CUSHMAN HONORED WITH A NAMED SPECIAL SESSION AT CONFERENCE

A special session in honor of John Cushman, distinguished professor of earth and atmospheric sciences and a professor of mathematics, will be presented at the 2011 Society for Industrial and Applied Mathematics (SIAM) Conference on Mathematical & Computational Issues in the Geosciences, which will take place March 21-24 in Long Beach, Calif.

The session is titled “Physics of Porous Media in Honor of John Cushman.” Presentations during this session will span the topics of Cushman’s research career and will have a general focus on physics of fluids in porous media over time, scales ranging from picoseconds to years and spatial scales ranging from angstroms to miles. Specific problems of interest include species separation and phase change in micropores, dispersion in media with continuously evolving heterogeneity, swelling colloidal systems, reservoir-scale dispersion of environmental contaminants, transconjugation of genes between microbes and their evolution in the environment and theories for the evolution of earth plates.

Cushman was named a GSA Fellow in 2010, a Purdue distinguished professor in 2005, an American Geophysical Union Fellow in 1996, a recipient of the Purdue Herbert Newby McCoy Award in 1995 and a Soil Science Society of America Fellow in 1990.

EAS TECHNOLOGY SUPPORT NEWS

ITaP Surveying Faculty and Staff about Research Computing Needs and New Supercomputer

ITaP is planning a new community cluster supercomputer to be built in 2011 and gathering information about what Purdue faculty and staff may need either as a part of the new system or in computers for departmental or individual use. The combined purchase allows Purdue to negotiate a better price with vendors in both cases. February 25 is the deadline for completing the online survey at: https://purdue.qualtrics.com/SE/?SID=SV_5jBW4tFRIf4EWKE

UPCOMING MEETINGS

Tuesday, February 15
- Undergraduate Committee, CIVL 2201 (2:30 p.m.)

Friday, February 18
- EAS Executive Committee, CIVL 2201 (9 a.m.)

Monday, February 21
- EAS Faculty Meeting, CIVL 2201 (11:30 a.m.)

EAS SEMINAR

Thursday, February 17, at 3:30 p.m. in CIVL 1252:
“Water beyond Earth: A Remote-Sensing Perspective on the Role of Aqueous Processes in Our Solar System.” Ralph Milliken, University of Notre Dame

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

THESIS DEFENSE

Friday, February 18, at 1 p.m. in CIVL 2201: "A Geophysical and Geological Analysis of the Development, Structure, and Activity of the Eastern Sierras Pampeanas, Argentina." MS defense for Tonya Richardson; Advisor: Hersh Gilbert

EAS LIBRARY’S NEWEST BOOKS

Click here to see a list of new books in the EAS library in the last two weeks.

FROM OUR BUSINESS OFFICE

Risk Management Reminds University Personnel to Think About Emergency Plans for International Travel – 02/10/11

Concerns for the safety of Purdue personnel who travel abroad recently hit home. While traveling in Egypt, faculty member Michael Witt and his family were victims of that country’s current social unrest, which led them to a difficult time returning to the U.S.

“Now more than ever it is critical to assure you have a contingency or emergency plan in place before you travel internationally,” states Mark Kebert, risk manager for the Purdue system. Read more...
INSURANCE REMINDER
This is a reminder of the requirement for faculty and staff to have supplemental international insurance when traveling abroad for Purdue activities. The January 28th email edition of PurdueToday included an article Travel Department Updates Its Form 17 which discusses the need for and utility of the Form 17. This is the mechanism for insurance to be ordered for faculty and staff.

‘ON THE CUTTING EDGE’ WORKSHOPS
Workshop for Early Career Geoscience Faculty: Teaching, Research, and Managing Your Career
Conveners: Heather Macdonald & Michael Wysession
June 12-16 with optional visit to the National Science Foundation on June 17
College of William and Mary, Williamsburg, VA
Application deadline: March 4, 2011
http://serc.carleton.edu/NAGTWorkshops/earlycareer2011/index.html

Preparing for an Academic Career in the Geosciences: A Workshop for Graduate Students and Post-docs
Conveners: Barbara Tewksbury, Katryn Wiese, Robyn Wright Dunbar, and Edwin Harvey
June 6-9, 2011
University of Nebraska, Lincoln, NE
Application deadline: March 11, 2011
http://serc.carleton.edu/NAGTWorkshops/careerprep2011/index.html

WISP EVENTS
February 25th in CIVL 2201 from 12:00pm - 1:00pm: Dr. Krockover on “Equity, gender, and diversity issues related to science education teaching and outreach from pre-school through college.”

Rescheduled (snow-day) WISP Stress Saver Program: March 8th, CIVL 2201 from 12:00pm - 1:00pm.

2011 TSOP GRADUATE STUDENT GRANT PROGRAM, THE SPACKMAN AWARD
The Society for Organic Petrology (TSOP) invites applications for graduate student research grants, the Spackman Award. The purpose of the grants is to foster research in organic petrology (which includes coal petrology, kerogen petrology, organic geochemistry and related disciplines) by providing support to graduate students... Read more...

A NOTE FROM OUR ACADEMIC COUNSELOR
Summer Camp Job Fair
Friday, February 18, 2001. PMU. South Ballroom 11:00 a.m. – 3:00 p.m. Information session: Thursday February 17 in Kran G002 from 6:30-7:30 p.m. Gain valuable experience working at a summer camp. The information session will give you a chance to interact with camp representatives, learn more about the skills you will develop, and to better prepare for the job fair – which has camps from all over the US looking for people to hire. More information on what you do at camp and questions to ask.

