

# CALL FOR ABSTRACTS

March 10–14, 2019 San Antonio, Texas, USA

### **SUBMIT AN ABSTRACT TO:**

#### **ADDITIVE TECHNOLOGIES**

## Additive Manufacturing of Metals: Microstructural Evolution and Phase Transformations

Currently, an immense effort is being put into implementing Additive Manufacturing (AM) built components in demanding industrial applications. This requires the understanding of the stability of AM microstructures in service, including high load and temperature conditions. Presently, most feasibility studies are limited to existing commercial alloy compositions. Nevertheless, the uniqueness of AM technology opens new opportunities for the design of future alloys specifically tailored for the AM process and its application. The aim of this symposium is to provide a forum for presenting the latest progress towards the future of AM.

Topics of interest include, but are not limited to:

- Microstructural response of AM components to post-processing conditions
- Simulation/modelling of phase transformations and microstructure stability of AM components during service
- Novel alloy design tailored for AM
- Extension of these concepts to high-temperature Fe-, Co-, Ni- alloys currently not available as commercial AM product.

#### **ORGANIZERS**

Bij-Na Kim, LPW Technology/Lancaster University, United Kingdom Eric A. Lass, National Institute of Standards and Technology, USA Chantal K. Sudbrack, QuesTek Innovations, LLC, USA Mohsen Asle Zaeem, Missouri University of Science & Technology, USA Sudarsanam S. Babu, The University of Tennessee, Knoxville, USA Ryan R. Dehoff, Oak Ridge National Laboratory, USA Gerhard Fuchs, University of Florida, USA