

ASTM INTERNATIONAL CONFERENCE ON ADDITIVE MANUFACTURING

Research To Application Through Standardization

October 31 – November 4, 2022 | Orlando, FL JW Marriott Orlando Bonnet Creek Resort & Spa

Submit an Abstract at www.amcoe.org/icam2022

AM for Space Applications

Spaceflight is a unique industry that utilizes additive manufacturing (AM) to its fullest potential, often resulting in geometrically complex and integrated designs that can only be fulfilled by AM. Structural integrity, new materials, novel designs, and advanced post-processing techniques are key enablers for AM. However, there is a need to revise current standards, qualifications, and certification practices before they can be relevant for AM parts used in spaceflight applications.

This symposium covers the application of AM for space focusing on:

- Qualification strategies for AM Space Flight hardware
- Certification strategies for Suppliers of AM Space Flight hardware
- In-situ inspection or automated process control
- Quality Assurance including testing for the cleanliness of AM Space Flight hardware
- Application of computational approaches to accelerate AM across the full lifecycle
- Material development, post-processing, and mechanical testing
- Novel design approaches for AM Space hardware
- Innovation for in-space manufacturing
- Cost factors and business case analysis for printed spaceflight hardware



- Rick Russell, NASA, USA
- John Vickers, NASA, USA
- Kiley Versluys, Relativity Space, USA
- Faith Oehlerking, Beehive3D, USA



Research to Standards

ADDITIVE MANUFACTURING