Special Issue

Mineralogy of Iron Ore Sinters, 3rd Edition

Message from the Guest Editors

Iron ore sintering is an important stage in the production of steel from iron ore. Iron ore sintering is a high-temperature process that converts iron ore fines into larger agglomerates containing bonding phases, unmelted nuclei and pores. The sinter must possess the chemical, physical, metallurgical and gas permeability characteristics required for efficient blast furnace operation, and these are controlled in part via the sinter mineralogy. Although a mature field of research, the progressive decline in iron ore grades requires that innovative research into all aspects of the mineralogy of iron ore sinter, including its effect on the physical and mechanical properties, continues. For this Special Issue (Volume III), a follow-up to two previous Special Issues from 2019 and 2022, we welcome contributions detailing fundamental physical chemical studies, experimental and theoretical studied on mineralogy or iron ore sinters. This includes detailed characterization of the formation mechanisms of sinter mineral phases. We also solicit methodological studies employing cutting-edge analytics.

Guest Editors

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Deadline for manuscript submissions

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About the Journal

Message from the Editor-in-Chief

Minerals welcomes submissions that report basic and applied research in mineralogy. Research areas of traditional interest are mineral deposits, mining, mineral processing and environmental mineralogy. The journal footprint also includes novel uses of elemental and isotopic analyses of minerals for petrology, geochronology and thermochronology, thermobarometry, ore genesis and sedimentary provenance. Contributions are encouraged in emerging research areas such as applications of quantitative mineralogy to the oil and gas, manufacturing, forensic science, climate change, geohazard and health sectors.

Editor-in-Chief

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