

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

Mechanical Testing of Additive Manufactured Materials

Established testing standards exist for deriving different mechanical properties; however, it has become clear that conventional procedures may not always apply to additive manufactured materials due to the nature of the additive fabrication process. Additionally, unique mechanical characteristics and property dependence exist under different conditions such as geometry, process parameters, and post-process procedures.

This symposium will cover important topics such as:

- Applicability of existing test methods to additive manufactured materials
- Development of new test methods, such as small-scale tensile testing, to represent the local material performance
- High throughput testing methods for build quality screening
- Properties assessment of miniaturized engineering structures
- Influence of process and post-process parameters on part performance
- Structure-property-performance relationships
- Build size, orientation, and location dependence of mechanical properties
- Characterization of multi-material components
- Material testing methodologies representative of the part performance

Symposium Organizers



- Joy Gockel, Colorado School of Mines, USA
- Robert Lancaster, Swansea University, UK
- Ed Herderick, Ohio State University, USA
- Phuong Tran, RMIT, Australia
- Jason Ten Jyi Sheuan, A*STAR-SIMTech, Singapore



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ADDITIVE MANUFACTURING