

January 30, 2012

Upcoming MEETINGS

Every Monday

- EAS Gold Mine Committee, CIVL 2201 (Noon)

Tuesday, January 31

- EAS Women in Science, CIVL 2201 (Noon)

Wednesday, February 1

- EAS Honors Committee, CIVL 3223 (2:30pm)

Tuesday, February 7

- EAS Rock Display Comm, CIVL 2201 (3:30pm)
- CoS Faculty Meeting, TBA (3:30pm)

Thursday, February 9

- Schlumberger Info Session, CIVL 2201 (6:30pm)

Monday, February 13

- EAS Undergrad Comm, CIVL 2201 (9:00am)

Upcoming EAS SEMINAR

Thursday, February 2 2012, at 3:30 p.m. in CIVL 1252: "The 2008 Mw 7.9 Wenchuan, China, Earthquake: InSAR, Coseismic Slip, and the Accumulated Stresses." Eric A. Hetland, University of Michigan. (Abstract)

Refreshments at 3:00 p.m. in CIVL 2201

Upcoming EAS EVENTS

EAS GRAD EXPO will be held on February 3 – 4, 2012. For more information or to volunteers, please contact Mallie Toth (toth2@purdue.edu).

RECENT EAS PUBLICATIONS

Richardson, T., H. Gilbert, M. Anderson, K. D. Ridgway, 2012, Seismicity within the actively deforming Eastern Sierras Pampeanas, Argentina, *Geophys. Jour. Int.*, 188, 408-420, doi: 10.1111/j.1365-246X.2011.05283.x.

CAMPUS-WIDE SEMINARS & EVENTS

A University Department: The Musical February 9th, 7:00 pm, Fowler Hall

A University Department: The Musical uses unconventional music and staging to depict a day in the life of individuals who make up a department and are often unaware of each others' work experiences.

Stories are drawn from a variety of sources, including research from the Women of Color Academy Project, national ADVANCE studies, and student interviews. Following the show, a facilitated dialogue prompts audience members to share their reactions and perspectives and to suggest practical and positive ideas for changes that can improve departmental climate. The cast includes professional actors and singers from the University of Michigan and the Ann Arbor community.

GRANT INFORMATION

The Department of Homeland Security has released a funding opportunity announcement for **HS-STEM Career Development Grants (CDG)**. The CDG program enables U.S. accredited four-year colleges and universities with existing and/or proposed programs in homeland security-related STEM to award undergraduate scholarships and/or graduate fellowships to students who intend to pursue homeland security scientific, technology, engineering, or mathematic careers. Requests either up to \$200K for undergraduate scholarships for 3 years or up to \$500K to fund multiple graduate fellowships for up to 5 years. An institution can apply for both programs but awards are limited to one per institution. Additional information can be found at <http://www07.grants.gov/search/search.do?&mode=VIEW&opId=138893>.

For this opportunity, Purdue may submit **one application per eligible department** although only one award can be made per institution. Internal deadlines for this limited submission competition are as follows:

Monday, February 6: Letters of Intent due to the OVPR.

Monday, February 20: Preproposals due to the OVPR.

Thursday, February 23: Preproposal rankings due to the OVPR.

Sponsor deadline is March 22, 2012.

Please note: Letters of intent, preproposals, and rankings to the OVPR should be e-mailed to OVPRlimited@purdue.edu. Purdue's limited submission policy and template for letters of intent may be found at

<http://www.purdue.edu/research/vpr/rschdev/lid1.php>. For any case in which the number of internal letters of intent received is no more than the number of proposals allowed by the sponsor, the OVPR will notify the PI that an internal preproposal will be unnecessary.

INDIANA ACADEMY OF SCIENCE

IAC is holding its 127th Annual Academy Meeting on March 10, 2012 at Purdue University. To register visit www.indianaacademyofscience.org

DISCOVERY LEARNING RESEARCH CENTER SHOWCASE & SYMPOSIUM

Join us for an afternoon of information and conversation as we explore ways that partnering with the DLRC can enhance your STEM research and proposals. More detailed information at: <http://www.purdue.edu/discoverypark/learningcenter/DLRC-SandS-2012.php>.

