



Advances in Recycling and Reuse of Metals

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Message from the Guest Editors

The economic and environmental benefits of metal recycling are substantial. The practice reduces energy consumption and greenhouse gas emissions compared to primary production methods, contributing to climate change mitigation. Additionally, metal recycling contributes to the conservation of raw materials, thus reducing the need for extensive mining. This is more relevant when metals are scarce in nature or critical to the operations of modern society.

Metal recycling technologies are developing at a significant pace, enabling more efficient extraction and refinement processes. Innovations in sorting, shredding, separation techniques and extraction metallurgy also offer to enhance the recovery of various metals from complex waste streams. Moreover, advancements in metallurgical science allow the extraction of high-purity metals from recycled materials.

This Special Issue is devoted to the presentation of innovative research works on the field of recycling, extraction of metals from wastes as well as possibilities of reuse of metallic components.





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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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