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TMS2020

149th Annual Meeting & Exhibition

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

Submit an abstract to:

Materials Processing

Materials Processing Fundamentals

The key interest areas to be covered in this symposium are all aspects of the fundamentals, synthesis, analysis, design, monitoring, and control of metals, materials, and metallurgical processes and phenomena. Topics will include:

- Experimental, analytical, physical, and computer modeling of physical chemistry and thermodynamics
- Modeling on the transport phenomena in materials processing and metallurgical processes involving iron, steel, nonferrous metals, and composites
- Second-phase particles in metals and processes, such as non-metallic inclusions and bubbles in metals (steel, aluminum, silicon, magnesium, etc.) or gas bubbles in slag or electrolyte (foaming, gas evolution or injection, etc.); the fundamentals (experimental studies or theoretical studies) on the nucleation, growth, motion, and removal of these second-phase particles from the molten metal or reactors
- Physical chemistry, thermodynamics, and kinetics for the production and refining of rare earth metals
- Control of industrial processes in the field of extraction and processing of metals and materials: novel sensors for hostile-environment materials processes, such as online inclusion detection, temperature, and velocity in molten materials, surface condition of hot moving products, etc.; innovative online sampling and analysis techniques; models for real-time process control; and quality monitoring systems

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Abstract Deadline is July 1, 2019. Submit online at www.programmaster.org/TMS2020.

Questions?
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