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Metallurgical Process Simulation and Optimization

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Message from the Guest Editors

Dear Colleagues,

Metallurgy involves the art and science of extracting metals from their ores and modifying the metals for use. With thousands of years of development, many interdisciplinary technologies have been introduced into this traditional and large-scale industry. In modern metallurgical practices, modelling and simulation have been widely used to provide solutions for design, control, optimization, and visualization, and tend to be increasingly significant in the progress of digital transformation and intelligent metallurgy.

This Special Issue aims to provide an opportunity for researchers from both academia and industry to share their advances pertinent to the Special Issue “Metallurgical Process Simulation and Optimization,” which covers the process of electric/oxygen steelmaking, secondary metallurgy, (continuous) casting, and processing. Both fundamental insights and practical foresights are greatly welcome in the form of research article or review, such as thermodynamics, kinetics, physical modelling, numerical simulation, CFD, 3D visualization, microstructural evolution, quality control, artificial intelligence, big data, and cloud computation.



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Special Issue



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Message from the Editor-in-Chief

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