

**TMS2016**  
145<sup>th</sup> Annual Meeting & Exhibition

FEBRUARY 14-18 DOWNTOWN NASHVILLE,  
TENNESSEE MUSIC CITY CENTER

Connecting the Global Minerals, Metals, and Materials Community.



## Additive Forming of Components - Tailoring Specific Material Properties in Low Volume Production

Advancements in additive manufacturing technology have created the ability to design and construct parts with geometries and properties that cannot be achieved through traditional machining processes. This ability has promoted new design strategies whose success relies on close integration of engineering with materials science. Of particular interest is tailoring specific material properties in low-volume production.

The main objective of this symposium is to provide a forum to discuss ways to integrate approaches to develop customized, low-volume production components with customized material properties. This includes increasing our understanding of the relationships between complex microstructures and mechanical behavior with regards to the influences of repetitive rapid solidification on resulting phase transformations and their influence on the strengthening mechanisms. Abstracts are requested in the following general topic areas relating to additive manufacturing and its influence on phases and properties: transient phenomena, phase transformation, and rapid solidification.

**Organizers include:**

**Judith Schneider**, Mississippi State University (USA)

**Mark Stoudt**, NIST (USA)

**Kester Clark**, Los Alamos National Laboratory (USA)

**Lee Semiatin**, US Air Force Research Laboratory (USA)

**Mohsen Asle Zaeem**, Missouri University of Science and Technology (USA)

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