

SUBMIT AN ABSTRACT FOR THE FOLLOWING TMS2022 SYMPOSIUM:

MATERIALS DESIGN

Metal-Matrix Composites: Advances in Processing, Characterization, Performance and Analysis

This symposium, the fourth in a series, will bring together engineers, scientists, scholars, and entrepreneurs to present and discuss their novel and innovative contributions in the domain specific to metal-matrix composites and on aspects specific to:

- Processing
- Characterization
- Mechanical Behavior
- Measurements
- Failure behavior
- Kinetics governing microstructural influences on failure by fracture

The goal of this inter-disciplinary symposium is to bring together the range of developments in the domains spanning processing, microstructural characterization, mechanical property evaluation, and an analysis of failure behavior of this material, an attractive, potentially viable, and affordable choice for selection and use in both existing and emerging applications. The family of composites span the entire spectrum of metals to include the intermetallic. The conference will certainly provide an attractive forum for presenting recent advances on aspects related to materials processing, fabrication, characterization, modeling, analysis, and observations by way of interpretations by both researchers and engineers working in industry, national research laboratories, and academia. Keynote, invited and contributed talks will be included. The keynote and invited papers from leading-edge academic and industrial research settings will provide a lucid and comprehensive overview of the status and potential future directions for both research and applications.

Contributed papers will attempt to cover specific problems in the same areas. The topics of interest include the following:

- Metals and Metal-matrix composites
- Nano-metal based composites
- Intermetallic-based composites

Where possible, contributions in the above topics should relate to applications in one of the eight industry-relevant areas:

- Automotive
- Energy applications
- Aerospace
- Failure Analysis
- Bio-medical and healthcare
- Heavy Equipment, Machinery, and Goods
- Nuclear
- Clean Energy (Renewable)

ORGANIZERS

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SYMPOSIUM SPONSORS

TMS Composite Materials Committee

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QUESTIONS? Contact programming@tms.org