



an Open Access Journal by MDPI

# Advanced Tundish Metallurgy and Clean Steel Technology

Guest Editors:

Dr. Chao Chen

Dr. Adam Cwudziński

Deadline for manuscript

closed (31 December 2023)

submissions:

Prof. Dr. Rodolfo Morales

Prof. Dr. Markéta Tkadlečková

## Message from the Guest Editors

Tundish has been widely used in the continuous casting of steel, aluminum, and copper. In the early 1980s, the concept of tundish metallurgy was put forward by Heaslip and McLean. The tundish metallurgy has developed with the evolution and demand of continuous casting as well as clean steel production. Extensive physical and mathematical model studies on tundish have been carried out. Even larger tundish volume, long refractory service life. stable performance for high-speed casting, uniform temperature control by heating technologies, and flexible flow control for casting speed adjustment are new demands and technologies for tundish. Clean steel production is a systematic and complicated project throughout the whole steel production process. Raw material (ferroalloys), secondary refining, tundish, and continuous casting are all key issues for clean steel production.

In this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) tundish metallurgy, secondary refining, continuous casting, clean steel technologies, refractories, converter and electric arc furnace steelmaking, and metallurgical equipment development.



mdpi.com/si/130937







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 metallurgical field the ranging from processing. and mechanical behavior. phase transitions 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 and Metallurgical Engineering*) / CiteScore - Q1 (Metals and Alloys)

## **Contact Us**

*Metals* Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/metals metals@mdpi.com X@Metals\_MDPI