TMSFALL2023

@ MATERIALS SCIENCE & TECHNOLOGY

October 1-4, 2023 | Columbus, Ohio | #TMSFallMeeting

Submit Your Abstract Today: Join Us for the TMS Fall Meeting at MS&T23!

Abstracts are now being accepted for 25 symposia organized by TMS technical committees and TMS members. Select the symposium that best suits your work, and submit an abstract today. The TMS Fall Meeting allows TMS members to meet and share their work within the broader structure of the Materials Science & Technology 2023 (MS&T23) meeting and exhibition.

Abstracts Due April 3, 2023

ADDITIVE MANUFACTURING

- Additive Manufacturing Modeling, Simulation, and Machine Learning: Microstructure, Mechanics, and Process
- Additive Manufacturing of Polymeric-based Materials: Challenges and Potentials
- Additive Manufacturing of Titanium-based Materials: Processing, Microstructure and Material Properties
- Additive Manufacturing:
 Equipment, Instrumentation and In-Situ Process Monitoring
- Agile Additive Manufacturing by Employing Breakthrough Functionalities
- Phase Transformations and Microstructure Evolution during Post-Processing of Additively Manufactured Metals

ARTIFICIAL INTELLIGENCE

 Leveraging Integrated Computational Materials Engineering for High-fidelity Physics-based and Machine Learning Models

CERAMIC AND GLASS MATERIALS

 Integrated Computational Materials Engineering (ICME) for Ceramics and Ceramic Matrix Composites (CMCs) in Extreme Environments

EDUCATION AND CAREER DEVELOPMENT

- ACerS/TMS Emerging Faculty Symposium
- Curricular Innovations and Continuous Improvement of Academic Programs (and Satisfying ABET along the Way): The Elizabeth Judson Memorial Symposium

FUNDAMENTALS AND CHARACTERIZATION

- High Entropy Materials: Concentrated Solid Solutions, Intermetallics, Ceramics, Functional Materials and Beyond IV
- Interface-mediated Phenomena in Structural Materials
- Metal Powder Synthesis and Processing: Fundamental Aspects and Modeling

IRON AND STEEL (FERROUS ALLOYS)

- Advances in Understanding of Martensite in Steels II
- Steels for Sustainable Development II

LIGHTWEIGHT ALLOYS

 Recent Developments in Light-Weight Composites and Materials

MODELING

- Computational Discovery, Understanding, and Design of Multi-principal Element Materials
- Integration between Modeling and Experiments for Crystalline Metals: From Atomistic to Macroscopic Scales V

NUCLEAR ENERGY

- Advanced Characterization of Materials for Nuclear, Radiation, and Extreme Environments IV
- Ceramics for New Generation
 Nuclear Energy System Application
- Progressive Solutions to Improve Corrosion Resistance of Nuclear Waste Storage Materials

PROCESSING AND MANUFACTURING

- Advanced Joining Technologies for Automotive Lightweight Structures
- Advances in Surface Engineering
- Energy Efficient Solid-state Processing

SPECIAL TOPICS

 History of Materials Science and Engineering