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.

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Deadline for manuscript submissions

closed (31 January 2025)

Minerals

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CiteScore 4.4

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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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