

AGENDA

Standards: Enabler of Sustainability **AN ACADEMIC-INDUSTRY WORKSHOP**

Sponsored and organized by the National Institute of Standards and Technology, Michigan State University, NSF International, and Northwestern University

May 17 and 18, 2017 ** The Henry Center, 3535 Forest Road ** Lansing, MI 48910

Day 1 (8:00am – 5:00pm) **Rooms B106-107**

8:00 Doors open
Networking Coffee

9:00 Welcome

Doug Gage, Assistant Vice President, Michigan State University
Office of Interdisciplinary Research and Internal Grants
Institutionally Limited Proposals, Bioeconomy Network

9:10 Laying out the challenges

Erik Puskar, Senior International Standards Specialist, Standards Coordination Office, National Institute of Standards & Technology (NIST)

9:25 Overview of the agenda

Jeffrey Strauss, Associate Director, Big Problems and Technical Standards Initiatives,
Northwestern
University Buffett Institute

9:35 Keynote Address: Call to Action – Our keynoter will speak to the meaning, importance and challenges of sustainability, why standards are a critical underpinning to meeting the Sustainability challenges, and need to consider standards in teaching

Wolfgang Bauer, Senior Consultant in the Office of the Executive Vice President for Administrative Services, (focused on energy efficiency and renewable energy); previously Distinguished Professor and Chair, Physics Department, Michigan State University

10:00 BREAK

10:15 Panel #1: Industry and Government stakeholders

Government & Industry: A Public-Private Partnership

Government: What are the implications of changing the regulatory and policy environment; what are the implications for teaching?

- The Value of Sustainability Standards: How They Are Used to Meet EPA Objectives
Holly Elwood, Senior Advisor, Environmentally Preferable Purchasing Program, U.S. Environmental Protection Agency
- Mary Saunders, Vice President for Government Relations and Public Policy, American National Standards Institute (ANSI)

Industry: What are the key sustainability challenges and related standards issues facing industry; how are companies addressing these challenges? What standards have been most impactful standards? What are the career implications? What are industry workforce needs? What do new employees need coming in to the workforce?

- Douglas Mazeffa, Environmental Project Manager, Sherwin-Williams Company and Lecturer, Baldwin Wallace University
- David Green, Manager Applied Sustainability, Admixture Systems, BASF
- Denise Van Valkenburg, Eco-Inspired Design / Sustainability Manager, Corporate Safety and Sustainability, Herman Miller, Inc.

Discussion/Q&A

11:45 LUNCH

12:45 Panel #2: Education and Standards Professionals – Panel members respond to the Keynote and the Challenges presented by Panel #1

Education community: How standards are being incorporated into the higher education curricula

Rochester Institute of Technology (RIT)

- Lisa Greenwood, Civil Engineering Technology, Environmental Management & Safety Department, Rochester Institute of Technology – Remote presentation

Michigan State University:

- Thomas Smith, Associate Director, College of Agriculture & Natural Resources, Institute of Agricultural Technology, MSU
- Ryan Kimbirauskas, Center for Integrative Studies in General Science, MSU
- Claudia Vergara, Research Specialist, MSU
- Osvaldo Hernandez, Center for Integrative Studies in General Science, MSU
- Gabe Ording, Director for Integrative Studies in General Science, MSU

Grand Valley State University, Allendale, Michigan

- Norman Christopher, Executive Director, Office of Sustainability Practices, Grand Valley State University, Allendale, Michigan

Carnegie Mellon University

- Deanna Matthews, Assistant Teaching Professor, Associate Department Head for Undergraduate Affairs, Department of Engineering and Public Policy, Carnegie Mellon University

Standards organizations: Standards work related to sustainability; related programs implications for standards student preparation

- Mary Saunders, Vice President for Government Relations and Public Policy, American National Standards Institute (ANSI)
- Brad Miller, Director of Advocacy & Sustainability, BIFMA
- Pamela Brody-Heine, Director of Standards, Green Electronics Council
- Travis Murdock, Manager, Technical Committee Operations, ASTM International
- Jessica Slomka, Manager, NSF International Center for Sustainability Standards

Discussion/Q&A

2:45 “Birds-of-a-Feather” Breakouts and Discussion

Breakout groups will be defined by sector of sustainability education e.g. engineering, management environmental management, sustainable manufacturing, agriculture, etc.

Theme: What are the industry challenges and implications for teaching – i.e. how can students be prepared to address and contribute to solving these challenges?

2:45 Introductions and expectations

Patricia Harris, International Standards Specialist, Standards Coordination Office/Standards Services, NIST

2:55 Focal Questions: Discussion (Each breakout group should choose a spokesperson to give a 5-minute summary of the discussion)

- *What sustainability challenges have standards underpinnings? How will standards impact solutions?*
- *What are related implications/requirements for education? What topics need to be covered in courses?*
- *What are the challenges to teaching: materials? faculty knowledge? course content? etc.? How can these be overcome?*
- *How can standards content be incorporated into the curricula? Consider business, engineering and other possible “homes” and specific courses; what are course/discipline specific issues and how can they be addressed?*
- *What specific knowledge and skills will professionals require to support the target domains and related standardization? What types of support and assistance enable the integration of standards into a sustainability curriculum?*

4:00 Reports from the Breakout Groups and open discussion

4:40 Summary of Day 1 and Lead in to Day 2 - Jeffrey Strauss

5:00 ADJOURN Day 1

Day 2 (8:00 am – 11:30 am)

Room B119

8:00 Doors open, coffee

8:15 Standards Simulation Exercise: An interactive, multi-country Standards negotiation
The goal of this session is to expose the challenges and complexity of standards development and present a pedagogical tool.

Introduction and instructions:
Jeffrey Strauss, moderator

8:30 Exercise begins

9:45 BREAK

10:00 Report-out: Discussion of the exercise; what lessons were learned; the potential use of this model in the academic and corporate setting and opportunities for adaptation in academic and institutional contexts

10:45 Wrap-up discussion: Next Steps and Action Items

11:30 ADJOURN