TRAVELING IN CHINA? CONVERSATIONAL CHINESE COURSE

A non-credit course intended to develop the participants' oral skills for self-expressions at elementary level, with a focus on tourism. Ideal for students, staff and faculty who are participating in or leading Study Abroad courses, or engaging in research and learning project with Chinese-speaking regions. Course materials will be provided. The course runs March 21 – April 25 on Wednesdays from 7 – 9 pm, Stanley Coulter 114. Fee is \$120. Register online at: www.distance.purdue.edu/china

2012 GRADUATE STUDENT RESEARCH AWARDS COMPETITION

The Purdue University Chapter of Sigma Xi, the scientific research society, is conducting a **Graduate Student Research Awards Competition** in the format of a scientific poster session. There will be a first prize of \$200, provided by Sigma Xi and The Graduate School, and recognition for other outstanding posters in each of the four research areas: Physical Sciences, Life Sciences, Engineering, and Behavioral and Social Sciences.

To participate: Submit an abstract of your research by **5:00 pm, Wednesday February 1, 2012**. These will be published in a booklet. To obtain an abstract submission form, go to the Purdue Sigma Xi website <http://www.purdue.edu/research/sigmaxi/gsrpa.shtml> and click on 'Graduate student'. Applications, in electronic format, may be submitted to rhoward@purdue.edu by February 1, 2012. Those who submit abstracts will receive detailed information about poster preparation. The 2012 SIGMA XI GRADUATE STUDENT RESEARCH AWARDS COMPETITION POSTER SESSION will be held in Steward Center, Rooms 214/218 on

Wednesday, February 15, 2012. The session will run from 12:30 - 4:00 pm (for poster set up and viewing) and from 6:00 - 9:00 pm (for presentation and judging).

For additional information, please contact: Richard D. Howard (494-8136 or rhoward@purdue.edu)

CENTRAL INDIANA SEVERE WX SYMPOSIUM

The 2012 Central Indiana Severe Weather Symposium is a biennial weather information session for spotters and weather enthusiasts, providing interesting and informative speakers on severe weather related topics. Confirmed speakers include The Weather Channel's Mike Bettes, nationally-known tornado damage expert Tim Marshall, Fox 59's Brian Wilkes, and meteorologists from NWS Indianapolis and Northern Indiana. CISWS will be held on Saturday, March 10th, 8:30am - 4:00pm, with registration and breakfast beginning at 7:15am. Discounted student registration is available. For complete information, including pre-registration:

http://www.crh.noaa.gov/news/display_cmsstory.php?wfo=ind&storyid=40755&source=0

SCHLUMBERGER VISIT TO EAS

Winston Anyanwu, Schlumberger, will present an informational session at 6:30pm on Thursday, February 9th in CIVL 2201 (food provided). All who are interested in pursuing a career with Schlumberger are welcome to attend. Hear about their current job opportunities, chat with the recruiter and have your resumes reviewed.

On Friday, February 10th, Schlumberger will be conducting interviews in the department. They would like to meet with students who fit the following criteria:

- graduating from Dec 2010 to October 2012
- studying Earth Sciences, Geology & Geophysics at all degree levels (BS, MS, PhD)
- The positions are open to US citizens and permanent residents, refugees, asylum status, F1 (International) students (Schlumberger sponsors potential international students for certain positions).

If you are interested in job opportunities with Schlumberger, you must apply online in their **Geoscience & Petrotechnical** career group at careers.slb.com for their **students and recent graduates**. Also, please send your resume directly to Winston at: wanyanwu@slb.com.

JOB / INTERNSHIP ANNOUNCEMENTS

Morning Meteorologist/Reporter opening in Lima, Ohio. We are looking for personality driven pro interested in working in both weather and news. Five mornings a week. NO WEEKENDS (well maybe on occasion). College degree required, meteorology degree preferred. Knowledge of Weather Central 3D Live a plus. Previous on-air experience preferred. Mandatory Drug Test. WLIO offers excellent benefits including immediate 401K plan. Must have good driving record. Send Link or DVD, cover letter and resume to ltegels@wlio.com or WLIO-TV, Lon Tegels, News Director, 1424 Rice Ave. Lima Ohio 45805. WLIO-TV an equal opportunity employer.

CIMMS at OU is looking for a Research Associate to collaborate with scientists and instructions at the NWS Training Center in Kansas City, MO. Minimum qualifications include an MS in Atmospheric Science. (see attachment for more information).

NASA is accepting applications from science and engineering post-docs, recent PhDs, and doctoral students for its 24th Annual Planetary Science Summer School, which will hold two separate sessions this summer (18-22 June and 16-20 July) at the Jet Propulsion Laboratory in Pasadena, Calif. Applications are due March 28, 2012. Partial financial support is available for a limited number of individuals. Further information is available at <http://pscischool.jpl.nasa.gov>

ATTN GEOSCIENCE STUDENTS: **The 2012 AAPG/SEG Spring Break Student EXPO** will be held March 14 – 16, 2012 at The University of Oklahoma. See attached flyer for more information.

