Special Issue

New Advances in Corrosion Inhibitor for Metals and Alloys

Message from the Guest Editor

Corrosion of metals and alloys remains a significant challenge across various industries, leading to substantial economic losses and safety concerns. The development of effective corrosion inhibitors is crucial to mitigate these issues and extend the lifespan of metallic structures. This special issue, brings together cutting-edge research and innovative approaches in the field of corrosion inhibition. The contributions cover a wide range of topics, including the synthesis and characterization of novel inhibitors, eco-friendly and sustainable corrosion inhibitors, computational modeling for inhibitor design, and the application of advanced techniques for performance evaluation. Topics include, but are not limited to, methods and/or applications in the following areas:

- Synthesis and Characterization of Novel Corrosion Inhibitors
- Green and Sustainable Corrosion Inhibitors
- Nanotechnology in Corrosion Inhibition
- Computational and Theoretical Approaches
- Electrochemical Techniques for Corrosion Monitoring
- Smart and Functional Materials
- Industrial Applications of Corrosion Inhibitors.

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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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