

**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