Upcoming MEETINGS

Monday, March 26
- EAS Faculty Meeting, CIVL 3201, 11:30-1:20pm

Monday, March 26
- EAS Gold Mine Committee, CIVL 2201 (Noon)

Tuesday, March 27 - PCCRC Faculty Search Candidate Seminar
- Dr. Axel Lauer, Pacific Research Center, University of Hawaii, “The Response of MBL Clouds to Global Warming: A Regional Model Study,” CIVL 2201, 9:30am (See flyer attachment)

Tuesday, March 27
- WISP – CIVL 2201, (Noon)
  Qianwen Luo: luo43@purdue.edu

Thursday, March 29
- Shankar Jayaganapathy, Purdue Alum, Senior Director with Oracle Enterprise Solutions Group (ESG), “Sailing the Oracle Sea: An Inside Look at the Largest Enterprise Software Vendor in the World,” LWSN 1142 3:00-4:30pm
  (See flyer attachment)

Friday, March 30 - PCCRC Faculty Search Candidate Seminar
- Dr. Donifan Barahona, NASA Goddard Space Flight Center. “Representation of ice nucleation in atmospheric models: Theory, challenges, and recent developments.” CIVL 2201, 9:30am

EAS & ENE SEMINAR

Thursday, March 29, at 3:30 pm in CIVL 1252: “A Cognitive Model for Implementing Knowledge: Moving Research into Practice Through Professional Development.” Dr. Dale Baker, Science Educator in Mary Lou Fulton Teachers College, Arizona State University. (See attached flyer)

UPCOMING DEFENSES

Monday, April 2, at 1:00 pm in CIVL 2201:

Tuesday, April 3, at 1:00 pm in CIVL 2201:
“Changes in Soil Carbon and Nitrogen Cycling in Response to Woody Plant Encroachment into Grasslands,” for Courtney Creamer; Advisor: Tim Filley.

Tuesday, April 3, at 1:30 pm in ME 3006:

Wednesday, April 4, at 8:00 am in CIVL 2201:
“Using satellite aerosol observations to constrain biomass burning emissions source strength in global chemistry transport model (GOCART),” for Mariya Petrenko; Advisor: Harshvardhan

UNIVERSITY NEWS SERVICE, March 20, 2012
Jay Melosh quoted in article, “Super-Earth unlikely able to transfer life to other planets.”
http://www.purdue.edu/newsroom/research/2012/120320MeloshSuperearth.html

REED TIMMER FT. WAYNE EVENT
Josiah Maas, EAS major, attended a presentation by Reed Timmer, Star of Discovery Channel’s “Storm Chasers” in Ft. Wayne, March 14, 2012. As he was leaving the presentation, a TV news team nabbed him for an interview, and was featured on the Ft. Wayne news that evening!

Dominator 2 Tornado Intercept Vehicle
**DOPPLER ON WHEELS**

Profs. Trapp, Min, and 13 Purdue students participated in a field research experience in Florida during Spring Break. Meteorological instruments, including a mobile weather radar (the “Doppler on Wheels”) on loan from the National Science Foundation, were used to investigate the structure and evolution of the sea breeze. The students were fortunate to sample a range of sea-breeze behavior during six mission days. The students will spend the remainder of the semester analyzing the data, and then use these analyses to address their sea-breeze hypotheses.

1st row: Daniel Burgin, Paul Brandt, Ryan Meiszberg, James Parish, Joe Woznicky, Kandace Kiefer, Brian Harvey, Melissa Mazer, Kayla Hudson, Cecille Villanueva, and Ki-Hong Min 
2nd row: Jeff Trapp, Chris Ward, Zach Zobel, and Andrew Arnold (Purdue/EAS alumnus, and Center for Severe Weather Research meteorologist/DOW technician)

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**CAMPUS-WIDE SEMINARS**

Richard Tapia, PhD. Inaugural Presidential Diversity Lecture, “Crisis in Academia: Need for New Leadership,” Wednesday, 3/28, 3:30-5:00, Fowler Hall. For more details, visit: [http://Diversity.purdue.edu/Tapia/](http://Diversity.purdue.edu/Tapia/)

**MOTOROLA Tech Talk**

Greg Skillman, Motorola Software Engineering Manager, “12 Steps to a Dynamic Career in a Tech Company,” Tuesday, 4/3, 5:30-7:30, ARMS 1010. (See flyer attachment)

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**A NOTE FROM OUR ACADEMIC COUNSELOR**

**Fall/Summer 2012 Registration**

If your earned semesters credit hours are 90 and above, you will be adding fall/summer classes in myPurdue this week (March 26- March 31).

**Scholarships?**

DegreedUp is promoting college and scholarships. They accept scholarship applications each month due on the 27th. See link for details: [http://www.degreedup.com/cash-scholarship.html](http://www.degreedup.com/cash-scholarship.html). Use their online application link; no need to contact your scholarship office.