Society of Petroleum Engineering - Midwest Gas Storage Section Scholarship Program

The Midwest Gas Storage Section of the SPE will award a \$1000 scholarship for the 2012 – 13 academic year to one BS or MS student who wishes to pursue a career in the petroleum industry. The deadline for this competitive scholarship is March 30, 2012. Students may download the necessary forms on the website: <http://connect.spe.org/MidwestGasStorage/AboutUs/Scholarships/>,

A NOTE FROM OUR ACADEMIC COUNSELOR

Summer Study in France 2012

No French language needed and No Tuition! The Universite Joseph Fourier in Grenoble, France is offering a new summer program. Because it is a new program, they will not be charging Purdue students tuition this summer. There are courses in physics, computer science, and math. All three departments have approved these courses for direct Purdue credit. The Study Abroad Office webpage for the program can be found at <http://www.studyabroad.purdue.edu/programs/flyer.cfm?flyer=997>.

Closer to Home

Purdue University's College of Education and Kappa Delta Pi, an education student honor society, are hosting a community screening of the documentary "American Teacher" on **Tuesday, January 31** at 6 pm in Fowler Hall, Stewart Center. "American Teacher," narrated by Academy Award-winner Matt Damon, is a definitive look at the state of teaching in America that offers a solution to the education crisis. View the trailer at: <http://www.youtube.com/watch?v=dzvD9v7CbEE> .

Purdue Engineering Student Council Expo Wednesday, **February 8**, in the PMU Ballrooms from 9 am – 4 pm with seminars on February 7 and any interviews Feb. 9-10. See <http://www.purdueesc.org/events/expo> for updates. This event is similar to the Industrial Roundtable held in September and is an opportunity to interview for jobs or internships with engineering companies.

2012 Indiana GIS Conference

Opportunities for students from any field are invited to participate in the 2012 Indiana GIS Conference May 8 - 9 in Bloomington, IN

- IndianaMap Poster Competition with awards of \$100-\$200
- Volunteer for a half or full day to receive free registration
- Discounted student rates to attend the conference for non-volunteers
- Submit an abstract to present: Deadline February 10th

For more information about any of these opportunities, visit www.igic.org/conference or contact Laura Haley at haley1@bloomington.in.gov

FEBRUARY BIRTHDAYS!!!

7th - Mike Baldwin

14th – Andrei Gabrielov

15th – Yuch-Ning Shieh

28th – Brenda Beitler-Bowen

28th – Terry Wade



IMPORTANT NOTICE ABOUT THIS NEWSLETTER

This newsletter will now be 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 Suzanne Zurn-Birkhimer (zurnbirk@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>.



Earth & Atmospheric Sciences Seminar

The 2008 Mw 7.9 Wenchuan, China, Earthquake: InSAR, Coseismic Slip, and the Accumulated Stresses

Eric A. Hetland

University of Michigan

The M_w 7.9 Wenchuan earthquake occurred on 12 May 2008, along the middle segment of the Longmen Shan fault zone (LMSfz), marking the eastern margin of the Tibetan plateau and the Sichuan basin in China. The Wenchuan earthquake was devastating to Sichuan Province, with about 70-86 thousand dead and wide-spread damage. The LMSfz is characterized by significant topographic relief indicating that deformation is active, yet prior to the 2008 earthquake this area was fairly seismically quiet and GPS revealed little strain accumulation along the faults. We use ALOS/PALSAR imagery to produce interferometric synthetic aperture radar (InSAR) interferograms of coseismic deformation. We find that many of the radar acquisitions associated with the Wenchuan earthquake were strongly affected by ionospheric disturbances coincident with the rupture. Using InSAR interferograms, as well as GPS data, we investigate the coseismic fault slip that occurred during the 2008 earthquake. The Wenchuan earthquake was oblique-thrust, but coseismic slip models indicate that the fault slip rake varied during the rupture, with progressively more strike-slip occurring on steeper faults as the rupture propagated from the SW to the NE. We further use geodetic-based inferences of coseismic slip to investigate the stresses in the LMSfz that led to the 2008 earthquake, and the relation of these stresses to strain-accumulation. Our initial analysis does not rely on models of static frictional stability, although we are exploring such models in order to seek further constraints on the stresses responsible for the Wenchuan earthquake .

Thursday, February 2, 2012

3:30 p.m.

