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**MARCH 14-18, 2021 • ORLANDO WORLD CENTER MARRIOTT
ORLANDO, FLORIDA, USA**
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SUBMIT AN ABSTRACT TO:

ADDITIVE TECHNOLOGIES

COMPUTATIONAL TECHNIQUES FOR MULTI-SCALE MODELING IN ADVANCED MANUFACTURING

The purpose of the symposium is to present the development of computational techniques for the modeling of multi-scale phenomena in materials processing and advanced manufacturing processes such as additive manufacturing. The submitted papers should address the new application of conventional techniques or new, more efficient, numerical methods and solution algorithms for the solution of problems that involve multiple-scale phenomena.

Typical topics may include solution algorithms for coupling of models that describe microscale, mesoscale, and macroscale phenomena, deterministic and stochastic models, phase field simulations, cellular automata, direct numerical simulations of microstructure, mass transport, stress evolution during solidification, and fluid dynamics effects. In addition to theoretical studies, experimental efforts that generate data to validate the models are encouraged; as are applications of these techniques to solve actual complex problems faced by industry in developing new materials and new processes. Topics may pertain to phenomena related to any material or metallurgical processes.

ORGANIZERS

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Abstract Deadline is July 1, 2020. Submit online at
www.programmaster.org/TMS2021.

Questions?
Contact programming@tms.org