

Special Issue

Advances in Research on the Tribological Behavior of Steels in Lubricated and Unlubricated Contacts

Message from the Guest Editor

Steel plays a key role in contemporary societies, and it is very difficult to imagine life today without this material. Extending the useful life of mechanical components by controlling wear has become a very important tool for reducing production costs in industries. In the same way, the reduction in friction generated in any machinery means significant savings in energy consumption. With this Special Issue, we seek to provide a series of articles on a wide variety of aspects related to the tribology of steels. The purpose is to exhibit recent advances in the characterization and evaluation of new technologies or techniques for the improvement of friction and wear behavior of steel materials. It is hoped that this open access Special Issue will provide a place for anyone wanting to familiarize themselves with the current state-of-the-art of tribological behavior of steels. Original research articles and short communications on the characterization and evaluation of new technologies applied to steels for the enhancement of their tribological performance are welcome.

Guest Editor

Prof. Dr. Karla Judith Moreno

Head of the Materials and Tribology Research Laboratory Mechanical Engineering Department, National Technological Institute of Mexico (TecNM) in Celaya, Ave. Tecnológico y A.G. Cubas S/N, C.P., Celaya 38010, Guanajuato, México

Deadline for manuscript submissions

closed (31 December 2022)



Metals

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.3



mdpi.com/si/86874

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).