



**PennState**

**CIMP-3D**

**Coordination of U.S. Standards Development for Additive Manufacturing**

# **Objectives of the Technology Exchange**

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## History of the Technology Exchanges



- One component of our mission as the DARPA Open Manufacturing Demonstration Facility for AM is the dissemination of relevant technology for spurring adoption of additive manufacturing
- Three prior Technology Exchanges have been conducted by CIMP-3D:
  - Modeling & Simulation of Additive Manufacturing, January, 2013
  - Advanced Sensing Techniques and Control Methods for Additive Manufacturing, January, 2013
  - Materials for Additive Manufacturing, November, 2013





## Purpose of the Technology Exchange

- Provide a forum where technical leaders may discuss and collaborate on a specific topic having importance for encouraging adoption of additive manufacturing
- Four important components for success:
  - selection of a relevant topic,
  - gathering of technical leaders,
  - urging candid discussions and dialogue, and
  - promoting collaboration in achieving objectives



## Elements of this Technology Exchange

- Session I: Presentations from standards organizations and discussions with participants
- Session II: Presentations from potential users and discussions with participants
- Session III: Group collaboration to meet objectives:
  - Group A: Coordination of U.S. Standards, with an objective to define how coordination of U.S. standards should be achieved
  - Group B: Qualification and Certification, with an objective to define requirements for implementing an initial performance qualification protocol
- Session IV: Report results to participants and final discussion



## Guidelines for the Technology Exchange

- Engage speakers through concise and meaningful questions
  - please state your name and affiliation when asking a question
- All participants are encourage to share their broad perspectives during the discussions
- Collaboration groups will be used to discuss and formulate a response to each group objective:
  - group discussions lead by the facilitators
  - “divide and conquer” using smaller groups for meeting sub-objectives
  - must generate a group consensus for meeting the overall objective
- Plan for meeting group objectives presented to all participants for discussion and refinement



## Special Thanks to:

- The co-sponsors of this Technology Exchange: ASTM International, SAE International, ASME, AWS, and SME,
- America Makes for co-hosting this event,
- Shane Collins of CalRAM Inc. for helping to develop the concept for this Technology Exchange,
- Mick Maher of DARPA's Open Manufacturing Program, and
- Barb Belko for her coordination of the event.