EAPS SEMINARS

Thursday, 4/25, 3:30 pm, HAMP 1252


Refreshments, 3:00 pm, HAMP 2201

EAPS Seminars Armchair Traveler Series

Friday, April 26, 12:00-1:00, HAMP 2201

Kimberly Lutz, Jenaya Hooks, and Samuel Noel, 2012 H2O Grant Recipients, "Implementing a Water-Based Service Learning Project in Costa Rica."

EAPS PRESENTATIONS

Miller, Bridget T. and Krockover, Gerald H. Using iPads to Teach Inquiry Science to Students with a Moderate Intellectual Disability (April 9), National Association for Research in Science Teaching Annual Conference, Rio Grande, Puerto Rico.

Jim Ogg gave the keynote "Jurassic Time Scale" for Jurassic Symposium V in Trelew, Argentina, 15-21 April, 2013.

Alex Gluhovsky gave two talks: "Progress in atmospheric time series analysis" at ENS (École Normale Supérieure, Paris, France) on April 5th, and "Time series analysis of Rayleigh–Bénard convection" at the EGU General Assembly 2013 on April 8th.

On April 16, 2013, Terry West and two engineering geology students attended the North Central AEG section meeting in Chicago. Kelsey Crane's student paper and presentation titled "Preliminary Analysis of Causes of Subsidence in Association with Abandoned Coal Mines, Southwestern, IN" was awarded second place honors in the graduate division. Olivia Miller also attended the meeting along with students from several schools in Wisconsin and Illinois. Crane's presentation considered the possible factors contributing to subsidence associated with abandoned coal mines, a special concern for the Indiana Division of Reclamation. These factors were each evaluated in statistically appropriate manners to determine their significance in perceptible contribution to subsidence. It also included a model to aid the prioritization of grouting projects for the DNR.

Angel Torres-Valcarcel, EAPS PhD candidate, offered an introductory presentation, on April 17, about the Sustainable Schools Program principles and benefits to middle and high school students and teachers from Juan José Osuna High School at San Juan, Puerto Rico.

Angel Torres-Valcarcel, EAPS PhD candidate, offered a demonstrative presentation, on April 18, about Compost and Composting to local municipality government employees at Trujillo Alto, Puerto Rico.

2013 EXCELLENCE IN TEACHING AWARD

CHRISTINE KASSAB, EAPS Graduate Student, was awarded the 2013 Graduate School’s Excellence in Teaching Award. This is the University’s highest award in recognition of graduate student teachers. Christine will be honored at the 15th Annual Celebration of Graduate Student Teaching Excellence on April 23. Congratulations!!

CAMPUS NEWS

REM’s Lab Safety Newsletter (April 2013 Edition) (See attached flyer)

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Crisis Support for Students (and advisors of students)

If you need help, or have a student colleague who needs help, please do not hesitate to make use of http://www.purdue.edu/vpsa/crisis-support/. The Office of the Dean of Students provides crisis services 24 hours a day for graduate, professional and undergraduate students who may be dealing with a crisis or traumatic event. Professional staff members are available weekdays from 8:00 am - 5:00 pm for support, consultation, and intervention through drop-in appointments in Schleman Hall 207, or phone calls at (765) 494-1254. For urgent situations occurring any other times, the Office of the Dean of Students-On-Call Team (OOT) is accessed by calling The Purdue University Police Department at (765) 494-8221. The Purdue Police Department makes contact with the on-call team member who is available to respond to any needs that may arise. Team members offer assistance, support and resource information.
THE DYNAMICS OF CLIMATE CONFERENCE

The May 15-17 conference is designed to prepare participants to use a professional development toolkit for climate science education and provide up-to-date information on climate science from Purdue scientists. David Archer is the keynote speaker. For more information about the conference and how to register see the attached brochure.

