



Simulation Using the Discrete Element Method (DEM) in the Minerals Industry

Guest Editor:

Dr. Rodrigo Magalhães de Carvalho

Department of Metallurgical and Materials Engineering, COPPE, Universidade Federal do Rio de Janeiro, Rio de Janeiro CEP 21941-972, RJ, Brazil

Deadline for manuscript submissions:

closed (18 June 2021)

Message from the Guest Editor

The discrete element method (DEM) has proved to be a powerful tool that has allowed and has been opening the black box of operations and mechanisms in several processes in the minerals industry. As this industry deals mostly with particles, DEM can be used with different approaches ranging from machine- or process-focused to particle scale applications, where each of them presents individual challenges. Some of DEM's applications include simulation of granular materials handling, classification, comminution, agglomeration and concentration. DEM also can be applied as a coupled tool to other numerical simulation techniques such as CFD, SPH, MBP, MBD and FEM. This Special Issue of *Minerals* aims to gather the most recent research and application advances using DEM, and its coupled techniques, with direct interest in the minerals industry. We would like to invite researchers in this field to submit your research papers, review papers, and communications related to DEM in the minerals industry.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Leonid Dubrovinsky
Bayerisches Geoinstitut,
University Bayreuth, D-95440
Bayreuth, Germany

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), GeoRef, CaPlus / SciFinder, Inspec, Astrophysics Data System, AGRIS, and other databases.

Journal Rank: JCR - Q2 (*Geochemistry and Geophysics*) / CiteScore - Q2 (*Geology*)

Contact Us

Minerals Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/minerals
minerals@mdpi.com
[X@Minerals_MDPI/](https://twitter.com/Minerals_MDPI/)