



Advances in Carbonate Diagenesis

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Message from the Guest Editors

Dear Colleagues,

In recent years, remarkable advances have been made in carbonate diagenesis studies, specifically regarding the use and calibration of various geochemical, mineralogical, and textural proxies. Proxies such as stable isotopes, trace elements, mineralogical properties (e.g., stoichiometry and cation ordering), as well as crystal size and texture, provide valuable insights into the origin and evolution of diagenetic fluids, paleoenvironmental and burial conditions. This Special Issue intends to publish high-impact original research and review papers that apply geochemical, mineralogical, and textural proxies in order to understand carbonate diagenesis. We aim to organize this Topical Collection into four sections that emphasize advances in the following areas of interest: (1) diagenetic proxies (e.g., clumped isotopes, Mg and Ca isotopes, stoichiometry, and textural proxies), (2) diagenetic models, (3) new insights into dolomitization, and (4) novel methods and tools.





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Message from the Editor-in-Chief

Understanding the Earth's origin and its bio-geological evolution, the multiple implications of the geosciences (as a coherent set of interconnected disciplines), and the sociocultural and ethical interdisciplinary approaches, will be crucial for a better understanding of Nature, and also for undertaking scientifically based political decisions.

We are committed to drive *Geosciences* to a position in which it is recognized for its high-quality, cutting-edge research and scientific influence, and strongly encourage and invite your participation and manuscripts.

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