



ICAM25

International Conference on Advanced Manufacturing Research to Application through Standardization

October 6-10 | Las Vegas, NV



Industrial Sector: Space

Spaceflight is a unique industry that utilizes several forms of advanced manufacturing to its fullest potential, often resulting in geometrically complex and integrated designs that can only be fulfilled by these processes that include additive manufacturing (AM). Structural integrity, new materials, and novel designs are key enablers for, and by, AM; however, there is a need to revise current standards, qualifications, and certification practices before they can be fully leveraged for AM parts used in spaceflight applications.

TOPICS OF INTEREST INCLUDE BUT ARE NOT LIMITED TO:

- 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
- Sustainability, waste, and environmental concerns in the production of AM parts for space exploration
- AM for extreme environment materials
- Applications and development of multi-material assemblies to meet diverse requirements
- Functional integration and part count reduction opportunities for AM space hardware
- Innovative design strategies for AM Space hardware: leveraging AI tools for enhanced development and real-time monitoring

Symposium Organizers

- **Christo Dordlofva**, GKN Aerospace, Sweden
- **Eliana Fu**, TRUMPF, USA
- **Xueyong Qu**, The Aerospace Corporation, USA
- **Shahrooz Nafisi**, Rocket Lab, USA
- **Andrew Norman**, ESA, Netherlands
- **Maximilian Strixner**, The Exploration Company, Germany
- **John Vickers**, NASA, USA

Submit
an abstract

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