



# First Annual Central PA STEM Regional Conference

## Keynote Speaker: **Jim Brazell**

The Future is Here: The Role of Science, Technology, Engineering and Mathematics (STEM) in US Innovation

## Register Now to:

Attend the Conference  
Be a Presenter  
Become a Sponsor  
Become an Exhibitor  
Place a Program Ad

# June 15, 2011

Frank J. Pasquerilla Conference Center, Johnstown, PA

## Act 48 Hours for Teachers

- Teachers
- Guidance Counselors
- Administrators
- Higher Ed Personnel
- Business
- Industry
- Workforce Development Leaders

↳ For Additional Information Please Visit:

**[www.francis.edu/stemconference.html](http://www.francis.edu/stemconference.html)**

Online Registration is Now Open

## Pro/E Workshop Available at the Conference

PO Box 600, Loretto, PA 15940,  
Tel: (814) 472-3878 • Fax: (814) 472-3028  
[scienceoutreach@francis.edu](mailto:scienceoutreach@francis.edu) • [www.francis.edu/soc](http://www.francis.edu/soc)



## Regional Conference

# Central PA STEM Regional Conference

Creating STEM Pathways to 21st Century Careers

**June 15, 2011**

Frank J. Pasquerilla Conference Center, Johnstown, PA

Act 48 Hours for Teachers

### Agenda (subject to change)

8:15 - 8:45	Check-in
8:45 - 9:00	Welcome
9:00 - 10:00	Keynote Speaker - James Brazell
10:10 - 10:50	Session I Presentations or Exhibitor Interaction
11:00 - 11:40	Session II Presentations or Exhibitor Interaction
11:45 - 12:30	Lunch Presentation - Dr. Richard A. Duschl
12:40 - 1:20	Panel Discussion - Bridging the Gap between STEM Pipeline and Workforce
1:30 - 2:10	Session III Presentations or Exhibitor Interaction
2:20 - 3:00	Session IV Presentations or Exhibitor Interaction
3:00 - 3:15	Closing

## **About the Conference**

The Central PA STEM Regional Conference will provide exceptional opportunities for professionals in STEM (Science, Technology, Engineering, and Mathematics) education, workforce development, and business and industry to interact, learn about and showcase best practices, and learn more about STEM education initiatives from through the Central Pennsylvania STEM Region.

The regional conference is designed to reach teachers, guidance counselors, administrators, colleges and universities, Intermediate Units, business and industry, and workforce development. Educators and administrators will have the opportunity to network with STEM professionals in order to develop an awareness of the need for STEM education as well as the opportunities available in STEM careers.

The Central PA STEM Regional Conference has been made possible through partnerships between the Central PA STEM Region and Math and Science Partnership projects with Appalachia Intermediate Unit 8 and Central Susquehanna Intermediate Unit 16.

## **Why Educators Should Attend**

- Share ideas and best practices for providing STEM education to students
- Learn about STEM education and opportunities for teachers and students
- Learn about the benefits of providing STEM education to students and the demand for STEM-literate students in the economy of the 21st century

## **Why Business, Industry, and Workforce Professionals Should Attend**

- Provide insight and guidance to K-12 and post-secondary educators into the skills your organization needs
- Learn about STEM education and develop relationships with educational institutions
- Showcase how your organization utilizes skills in STEM

## **Register to Attend the Conference**

Online registration is available at [www.francis.edu/stemconference.html](http://www.francis.edu/stemconference.html)

Registration fee: \$30 (includes lunch)

(Complimentary registration for IU8 and CSIU MSP Participating school districts)

## **Presentations**

Exciting break out session presentations have been scheduled to serve a wide variety of audiences in education, workforce development, and business and industry. To view presentations, please visit [www.francis.edu/stemconference.html](http://www.francis.edu/stemconference.html) and click on “Presentation Descriptions.”

Training in Pro/Engineer design software has been scheduled. An additional registration fee applies.

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## **Become a Sponsor**

*Don't miss the opportunity to sponsor the Central PA STEM Regional Conference.*

- Connect with other personnel involved in STEM fields
- Engage educators, business, industry, and workforce development personnel
- Your support will help create STEM pathways to 21st century careers

Sponsor information can be found at [www.francis.edu/stemconference.html](http://www.francis.edu/stemconference.html) and click on “Become a Sponsor” at the bottom of the page.

## **Thank you to our sponsors to date!**

Appalachia IU8  
Central Susquehanna IU16  
North Central Workforce Investment Board  
Lift Johnstown  
Pennsylvania Highlands Community College  
Southern Alleghenies Workforce Investment Board  
ABCD Corporation  
Goodwill Industries of the Conemaugh Valley

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## **Become an Exhibitor**

*Don't miss the opportunity to network with STEM educators and professionals.*

- Help Central PA educate its next generation workforce.
  - Network with educators, administrators, business, industry, and workforce development
  - Showcase how your organization utilizes skills in STEM or can
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## **Showcase Your Students' STEM Projects**

Space will be available at the conference for a STEM Student Showcase where student groups can showcase their STEM prototypes and designs that have been submitted to STEM competitions.

For more information about the STEM Student Showcase, please contact us at [scienceoutreach@francis.edu](mailto:scienceoutreach@francis.edu).



## Regional Conference

### **About the Keynote**

*The Future is Here: The Role of Science,  
Technology, Engineering, and Mathematics (STEM) in US Innovation*

Speaker: Jim Brazell

Robot cars. Virtual reality phones. Supercomputer toys. This is not fiction, not a dream, not the future—this is the world today. As technology continues to advance, schools, communities and families are challenged by the pace of change. Attend the Future is Here to learn to think like a futurist. Learn about emerging technologies, jobs and communities. The Future is Here explores the role of STEM in driving change in the 21st century. Forget crystal ball technology forecasting and pie-in-the sky predictions. This presentation explores real world technologies, jobs, communities and schools in a way that has implications for everyone. Learn about emerging strategies to create wealth, improve educational attainment among youth, and increase collaboration in broad stakeholder communities. Jim will make you laugh, he will inspire you, and he can move you from why to how to bring on board your toughest constituents.

Jim Brazell is a technology forecaster, public speaker, and strategist focusing on innovation and transformative systems. Since 2003, Jim has authored several emerging technology forecasts and briefs in addition to consulting on international technology innovation strategies in Portugal and the U.S. In October of 2009, Jim's comments related to science, technology, engineering, and mathematics (STEM) were heard by the President's Council of Advisors on Science and Technology.

### **About the Lunch Presentation**

Speaker: Dr. Richard A. Duschl is the Waterbury Chaired Professor of Secondary Education, College of Education, Penn State University. Prior to joining Penn State Richard held the Chair of Science Education at King's College London and served on the faculties of Rutgers, Vanderbilt and the University of Pittsburgh. He recently served as Chair of the National Research Council research synthesis report Taking Science to School: Learning and Teaching Science in Grades K-8 (National Academies Press, 2007). With Richard Grandy, he co-edited Teaching Scientific Inquiry: Implications for Research and Implementation (SensePublishers, 2008). His research focuses on establishing epistemic learning environments and on the role of students' inquiry and argumentation processes. Richard has twice received the 'JRST Award' (1989; 2003) for the outstanding research article published in the Journal of Research in Science Teaching. He also served for more than a decade as editor of the research journal Science Education and editor for TC Press "Ways of Knowing in Science and Math" book series.