Wetherill Chemistry Laboratory National Historic Chemical Landmark Dedication Ceremony

The Department of Chemistry invites you to join us in April when the Wetherill Chemistry Building is recognized as a National Historic Chemical Landmark. Friday, April 26, 2013 at 4pm. Remarks by: Timothy D. Sands, Executive Vice President for Academic Affairs and Provost, Purdue University. Marinda Li Wu, President, American Chemical Society. (Reception will immediately follow the ceremony.) More information and RSVP: http://www.chem.purdue.edu/wetherill/

NATIONAL RESEARCH COUNCIL of the NATIONAL ACADEMIES

The National Research Council of the National Academies sponsors a number of awards for graduate, postdoctoral and senior researchers at participating federal laboratories and affiliated institutions. These awards include generous stipends ranging from $42,000 - $80,000 per year for recent Ph.D. recipients, and higher for additional experience. Graduate entry level stipends begin at $30,000. These awards provide the opportunity for recipients to do independent research in some of the best-equipped and staffed laboratories in the U.S. Research opportunities are open to U.S. citizens, permanent residents, and for some of the laboratories, foreign nationals.

Detailed program information, including online applications, instructions on how to apply and a list of participating laboratories, is available on the NRC Research Associateship Programs Website (see link above). Questions should be directed to the NRC at 202-334-2760 (phone) or rap@nas.edu.

There are four annual review cycles.
Review Cycle: May; Opens March 1; Closes May 1
Review Cycle: August; Opens June 1; Closes August 1
Review Cycle: November; Opens September 1; Closes November 1
Review Cycle: February; Opens December 1; Closes February 1

Applicants should contact prospective Adviser(s) at the lab(s) prior to the application deadline to discuss their research interests and funding opportunities.

Discovery Lecture Series

Colonel Mark “Puck” Mykleby (USMC-retired) on “Sustainability: Our National Strategic Initiative.” His presentation is on Earth Day, Monday, April 22nd, 2013 at 5:30 p.m. in Forney Hall of Chemical Engineering, G140. (See attached flyer)

DISCOVERY PARK NanoDays

Educational Activities about Nanoscale Science and Engineering for students in Grades K-12 Volunteer at www.nano.purdue.edu/nanodays
(See the attached flyer)

NASA Langley Research Center

The Langley Aerospace Research Student Scholars (LARSS) Research Internship Program

The NASA LARSS internship program is a paid (stipend) research experience open to U.S. citizens who are full-time undergraduate (juniors and seniors) and graduate students. http://www.nitanet.org/larss
(See the attached flyer for details)

EAPS FACULTY AND GRADS

VISITING FACULTY POSITION OPEN WASHINGTON AND LEE UNIVERSITY

The Geology Department at Washington and Lee University, Lexington, VA seeks applications for a one-year visiting professor position for the 2013-14 academic year. A PhD or ABD is required, and the position is open to all geoscience disciplines. The teaching load for the year will consist of two sections of Physical Geology and two topical/seminar courses in the applicant’s specialty. Applicants must be committed to high-quality undergraduate teaching. W&L is a nationally ranked, highly selective liberal arts college. The Department (geology.wlu.edu) is a member of the Keck Geology Consortium, and is committed to undergraduate research. The department has excellent facilities and resources and makes great use of the Appalachians in field courses and labs. Apply via email to wilsons@wlu.edu. Applications should include curriculum vitae, statement of teaching interests/experience, and contact info for 3 referees and be addressed to Search Committee, Geology Department, Washington and Lee University. Review of applications will begin immediately and continue until the position is filled. Washington and Lee and the Department of Geology are interested in candidates committed to high standards of scholarship and professional activities, and to the development of a campus climate that supports equality and diversity among its faculty, staff, and students. The University is an Equal Opportunity Employer.
PGS – 11th Leonards Lecture and PGS Workshop
The Purdue Geotechnical Society is pleased to announce the 11th edition of the Purdue Geotechnical Workshop and 11th G.A. Leonards Lecture that will take place on Friday, April 19, 2013 on the Purdue campus in West Lafayette, Indiana. The 2013 PGS workshop is entitled “Soilmakers: Engineering Soil for Geoenvironmental Applications”. The theme of the workshop is inspired by the topic of this year’s Leonards Lecture, in honor of Professor G.A. Leonards, a Purdue geotech faculty member from 1946 to 1991 and a great of the geotechnical engineering profession. The 11th G.A. Leonards Lecture entitled “ORGANOCLAYS: NOVEL BARRIER MEDIA FOR MANAGING GROUNDWATER FLOW AND TRANSPORT AT NAPL-SITES” will be delivered by Dr. Craig Benson, P.E., DGE, NAE, Wisconsin Distinguished Professor at the University of Wisconsin-Madison, a world-known expert, researcher and educator in the field of environmental geotechnics. The lecture, which is free and open to the public, will take place in the Krannert Auditorium at 4:30 p.m. The PGS is thrilled that Prof. Benson has agreed to present this year’s Leonards lecture as he embodies many of the qualities that made G.A. Leonards a legend as a professor and an engineer.

