

## Special Issue

# Evolution and Modeling of Iron Ore Sintering Process

### Message from the Guest Editor

This Special Issue will mainly focus on the actual status and developments of the iron ore sintering process and discussing new insights into ongoing technologies with potential for integration and sustainable approaches, from raw material selection and preparation to technological predictions of sinter properties. Our Special Issue will cover relevant topics of interest, such as:

- Raw material selection and intensive mixing (experimental and modeling approaches);
- Sintering modeling (statistical, continuous and discrete approaches);
- Modeling and optimization techniques applied to sinter production;
- CALPHAD approach for sintering phase evolution;
- Kinetics and phenomenological modeling;
- Big data approach for raw material preparation and sintering process;
- Artificial intelligence and expert systems for sintering process control;
- Image analysis and alternatives techniques for mineral and sinter phase quantification;
- New alternative fuels for the iron ore sintering process;
- Industrial trials aiming at sustainable developments in the iron ore sintering process.

Thank you and we look forward to receiving your contributions.

### Guest Editor

Prof. Dr. Jose Adilson de Castro

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### Deadline for manuscript submissions

closed (31 December 2022)



## Minerals

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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.

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### Editor-in-Chief

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JCR - Q2 (Mining and Mineral Processing) / CiteScore - Q1 (Geology)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.2 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2025).