Special Issue

Refining and Casting of Steel

Message from the Guest Editors

Steel is the most requested material all over the world during the past fast technically evolving centuries. As our civilization grows and its technological development is connected with more demanding processes, it is more and more challenging to fit required physical and mechanical properties for steel in its huge portfolio of grades for each steel producer. It is necessary to improve the refining and casting processes continuously to meet customer requirements and lowering the production costs to stay competitiveness. In this Special Issue, we seek to provide a broad set of the state-of-the-art researches of steel refining and casting. Articles on the ladle refining, vacuum processing, micro cleanness of steel, non-metallic inclusion management, slag optimization, continuous casting, ingot casting, and numerical and physical simulation of mentioned processes are welcome.

Guest Editors

Assoc. Prof. Karel Gryc

Environmental Research Department, Faculty of Technology, The Institue of Technology and Business in České Budějovice, Okružní 517/10, 370 01 České Budějovice, Czech Republic

Assoc. Prof. Jan Falkus

Department of Ferrous Metallurgy, Faculty of Metals Engineering and Industrial Computer Science, AGH University of Science and Technology, Mickiewicza Av. 30, 30-059 Kraków, Poland

Deadline for manuscript submissions

closed (15 October 2019)



Metals

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.3



mdpi.com/si/15666

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

mdpi.com/journal/ metals





Metals

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.3





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).