Special Issue

Modern Materials and Methods of Mitigating Metal Corrosion

Message from the Guest Editor

Metals are broadly utilized in modern society because of their excellent mechanical properties and their ability to withstand different conditions. Corrosion occurs at the metal–electrolyte interface and significantly reduces the lifetime of metals. Corrosion is induced by chemical and electrochemical processes. A recognizable strategy to combat corrosion is by employing corrosion inhibitors. These inhibitors have a tendency to mitigate corrosion by forming various kinds of protective films via adsorption, forming precipitates, or forming an inactive layer on a metal surface. Most inhibitors inhibit the corrosion process by developing an invisible protective film on the surface of metal. Metal corrosion is a major issue due to its negative impact on economics, society, and the health and safety of people. Hence, there is an alarming need to address this issue, and modern materials and methods to mitigate corrosion need to be discussed. This Special Issue on the mentioned theme will represent a common forum for research findings from around the world addressing solutions for challenges and issues relating to metal corrosion.

Guest Editor

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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