The EAPS Weekly News

UPCOMING EAPS MEETINGS

EAPS STAFF MEETINGS

Thursday, Nov. 20th
9:00-10:00 a.m.
HAMP 2201

EAPS RECEPTIONS AT CONFERENCES

GSA (Vancouver)
Monday, Oct. 20, 2014, 7:00 - 9:00 p.m.
Vancouver Hyatt Regency-Cypress Room

SEG (DENVER)
Monday, Oct. 27, 2014, 6:00 - 8:00 p.m.
Denver Hilton Garden Inn-Element Ballroom

AGU (SAN FRANCISCO)
Wednesday, Dec. 17, 2014, 7:00 - 9:00 p.m.
Thirsty Bear-Billar Room

AMS (PHOENIX)
Tuesday, Jan. 6, 2014, 6:30 - 8:30 p.m.
TBA

FALL FACULTY MEETING SCHEDULE

Tuesday, Oct. 7th and Nov. 18th
3:00-4:30 p.m.
HAMP 3201

EAPS OUTSTANDING ALUMNI EVENT

Fri., Oct. 10th
HAMP 2201

EXTERNAL REVIEW

Nov. 3rd & 4th

EAPS COLLOQUIA

Sulfur Cycling on Mars from a Perspective of Sulfur-Rich Terrestrial Analog
Anna Szynkiewicz
University of Tennessee
Thursday, Oct. 9th at 3:30 p.m.
HAMP 1252

Elevated Convective Systems and Extreme Rainfall
Russ Schumacher
Colorado State University
Tuesday, Oct. 7th at 4:00 p.m.
HAMP 2201

(Please see attached fall 2014 EAPS Colloquia)

EAPS NEWS

During the 58th annual meeting of the Association of Environmental and Engineering Geologists (AEG), in Scottsdale AZ, September 23-26, 2014, Terry R. West was awarded the Floyd T. Johnston Service Award at the annual banquet. This major award by the association is given for long standing service to AEG and is the 29th award given at an annual banquet. Dr. Christopher Stohr, of the Illinois State Geological Survey, and an alumnus of EAPS, served as the Citationist.

Also at the meeting Dr. West served as the co-moderator of the session on Sanitary Landfills and presented the oral paper “Tippecanoe County Indiana Landfill, A Case of Overdesign and Excessive Cost”.

UNDERGRADUATE AND GRADUATE STUDENT INFORMATION

PUMA & PUGS ICE CREAM SOCIAL

Friday, Oct. 10, 2-4 p.m. in the EAPS Undergraduate Lounge—Rm. 2294 HAMP

Please see attached flyer for more details.
REGISTRATION FOR SPRING 2015 CLASSES

The spring 2015 schedule of classes will be available Oct. 13th as will Time Tickets (the exact dates and time your ticket will open and close).

Purdue Student-Athlete Career Fair - October 6, 2014.
2:00pm - 6:00pm

2:00 pm - 4:00 pm Students Athletes Only
4:00 pm - 6:00 pm Open to all Campus
Mackey Arena Concourse

Employers include Caterpillar, Boston Scientific, Coyote Logistics, DishOne, CVS, Ford, GE, Geico, Indiana State Police, Indianapolis Metropolitan Police, and more (42 employers attending). View the full list here: http://goo.gl/gbhvHR

CORPORATE INTERNSHIPS IN LIMA, PERÚ SUMMER 2015

This opportunity is available to all majors at Purdue; informational call-out will be held on Wednesday, October 8, 2014 at 7:00 p.m. in BRNG 1260.

More information: Lupita Acosta-Roberts, acostang@purdue.edu and https://www.facebook.com/PurdueLima2015.

THE DISCOVERY PARK UNDERGRADUATE RESEARCH INTERNSHIP (DURI)

This program involves Purdue undergraduates in the interdisciplinary research environment of Discovery Park. The program provides opportunities for students to work with faculty affiliated with Discovery Park on cutting edge research projects that involve combining two or more disciplinary strengths. The program is open to sophomores, juniors and seniors from all majors with a minimum 3.0 GPA. Applicants must be a full time student in a degree seeking program.

Spring 2015:
Applications: October 21 - November 17
Interviews: November 19 - December 8
Internships: January 12 - May 9, 2015

EAPS HONORS COMMITTEE
Monday, Oct. 6, 2014
2:30pm
Room 2201/HAMP

ECOLOGICAL SCIENCE AND ENGINEERING SYMPOSIUM

Poster Session Callout - Register here - http://www.purdue.edu/gradschool/ese/symposium/poster.cfm
Present your research in THREE Minutes

Cash Awards for both Competitions!

2014 ESE SYMPOSIUM
# SCIENCE: Effective Interdisciplinary Communication
Monday, Oct. 20, 2014

Please see attached flyer for more information.

GRADUATE STUDENTS-CHILD WELLNESS DAY
Tippecanoe County Health Department
October 24, 2014
10:00 a.m.-4:00 p.m.
To register online, please click here: https://www2.itap.purdue.edu/bs/worklife/
See attached flyer for more information.

