



Advances in Recycling and Reuse of Metals

Guest Editors:

Prof. Dr. Fernando Castro

Department of Mechanical
Engineering, Universidade do
Minho, 4800-058 Guimarães,
Portugal

**Prof. Dr. Manuel Fonseca
Almeida**

Department of Materials and
Metallurgical Engineering,
Faculty of Engineering, University
of Porto, Porto, Portugal

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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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Editors-in-Chief

Prof. Dr. Hugo F. Lopez

Department of Materials Science
and Engineering, College of
Engineering & Applied Science,
University of Wisconsin-
Milwaukee, 3200 N. Cramer
Street, Milwaukee, WI 53211, USA

Prof. Dr. Yong Zhang

Beijing Advanced Innovation
Center of Materials Genome
Engineering, State Key
Laboratory for Advanced Metals
and Materials, University of
Science and Technology Beijing,
30 Xueyuan Road, Beijing 100083,
China

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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Metals Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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