Special Issue

Corrosion Electrochemical Measurement, Analysis and Research

Message from the Guest Editor

Since electrochemical reaction is a fundamental part of the metal corrosion process in the majority of cases, electrochemical measurement and analysis play an extremely important role in corrosion evaluation, monitoring and research based on the mixed potential theory for electrochemical corrosion. Alongside the development of science and technology, increased attention has been paid to scanning microelectrochemical technology, which is also closely related to the initiation and development of corrosion, especially localized corrosion. In addition, it is important to understand corrosion phenomena, study corrosion behavior, and develop corrosion electrochemical monitoring methods from the perspective of electrochemical/chemical reactions. We believe that electrochemical technology is an irreplaceable method for corrosion monitoring and research in the past, present and future.

This Special Issue welcomes articles that focus on the base and application of corrosion electrochemical techniques for metal and coating during corrosion, such as EIS, potential scanning, electrochemical noise, scanning electrochemical probes, etc.

Guest Editor

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Deadline for manuscript submissions

closed (30 June 2024)



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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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