



materials



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Design, Manufacturing and Properties of Refractory Materials

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Message from the Guest Editors

Dear Colleagues,

Refractory materials are strategic materials taking into account the fact that they enable the production of strategic building materials, such as steel, cement, or glass. Extensive research into their properties, including corrosion resistance, mechanical properties or thermal behavior, is critical in the development of new types of long-life and ecologic materials as well as in enhancing the properties of existing ones. At present, Artificial Intelligence (AI) contributes to facilitating R&D and industrial processes, including the refractory industry, e.g., in predicting selected material properties or wear of refractory lining. Thus, exploring this cutting-edge technology has great potential. This issue invites a broad group of researchers who test and assess primary and secondary refractory raw materials, design or investigate properties of both formed and monolithic refractory materials with the intention to increase their lifetime or enhance positive or neutral environmental character, including those applying AI technology.

Prof. Dr. Jacek Szczerba

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Guest Editors



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Message from the Editor-in-Chief

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