



Dissolution and Precipitation Dynamics at the Mineral–Fluid Interface

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Deadline for manuscript submissions:
closed (31 August 2025)

Message from the Guest Editors

Mineral reactivity is a major factor controlling the natural fluxes of matter and energy in the Geosphere. In fact, and all large-scale geological phenomena are related to it. The key to understand complex geological processes often rests in mineral stability/reactivity features, and the mineral-fluid-organism/organic substance interactions are central to the dynamics of the Earth's Critical Zone. The study of mineral-fluid interactions is of great importance to the characterization and prediction of the mobility of hazardous elements and compounds in the environment, also provide with the efficient methods for environmental remediation. Finally, all biomineralization processes are strongly dependent on the thermodynamic and kinetic forcing factors of dissolution, nucleation, and growth of critical biomineral systems.

The present Special Issue invites submissions of original research related to the study of mineral-fluid interactions, especially those concerning mineral dissolution/precipitation features, in various contexts (geoscientific, experimental mineralogy, environmental management-remediation, material sciences, biomineralization, etc.).





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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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