**STEM Juniors, Seniors, MS Students**

On Saturday, April 14, the GEM Consortium will hold a GEM Grad Lab at Notre Dame University from 9:00am until 3:00pm. Purdue Engineering will be financially supporting this event which provides attendees with an information notebook, lunch, and transportation.* GEM representatives will be giving workshops in which students will learn how to successfully apply to grad school and find funding opportunities and a panel of speakers will prove their insight and experiences on graduate school and beyond. More information and registration at: [https://egem.gemfellowship.org/events/ViewEvent.aspx?contextID=10060](https://egem.gemfellowship.org/events/ViewEvent.aspx?contextID=10060).

*IMPORTANT: If you register for this event, you need to contact Susan Fisher [fishersk@purdue.edu](mailto:fishersk@purdue.edu) for your Purdue transportation reservation.

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**2012-13 PRF INTERNATIONAL TRAVEL GRANT ANNOUNCEMENT**

The first round of the 12-13 PRF International Travel Grants is open. An application form can be obtained by selecting appropriate links on the following Web page: [http://www.purdue.edu/research/vpr/funding/itg.php](http://www.purdue.edu/research/vpr/funding/itg.php)

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**MARCH BIRTHDAYS!!!**

9th – Ki-Hong Min
11th – Elizabeth McNie
17th – Greg Michalski
21st – Larry Braile
24th – Megan Sapp Nelson
26th – Joseph Francisco
27th – Dongbin Xiu
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 EAS 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 EAS 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.
ABSTRACT: Clouds play a key role in climate and the hydrologic cycle. The response of clouds to large-scale climate forcing such as that resulting from increased greenhouse gas concentrations is still poorly understood and remains a major uncertainty in projections of future climate. This is particularly the case for marine boundary layer (MBL) clouds, which makes the East Pacific Ocean a region of particular interest for studying the sensitivity of these clouds to environmental changes because highly climate relevant cloud regimes such as stratocumulus clouds and trade wind cumuli are frequently found there. In this study we use the University of Hawaii’s regional climate model iRAM to dynamically downscale climate projections for the end of the 21st century for the tropical and subtropical East Pacific in order to address the following questions: 1) How do MBL clouds over the East Pacific respond to global warming? 2) What are possible mechanisms for changes in cloud properties? 3) How do details of the cloud parameterizations affect our results?

With co-authors: Ralf Bennartz, Kevin Hamilton, Yuqing Wang, and Jean-Louis Brenguier
Sailing the Oracle Sea: An Inside Look at the Largest Enterprise Software Vendor in the World
This week: “A Cognitive Model for Implementing Knowledge: Moving Research into Practice Through Professional Development”

Dr. Dale Baker, Science Educator in Mary Lou Fulton Teachers College, Arizona State University

Very little research finds its way into the classroom in a timely manner, if at all, and innovations that are implemented in classrooms are often not sustained. This lack of success is attributed to 1) attempts based on false premises; 2) ignoring the cognitive process that underpins the process of change; 3) differing viewpoints of researchers and teachers as to what is important, relevant, and feasible; and 4) the way we currently go about providing professional development.

I will present a cognitive model to support moving research into classroom practice, strategies that facilitate the implementation of current research findings into classroom practice, and a structure for professional development that will help researchers engage teachers in the implementation of research-based practices in their own classrooms. In addition, I will present lessons learned from an attempt to change teacher practice through professional development and to measure teachers’ fidelity of implementation of research-based instructional strategies presented through professional development.

Dale Baker is a science educator in Mary Lou Fulton Teachers College at Arizona State University. She is a Fellow of the American Association for the Advancement of Science and member-at-large of the Steering Committee for the Education section of AAS. She is also a fellow of the American Educational Research Association and an affiliate of the Learning Sciences Institute. She has been editor of the Journal of Research in Science Teaching and currently is on the Advisory board of the Journal of Engineering Education. Her research focuses on teacher professional development, equity issues in science and teaching and learning in science and engineering.

For more information on ENE seminars, contact Dr. Demetra Evangelou at evangeloud@purdue.edu. Updated schedule available at www.purdue.edu/ENE/research/seminars

Graphic: Network of engineering education research community, courtesy of Dr. Krishna Madhavan (iKNEER: Interactive Knowledge Networks for Engineering Education Research).
FEATURING:
Motorola Software Engineering Manager,
Greg Skillman

TOPIC: 12 STEPS TO A DYNAMIC CAREER IN A TECH COMPANY

Free Food, Giveaways, and a Q&A session
Plus a contest to win a Motorola Xyboard!

WHEN:
APRIL 3, 2012
5:30 p.m. – 7:30 p.m.

WHERE:
ARMS 1010

Please RSVP to tdmedley@purdue.edu
www.motorola.com/careers