The workshop will precede the Leonards Lecture, starting at 8 a.m. in the Purdue Memorial Union. The program includes two keynote lectures: one by Prof. Krishna Reddy of the University of Illinois at Chicago, on modifying cover soil for controlling methane in landfills; the second by Dr. David Espinoza of Geosyntec Consultants who will tell us a tale of sludge lagoons. Other nine shorter presentations complete the program and cover a variety of exciting topics.

Support for the PGS workshop and Leonards lecture is provided, at the time of this announcement, by the following sponsors: Earth Exploration, ECS Ltd, Fugro Consultants, Golder Associates, Hayward Baker, Nicholson Construction, and Patriot Engineering & Environmental.

Three attachments: Leonards Lecture; PGS workshop program; & Registration Form. Information can also be found at https://eng.purdue.edu/PGS or by contacting Philippe Bourdeau at bourdeau@ecn.purdue.edu

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GCC2013
7th GRADUATE CLIMATE CONFERENCE

MIT’s Program in Atmospheres, Oceans, and Climate and the Woods Hole Oceanographic Institution.
Who: Graduate students studying climate
What: 7th Graduate Climate Conference
When: November 1-3, 2013
Where: Woods Hole Oceanographic Institution
Woods Hole, MA
Email: gcc-2013@mit.edu
Website: http://gradclimateconf.mit.edu
Abstract Deadline: June 7, 2013
(See flyer for more details)

A NOTE FROM OUR COUNSELOR

Today is Earth Day – April 22
Carnival on Centennial Mall 11:30-3:30
http://www.purdue.edu/sustainability/

Peace Corps Info Table
Wednesday, April 24, 2013, 10:00am to 3:00 p.m. STEW Room 194. Stop by the Peace Corps table to talk to a local representative about opportunities to live, learn, and work with a community overseas. For questions about this event contact Kendrall Masten, kmasten@peacecorps.gov . About the Peace Corps: Read more at http://www.peacecorps.gov/learn/ or watch a video. Learn what it’s like to be a volunteer, including what volunteers do, where they go, and the many benefits of Peace Corps service. You can apply now at http://www.peacecorps.gov/apply/.

April Birthdays

Nat Lifton – 14th
Maarten de Hoop – 20th
Dayton Vincent – 23rd
Claire Chandler – 29th

GRADS AND POST-DOCS’ NEWS

FULBRIGHT OPPORTUNITIES
NATIONAL AND INTERNATIONAL SCHOLARSHIPS
OFFICE
Graduate study, research, or teaching assistanships
Tuesday, April 23, STEW 311
Wednesday, April 24, PMU 136
RSVP at www.purdue.edu/niso
(See attached for more details.)
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 EAPS 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 (thompsonw@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 EAPS 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.
In light of recent events, I want to take a moment to mention a few safety reminders that are useful in lab and while out on campus.

