

**Roadmapping Workshop:
Measurement Science for Polymer-Based
Additive Manufacturing**

June 9-10, 2016 • National Institute of Standards and Technology • Gaithersburg, MD

**Report Out
June 10, 2016**

**Breakout Out Group:
Performance**



Desired AM Capabilities/Technologies

- Final Product Quality
 - reliable, repeatable outputs
- Product Lifetime
 - stability and reactivity
- Predictability
 - materials, process, product
- Multi-Material
 - expand materials library
- Multi-Functionality
 - designed roles, synergy
- Design
 - validated model -> tailoring
- Product Characteristics
 - quality and customization
- Medical Applications
 - speed, cleaning, validation



Top-Voted Challenges/Priority Topics

- Understanding and Modeling AM Processes
- Lack of Information on Stock Materials and Standards
- Understanding Variable and Parameter Impacts on Part Properties
- Transparency in Polymer Additive Manufacturing
- Development of Appropriate Safety Standards