

## Special Issue

# Advances in Industrial Flotation Applications

### Message from the Guest Editors

Flotation plants face multiple challenges, such as processing extensive amounts of ever-decreasing-grade ores that exhibit complex, varying mineralogy and demand large quantities of water that may be scarce and/or have low metallurgical quality. Efficiently treating these ores requires advances in different fields, such as developing novel chemical reagents and flotation machines with enhanced hydrodynamics for fine and coarse particle recovery. In addition, plant operators must search for optimal metallurgical performance with limited real-time information. Therefore, advances in real-time sensing technology for characterizing mineralogy, water quality, gas dispersion, and mineral suspension properties; CFD modeling; process supervision incorporating recent advances in machine learning techniques; and optimizing control strategies are also required. Thus, we invite researchers and professionals to contribute articles describing recent industrial flotation applications.

### Guest Editors

Dr. Miguel Maldonado

Department of Metallurgical Engineering, University of Santiago. Avda. Libertador Bernardo O'Higgins 3363, Santiago, Chile

Dr. Luis Vinnett

Department of Chemical and Environmental Engineering, Universidad Técnica Federico Santa María, Av. España 1680, Valparaíso, Chile

### Deadline for manuscript submissions

closed (31 January 2025)



## Minerals

an Open Access Journal  
by MDPI

Impact Factor 2.2  
CiteScore 4.4



[mdpi.com/si/174386](https://mdpi.com/si/174386)

*Minerals*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[minerals@mdpi.com](mailto:minerals@mdpi.com)

[mdpi.com/journal/  
minerals](https://mdpi.com/journal/minerals)





# Minerals

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.2  
CiteScore 4.4



[mdpi.com/journal/  
minerals](https://mdpi.com/journal/minerals)



## 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

Prof. Dr. Leonid Dubrovinsky

Bayerisches Geoinstitut, University Bayreuth, D-95440 Bayreuth,  
Germany

---

### Author Benefits

#### High Visibility:

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

#### Journal Rank:

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).