- Whether you’re driving, walking, or cycling, follow the rules of the road. Pay attention to all posted signs.
- Use all your senses, including hearing, whether in a lab or outside. If you like listening to music, think about putting one ear bud in and leaving one out so you can hear what is around you.
- Use the marked crosswalks! Don’t assume a vehicle will see you and be able to stop in time if you are in the middle of the road.
- At a crosswalk, remember that vehicles can’t stop on a dime. Make sure to look into the road before entering the crosswalk.
- If you encounter a large vehicle, such as a box truck or bus, try not to walk behind them. It could be difficult to see you!

Container Return Policy

REM returns containers, such as 5 gallon Nalgene® carboys (shown at right), as long as they are in good condition and marked with the building name and room number. If your container is damaged it will not be returned. If this happens we will send a notification.

We try to return containers as soon as possible, however, this spring our Laboratory Materials Storage Building is getting an HVAC system upgrade. This could lead to a delay in containers being returned because waste processing takes longer as we work around construction crews. If you have any questions, call our main line: 49-40121.

Waste Pickup Web Submission Form

The Web Submission version of the Hazardous Materials Pickup Request is back online. You must enter your Purdue user id and password to fill out the form.

Here’s the link: [http://www.purdue.edu/rem/home/files/forms.htm#HMM001](http://www.purdue.edu/rem/home/files/forms.htm#HMM001)

Face/Eye Protection:

Safety Glasses vs. Goggles

Your vision is important! Follow these guidelines while working in the lab to protect your eyes.

1. Check with your PI or lab manager for any specific rules regarding eye protection and follow them.
2. Wear goggles when you are using a chemical outside of the hood or in any instance there could be a splash hazard.
3. Wear safety glasses while you are in a lab where chemicals are being used. They should also be worn in any instance there is an impact hazard.
4. You can also use a face shield when added facial protection is necessary, such as in cases with spray or severe splash hazards.

Note: UV goggles or face shield should be worn when using a UV light box.

Choosing the Right Glove

Did you know that Benzene can permeate nitrile gloves within 3 minutes? Make sure you’re using the right glove to keep your hands protected from chemical exposure.

A great resource is [www.chemrest.com](http://www.chemrest.com), where you can search by chemical name or CAS number for gloves that offer the best level of protection.
Here’s a comic to get you ready for summer.
Construction season offers lots of practice for paying attention to signs!

“Construction”

“Piled Higher and Deeper” by Jorge Cham

www.phdcomics.com

Do you have a lab safety question or issue you’d like Amy to address in this newsletter? Let her know!

E-mail atheivag@purdue.edu; Phone 49-69359
What’s in the toolkit?

- professional development program manual
- PowerPoint presentation with video clips and talking points
- presenter’s guide that details the talking points, video clips, and instructional activities
- materials packet including the handouts, visuals, and data sets for the instructional activities and program
- teachers’ guide for climate system instruction
- an administrative packet for implementing a professional development program in climate education

The Dynamics of Climate conference is made possible through NSF Grants GEO-1034821 and DRL 0822181 and supported by the following departments at Purdue University, West Lafayette campus:

- Earth, Atmospheric, and Planetary Sciences in the College of Science
- Curriculum and Instruction in the College of Education
- Agronomy in the College of Agriculture

The program and toolkit were developed in collaboration among Dan Shepardson, Purdue, Project PI and Dev Niyogi, CoPI and Indiana State Climatologist, and:

Adam Baker, Meteorologist, National Weather Service, Indianapolis
Mary Cutler, Naturalist, Tippecanoe County Parks and Recreation Department
Olivia Kellner, PhD student, Purdue University
Mark Koschmann, Science Teacher, St. John’s Lutheran School, Midland, MI
Ted Leuenberger, Former Science Teacher, Benton Jr./Sr. High School
Ian Pope, Graduate Research Assistant, Purdue
Hans Schmitz, Extension Educator, Purdue
Jan Sneddon, Director, Indiana Earth Force and President, Environmental Education Association of Indiana

Questions about registration?
Call Purdue Conferences, 765-494-7231.

