Special Issue

Corrosion-Related Failure Analysis in Industrial Components and Equipment

Message from the Guest Editors

This Special Issue, "Corrosion-Related Failure Analysis in Industrial Components and Equipment," aims to cover the current trends in the science, engineering, and technology of metals and alloys. It will contribute to recent research studies related to the corrosion and failure of materials under service conditions. The issue will address various failure analysis methodologies, including the organization and execution of a failure investigation, the determination and classification of damages, and the evaluation and analysis of mechanical properties such as hardness, stress analysis, fatique. creep, fracture analysis, and corrosion mechanisms in aggressive environments. The assessment of damage can be studied through micro- and macroscopic examination, metallographic techniques, nondestructive testing, quantitative chemical analysis, X-ray diffraction, scanning electron microscopy, electrochemical techniques, as well as advanced surface chemical characterization techniques. We welcome any articles that are related to the wide spectrum of material deterioration and performance in the industry.

Guest Editors

Prof. Dr. Facundo Almeraya-Calderón

Prof. Dr. José Guadalupe Chacón-Nava

Prof. Dr. Citlalli Gaona-Tiburcio

Prof. Dr. Enrique Vera-López

Deadline for manuscript submissions

closed (15 February 2024)



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About the Journal

Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

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