Room 1252, CIVL Bldg

PURDUE
UNIVERSITY

*Refreshments at 3:00 pm.
Room 2201 CIVL*

Research Associate

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at The University of Oklahoma is currently looking for a Research Associate to collaborate with scientists and instructors at the National Weather Service Training Center (NWSTC) in Kansas City, MO to transition meteorological research and forecasting tools into the operational environment, develop practical applications for emerging technologies, incorporate risk communication skills into the warning and forecast system, and optimize NWS forecast delivery systems. NOAA's Advanced Weather Interactive Processing System 2 (AWIPS2) enables NOAA's meteorological research, development and operational services to be integrated and leveraged with other federal, regional, state and local agency activities and the private sector.

The duties of this position are:

1. Develop expertise in meteorology and the delivery of forecasts and decision support services.
2. Develop expertise in applying meteorological forecasting and product dissemination and decision support services with the Advanced Weather Interactive Processing System 2 (AWIPS2)
3. Develop skills in operation of Linux, HP, and Windows workstations.
4. Participate in NWS designed simulations to study the effectiveness of newly developed applications and improve field use.
5. Assist in testing and fielding new capabilities and services in a simulated operational environment; by validating both scientific integrity and human factors, deployment risks will be reduced prior to implementation.
6. Review technical and professional publications, and attend seminars to stay abreast of current developments in meteorological and hydrological applications.
7. Attend meetings and professional conferences to understand new meteorological and hydrological applications and interact with the operational community.
8. Perform related duties as assigned to support the development and delivery of user and focal point training for the Advanced Weather Interactive Processing System 2.

The minimum qualifications for the position are:

1. A Master's Degree in Meteorology, Atmospheric Science or related area;
2. Or a Bachelor's Degree in Meteorology, Atmospheric Science or related area and at least three years' experience in operational meteorology, operational hydrology or applied research;
3. Emphasis will be placed on applicants with experience with operational forecast operations, operational forecast systems, risk communication and adult education.

Applicants should identify expertise with any of the following areas: operational forecasting, forecast systems, risk communication and adult education. Strong oral and written communication skills are needed for the position. Please indicate experience with Linux (or UNIX) operating systems, National Weather Service systems, programming skills and commercial software applications specifically Dreamweaver, Flash, and graphic design programs.

Normal working hours will be observed except for occasional irregular hours during system testing or workshops. Incumbents will receive training and gain expertise in the latest meteorological forecasting systems. This position is located in Kansas City, MO.

Supervision will be provided by CIMMS staff. Technical oversight will be provided by CIMMS staff, NWS meteorologists/hydrologists, and NWSTC management. The incumbent will work under general supervision but is expected to determine action to be taken in handling all but unusual situations. Incumbents in this position are not expected to supervise other employees, but may serve as leaders of technical teams.

The beginning salary range will be \$33,000-\$36,000 per year with University of Oklahoma benefits.

Information on benefits may be found at <http://www.hr.ou.edu/employment/WorkingatOU.asp>.

The position can begin as soon as February 13, 2012.

To apply for the position, please forward your resume, cover letter and list of three references to:

Tracy Reinke
Executive Director, Finance and Operations
University of Oklahoma CIMMS
120 David L. Boren Blvd., Suite 2100
Norman, OK 73072-7304
treinke@ou.edu

JOB REFERENCE: KC12

The University of Oklahoma is an equal opportunity/Affirmative Action employer.



2012 AAPG/SEG SPRING BREAK STUDENT EXPO



AAPG

American Association of Petroleum Geologists
Partnering for Your Success

Hosted by



ConocoPhillips
SCHOOL OF GEOLOGY & GEOPHYSICS
The University of Oklahoma

MARCH 14 — 16, 2012

- ▶ Private Interviews
- ▶ Multiple Short Courses
- ▶ Scientific Poster Contest
- ▶ SEG Challenge Bowl
- ▶ Company Booth Exhibits
- ▶ Field Trip
- ▶ Door Prizes

Field Trip

Networking

Find your perfect fit!

Poster Contest

Short Courses

Challenge Bowl

Interviews

GEOSCIENCES STUDENTS

Go to <http://geology.ou.edu> and click on "2012 Spring Break Expo" to register online! Submit resumes and abstracts to lvassmer@ou.edu.

**REGISTRATION OPENS
JANUARY 10th**

COMPANIES

Review resumes and abstracts online. Booth space will be provided for company exhibits and rooms for private interviewing. Three sponsorship levels! Contact Lisa Vassmer to register, lvassmer@ou.edu, 405-325-0360, or download the forms off our Web site and fax to 405-325-3140.

REGISTRATION OPENS JANUARY 10th

See Web site for links to Expo **AGENDA**, host hotel, map, SEG Challenge Bowl details, short course descriptions, and poster guidelines, <http://geology.ou.edu>.