OTHER ANNOUNCEMENTS

INDIANA CLINICAL AND TRANSLATIONAL SCIENCES INSTITUTE (CTSI)
PREDOCTORAL TRAINING AWARDS IN TRANSLATIONAL RESEARCH

The Indiana Clinical and Translational Sciences Institute are seeking applicants for special predoctoral training awards in translational research.

Funding is available for pre-doctoral graduate students. Criteria for application include:

• Candidates must have completed at least one year of a pre-doctoral training program but cannot have completed more than their third year (i.e., applicants must be in the second or third year of their pre-doctoral program when they apply).
• Co-mentorship by faculty investigators from at least two different disciplines (preferably a clinician and a non-clinician scientist).
• Research that is translational in nature and takes advantage of the synergism that comes from working at this basic/clinical interface or clinical/community interface.
• U.S. citizen or permanent resident status.

Funding is for two years (with the 2nd year of funding contingent upon satisfactory progress). Benefits include a
stipend as well as health insurance and partial coverage of tuition and fees.

Trainees will be required to participate in a translational science course, attend a National CTSA meeting, and present their work at several Indiana CTSI pre-doctoral gatherings during the academic year.

Completed applications must be submitted by December 8, 2014, and awards will start July 1, 2015. Interested candidates must be prescreened for eligibility by submitting a copy of their CV to Colleen Gabauer by November 24, 2014 at ictsi@purdue.edu (Phone: 765-496-1016).

ASSOCIATE ENGINEERING GEOLOGIST OR ENGINEERING GEOLOGIST OPENING
(Depending on qualifications)

CLOSING DATE: 10 OCTOBER 2014

The Illinois State Geological Survey at the University of Illinois Urbana-Champaign is currently seeking an Associate Engineering Geologist or Engineering Geologist (depending on qualifications). For more information and to apply, visit https://jobs.illinois.edu/academic-job-board and search by the reference number A1400327.

To apply, please visit https://jobs.illinois.edu/academic-job-board to complete an online profile and to upload a 1) cover letter, 2) résumé/CV, 3) the names and contact information (including e-mail addresses) of three professional references. All requested information must be submitted for your application to be considered. Incomplete information will not be reviewed.

For further information please contact Lori Walston-Vonderharr, Human Resources, Illinois State Geological Survey, at lwalston@illinois.edu or 217-244-2401.

BIRTHDAYS

Wen-Wen Tung  Oct. 8

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 Fallon Seldomridge (fseldomridge@purdue.edu) by 5:00pm on Thursday 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, etc., see our departmental calendar at http://calendar.science.purdue.edu/eas/seminars.
Sept.  4 When Engineering Geology Meets Geotechnical Engineering
Gary Luce, Knight Piesold & Co., AEG President
Host: West

Sept.  9 The Impact of Climate Change and Agricultural Activities on Water Cycling in Northern Eurasia
Yaling Liu, PhD Candidate
Advisor: Zhuang
Tuesday, 4:00PM, Room 2201/HAMP

Sept. 11 The DOE Accelerated Climate Modeling for Energy Project
Dr. Robert Jacob, Argonne National Laboratory
Host: Harshvardhan

Sept. 18 The Origins of Volatile-rich Solids and Organics in the Outer Solar Nebula
Prof. Fred Ciesla, University of Chicago
Host: Minton

Sept. 25 Long-term Morphological Changes in Mature Supercell Thunderstorms Following Merger with Nascent Supercells
Prof. Ryan Hastings, Purdue University

Sept. 30 Making Weather and Climate Data More Usable for Agriculture Across the U.S. Corn Belt
Olivia Kellner, PhD Candidate
Advisor: Niyogi
Tuesday, 4:00PM, Room 2201/HAMP

Oct. 2 New Perspectives on Tidewater Glacier Mass Change
Dr. Tim Bartholomaus, University of Texas-Austin
Host: Elliott

Oct. 9 Sulfur Cycling on Mars from a Perspective of Sulfur-Rich Terrestrial Analogs
Prof. Anna Szynkiewicz, University of Tennessee
Host: Horgan

Oct. 16 Climate Impacts and Extremes in Large Earth System Model Ensembles
Prof. Ryan Sriver, University of Illinois-Champaign/Urbana
Host: Wu

Oct. 21 Towards a Paradigm Shift in the Modeling of Soil Carbon Decomposition for Earth System Models
Yujie He, PhD Candidate
Advisor: Zhuang
Tuesday, 4:00PM, Room 2201/HAMP

Oct. 23 Anthropogenic Signals in InSAR
Prof. Rowena Lohman, Cornell University
Host: Elliott/Flesch

Oct. 28 Giant Impacts on the Asteroid Vesta
Tim Bowling, PhD Candidate
Advisor: Melosh
Tuesday, 4:00PM, Room 2201/HAMP

Oct. 30 Abiotic and Biogeochemical Controls on Reactive Nitrogen Cycling on Boundary Layer Surfaces
Prof. Jonathan Raff, Indiana University
Host: Shepson

(continued on next page)
Nov.  6  Andean Foreland Basins: A Thermochronologic Perspective on Sediment Provenance, Deformation, and Basin Thermal Histories  
Prof. Julie Fosdick, Indiana University  
Host: Ridgway

Nov.  11  Profiling Developing Tropical Storm Environments Using GPS Airborne Radio Occultation  
Brian Murphy, PhD Candidate  
Advisor: Sun/Haase  
Tuesday, 4:00PM, Room 2201/HAMP

Nov.  13  Shale Gas Development and the Environment  
Prof. Mark Zoback, Stanford University  
Host: Nowack  
Thursday, 4:00pm, Room 210/MTHW (joint with the Physics Dept.)

