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Corrosion Electrochemistry and Protection of Metallic Materials

Guest Editors:

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Message from the Guest Editors

Dear Colleagues,

Metallic alloys are used in various industries such as automotive aerospace, aeronautic, chemical and naval. These industries have high requirements with few damage tolerances. As such, they necessitate the use of materials that present fatigue, mechanical and mainly corrosion resistance. Corrosion of materials in the industry is a major problem affecting economics, safety and logistical issues. The mechanic strength of metallic alloys is not sufficient to protect components exposed to aggressive environments. In both cases, this can be achieved via the optimization of alloy designs and metallurgical processes, as well as appropriate corrosion control strategies.

This Special Issue covers investigations on corrosion electrochemistry and the protection of metallic materials, focusing on current trends in electrochemical corrosion science, and aims to provide a perspective on recent research studies related to metallic materials, where electrochemical techniques, corrosion mechanisms and corrosion protection methods are addressed. All articles related to electrochemical corrosion and methods of protection of metallic materials are welcome.

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Message from the Editor-in-Chief

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