Special Issue

Electrorefining in Sustainable Metals Production

Message from the Guest Editor

World faces growing demand of raw materials and nonferrous as well as specialty metals. To make metals production more sustainable, it is necessary to use resources efficiently and at the same time develop processes that can treat both complex, low-grade primary materials as well as secondary materials. Hydrometallurgy is often used for the production of nonferrous, noble, and specialty metals, and in hydrometallurgical processes electrorefining is often the final step in the production. Electrorefining is efficient in the production of pure metals because only very small amounts of metallic impurities end up in the cathodes. The general focus of this Special Issue of Metals is on papers related to the improvement of production rate, improvement of energy usage, and methods to ascertain product quality. Papers that address the challenges caused by the increasing use of secondary raw materials are encouraged. In this Special Issue, the concept of electrorefining is not limited to traditional aqueous systems, and papers on nonagueous systems such as ionic liquids and molten salt electrolysis are very welcome.

Guest Editor

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About the Journal

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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