

Special Issue

Corrosion and Protection of Metallic Materials in Extreme Environments

Message from the Guest Editor

One of the main drawbacks to the use of metallic materials is the degradation and deterioration of their properties by the action of the surrounding environment due to electrochemical corrosion. As new applications appear in the main industrial fields involving harsh media, the minimum requirements demanded of traditional alloys have increased. It is for this reason that the development of new materials has become a fruitful object of research in materials science and technology. In order to achieve this goal, a careful characterization and understanding of the complex processes of corrosion on the surface of the new candidate materials are needed. Moreover, apart from the straightforward approach of using bulk alloys with improved corrosion resistance, the application of a protective coating to the metallic substrate is another effective technique. Therefore, this Special Issue of *Metals* will be devoted to illustrating the state-of-the-art in the study of electrochemical behavior and corrosion resistance of alloys of industrial interest. We also encourage authors reporting new breakthroughs in the field of protective coatings to participate.

Guest Editor

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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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