e-news updates from the PSIEE listserv!
Can also view as pdf online at: http://www.psiee.psu.edu/news/listservMessages.asp

Social Media
For timely updates on energy and environmentally-related news and announcements, we invite you to follow PSIEE on Twitter or like us on Facebook.

Happy Holidays to all!

News Highlights and Announcements

- **Analysis of Marcellus flowback finds high levels of ancient brines**
  Brine water that flows back from gas wells in the Marcellus Shale region after hydraulic fracturing is many times more salty than seawater, with high contents of various elements, including radium and barium. The chemistry is consistent with brines formed during the Paleozoic era, a study by an undergraduate student and two professors in Penn State’s Department of Geosciences found.

- **Plant sniffs out danger to prepare defenses against pesky insect**
  A plant may start to prime its defenses as soon as it gets a whiff of a male fly searching for a mate, according to Penn State entomologists.

- **Fall 2012 Issue IJSLE published**
  The editors of the International Journal for Service Learning in Engineering, Humanitarian Engineering and Social Entrepreneurship (IJSLE) are pleased to announce publication of the Fall 2012 issue. Thomas Colledge is the Editor-in-Chief.

- **3 Workshops on Environmental Justice and on Engineering and Sustainability and Geosciences Workforce**
  - **Engineering, Sustainability, and the Geosciences: March 6-8, 2013, Colorado School of Mines**
    Engineering plays an important role in building a sustainable future, in areas such as hazard mitigation, and resource and energy use. Engineers and geoscientists already work together on such issues, and future engineers will benefit from a solid foundation in the geosciences. To address this need, this workshop is designed for undergraduate engineering and geoscience faculty interested in creating a stronger integration of engineering and geoscience for engineering students. We seek applications from two-year and four-year college faculty, as well as faculty from research universities. An important outcome from this workshop will be to identify opportunities where new interdisciplinary curricular materials will have a major impact on integrating geosciences into the teaching of engineering.
    **Application deadline: January 7, 2013** (workshop is open to 30 participants by application)
  - **Teaching Environmental Justice: Interdisciplinary Approaches: April 14-16, 2013, Carleton College**
    Equitable distribution of risks and resources, long a discussion of interest to economists, ethicists and others, now requires an understanding of geoscience topics from natural hazards to ground water
hydrology to mineral and energy resources. This workshop will explore how we bring together concepts from humanities, social science, and geoscience to further students’ understanding of environmental justice and foster their ability to act. Workshop participants will gain a broad perspective on ways in which environmental justice is taught across the undergraduate curriculum and new ideas for integrating geoscience and environmental justice together in their teaching. The workshop is for undergraduate faculty from all disciplines who are interested in a stronger integration of geoscience and other perspectives in teaching environmental justice. **Application deadline: January 21, 2013** (workshop is open to 30 participants by application)

- **Geoscience and the 21st Century Workforce: Considering undergraduate programs in the context of changing employment opportunities:** June 26-28, 2013, Penn State University

Geoscience knowledge and skills play new roles in the workforce as our society addresses the challenges of living safely and sustainably on the planet. As a result, we expect a wider range of future career opportunities for students with education in the geosciences and related fields. The opportunities and pathways for careers in natural resources and sustainability areas are diverse and the conversation between employers and higher education is only just beginning. This workshop will focus on articulating the breadth of opportunities and identifying the knowledge and skills that are pathways to different types of employment. Application deadline: February 22, 2013

**Special request to participate in the “Pennsylvanians and their Water” survey**

- Water is worth it! From the water we drink, to the crops we irrigate, to the lakes we swim in, Pennsylvania’s water supply is vital and worth protecting. The Pennsylvania Water Resources Research Center is partnering with Penn State Extension, Sea Grant Pennsylvania, and the Pennsylvania American Water Resources Association to conduct a survey entitled Pennsylvanians and Their Water. The objective of this survey is to collect opinions from a large number of Pennsylvania residents on the current status of our water and how best to protect and manage it. This informal survey is intended as a public engagement project and does not necessarily represent a statistical sampling of opinions.

The five-minute survey can be completed online at [https://www.surveymonkey.com/s/PaWater](https://www.surveymonkey.com/s/PaWater). Please feel free to pass along this email and the link to the survey to other Pennsylvania residents but they must be at least 18 years of age to complete the survey. The survey will remain open until January 31, 2013 and a summary of results will be published on the Pennsylvania Water Resources Research Center website in Spring 2013 at: [http://www.pawatercenter.psu.edu/](http://www.pawatercenter.psu.edu/). This is your chance to be heard on water issues and we appreciate your response!

