Special Issue

Advances in Continuous Casting and Refining of Steel

Message from the Guest Editor

Continuous casting and refining play a crucial role in steel production. Continuous casting enables the efficient solidification of molten steel into semi-finished products, enhancing productivity. Refining processes, such as LF and RH, precisely control chemical compositions and remove inclusions. Their combined application ensures the production of high-quality steel with enhanced mechanical properties and reduced defects, meeting the stringent demands of modern industries.

This Special issue aims to present new technologies, processes, and trends regarding the application of continuous casting and refining. Original research articles and reviews from academia and industry are welcome. The scope of this Special Issue includes, but is not limited to, the following topics: innovative casting techniques, the optimization of the refining process, clean steel technologies, improvements in the quality of cast products, digital and intelligent applications, and the impact of novel refractory materials. I look forward to receiving your contributions.

Guest Editor

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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.

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