

## Special Issue

# Numerical Simulations in Metal Refining Process

### Message from the Guest Editor

With the increasing demand for high-quality metals, it is necessary to improve the refining process to improve its efficiency, stability, and lower its carbon to enhance smelter competitiveness. With the development of numerical techniques and computational resources, the computational fluid dynamics (CFD) method has become a powerful tool for understanding the metal refining process, able to solve the coupled mass, momentum, and heat transfer equations and allowing for a more realistic assessment of the flow field.

Therefore, the purpose of this Special Issue is to collect and display the latest research progress of the numerical simulation of the metal refining process, as well as identify any research gaps.

This Special Issue of *Materials* aims to advance the current knowledge in numerical studies concerning the multiphase flow, inclusion motion, bubble coalescence and breakup, the and chemical reaction in various metal refining processes, especially welcoming research papers addressing the innovative numerical approach. The journal accepts original research papers as well as review articles summarizing recent progress in the field.

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### Guest Editor

Prof. Dr. Qiang Wang

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### Deadline for manuscript submissions

closed (10 November 2023)



## Materials

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## About the Journal

### Message from the Editor-in-Chief

*Materials* (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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### Editor-in-Chief

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