**Featured Events Calendar**

**January 8, 2013**

- **Millennium Café**
  Speaker TBA, "Title TBA"
  10:00 a.m. - 11:00 a.m.; 3rd Floor MSC Café Commons (Millennium Science Complex)
January 10, 2013

- **Center for Infectious Disease Dynamics**
  
  Stephen J. Knabel, *"Evolution of Epidemic Clones of Bacterial Pathogens"*
  
  11:00 a.m.; W-203 Millennium Science Complex

January 14, 2013

- **Plant Biology Seminars**
  
  Charles Anderson, *"Rising Above the Crowd: Identification of Wall-Related Genes that Confer Enhanced Growth in Arabidopsis thaliana"*
  
  12:10 p.m.; 108 Wartik Laboratory

January 15, 2013

- **Clean Energy Seminars**
  
  James Friehaut, Director, DOE Mid-Atlantic Clean Energy Application Center, *"Combined Heat and Power: Will Shale Gas and "Sandy" Lead to Exponential Growth in Application"*
  
  10-11:00 a.m.; C213 Coal Utilization Laboratory | [View flyer](#)

- **Millennium Café**
  
  Speaker TBA, *"Title TBA"*
  
  10:00 a.m. - 11:00 a.m.; 3rd Floor MSC Café Commons (Millennium Science Complex)

January 17, 2013

- **Marcellus Shale Webinar Series**
  
  Dan Borne, LA Chemical Association, *"America's New Industrial Revolution: A Renaissance for US Chemical Manufacturing"*
  
  1:00 - 2:00 p.m.

**Featured Conferences**

- [International Conference on Carbon Dioxide Utilization](#)
  
  The Penn State EMS Energy Institute is pleased to invite you to contribute one or more papers to the 12th International Conference on Carbon Dioxide Utilization (ICCDU). The 2013 conference will focus on sustainable development through CO2 utilization and recycling for chemicals, materials and fuels. The goal of the conference is to emphasize recent trends in CO2 research and bring together the academic and industrial communities for the exchange of ideas, concepts, and innovations. Abstract deadline is Jan. 31, 2013. Conference chaired by Chunshan Song, PSIEE associate director.

- [International Conference on Coal Science and Technology (ICCS&T) Abstracts due Feb. 11, 2013](#)
  
  ICCS&T will be held Sept. 29 – Oct. 3, 2013 at the Penn Stater Hotel and Conference Center. Jonathan Mathews, PSIEE co-hire and assistant professor of energy and mineral engineering, is the conference chair.

- [View all 235 open conferences](#)
Select Employment Opportunities

- Utah State University: Forest Ecologist, Assistant Professor
- University of Hawaii: Assistant Professor (Geography and Environmental Studies)
- USDA: Interdisciplinary: Research Soil Scientist/Research Microbiologist
- Western Michigan University: Assistant Professor - Environmental Studies
- University of Edinburgh: Lecturer/Senior Lecturer in Atmospheric Sciences
- University of Edinburgh: Lecturer/Senior Lecturer in Biogeography and Lecturer/Senior Lecturer in Terrestrial Ecology
- State University of New York College of Environmental Science and Forestry: Assistant/Associate Professor - Toxicology

Select recent funding opportunities

- (View all 38 recently added announcements)
- (View all 201 funding announcements)

We welcome your input!

In order to make this listserv useful for our subscribers, we appreciate your feedback! Please send your comments/suggestions to Patricia Craig at plc103@psu.edu. Please use “PSIEE listserv” in the subject line. If you have information that you would like us to distribute please send that as well. Thanks!

Thank you for your continued interest in the Penn State Institutes of Energy and the Environment!

Best regards,

Patricia Craig

UNSUBSCRIBE

If you do not wish to receive messages from this listserv you can unsubscribe by simply sending an e-mail to L-PSIEE-unsubscribe-request@lists.psu.edu - no subject or message text is required.

NEW SUBSCRIBERS

If you know of others that may be interested in joining this listserv, they can join by sending an e-mail to: L-PSIEE-subscribe-request@lists.psu.edu - no subject or message text is required. The system picks up the name and address from the e-mail headers.