

2016 Joint Mechanical Engineering Education Leadership & Advanced Manufacturing Innovation Summits

March 16-19, 2016 --- Westin Tampa Harbour Island Hotel --- Tampa, FL

PRE-CONFERENCE WORKSHOP

Wednesday, March, 16

3:30p – 5:00p **NEW-TO-ABET Orientation Session** - ABET, who it is, how it works and how far it reaches.

5:00p – 7:30p **ASME/ABET Preparation Pre-Conference Workshop** (*working dinner*)

Col. Daisie Boettner, Head, Civil & Mechanical Engineering, United States Military Academy, West Point (ABET/EAC)

Christa Weisbrook, Past-Director, Academic Programs, Office of Academic Affairs, University of Missouri System (ABET/EAC)

Mahesh Aggarwal, Professor, Mechanical Engineering, Gannon College (ABET/EAC)

William Wepfer, Chair, Woodruff School of Mechanical Engineering Georgia Institute of Technology (Chair, ABET/EAC Executive Committee)

Joe Sussman, Chief Accreditation Officer, Chief Information Officer, ABET

Thursday, March 17

7:30a – 12:00p **ASME/ABET Preparation Pre-Conference Workshop** (*continued*)

12:00 – 1:30p **Joint Summit Opening & Luncheon**

William Predebon, Chair, Department of Mechanical Engineering & Engineering Mechanics, Michigan Technological University & ASME Chair, Engineering Education

Caroline Hayes, Chair, Department of Mechanical Engineering, Iowa State University, General Chair 2016 ASME International Mechanical Engineering Education Leadership Summit

Gloria Wiens, ASME Foundation Swanson Fellow (2013-2015); Former Assistant Director for Research Partnerships, Advanced Manufacturing National Program Office; Associate Professor, Mechanical Engineering, University of Florida; Chair, ASME Advanced Manufacturing Innovation Summit

Opening Address: Michael Molnar, Director, Advanced Manufacturing Program Office, U.S. National Institute of Standards and Technology

1:30 – 5:00p **Advanced Manufacturing Innovation Summit**

Public-Private Partnerships in Applied Research & Workforce Development -- a discussion of technologies, collaboration models and funding opportunities featuring leaders from the National Network for Manufacturing Innovation: (visit manufacturing.gov to learn more about NNMI)

1:30 – 2:45p **Panel 1** **NNMI Vision and Institute Engagement Models: What Does Membership Mean?**

Adele Ratcliff (Moderator), Director of Manufacturing Technology, Office of Deputy Assistant Secretary for Manufacturing and Industrial Base Technology, Department of Defense (invited)

- **America Makes** – **Edward Morris**, Director, National Additive Manufacturing Innovation Institute (Youngstown, OH)
- **AIM Photonics** – **Michael Liehr**, Chief Executive Officer, American Institute for Manufacturing Integrated Photonics (Rochester, NY)
- **DMDII** – **Dean Bartles**, Executive Director, Digital Manufacturing and Design Innovation Institute (Chicago, IL)
- **LIFT** – **Lawrence Brown**, Executive Director, Lightweight Innovations for Tomorrow (Detroit, MI) (invited)

- **IACMI** – **Craig Blue**, Chief Executive Officer, Institute for Advanced Composites Manufacturing Innovation (*Knoxville, TN*)
- **NEXTFLEX** – **Paul Semenza**, Director of Commercialization, Flexible Hybrid Electronics Manufacturing Innovation Institute (*San Jose, CA*)
- **PowerAmerica** – **Nickolas Justice**, Executive Director, Wide Bandgap Semiconductors (*Raleigh, NC*)

2:45 – 3:15p Break

3:15 – 4:30p **Panel 2** *Managing Project Calls and Intellectual Property*

Robert Ivester (Moderator), Deputy Director, Advanced Manufacturing Office, U.S Department of Energy (invited)

NNMI Institute Directors (shown above)

4:30 -- 5:00p **Panel 3** *Education & Workforce Development*

Robert Ivester (Moderator), Deputy Director, Advanced Manufacturing Office, U.S. Department of Energy (invited)

NNMI Institute Directors (shown above)

William Wepfer, *Head, Woodruff School of Mechanical Engineering, Georgia Tech and Chair, ABET Engineering Accreditation Commission (ABET/EAC)*

M. Patricia Brackin, *Professor, Mechanical Engineering, Rose Hulman Institute and Chair, Criteria Committee, ABET Engineering Accreditation Commission (ABET/EAC)*

5:30 – 7:00p **Networking Reception**

(Dinner on Your Own)