Questions about the Conference?
Call Peggy Favorite, 765-494-6814.
The *Dynamics of Climate* conference for informal and formal educators is designed to prepare participants to use a professional development toolkit for climate science education and provide up-to-date information on climate science. The conference and toolkit take a climate system approach to understanding how the Earth’s climate is changing.

The toolkit utilizes climate datasets and activities to develop understanding of climate. Small group and individual activities require participants to interpret, analyze, and represent climatic data and use scientific concepts to explain climate events. Conference sessions take participants through the implementation of the professional development toolkit.

*Included in your $25 conference registration:*
- Atlas of Climate Change, by Kirstin Dow and Thomas Downing, a 2006 Planeta.com Book of the Year winner
- Breakfasts, lunches, and BBQ social
- Digital toolkit and professional website access
- Access to the network mentoring group

**Early Bird Special — the first 50 registered participants will receive one night lodging (single occupancy) or both nights (two participants sharing double occupancy) at the Purdue Memorial Union Club Hotel. Be one of the first!** Register at: [www.conf.purdue.edu/climate](http://www.conf.purdue.edu/climate)

*May 1, 2013 is the last day to register.*

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**David Archer** is a professor in the Department of the Geophysical Sciences at the University of Chicago and a Fellow of the American Geophysical Union, publishing on Earth’s carbon cycle and its interaction with global climate. Dr. Archer has written a series of books on climate change, including *Global Warming: Understanding the Forecast*, a text for non-science major undergraduates now in second edition; *The Long Thaw: How Humans are Changing the Next 100,000 Years of Earth’s Climate; The Climate Crisis, a summary of the IPCC Scientific Assessment; The Global Carbon Cycle, a primer in climate science*; and *The Warming Papers: The Scientific Foundation for the Climate Change Forecast.* He teaches classes on global warming, environmental chemistry, and global biogeochemical cycles, and is regular contributor to the climate science blog site realclimate.org.

**Conference Highlights**

**May 15**
- 11:00 Registration and check in
- 1:30—Welcome and Overview Professional Development Toolkit
- Midwest Climate: Past, Present, and Future
- Toolkit: Climate Continuum and Climate System
- BBQ Social at Prophetstown State Park

**May 16**
- Keynote: **David Archer**, University of Chicago
- Toolkit: A Changing Climate
- Climate Panel: Matt Huber, Otto Doering, Linda Prokopy, and Leigh Raymond, Purdue
- Toolkit: Greenhouse Gases, Greenhouse Effect and the Carbon Cycle
- Toolkit: Climate Data, Scales and Models
- Toolkit: Adaptations and Mitigation

**May 17**
- Climate Education: Meeting the Needs of Teachers and Students
- Toolkit: Action and Impacts
- Supplemental PD Resources
- Planning for Action
- 3:00 Wrap Up
In 2011, while working for the Chairman of the Joint Chiefs of Staff, Mark Mykleby co-authored A National Strategic Narrative, which advocates that the United States should take on sustainability as a national strategic imperative for the 21st century.

The New America Foundation — defining grand strategy as the correlation of America's economic engine, its foreign policy, and its governing institutions to meet the great global challenge of the era — has developed a strategic framework to functionally and pragmatically implement this concept. In the face of the combined challenges of a burgeoning world population; ecosystem depletion at a scale never before seen; the ongoing global contained depression; and a resilience deficit within global economic and political systems, America's response must be to lead by example.

