





an Open Access Journal by MDPI

Industrial Minerals Flotation-Fundamentals and Applications

Guest Editors:

Prof. Dr. Xuming Wang

Department of Materials Science and Engineering, College of Mines and Earth Sciences, University of Utah, 122 S. Central Campus Drive, #304 Salt Lake City, UT 84112, USA

Prof. Dr. Jan D. Miller

Department of Materials Science and Engineering, College of Mines and Earth Sciences, University of Utah, 122 S. Central Campus Drive, #304 Salt Lake City, UT 84112-0114, USA

Deadline for manuscript submissions:

31 August 2024

Message from the Guest Editors

Industrial minerals are generally considered to be nonmetallic mineral resources. Most industrial minerals, including limestone, clays, sand, gravel, diatomite, and so on. Industrial minerals are valued for their physical and chemical properties that make them useful for many industrial applications. As with many other metallic mineral resources, concentration processes are needed to purify and enrich industrial minerals before further preparation and utilization. One important processing technology is the flotation separation method. This Special Issue focuses on the flotation chemistry of industrial minerals, which is different from sulphide mineral flotation, and is organized into the following sections.

- Industrial minerals applications;
- Fundamental features of the flotation process bubble attachment;
- Phosphate flotation;
- Soluble salt flotation;
- Phyllosilicate mineral surface chemistry;
- Bauxite flotation:
- Spodumene flotation;
- Graphite recovery from retired batteries.











an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Leonid DubrovinskyBayerisches 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 (*Mining & Mineral Processing*) / CiteScore - Q2 (*Geology*)

Contact Us