Friday, March 18

8:00 – 11:30a **Plenary I** *The Digital Mechanical Engineer*

Eliot Winer (Plenary Leader) - Associate Director, Virtual Reality Applications Center; Associate Professor, Department of Mechanical Engineering; Associate Professor, Department of Electrical & Computer Engineering
Speakers TBA

11:30a – 1:00p **ASME Engineering Education Awards Luncheon**

Kenneth Ball, *Dean, Volgenau School of Engineering, George Mason University; Chair, ASME Edwin F. Church Committee*

John C. Williams, *Dean, School of Architecture, Management and Engineering Technology Alfred State; Chair, ASME Ben C. Sparks Committee*

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2016 Edwin F. Church Medal **Karen Thole**, *Head, Department of Mechanical and Nuclear Engineering, Pennsylvania State University*

2016 Ben C. Sparks Medal **Allen H. Hoffman**, *Professor, Mechanical Engineering Worcester Polytechnic Institute*

2016 Donald N. Zwiep Medal *Honoree to be announced*

1:00 – 2:00p

Briefing ***ABET Update and Proposed General Criteria Changes***

Joe Sussman, Chief Accreditation Officer, Chief Information Officer, ABET

William Wepfer, Head, Woodruff School of Mechanical Engineering, Georgia Tech and Chair, ABET Engineering Accreditation Commission (ABET/EAC)

M. Patricia Brackin, Professor, Mechanical Engineering, Rose Hulman Institute and Chair, Criteria Committee, ABET Engineering Accreditation Commission (ABET/EAC)

2:00 – 5:00p

Plenary II ***Creating and Sustaining Inclusive & Diverse Environments in ME/MET Departments and Programs (TECAID)***

What do we know about engineering culture? Engineering culture is a primary factor in the retention or attrition of engineering faculty, students and staff—especially women and those from other underrepresented groups. To advance inclusion and diversity, engineering faculty, encouraged and supported by institutional leaders, must orchestrate and maintain inclusive, motivating and welcoming department environments.

The work, over the past year (and continuing), has involved intensive professional development, expert consultation, and a facilitated virtual learning community to participating ME department leaders and faculty. Five (5) department head/faculty teams from ME departments at **Michigan Technological University, Oregon State University, Purdue University, Texas Tech University and University of Oklahoma** have been sharing and collaborating on projects aimed at advancing their understanding and response to the experiences of underrepresented students, faculty, and staff. Hear their stories, learn about TECAID's theory of change for culture transformation and consider how you can best set the stage and take action in your department.

TECAID-Transforming Engineering Culture to Advance Inclusion and Diversity, is a joint NSF-funded project of the Women in Engineering ProActive Network (WEPAN), ASME and Purdue University. Through a collaboration with the Kardia Group, specialists in leadership, diversity, and change in academia, TECAID provides expert and community support to propel the work of ME departments that are committed to research-informed, faculty-driven change to advance diversity and inclusion understanding and practices in the department and the ME program.

Klod Kokini (Plenary Leader) – *Associate Dean for Academic Affairs, College of Engineering & Professor, Mechanical Engineering, Purdue University*

Speakers: **C. Diane Matt**, Executive Director, Women in Engineering ProActive Network (WEPAN)
 Diana Kardia, Founder and Lead Consultant, The Kardia Group LLC
 Bill Predebon, Head, Department of Mechanical Engineering & Engineering Mechanics, Michigan Technological University
 M. Cengiz Altan, Chair, Department of Mechanical Engineering, University of Oklahoma
 David Cann, Interim Head, School of Mechanical Engineering, Oregon State University
 Anil Bajaj, Head, Department of Mechanical Engineering, Purdue University
 Ed Anderson, Interim Chair, Department of Mechanical Engineering, Texas Technological University

5:30 – 7:00p

Open Mic Reception (*for the benefit of new and nearly new Department Chairs*)

(Dinner on Your Own)

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Committee Meetings

6:00 – 8:00p

ASME Committee on Engineering Technology Accreditation

7:00 – 9:00p

ASME ME Department Heads Executive Committee
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Saturday, March 19

8:30 – 11:30a **Plenary III Practice-based Curriculum Transformation: Strategies--Tactics--Resources**

Allan Kirkpatrick (Plenary Leader) – *Professor, Mechanical Engineering, Colorado State University*
Speakers: **Bill Predebon**, Head, Department of Mechanical Engineering & Engineering Mechanics,
Michigan Technological University

11:30 – 12:00p **Conference Wrap-Up & Close**

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12:30 – 4:30p **ASME Committee on Engineering Education (CEE)**