# Special Issue

# Research on Corrosion Behavior of Alloys and Protective Coatings

## Message from the Guest Editors

This Special Issue, titled "Research on Corrosion Behaviors of Alloys and Protective Materials", presents a comprehensive exploration of the latest advancements in understanding and mitigating corrosion in various alloy systems. The focus is on materials commonly used in demanding environments, such as stainless steel, Ni-based alloys, and Cr-bearing alloys, which exhibit varying degrees of corrosion resistance due to their unique compositions and surface treatments. A key theme in this Special Issue is the investigation of stainless steel's performance under corrosive conditions, particularly its susceptibility to localized corrosion and the effectiveness of protective strategies like coatings and cathodic protection. This Special Issue also delves into Ni-based alloys, known for their excellent corrosion resistance, especially in high-temperature and aggressive environments. The included studies examine their microstructure, passive film formation, and response to corrosive agents, providing insights into enhancing their durability.

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## Deadline for manuscript submissions

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## Message from the Editor-in-Chief

*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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