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Recent Surface Treatments of Metals and Their Alloys

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Message from the Guest Editors

Dear Colleagues,

Recently, considerable effort has been expended in the search for green anti-corrosion compounds that can protect metals against mechanical and chemical attacks. New ways of designing metallic materials with specific functionality have already highlighted the potential of ecofriendly corrosion inhibitors with respect to the variety of coating methods. Owing to its positive impact on the electrochemical and catalytic responses, nature-friendly compounds are considered a promising class of surface treatments, and their interfacial mechanisms are critical in exploring corrosion behavior, property changes and surface modification. The combination of experimental and theoretical approaches is crucial to obtain more accurate, complete and detailed information about the functionalization of organic compounds on metallic surfaces. This Special Issue is dedicated to providing preparation comprehensive insight into the and characterization of organic corrosion inhibitors, including characterization surface/interface interfacial and mechanism studies









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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 metallurgical field the 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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