

COMPUTATIONAL MECHANICS FOR ADDITIVE MANUFACTURING

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MINISYMPOSIUM

Computational mechanics has been playing a vital role in developing effective modeling, optimization, and monitoring tools for additive manufacturing. This mini-symposium (MS) aims to provide a platform to discuss the recent advances in computational mechanics for additive manufacturing. Specific topics of the MS include (but are not limited to)

- Multi-scale and multi-physics AM process modeling
- Modeling and simulation for microstructure evolution, phase transformation, and defect formation
- Data-driven modeling techniques for model integration and material design

- Topology optimization
- Uncertainty quantification in AM process and materials properties prediction