

Special Issue

Challenges in the Development of Sustainable Extractive Metallurgy Processes

Message from the Guest Editors

The development of new technologies and the increasing demand of mineral resources from emerging countries are responsible for significant tensions on the price of nonferrous metals. They are found in high-tech products such as flat panel TVs (indium), solar panel cells (indium), lithium-ion batteries for electric vehicles (lithium), magnets (rare earths such as neodymium and dysprosium), scintillators (rare earths), and aviation and medical applications (titanium). The secured supply of these metals is crucial to continue producing and exporting their technologies and because specific properties of these metals make them essential and difficult to substitute for a given industrial application. This Special Issue aims at gathering recent advances in the field of extractive metallurgy applied to metal valorization contained in primary and secondary resources and to the development of technologies aiming at reducing effluent production and effluent impact on environment. Recent studies on societal and environmental impacts of extractive metallurgy as well as economics of processes are also of interest for this Special Issue.

Guest Editors

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Deadline for manuscript submissions

closed (31 October 2020)



Metals

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Impact Factor 2.5
CiteScore 5.3



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About the Journal

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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