# Special Issue

# Computational and Experimental Studies on Corrosion of Materials

## 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.

## Guest Editors


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## Deadline for manuscript submissions

closed (20 July 2023)


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### Message from the Editorial Board

*Materials* (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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