

ASTM INTERNATIONAL CONFERENCE ON ADVANCED MANUFACTURING Research to Application through Standardization

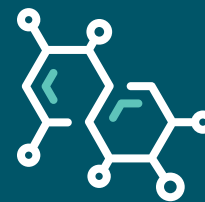
Submit an Abstract at www.amcoe.org/icam2024

Non-Metallic Materials: Polymers

With a focus on progress in polymer materials for additive manufacturing, this symposium has an emphasis on the latest advancements related to material and process standardization, mechanical performance, and unique test standards. The need for documented design, analysis, qualification and certification methods, novel applications, and requirements for a trained workforce are also critical areas for discussion. In addition, this symposium will highlight the maturation of additive manufacturing technologies and processes with these polymer materials and how they work to produce complex geometries with suitable structural and functional properties.

Topics of interest include but are not limited to:

- Material property characterization and test methods for feedstock materials, long term material viability, and additively manufactured parts
- Process influence in physical, chemical, and mechanical characteristics of additively manufactured parts
- Design and analysis methods
- Characterization of defect formation and effects of defects
- Certification methods for product design through production
- Installation qualification (IQ), operational qualification (OQ), and performance qualification (PQ)
- Workforce training, education, and operator certification
- Materials extrusion, direct ink write, embedded direct ink write
- Polymer based AM technologies including powder bed fusion, material jetting, material extrusion, vat photopolymerization, and binder Jetting
- In-situ measurements for process control
- Highly loaded material systems
- Printability optimization
- Sustainability in processes and materials



Symposium Organizers

- Thomas Fabian, Blue Sky Polymer Consulting, USA
- Jessica Hemond, TE Connectivity, USA
- Callie Higgins, NIST, USA
- Karl Nelson, Stratasys, USA
- Michael Pecota, NAVAIR, USA
- Richard Schmidt, Interactive Inks & Coatings, USA



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Research to Standards

ADDITIVE MANUFACTURING