



Corrosion-Related Failure Analysis in Industrial Components and Equipment

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)

Message from the Guest Editors

Dear Colleagues,

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, fatigue, creep, fracture analysis, and corrosion mechanisms in aggressive environments. The assessment of damage can be studied through micro- and macroscopic examination, metallographic techniques, non-destructive 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.





an Open Access Journal by MDPI

Editors-in-Chief

Prof. Dr. Hugo F. Lopez

Department of Materials Science
and Engineering, College of
Engineering & Applied Science,
University of Wisconsin-
Milwaukee, 3200 N. Cramer
Street, Milwaukee, WI 53211, USA

Prof. Dr. Yong Zhang

Beijing Advanced Innovation
Center of Materials Genome
Engineering, State Key
Laboratory for Advanced Metals
and Materials, University of
Science and Technology Beijing,
30 Xueyuan Road, Beijing 100083,
China

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.

Author Benefits

Open Access: free for readers, with **article processing charges (APC)** paid by authors or their institutions.

High Visibility: indexed within **Scopus**, **SCIE (Web of Science)**, **Inspec**, **CAPLUS / SciFinder**, and **other databases**.

Journal Rank: JCR - Q2 (*Metallurgy & Metallurgical Engineering*) / CiteScore - Q1 (*Metals and Alloys*)

Contact Us

Metals Editorial Office
MDPI, St. Alban-Anlage 26
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/metals
metals@mdpi.com
[X@Metals_MDPI](https://twitter.com/X@Metals_MDPI)