



## Biosignatures in Deep Time

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Deadline for manuscript  
submissions:

**closed (15 June 2021)**

### Message from the Guest Editors

Dear Colleagues,

Life probably appeared on Earth 4 billion years ago. Unfortunately, studying fossils dating from this time to understand the origin and early evolution of life is hampered by geological and biological processes. In particular, metamorphism, plate tectonics, and crustal recycling are responsible for the degradation or disappearance of most of the oldest fossils. Moreover, when looking back into the past, the presence of large organisms decreases with time, and for most of Earth's history, the biosphere is only composed of microbes.

This Special Issue focuses on corroborative biosignatures and bio-indicators that allow demonstration of the biogenicity of ancient microbial remains from the kilometer to nanometer scale. We are thus particularly looking for contributions based on **correlative multiscalar and multimodal approaches**.





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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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