

### March 15-19, 2026

San Diego Convention Center and Hilton San Diego Bayfront San Diego, California, USA #TMSAnnualMeeting

# SUBMIT AN ABSTRACT FOR THE FOLLOWING SYMPOSIUM

### MATERIALS SYNTHESIS AND PROCESSING

## **Rare Metal Extraction & Processing**

This symposium will cover extraction of critical minerals, including rare metals, from primary and secondary sources, materials and residues, recycling of critical elements, as well as extraction processing techniques used in metal production.

The focus of this symposium will be on critical minerals, rare metals—less common metals or minor metals (those are not covered by other TMS symposia), such as antimony, bismuth, barium, beryllium, boron, calcium, chromium, gallium, germanium, hafnium, indium, lithium, manganese, molybdenum, platinum group metals, rare earth metals, rhenium, scandium, selenium, sodium, strontium, tantalum, tellurium, and tungsten.

Critical element processing will cover bio-metallurgy, hydro-metallurgy, and electro-metallurgy. Novel high-temperature processes such as biomimicking leaching and separation, external forces stimulated separations, microwave heating, solar-thermal reaction synthesis, and cold crucible synthesis of critical elements will be considered. Processing design of extraction technologies and equipment used in these processes will be included from industry, as well as laboratory and pilot plant studies.

Note regarding publication: Authors seeking an oral or poster presentation opportunity must submit a manuscript for the proceedings or be accepted for publication in a TMS journal.

#### **SPONSORED BY:**

TMS Extraction & Processing Division; TMS Hydrometallurgy and Electrometallurgy Committee

### **ORGANIZED BY:**

- Athanasios Karamalidis, Pennsylvania State University
- **Kerstin Forsberg**, KTH Royal Institute of Technology
- Takanari Ouchi, University of Tokyo
- Gisele Azimi, University of Toronto
- · Shafiq Alam, University of Saskatchewan
- Neale Neelameggham, IND LLC
- Alafara Baba, University of Ilorin
- Hong Peng, University of Queensland