

## Special Issue

# Trends in Modern Mineral Processing and Recovery Techniques Toward the Energy Transition

### Message from the Guest Editors

This Special Issue aims to cover topics and foster debates concerning technological innovations in geomettallurgy, focusing on mineral processing technologies and recovery techniques for ores, by-products, and waste streams, including critical raw materials (CRMs), while rebounding a responsible supply of strategic metals through sustainable metallurgy in the era of energy transition. To the trajectory of ecological modernization and development, the mining industry requires sustainable exploration/exploitation and the efficient processing of materials. To meet the fundamental needs in mining concerning low CO<sub>2</sub> emission and energy consumption, intelligent mining, mining hazard management, and self-driving technologies are proposed to be implemented in order to obtain social, economic, and environmental outcomes. Additionally, old-standing mineral processing technologies (e.g., comminution—grinding/crushing; classification—particle size separation; beneficiation combined with metallurgy and dewatering—solid/liquid separation) serve as high-energy and cost-consuming methods, affecting the economy and environment.

### Guest Editors

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### Deadline for manuscript submissions

closed (20 May 2025)



## Materials

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### Message from the Editor-in-Chief

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