basic principles of service-learning will be reviewed and perspectives on service-learning experiences from faculty, students, and community partners will be provided. The workshop will also provide opportunities to ask faculty fellows about setting up service-learning courses and the specific challenges and rewards of service-learning. Both those new to service-learning and veterans are invited. REGISTRATION

#### FINAL WISP MEETING OF THE SEMESTER

**Topic:** Effective presentations Date: Tuesday November 1, 2011

*Time*: 11:30-12:30 Place: Civil 2201

\*\*TECHNOLOGY UPDATE\*\*

# HYPOCENTER TO VORTEX MIGRATION

Assuming our testing this week and next goes as planned, the ScienceIT staff will begin the storage switchover from the "old" (hypocenter) to the "new" storage server (vortex) after 5:00 pm on Friday, October 28. To make this move as transparent to EAS faculty, staff, and students as possible, once we make the conversion, "new" the server will still be called hypocenter.eas.purdue.edu.

Hypocenter is the older Sun server and storage array that has been used by the EAS department for many years. Vortex is a new virtual server within the Science VMware cluster that will provide file storage and services in lieu of older Sun Hypocenter hardware and software. With the Hypocenter hardware at the end of its lifetime, our plan will be to shut it off after all of the services and storage moves to Vortex have been made and confirmed to be working properly.

Since we have been mirroring the Hypocenter storage on Vortex for several weeks now, the migration should involve only a few minor changes for the EAS user community. Possible changes include accepting a new SSH key to connect directly to "new" hypocenter and rebooting your computer if you lose your network connection when "old" hypocenter becomes "new" hypocenter. And we'll have the ability to quickly return to the "old" Hypocenter if there are problems with networking or access to services.

Please email us at eas-help@purdue.edu if you have questions or detect any differences between Vortex and Hypocenter storage and services. Thank you very much for your help and support!

#### FROM OUR EAS LIBRARY

Thank you for the warm welcome that I have received in the last few months. I have been in the EAS Library since June 1, and have been busy learning the collection.

A list of new resources that have been purchased in the last six months are available http://bit.ly/p1DT13. If there are specific subjects that you would like to see better represented in our collection, please let me know.

The EAS library map collection is going to be cataloged. At long last, the availability of maps will be recorded in the Libraries' catalog. As part of this project, we are also investigating digitizing maps that are no longer under copyright. We are beginning this project by prioritizing geographical regions to be done first. Indiana and the surrounding states, New Mexico, Utah, Texas, Montana, Tennessee, and North Carolina are our highest priorities. If there are other regions that you have interest in having cataloged and potentially digitized, please contact me and I'll add your request to the priority list.

I am looking for a researcher or two to interview about teaching data skills to students. If you have had graduate students who were outstanding data managers, or students who were woefully lacking in data skills, I would like to talk to you about those students. Please contact me if you are willing to share your experience.

Megan Sapp Nelson (msn@purdue.edu) Associate Professor of Library Science EAS Library

#### TENURE-TRACK ASSISTANT PROFESSOR **TEXAS A&M**

The Department of Atmospheric Sciences at Texas A&M is seeking applications for a tenure-track position at the assistant professor level in the field of weather analysis and forecasting. Read more...

#### 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. Read more...

#### 2012 EXXONMOBIL GEOSCIENCE GRANTS

ExxonMobil is pleased to be able to make available ten research grants of \$7500 each to provide partial support for master's and doctoral thesis research in all fields of geosciences. Read more...



#### **HAPPY BIRTHDAY!!!**

Kathy Kincade - October 24



# Monday, October 24, 2011 3:30 p.m. 2-425 Lilly

(3:15 pm for pre-visiting, coffee, refreshments)

"Agronomists, Pharmacists, and Medical Doctors: A Unique Partnership Between Purdue University, Indiana University and Moi University in Kenya That is Improving Health in Western Kenya"

By

# Robert Einterz Indiana University Medical School



In the seminar, I will give an overview of IU's and PU's partnership with Moi U in Kenya, and I will discuss some of the achievements of that partnership, focusing particularly on our collaborative efforts to improve the healthcare delivery system, including efforts to assure income and food security; train health care professionals; and do research. Bob

There will be time for one-on-one questions after the seminar/discussion and a reception at the Black Sparrow from 5:00 – 7:30 pm

# Global Policy Research Institute Presents the Global Policy Thought Leader Seminar Series



#### SPEAKER BIOGRAPHY

Ambassador Louise V. Oliver was named by President George W. Bush as Permanent Representative of the United States to the United Nations Educational, Scientific and Cultural Organization (UNESCO). She was sworn in on February 12, 2004 by U.S. Secretary of State Colin Powell and presented her credentials to UNESCO Director-General Koichiro Matsuura on March 9, 2004.

October 25, 2011 @ 4:30 PM

Burton Morgan Center for Entrepreneurship Room 121

Reception Immediately Following Seminar

# Ambassador Louise V. Oliver

"Returning to UNESCO After a Two-Decade Absence: An Ambassador's Story"

#### **ABSTRACT**

UNESCO, the United Nations Educational, Scientific and Cultural Organization, works to promote peace through international collaboration in these and other areas. Although the United States helped found UNESCO in 1946, due to serious financial and policy issues within the organization, the United States left UNESCO in 1984.

