

## **3rd Annual ASQ Advancing the STEM Agenda Conference**

### **Collaboration with Industry on STEM Education**

Sponsored by the ASQ Education Division and  
The Grand Valley State University  
Seymour and Esther Padnos College of Engineering and Computing

## **Call for Abstracts and Papers**

**Abstracts due January 19, 2013**



**Where: Grand Valley State University Campus,  
Grand Rapids, Michigan**

**When: June 3-4, 2013**

**Join us for this innovative conference by presenting a paper on your STEM education initiatives and STEM collaborative efforts between education and industry!**

### **Abstract and Paper Required to Present at Conference**

All conference presentations require a paper. First, abstracts are reviewed and accepted. For all accepted abstracts, a conference paper will be peer-reviewed. A paper may be either a 2-page extended abstract paper or a full paper. A paper may be accepted as is, may be rejected or a revision may be requested. All accepted papers will be published in the conference's online proceedings and the papers will be accessible from the ASQ Education Division online library. Presentations may also be included in the online proceedings and library.

## **Abstracts due January 19**

- 500 words or less
- Notification of acceptance by January 25
- For accepted abstracts, papers are due March 7, 2013

*The abstracts will be reviewed on the basis of applicability to the conference theme and call for papers topics, a broad appeal to conference participants and readability. Abstracts from doctoral students may be submitted.*

## **Conference Paper Focus Areas:**

### **Industry Partnerships and Transition to STEM and Engineering Careers**

Bridging STEM careers through co-ops, internships and joint partnerships

Helping graduates transition to an engineering/STEM career: problems and best practices

Challenges of partnerships between small manufacturing or engineering companies and colleges

Industry partnerships for capstone projects or class projects

Best practices for industry advisory committees for improving STEM curricula

Recognizing the unique role of community/technical colleges in bridging STEM education and the workplace

New models for partnerships between community/ technical colleges and industry for developing manufacturing and engineering technicians

The challenge of developing 21st century global leaders in science and engineering

U.S. and global models for P-20 STEM/engineering learning: Partnerships in the community

### **Higher Education STEM- Improved Learning through Teaching and Communities**

Using high impact teaching practices such as active learning, inquiry thinking, integrated curricula, experiential and problem based learning in STEM/engineering classrooms

New teaching/learning programs such as the “flipped” classrooms for STEM courses

Applying scholarship of teaching and learning to the STEM fields

Engaging and retaining students at community/technical colleges: Best practices for the community college classroom

First Year Programs for engineering and STEM students

The influence of certifications on STEM curricula

STEM student retention best practices—innovative learning communities, bridge programs and student learning centers

Systems thinking for STEM retention using continuous improvement, e.g. PDSA, the Baldrige Education Criteria and Lean Six Sigma

Using student surveys to continually improve the academic success of STEM students

Global models for STEM higher education

### **College-Ready in STEM and Transition to College**

Preparing high school students to be STEM college-ready

Partnering of P-12 schools with colleges and the community for STEM student success

STEM High Schools: Case studies of successes and challenges

Training/professional development of STEM high school teachers for improved student preparedness for college and STEM careers

## **The STEM Gap: Representation and Access in STEM**

K-12 outreach Programs: Engaging girls and minorities

K-12 engineering and STEM curriculum innovations

College-based summer enrichment programs

Using the continuous improvement cycle to improve STEM support programs (mentoring, tutoring, bridge programs)

Success with the NAE “Changing the Conversation” case studies

Social responsibility, communities and helping disadvantaged students

## **Submission of Abstract**

Email the abstract to Dr. Cindy Veenstra at [Conference@asgedu.org](mailto:Conference@asgedu.org) in a Word document with the following information:

- Abstract title
- Relevant call for paper focus area
- Authors’ names, affiliation, title, email address, and phone numbers
- Willing to be a reviewer for the conference papers (yes/no)?
- Abstract

[Read this document](#) for more information on the submission of conference papers and peer-review process.

The conference website is at <http://asq.org/conferences/stem-agenda/>

To keep up to date on the latest news on this conference:

Join our [ASQ Advancing the STEM Agenda](#) LinkedIn Group

**Questions? Email [conference@asgedu.org](mailto:conference@asgedu.org)**

Revised December 2012