Colonel Mark “Puck” Mykleby, USMC (Retired)

Mark Mykleby was commissioned as a second lieutenant in the Marine Corps following his graduation from the United States Naval Academy in 1987. After serving as a naval aviator, he became a special strategic assistant to the Chairman of the Joint Chiefs of Staff. Now retired from the Marine Corps, Mykleby serves as a senior fellow at the New America Foundation.
Purdue University
Discovery Park
April 25-26, 2013
9 a.m. - 3 p.m.

Engage future nanoscientists!

NanoDays™

Educational Activities About Nanoscale Science and Engineering For Students in Grades K-12

Volunteer today at the website below. nano.purdue.edu/nanodays

The first 100 volunteers to participate in NanoDays will receive a free t-shirt!
The NASA Langley Research Center (Hampton, VA) offers paid, year-round (3 sessions), highly competitive research internships for exceptional students to work with Langley engineers and scientists on some of the Nation’s most important, difficult, and challenging problems. The LARSS program emphasizes multi-disciplinary and collaboratively developed solutions to problems in such broad areas as (1) flight, including entry, descent, and landing, in all atmospheres; (2) Earth systems science, including the characterization of all atmospheres; (3) affordable, safe, and sustainable space exploration systems and technology; and (4) materials and structural concepts, analysis, and integration.

ELIGIBILITY REQUIREMENTS

- U.S. Citizenship
- Full-time student status at an accredited U.S. college or university
- Classification as a rising undergraduate junior or senior, or graduate student (master's or doctoral level)
- Cumulative 3.0 GPA on a 4.0 scale

PROGRAM SESSION DATES

  Application Deadline: Oct. 11, 2012
- 2013 Summer Session (10 weeks) June 4 – Aug. 9, 2013
  Application Deadline: Feb. 1, 2013
- 2013 Fall Session (15 weeks) Sept. 4 – Dec. 13, 2013
  Application Deadline: June 26, 2013

CONTACT INFORMATION

Debbie Murray
LARSS Program Coordinator
Phone: 757-864-5215
Fax: 757-864-9701
Deborah.B.Murray@nasa.gov

Find additional LARSS information, application, and deadlines at 
http://www.nianet.org/larss
COME LEARN ABOUT FULBRIGHT OPPORTUNITIES

grants for graduate study, research, or teaching assistantships abroad

Tuesday, April 23
Room 311 Stewart Center
11:30-noon Noon-12:30
12:30-1:00 1:00-1:30
1:30-2:00 2:00-2:30
2:30-3:00 3:00-3:30

Wednesday, April 24
Room 136 Memorial Union
11:30-noon Noon-12:30
12:30-1:00 1:00-1:30
1:30-2:00 2:00-2:30
2:30-3:00 3:00-3:30

Please RSVP at www.purdue.edu/niso

http://www.us.fulbrightonline.org/
About the GCC
MIT’s Program in Atmospheres, Oceans, and Climate and the Woods Hole Oceanographic Institution are pleased to announce the 7th annual GCC, a unique forum for graduate students, organized and run by graduate students. The goal of the GCC is to provide a discussion forum for graduate students undertaking research on climate and climate change in an array of disciplines. The format is designed to encourage new climate scientists to become acquainted with the details of diverse areas of climate research and place their own research in the context of the climate science community.

Food, lodging and conference costs will be provided by our generous sponsors. Limited travel funding will be available on an as-needed basis. Applications open April 15 on our website.

Who: Graduate students studying climate
What: 7th Graduate Climate Conference
When: November 1-3, 2013
Where: Woods Hole Oceanographic Institution
       Woods Hole, MA
Email: gcc-2013@mit.edu
Website: http://gradclimateconf.mit.edu
Abstract Deadline: June 7, 2013

Potential Sessions:
Paleoclimate  Atmosphere/Ocean Dynamics
Cryosphere  Biogeochemical Cycles
Clouds/Aerosols  Ecosystems/Biosphere
Hydrology  Climate Change Impacts
Climate Policy  Atmosphere/Ocean Chemistry