

Special Issue

Corrosion Detection and Protection of Steel Pipelines

Message from the Guest Editor

Steel pipelines used in oil and gas exploration, marine development, gathering and transportation pipelines and other fields are corroded due to the influence of corrosive environments and operating conditions. Corrosion damage causes huge economic losses in itself, in addition to the losses brought by the shutdown of production due to corrosion. Therefore, the causes, the laws and behaviors of corrosion should be determined, and the corrosion mechanisms clarified. It is of great significance to take effective protective measures to prevent corrosion damage, prolong equipment life, reduce costs, and ensure production safety. There are two types of corrosion in steel pipelines: chemical corrosion and electrochemical corrosion. Therefore, it is necessary to conduct research on the detection and protective treatment of steel pipelines against both types of corrosion. In this Special Issue, we welcome articles that focus on the detection of and protection against corrosion in steel pipeline materials.

Guest Editor

Dr. Wanying Liu

1. School of New Energy and Materials, Southwest Petroleum University, Chengdu 610500, China
2. School of Materials Science and Engineering, Sichuan University, Chengdu 610065, China

Deadline for manuscript submissions

closed (31 October 2023)



Metals

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.3



mdpi.com/si/118486

Metals
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
metals@mdpi.com

[mdpi.com/journal/
metals](https://mdpi.com/journal/metals)





Metals

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.3



[mdpi.com/journal/
metals](https://mdpi.com/journal/metals)



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.

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

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, Ei Compendex, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Metallurgy and Metallurgical Engineering) /
CiteScore - Q1 (Metals and Alloys)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2025).