



## Metal Recovery from Secondary Resources

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### Message from the Guest Editors

Dear Colleagues,

Primary mining is inherently unsustainable and poses significant environmental risks. In the context of the huge imbalance between the increasing demand for metals and their decreasing supply from finite natural metal resources, metal recovery via sustainable and inexpensive routes from secondary resources is a significant way to reduce mining activities and their environmental impacts. Examples include mine tailing, metallurgy slags, spent catalysts, electronic wastes, and various other industrial side streams. The metals can be precious metals including gold, silver, and platinum, industrial and base metals such as copper, aluminum, steel, and zinc, rare earth metals, or other important metals.

This Special Issue is focused on the advanced methods for metal recovery from secondary resources, such as physical method, pyrometallurgy, hydrometallurgy, electrochemistry, and biohydrometallurgy techniques. Reviews and original articles in the areas of pretreatment, metal enrichment, metal purification, process optimization, industrial applications, as well as life cycle assessment, are welcomed.





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## Editor-in-Chief

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## Message from the Editor-in-Chief

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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