Special Issue

Carbonate Biomineralization, Environmental, and Diagenetic Significance

Message from the Guest Editors

Carbonate deposits usually originate from biomineralization and are frequently used in geochemistry to assess the composition of past seawater and environmental conditions. Therefore, understanding biomineralization and its diagenetic alterations is of prime interest for recording the world's history. Clearly, knowledge of biomineralization is crucial for the reconstruction of past environmental conditions and for the investigation on fossil records. Numerous new methods and apparatus have been developed in the last few years to investigate biominerals, i.e., their ultrastructures and composition. The importance of organic phases in now demonstrated, and the composite organization and the complex diagenetic evolution of biologically controlled mineralizations should be taken into account when environmental studies are performed. This Special Issue is dedicated to new insights into both calcium carbonate biomineralizations and their use as geochemical signatures.

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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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