



## Leaching/Bioleaching and Recovery of Metals

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### Message from the Guest Editors

Hydrometallurgical processes for metal extraction are becoming more and more popular as average ore grades are declining and huge tonnages of tailings and recycle materials containing valuable metals are being accumulated all around the world. Hydrometallurgy and more recently bio-hydrometallurgy have brought some added value to these processes, since they can recover large amounts of metals using aqueous solutions and chemical reagents that could be provided by certain microorganisms. In addition, environmental risks associated to the accumulation of hazardous residues from metallurgical industries could be overcome by applying bio/hydrometallurgical methods. Hydrometallurgy of base metals, particularly Cu, Zn, Ni, etc., is a well-documented process, but other metals, particularly strategic ones (cobalt, lithium, rare earths, etc.) have not yet deserved so much attention by the scientific community. In the same way, the field of bio-hydrometallurgy has been focused mainly on a few metals, so there is still room for improvement.





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## Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

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