Special Issue

Industrial Minerals Flotation— Fundamentals and Applications

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.

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Deadline for manuscript submissions

closed (20 June 2025)



Minerals

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Impact Factor 2.2 CiteScore 4.4



mdpi.com/si/167281

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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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