2011 Undergraduate Research and Poster Symposium
The 2011 Purdue URPS is Tuesday, April 12, 2011 – start planning now. Students need to register by March 8 to be considered for a Best Abstract Award; the final deadline to register is Tuesday, March 15, 2011. This event is open to any undergraduate student doing research. More info here (some links not live yet).

Reminder: The deadline to submit your work to The Journal of Purdue Undergraduate Research is February 15, 2011.

Transition to Work
The Disability Resource Center (DRC), the DRC Peer Mentor Program, and the Center for Career Opportunities are co-sponsoring three Disability Awareness Events during the months of February, March, and April focusing on the topic of transitioning to work for students with disabilities. These workshop events will include refreshments, presentations, and interactive activities to assist students in preparing for their eventual employment. The three sessions will be hosted from 7:00-8:30 p.m. in LSWN 1106 on the following dates:

1) February 23rd
   Rights and Responsibilities of Employees with Disabilities and Capitalizing on Strengths

2) March 23th
   Workplace Etiquette and Networking Event

3) April 6th
   Real World View: Employer and Employee Perspectives (Panel Discussions)

Nancy
HAPPY BIRTHDAY!!!
Andrei Gabrielov – February 14
Virginia Ewing – February 14
Yuch-Ning Shieh – February 15

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 Gina Richey (grichey@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.
The Birck Nanotechnology Center at Purdue University will be hosting an Asylum Research Atomic Force Microscopy (AFM) Workshop on February 17, 2011. The workshop will include lectures and equipment/imaging demonstrations for both life science applications and electrical characterization of materials. The AFM Workshop is open to current AFM researchers looking to learn more about AFM techniques and who want to “ask the experts”, as well as those new to AFM that want to learn how AFM can be used in their own research. A small registration fee of $30 will be charged to cover lunch and coffee breaks. Additional information and registration for the workshop can be found at [http://www.conf.purdue.edu/atomic](http://www.conf.purdue.edu/atomic).

### Birck Nanotechnology Center Lectures

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<tr>
<th>Time</th>
<th>Lecturer(s)</th>
<th>Topic</th>
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<tbody>
<tr>
<td>8:00a.m.</td>
<td>Registration</td>
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<tr>
<td>8:30</td>
<td>Monica Allain (Birck Nanotech Ctr.)</td>
<td>Welcome</td>
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<tr>
<td>8:40</td>
<td>Xin Xu (Birck Nanotech Ctr.)</td>
<td>Introduction to Birck AFM Center</td>
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<tr>
<td>9:00</td>
<td>Irene Revenko (Asylum Research)</td>
<td>Introduction to AFM for Life Science Applications – Including Combined AFM and Optical Measurements</td>
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<tr>
<td>10:00</td>
<td>Break</td>
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<tr>
<td>10:15</td>
<td>Amir Moshar (Asylum Research)</td>
<td>Force Measurements and Force Mapping</td>
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<tr>
<td>10:45</td>
<td>Dr. Robert Moon (Purdue University), Ryan Wagner</td>
<td>Uncertainty Quantification in AFM Force-Displacement Measurements</td>
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<td>11:45</td>
<td>Lunch provided</td>
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#### Tutorial - Room BRK 2001

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<tr>
<th>Time</th>
<th>Topic</th>
<th>Lab</th>
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<tbody>
<tr>
<td>1:00 - 2:15</td>
<td>Sample Prep for Biological Samples</td>
<td>Conductive AFM Lab</td>
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<tr>
<td>2:30 - 3:45</td>
<td>Force Measurements and Mapping, Spring Constant Calibration</td>
<td>Cell Imaging Lab</td>
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<tr>
<td>4:00 - 5:15</td>
<td>Conductive AFM Tips and Tricks</td>
<td>Cell Imaging Lab</td>
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Attendees may sign up for one Equipment Lab and may attend any/all tutorials that when they are not in their scheduled lab.

### Contact

For additional information, contact:

- **Terry Mehr**
  - Asylum Research
  - 805-696-6466
  - terry@asylumresearch.com

- **Xin Xu**
  - Purdue University
  - 765-494-0237
  - xu55@purdue.edu

- **Geni Greiner**
  - Conference Coordinator
  - Purdue University
  - 765-494-7219
  - ghgreiner@purdue.edu
Gender and Science Seminar Series

Why So Slow?
The Advancement of Women

Virginia Valian, Ph.D.
Thursday, February 17, 2011
5:00 pm
Fowler Hall

Virginia Valian, Distinguished Professor of Psychology and Linguistics at Hunter College and the Graduate Center of the City University of New York (CUNY), is the author of the landmark book “Why So Slow? The Advancement of Women.”

Abstract

Women are conspicuous by their absence at the most prominent levels of science, medicine, business, law, and academia. Women are sparsely represented on the editorial boards of leading journals, on the steering committees of professional organizations, and in groups like the National Academy of Sciences. Women are thinly represented among full professors at major research universities. Why?

Valian’s explanation of women’s slow advancement in the professions details how and why women are disadvantaged and men advantaged - even though all the participants sincerely hold egalitarian and meritocratic attitudes. Valian will review experimental data that demonstrate how gender schemas - held by men and women alike - produce subtle overvaluations of men and undervaluations of women. As a result of many small differences, men are able to accumulate advantage more quickly than women.

Valian includes remedies: institutions and individuals can work to achieve genuinely fair organizations that make full use of everyone’s talents.