

Special Issue

Advances in Anti-corrosion Polymeric and Paint Coatings on Metals: Preparation, Adhesion, Characterization and Application

Message from the Guest Editor

Metals play a critical role in people's lives, and metal products have a number of useful properties. The rapid increase in the amount of metal produced is accompanied by a rapid increase in economic losses from corrosion. Currently, the most common method of anticorrosion protection of materials is the use of paint and polymeric coatings, accounting for up to 90% of all corrosion protection costs. In order to ensure the reliable functioning of a metal structure, it is necessary to constantly monitor adhesion and its resistance to the action of the surrounding environment, permeability of the coating in relation to corrosive substances, the rate of underfilm corrosion, etc., as well as the characteristics of metal-polymer joints.

This Special Issue provides a thorough introduction to the various types of coatings that can be used to protect against corrosion. Physical, mechanical, adhesion, and anticorrosion properties of coatings and novel test methods—as well as areas of application—will be provided for each type of material.

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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