

## Topical Collection

# Detrital Minerals: Their Application in Palaeo-Reconstruction

### Message from the Collection Editors

In recent years, there have been remarkable developments in techniques employed in sedimentary provenance studies, including major and trace element mineral chemistry, isotopic analysis and thermochronology on an ever-increasing array of detrital minerals. This has been accompanied by new automated technologies to quantify sediment compositions that enable provenance studies to be applied to fine-grained sediments as well as sandstones, and increased understanding of the processes that control detrital sediment compositions (weathering, transport, hydrodynamics, diagenesis, mineral fertility). In this issue, we invite papers that utilise both traditional and novel approaches to sediment provenance studies for one of the most important geological purposes, the understanding of palaeogeography, including identification of the nature and location of sediment source regions, constraining sediment entry points and transport pathways, and linking climate and tectonics to basin development and infill. Contributions that offer multi-proxy approaches are especially welcome.

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### Collection Editors

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## Geosciences

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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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### Editor-in-Chief

Prof. Dr. John C. Eichelberger

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