THE WORLD COMES HERE.

TMS 2023

152nd Annual Meeting & Exhibition

MARCH 19–23, 2023
SAN DIEGO CONVENTION CENTER &
HILTON SAN DIEGO BAYFRONT
SAN DIEGO, CALIFORNIA, USA
#TMSANNUALMEETING

SUBMIT AN ABSTRACT BY JULY 1 FOR THE FOLLOWING TMS2023 SYMPOSIUM:

ADDITIVE TECHNOLOGIES

Additive Manufacturing: Beyond the Beam IV

Additive manufacturing comprises a breadth of processes, which have substantial commercial potential, design flexibility, and technical challenges. Significant corporate and government resources have been committed to energy beam powder bed fusion processes, while solid-state AM technologies have lagged in terms of overall funding for research and development. Furthermore, these "green part" additive technologies build extensively on decades of particulate material processes, which enable the additive manufacturing of non-weldable materials. These processes include, but are not limited to: binder jetting, material extrusion, material jetting, bound filament deposition, nano-Inkjet printing, friction stir deposition, ordered powder lithography, and cold spray. Non-beam-based additive technologies face several unique challenges, such as: feedstock development, alloy design, depowdering, powder recycling, binder design, debinding, process modeling, microstructural development, dimensional accuracy, sintering distortion, and sintering support structure design.

This symposium will explore the relationships between the various aspects of process variables, properties, application performance, economics, and functionality of these non-beam additive techniques.

ORGANIZERS

James Paramore Army Research Laboratory
Daniel Lewis, Texas A&M University
Kyle Tsaknopoulos, Worcester Polytechnic Institute
Paul Prichard, Kennametal Inc.

SYMPOSIUM SPONSORS

TMS Materials Processing & Manufacturing Division
TMS Powder Materials Committee
TMS Additive Manufacturing Committee

www.tms.org/TMS2023

QUESTIONS?
Contact programming@tms.org