America Makes & ANSI Additive Manufacturing Standardization Collaborative (AMSC) 
Working Group (WG) Architecture and Co-Chairs 
(updated 12/9/16)

Below is the current list of WGs and their co-chairs, and issues that they are addressing in terms of identifying existing or needed standards and specifications. Participants are invited to sign up for one or more groups using the sign-up sheet. The working groups generally hold online meetings every two weeks. WG meetings are on hiatus as of 12/9 and may resume in January as needed for finalizing the AMSC roadmap targeted for publication in February 2017.

**Design WG**
Meets: Every other Tuesday, 10-11:30 am Eastern  
Co-chairs: John Schmelzle, NAVAIR; Jayanthi Parthasarathy, MedCAD

- Design guides  
- Design tools  
- Design for specific applications (Design for assemblies, Design for printed electronics, Design for medical)  
- Design documentation  
- Design validation / verification

**Process and Materials WG*  
Co-chairs: Todd Rockstroh, GE Aviation; Art Kracke, AAK Consulting LLC**  
* All members are asked to join one of the 4 Subgroups (SG)  

**Future State: Left to Right Enabling Commercialized AM products**

- **Precursor Materials SG**  
  Meets: Every other Tuesday, 1-2:30 pm Eastern  
  Leaders: Jim Adams, MPIF; Justin Whiting, NIST
  - Storage, Handling and Transportation  
    - Characterization  
      - Chemical Composition  
      - Flowability  
      - Spreadability  
      - Density (apparent vs. tapped)  
      - Particle Size & Particle Size Distribution  
      - Particle Morphology  
      - Feedstock Sampling  
      - Hollow Particles and Hollow Particles with Entrapped Gas

- **Process Control SG**  
  Meets: Every other Thursday, 1-2:30 pm Eastern  
  Leaders: Justin Whiting, NIST; John Barnes, Alcoa
  - Digital format and digital system control  
  - Machine calibration / preventative maintenance  
  - Machine qualification  
  - Parameter control  
  - Adverse machine environmental conditions  
  - Precursor material handling, blending, use, re-use & recycling  
  - Precursor material flow monitoring  
  - Environmental health and safety  
  - Configuration management: cybersecurity  
  - Process monitoring

- **Post-Processing SG**  
  Meets: Every other Tuesday, 1-2:30 pm Eastern  
  Leaders: Amir Farzadfar, Corning, Inc.; J. Hector Sandoval, Lockheed Martin
  - Heat Treatment  
  - HIP  
  - Surface finish  
  - Machining  
  - Post Curing Methods

- **Finished Material Properties SG**  
  Meets: Every other Thursday, 1-2:30 pm Eastern  
  Leaders: Roger Narayan, North Carolina State University; Mohsen Seifi, Case Western Reserve University
  - Mechanical properties  
  - Component testing  
  - Bio-compatibility & Cleanliness of Medical Devices  
  - Chemistry  
  - Design allowables  
  - Microstructure
Qualification & Certification (Q&C) WG
Meets: Every other Monday, 2:30 – 4 pm Eastern
Co-chairs: Capt. Armen Kurdian, NAVSUP WSS; Shawn Moylan, NIST

Identified guidance documents (FDA Guidance, Lockheed Martin AM Supplier Quality Checklist, Aerospace Corp MAIW, CMH-17 and MMPDS Handbooks, AWS D20, NASA MSFC Draft Standard, ASME Y14.46)
User-group/industry perspectives on Q&C (Aerospace, Defense, Medical Devices)

Non-Destructive Evaluation (NDE) WG
Meets: Every other Friday 11 am – 12:30 pm Eastern
Co-chairs: Patrick Howard, General Electric; Steve James, Aerojet Rocketdyne

Scope: NDE of Finished Parts
(NDE for process monitoring under Process Control SG of Process and Materials WG)
Test methods or best practice guides for NDE of AM parts
Common defects catalog using a common language for AM fabricated parts
Test samples or best practice guides for NDE of AM parts
Dimensional metrology of internal features
Data fusion

Maintenance WG
Meets: Every other Monday 2-3:30 pm Eastern
Co-chairs: David Coyle, NAVSUP WSS; Michele Hanna, Lockheed Martin

Standard repair procedures
Standard technical inspection processes
Model based inspection
Standards for tracking maintenance operations
Cybersecurity for maintenance
Finishing and assembly, welding, grinding, coating, plating
America Makes & ANSI Additive Manufacturing Standardization Collaborative (AMSC)
Working Group (WG) Sign-Up Sheet

Please sign me up for the following Working Groups and Subgroups (check all that apply)

Design WG ____

Process and Materials WG* ____
  ▪ Precursor Materials SG ____
  ▪ Process Control SG ____
  ▪ Post-Processing SG ____
  ▪ Finished Material Properties SG ____

* All members are asked to join one of the 4 Subgroups (SG)

Quality & Certification WG ____

Non-Destructive Evaluation WG ____

Maintenance WG ____

Please provide your name and email address. If you have not already signed up for the AMSC, please include your other contact details.

Name:
Title:
Organization:
Phone:
Email:

Please email the completed sign-up sheet and your contact details to amsc@ansi.org