# THE WORLD COMES HERE. TMS 2025 154th Annual Meeting & Exhibition



March 23–27, 2025 MGM Grand Las Vegas Hotel & Casino Las Vegas, Nevada, USA #TMSAnnualMeeting



# SUBMIT AN ABSTRACT FOR THE FOLLOWING TMS2025 SYMPOSIUM:

# **ADDITIVE MANUFACTURING**

# **Additive Manufacturing: Marine Materials and Structures**

This symposium is focused on computational and experimental approaches to develop and validate alloys and additive manufacturing (AM) processes for naval, naval aviation, marine, and offshore energy applications. The symposium highlights research in developing AM processes for strategic alloys (Bronze, Titanium, Stainless Steels, Super Alloys, and High Entropy Alloys), large format AM processes, application-driven alloy design employing integrated computational materials engineering (ICME), machine learning, and artificial intelligence (AI) as well as fatigue/fracture/failure analyses of AM processed marine materials and structures.

Topics of interest include (but are not limited to):

- Tailored AM processes and large-scale AM
- Microstructure-property relationships in AM marine materials and structures
- AM of strategic marine alloys
- Rapid solidification frameworks
- Environmental effects (biofouling, corrosion, sub-zero temperatures, etc.)
- Computational modeling and simulation of AM processes
- · Digital manufacturing and process in-situ monitoring.

## **ORGANIZERS**

Mohsen Mohammadi, University Of New Brunswick; Meysam Haghshenas, University of Toledo; Charles Fisher, Naval Surface Warfare Center - Carderock

### **SYMPOSIUM SPONSORS**

TMS Materials Processing & Manufacturing Division, TMS Additive Manufacturing Committee, TMS Integrated Computational Materials Engineering Committee