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149th Annual Meeting & Exhibition

February 23-27, 2020 · San Diego, California, USA



Submit an abstract to:

Characterization

Characterization of Minerals, Metals and Materials

The symposium focuses on the advancements of characterization of the minerals, metals, and materials and the applications of characterization results on the processing of these materials. Subjects include, but not limited to, extraction & processing of various type of minerals, process-structure-property relationship of metal alloys, glasses and ceramics, polymers, composites, and carbon using as functional and structural materials such as natural fibers, biomaterials, electronic, magnetic and optical materials, energy materials, newly developed advanced materials, pollutants, recycled, insulation materials, etc. Advanced characterization methods, techniques, nondestructive evaluation, and new instruments are emphasized.

Areas of interest include, but are not limited to:

- Novel methods, techniques, and instruments for characterizing materials across a spectrum of systems and processes
- Characterization of mechanical, thermal, electrical, optical, dielectric, magnetic, physical, and other properties of materials
- Characterization of structural, morphological, and topographical natures of materials at micro- and nanoscales
- Characterization and related instrument for materials processing and manufacturing.
- Characterization of extraction and processing including process development and analysis.
- Nondestructive evaluation of engineering materials and components with ultrasonic testing, acoustic
 emission, infrared thermography, radiography, etc.
- Instrumental developments for microstructure analysis and performance evaluation of materials, such as process integration, computer tomography (CT), X-ray and neutron diffraction, electron microscopy (SEM, FIB, TEM etc.), spectroscopy (EDS, WDS, EBSD) techniques, TG/DTA/DSC, etc.
- 2D and 3D modelling for materials characterization

This symposium encourages, but does not demand, accompanying proceedings papers for each oral presentation. Awards will be presented for individuals who provide the best combination of oral presentation and written proceedings paper. In addition, a poster session will be organized at this symposium with awards for best posters.

ORGANIZERS

Jian Li, CanmetMATERIALS, Canada
Mingming Zhang, ArcelorMittal Global R&D, USA
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Abstract Deadline is July 1, 2019. Submit online at www.programmaster.org/TMS2020.

Questions?Contact programming@tms.org