



1828 L Street, N.W.  
Suite 906  
Washington, D.C. 20036

Tel 202.785.3756  
Fax 202.429.9417  
www.asme.org

## Strategic Initiatives & Innovation Committee Activity Report July – November 2009

### **Breakthrough Innovation Office**

The Board of Governors approved an initial \$250K for FY10 to support projects vetted through the IdeaPort process and approved for development by the ASME Office of Breakthrough Innovation (BI). In August, staff conducted internal orientation sessions with staff leads in each sector to educate them on the process overall and how this new endeavor could be a means to enhance their idea generation process.

To date seven proposals have been submitted to IdeaPort for BI Office consideration of which, the Strategic Initiatives and Innovation Committee have approved four for Phase I/Concept Exploration funding:

#### **Feasibility Study for an ASME Angel Fund**

**Purpose:** To explore the feasibility of an ASME affiliated angel fund to further the Society's goals of promoting mechanical engineering, engineering sciences, and associated disciplines. The proposal meets Society Objective L1 – Utilize a volunteer-staff partnership to foster innovation.

**Amount approved:** \$25K for Phase I/Concept Exploration

**Status:** Lead consultant on project is currently conducting internal staff interviews to best gauge alignment of existing programs/activities with viability of Angel Fund concept.  
External

#### **Automotive Innovation Network**

**Purpose:** To explore the application of a Network Innovation, a breakthrough innovation process, in an arena of intense public scrutiny and private interest – the U.S. auto industry. Success will have national significance by enabling an innovation process that offers lower cost, faster cycle time, and wider access to technology.

**Amount approved:** \$50K for Phase I/Concept Exploration

**External Funds/Resources Leveraged:** additional funding of \$836K via US DOE grant to Clemson University and in-kind support from USCAR

**Status:** A stakeholder's workshop has been scheduled for January 13-14 in Detroit to discuss technology focus and desired outcomes of an AutoVenture Forum in spring 2010.

#### **Long-Term Operation of Existing Nuclear Plants: Assessment of Feasibility**

**Purpose:** Industry studies suggest that it may be possible to safely extend the life of existing nuclear plants, which currently supply 20% of U.S. electrical power needs. If this proves feasible, the potential would be to meet rising demand for power with minimal carbon emissions.

**Amount approved:** \$50K for Phase I/Concept Exploration

**External Funds/Resources Leveraged:** additional funding of \$75K via grant from the Alfred P. Sloan Foundation and \$50K in-kind support from EPRI in senior SME staff support  
**Status:** The Sloan Foundation grant was awarded late September; initial project planning is underway for a Feb/Mar 2010 workshop.

### ***Engineering Solutions for the Base of the Pyramid (BoP) Workshop***

**Purpose:** The recent environmental scan report identifies numerous opportunities for ASME to serve the BoP community. The workshop of internal and external stakeholders would analyze and prioritize them, ultimately creating a path forward for ASME in this arena.

**Amount:** \$50K for Phase I/Concept Exploration

**External Funds/Resources Leveraged:** additional funding of \$50 via Strategic Issues Committee

**Status:** ASME Project Team has been organized and is currently working to finalize project plan in anticipation of a February/March 2010 workshop.

### ***Center for Engineering Entrepreneurship & Innovation (CEEI)***

#### ***Market Analysis Project, CEEI***

Performance Strategies has conducted a series of phone interviews and surveys of key volunteers and staff regarding the proposed rebrand of CEEI. Results will be discussed at the November committee meeting.

Selected speakers from the October 2009 State Science and Technology Institute Annual Meeting have been invited to be interviewed for a podcast that will be added to the CEEI website. The online presence of the CEEI has also been enhanced with reference material and resources related to entrepreneurship and innovation and a

#### ***ASME IShow***

The ASME IShow committee held a retreat at the ASME Washington Center in August 2009 to review trends and assess the future direction of the program. Action items from this meeting include active solicitation of projects in the area of “social entrepreneurship;” requiring at least one team member be an ASME member at the time of the competition; and actively investigating the feasibility of an international ASME IShow program.

The 4<sup>th</sup> Annual ASME IShow is scheduled to be held in conjunction with the ASME Annual Meeting on June 5, 2010, in Pittsburgh, PA. Team solicitation has been initiated.

### ***Industry Advisory Board***

The Industry Advisory Board (IAB) met in Palm Desert on June 15-16, 2009, to focus on Infrastructure Investment. Rehabilitation or replacement of infrastructure is an expensive endeavor; resources are limited and must be allocated in a prudent way. The Board discussed ASME’s involvement in a year long project to see if a methodology can be developed that can be used to support rational investment decisions which can help ensure optimal returns on investment

The Board held a September 2009 webinar to focus on the ASME Environmental Scan, “*Engineering Solutions for the Base of the Pyramid*” and plans to meet in Washington, DC on December 2-3, 2009 Investment.

### **2009 Annual Meeting**

IAB sponsored an Industry Roundtable on Breakthrough Innovation at the June 2009 ASME Annual Meeting prior to their Board meeting. Moderated by Dr. Gina O'Connor, co-author, "*Grabbing Lightning: Building a Capability for Breakthrough Innovation*," this facilitated discussion explored how to effectively tap resources to drive breakthrough innovation in a corporate environment. Kristen Pederson, Partner/VP, Americas Strategy & Market, Development Leader, IBM Global Business Services, Eric Ducharme, Vice President Engineering, GE Transportation, and John Goossen, Director Science & Technology Department, Westinghouse Electric Company, shared their experiences in striving to create a capacity for breakthrough innovation within their respective companies.

### **ASME ITI, LLC**

#### **Standards Development Activity**

Based on the evolution of the RAMCAP methodology to an all hazards approach to risk management and in part to sector specific work, ASME ITI, LLC secured three SPGFs in FY09, two of which supported the development of an ANSI accredited standard in the areas of 1) Water Security (in partnership with the American Water Works Association) and 2) Higher Education/Campus Security. Both standards have been released for an initial public comment period, with a final ballot/review scheduled for December 2009/January 2010. It is anticipated that the standards will be ready to publish in spring 2010.

The Standards Committee for RAMCAP Plus<sup>SM</sup> had their first meeting in August 2009. Past ASME President Bob Nickell is currently serving as Chair of the committee that will develop an American National Standard to address an overall outline for RAMCAP. The draft prepared by ASME-ITI was used as a starting point for discussion and subcommittee development.

#### **Risk-based Methodology to Assess Infrastructure Investment**

This activity, funded by an FY09 SPGF, has been chaired by past ASME President Gene Feigel. The ASME-ITI Working Group on Infrastructure Investment has been tasked with 1) examining the critical issue of inadequate and deteriorating infrastructures in the United States, and 2) developing a comprehensive methodology to evaluate and help prioritize infrastructure investments for optimum benefit. A final report has been peer reviewed and is in final edit for delivery to the SPGF Committee in late October.

#### **Long-Term Operation of Existing Nuclear Plants**

Working in cooperation with the ASME Office of Breakthrough Innovation (BI), this grant was awarded in September 2009. Joint project management and subject matter experts (SMEs) will be coordinated through ASME-ITI and the BI Office.