Almost two decades later, President George W. Bush announced that "As a symbol of our commitment to human dignity, the United States will return to UNESCO. This organization has been reformed and America will participate fully in its mission to advance human rights and tolerance and learning."

In March, 2004, Ambassador Oliver arrived in Paris to lead the U.S. re-engagement with UNESCO and its 192 Member States. Since the U.S. has no veto at UNESCO, Ambassador Oliver had to rely exclusively on diplomacy to advance U.S. policy interests at the organization. The story of how the U.S. became an effective and respected leader at UNESCO despite numerous problems and challenges will be the focus of her lecture.





## What Do You Know About Dwarfism?



Ethan Crough is currently a stay-at-home father, an assistant librarian with the Bartholomew County Public Library, a public speaker, and the Vice President of Membership for Little People of America. Ethan has worked at the Statue of Liberty National Monument, Department of the Environment for San Francisco, a doubledecker tour bus in New York City, and on stage. Articles of his have appeared in The Republic and the San Francisco Chronicle. Advocacy projects include Dwarfism Awareness Month in Indiana, an Associated Press Style Guide change, and a Midwest trip to schools with "midget" as part of their mascot. This year marked the 25<sup>th</sup> S. Thomas Crough Memorial Lecture for his late father at Purdue University. Ethan lives in Columbus, Indiana with his wife and two children.



Sponsored jointly with the Department of Earth & Atmospheric Science and the Science Diversity Office

Is it from textbooks, the Learning Channel, movies, or a friend? There are more than 200 types of dwarfism in the world and speaker Ethan Crough has one of them. Join Crough, Vice President of Membership for Little People of America, to learn about the history of dwarfism, the importance of being employed for your abilities, and what day to day life is like for a person with dwarfism.

Indiana recently named October a Dwarfism Awareness Month, due in large part to Crough's efforts. The relationships between broader aspects of the disability community and advocacy work will be discussed. Audience members will also participate in an activity showing stereotypes and how we create them in various industries.

Through his unique experiences and perspective, Crough's discussion-based presentation gives you the chance to ask questions so you come away with a new knowledge and a greater understanding of dwarfism.

Thursday, October 27, 2011

Presentation: 12:00-1:00 pm

Q&A: 1:00-1:20 pm

Room 1109, Armstrong Hall



# MECHANICAL ENGINEERING GRADUATE SEMINAR October 27, 2011 4:30 P.M. ROOM ME 1061

### Frank Incropera

Clifford and Evelyn Brosey Professor of Mechanical Engineering University of Notre Dame



#### **CLIMATE CHANGE**

# Complexity and Uncertainty at the Intersection of Science, Politics and Human Behavior

**Abstract:** In the history of U.S. environmental concerns, it is hard to think of an issue that has generated as much controversy as climate change. Because of inherent time scales and the interplay of economic, political and scientific issues, it has been difficult to get agreement on whether there is, in fact, a problem and, if one does exist, what remedies should be sought. In this seminar the scientific basis of climate change will be discussed, with special attention given to the relative roles of natural and anthropogenic agents. Adverse effects of climate change will be reviewed, along with measures that could be used to mitigate and/or adapt to the effects. Economic, political and ideological barriers to implementing these measures will be assessed, and root causes of the U.S. controversy will be discussed. The seminar will conclude with personal reflections on the way forward.

**Bio:** Professor Incropera received his BSME (1961) from MIT and his MSME (1962) and PhD (1966) from Stanford University, all in mechanical engineering. Except for research leaves spent at NASA-Ames (1969), U.C. Berkeley (1973-74) and the Technical University of Munich (1988), he was with Purdue University from 1966 to 1998. He was promoted to Professor in 1973 and was Head of the School of Mechanical Engineering from 1989 to 1998. From 1998 to 2006, he served as the Matthew H. McCloskey Dean of Engineering at the University of Notre Dame, and in 2007 he was a visiting professor at MIT.

Professor Incropera received the American Society of Engineering Education (ASEE) Ralph Coats Roe Award for excellence in teaching (1982), the ASEE George Westinghouse Award for achievements in teaching and research (1983), the American Society of Mechanical Engineers (ASME) Heat Transfer Memorial Award (1988), the Melville Medal for the best original paper published by ASME (1988), and the Worcester Reed Warner Medal of ASME (1995). He received the Senior Scientist Award from the Alexander von Humboldt Foundation in 1988 and in 1996 was elected to the U.S. National Academy of Engineering. In 2001 he was named by the Institute for Scientific Information as one of the 100 most frequently cited engineering researchers in the world. He is a Fellow of ASME and the American Association for the Advancement of Science.

Professor Incropera has had a long-standing interest in the transport of thermal energy and chemical species and has authored or co-authored 15 books and more than 200 journal articles in the field. In the last five years, his interests have focused on the broad range of technical and nontechnical issues associated with transition to a sustainable energy future.