Nov.  20  The Role of Monsoon Circulation on Tropopause Variability  
Prof. Yutian Wu, Purdue University

Dec.   4  CSI Patagonia: Tracking Glacial and Climate Dynamics over the Last Glacial Cycle  
Alessa Geiger, University of Glasgow  
Host: Harbor
One of the prominent geochemical features on Mars related to past water activity is the widespread occurrence of sulfate-bearing minerals on its surface. The Mg-Ca-Na-Fe sulfate minerals have been identified by rovers and orbital spectrometers in various locations of Mars. These sulfates exhibit different depositional environments including a variety of aqueous, sedimentary and eolian processes but there is also evidence for direct volcanic deposition. Generally, the origin of sulfate minerals on Mars is poorly understood and many competing hypotheses exist in the literature.

During my talk, I will present geochemical data describing factors controlling sulfur cycle in arid environments on Earth. I will discuss two terrestrial analogs from the Rio Grande rift (New Mexico) and show how they can be used to understand formation and distribution of sulfate minerals in some locations on Mars.
Extreme precipitation in the warm season can result from a variety of weather systems, but most such events in the U.S. occur in association with elevated convective systems, in which the unstable air feeding the convection originates above the surface. These events also tend to be poorly predicted by numerical weather prediction models. This presentation will look at past and possible future research directions for both surface-based and elevated mesoscale convective systems (MCSs). An overview of the climatology of extreme precipitation in the U.S. will be provided, and the synoptic- and mesoscale processes responsible for the maintenance of elevated, heavy-rain-producing MCSs will be discussed from the perspectives of both traditional composite analysis and a principal component analysis-based method. Quasi-idealized simulations, which incorporate either the mesoscale ascent, or the full three-dimensional variability, in elevated MCS environments, are used to address the respective roles of large-scale forcing for ascent, convectively generated cold pools, and convectively generated gravity waves. Using ensembles of forecasts, we explore the key sensitivities in rainfall amounts to initial conditions and physical processes, and hypotheses identified from the ensemble-based analyses are then tested in a more idealized framework. Finally, remaining limitations in understanding and prediction, along with plans for addressing them in the upcoming Plains Elevated Convection At Night (PECAN) field experiment, will be discussed.
PUMA & PUGS
Ice Cream Social

Friday, October 10th
2-4pm Hampton Hall
EAPS Student Lounge
The Purdue Graduate Student Government and the Purdue School of Nursing have come together to offer a Child Wellness Day for the children of Purdue Graduate Students. Services offered are:

- Physical Exams
- Immunizations
- Hemoglobin and Lead Screening
- Well Child Health Education
- Child Safety Education
- Hearing screen till 3pm
- Nutrition screening
- Speech/language screen 10am-2pm

TRANSPORTATION

- PVCC will provide a van that will pick up every 1/2 hour at PVCC and the Lyles Porter building and drop off at the clinic. Please provide car seats in order to utilize the van service.
- Parking is available all day long at the Harrison Street Parking Garage, need for “A” permit is waived for the day.
- The Boilermaker Special will be available for transport for a portion of the day. Pick up at PVCC and Lyles Porter on the 1/2 hour.

If your children have health insurance, please bring insurance card. Please bring copy of your children’s immunizations.
Predoctoral Training Awards in Translational Research

The Indiana Clinical and Translational Sciences Institute (CTSI) is seeking applicants for special predoctoral training awards in translational research.

In biomedical terminology translational research refers to what is popularly termed "bench to bedside", the process by which research in the lab "translates" into patient treatment. Translation may involve applying discoveries made during research (in the lab, through animal studies, etc.) to the development of clinical trials and studies in humans, or carrying out research aimed at enhancing the adoption of best practices, or both.

These two types of translational research are usually described as consisting of either “T1 research” (basic biomedical research, e.g. study disease at a molecular or cellular level, as it progresses to the development of new treatment options at the clinical level) or “T2 research” (enhancing access to and the adoption of evidence-based strategies in clinical and community practice, institutionalizing programs, products, and services to improve health). These awards are aimed at predoctoral students whose research is at any point along this spectrum.

Funding is available for pre-doctoral graduate students. Criteria for application include:

- Candidates must have completed at least one year of a pre-doctoral training program but cannot have completed more than their third year (i.e., applicants must be in the second or third year of their pre-doctoral program when they apply).
- Co-mentorship by faculty investigators from at least two different disciplines (preferably a clinician and a non-clinician scientist).
- Research that is translational in nature and takes advantage of the synergism that comes from working at this basic/clinical interface or clinical/community interface.
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