THURSDAY, MARCH 14, 2013

8:00 – 11:45  ASME/ABET Workshop
(Breakfast provided at 7:30 & lunch at 11:45)
(Executive 2A & 2B)

Through this workshop, the ASME Committee on Engineering Accreditation (CEA) helps ME program representatives to prepare their respective programs for successful ABET visits, including:
- Preparing materials for your next ABET visit.
- Strategies on demonstrating Program Educational Objectives and Outcomes (PEO's)
- Problems & solutions with satisfying Criterion 4 – Continuous Improvement
- More…. Based on recent pre-workshop survey of MEDH's.

| What's new for accreditation cycle 2013-2014 & beyond? | The ABET Accreditation Policy and Procedures; Adoption of harmonized criteria; Editorial changes to Program Criteria. |

1:45 – 4:30  The Changing (ME) Middle Class
(Plenary-1) (Harbor Island 1)

In recent years, there have been a number of national studies on the need for, and the nature of, change in ME curricula, such as 5XME (University of Michigan) and ASME Vision 2030. This plenary session is an opportunity to take stock of recent changes in ME undergraduate curricula, the processes used by programs to determine and execute these changes, resource needs and solutions, and the sustainability of these changes.

The session will focus on recent (or soon to be implemented) changes in ME undergraduate curricula, with emphasis on the sophomore and junior years, or the “middle years” of the program. First year program changes have been reported on quite a bit in earlier forums and so have changes in capstone senior design courses.

K. (Cheena) Srinivasan, Professor, Mechanical Engineering, Ohio State University

Increased emphasis on design/manufacturing/open-ended projects/hands-on experiences - Blaine Lilly (Ohio State University), Stacey Bamberg (University of Utah), Emad Jassim (University of Illinois at Urbana-Champaign)

5XME/Vision 2030 Implementations - Diann Brei (University of Michigan), Michele Miller (Michigan Technological University)

Learning communities in teaching mechanics courses - Samantha Brunhaver (Stanford University), Edward Berger (University of Virginia)

Industry perspectives & collaboration – Noel McCormick (McCormick Stevenson), Kalan Guiley (Boeing)

4:30 – 5:00  ABET Update & Major Initiatives
(Harbor Island 1)

Joseph Sussman, Managing Director, Accreditation and Chief Information Officer, ABET

FRIDAY, March 15, 2013

9:00 – 12:00  Future Educational Models in ME Enabled by MOOCs/Online Courses
(Plenary-2) (Harbor Island 1)

Massive Open Online Courses (MOOCs) are changing the face of education. From Kahn Academy to Coursera, EdX, and Udacity, major institutions are beginning to offer courses in these platforms. Mechanical Engineering content is at present nearly non-existent – now is the time to understand the platform and plan for how to best use all this new medium offers. From reaching the world to providing a way to easily “flip” the classroom on campus, this is an exciting opportunity in ME. What will we do with lab/design courses, how will credit be handled, who should teach what, what subjects are best for this platform, and many other questions will be discussed in this timely plenary session.

Cate Brinson, Chair, Mechanical Engineering, Northwestern University

Daphne Koller, Co-Founder, Coursera, Rajeev Motwani Professor of Computer Science and Oswald Villard University Fellow in Undergraduate Education, Stanford University

Magnus Egerstedt, Professor, Electrical and Computer Engineering, Georgia Institute of Technology

Sanjay Sarma, Professor, Mechanical Engineering, Director, of Digital Learning (MITx,) Massachusetts Institute of Technology
### 1:30 – 1:45
New **ASME Student & Early Career Development Sector**
*(Harbor Island 1)*

### 1:45 - 2:15
**Leadership Mini-topics Discussions**
*(Plenary-3) (Harbor Island 1)*

Sharing ideas and strategies in key leadership areas critical for mechanical engineering department functioning.

1) **Strategic Planning** *(NOTES)*
2) **Mentoring**
3) **Managing Up** *(NOTES)*
4) **Conflict Resolution**
5) **Industry Advisory Boards** *(NOTES)*
6) **Non-tenure track faculty** *(NOTES)*
7) **Effective Co-Curricular Learning Using Student Sections** *(NOTES)*

### 2:15 – 5:00
**Leadership Mini-topics Discussions**
*(Harbor Island 1)*

*Mahesh Aggarwal, Chair, Mechanical Engineering, Gannon University*
*Rich Gould, Head, Mechanical & Aerospace Engineering, North Carolina State University*
*Uwe Kortshagen, Head, Mechanical Engineering, University of Minnesota*
*Melur Ramasubramanian, Chair, Mechanical Engineering, Clemson University*
*Karen Thole, Chair, Mechanical & Nuclear Engineering, Penn State University*
*Kon-Well Wang, Chair, Mechanical Engineering, University of Michigan*

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### SATURDAY, March 16, 2013

### 8:30 – 10:00
**MS Programs – Challenges & Opportunities**
*(Plenary 4) (Harbor Island 1)*

*Imtiaz Haque, Professor, Mechanical Engineering and Executive Director, Carroll A. Campbell Graduate Engineering Center, Clemson University*
*Sheri Sheppard, Professor, Mechanical Engineering, Stanford University*

**MS programs serve many purposes at many institutions, ranging from online programs to weekend executive programs, programs closely linked to state economic development, to on-campus traditional programs. Some feed to PhD, some provide additional general expertise for the workforce, some are highly focused on key technological areas. In this session we present and discuss several of these models and the challenges and opportunities in each.**

### 10:00 – 12:00
**Special Topics (continued)**
*(Harbor Island 1)*

*Aisha Lawrey, Manager, Engineering Education, ASME*
*Danine Ezell, NGSS Writing Team Leader, District Program Manager, Secondary Science (ret.), San Diego Unified School District*
*Marion Usselman, Associate Director for Academic Outreach at the Center for Education Integrating Science, Mathematics and Computing (CEISMC) at Georgia Tech.*
*Ken Balkey, Consulting Engineer, Nuclear Services, Westinghouse Electric Company LLC, ASME Senior Vice President, Codes & Standards*
*Kristen De La Rosa, Director, Advanced Vehicle Technology Competition Argonne National Laboratory*

**ASME Research:** Why Women Choose ME & Why They Stay Next Generation (K12) Science Standards

**Advanced Manufacturing & Prototyping – In Middle School**

**ASME Codes & Standards Online Learning for Engineering Students**

**Project Based Learning through Advanced Vehicle Technology Competitions**