Computational and Experimental Studies on Corrosion of Materials

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Message from the Guest Editors

In recent decades, the development of mathematical models representing chemical and physical phenomena, as well as the application of modern computing simulations to analyze them, have experienced huge advancement. These methods have found applications in predicting atmospheric corrosion (i.e., via machine learning), characterizing corrosion inhibition mechanisms and their relationship with the molecular characterize structure and the adsorption processes, pit corrosion nucleation and growth, erosion-corrosion, crevice corrosion, and stress-corrosion cracking processes in industry.

This Special Issue focuses on Computational Simulation and Experimental Investigations on Corrosion of Materials as it relates to atmospheric influence, exploring the greatest advances in the field of corrosion prevision and surface modification by corrosion modeling. Topics include, but are not limited to, materials corrosion analysis by computational simulation, density functional theory (DFT), Monte Carlo (MC), molecular dynamics (MD), and RF-based machine learning.

Special Issue

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Message from the Editor-in-Chief

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