

Beyond Archaeology Alone: The Indispensable Role of Geoarchaeology in Understanding Human–Environment Dynamics Through Time

## **Keywords**

Geoarchaeology; Human-environment interactions; Landscape evolution; Site formation processes; Geosciences.

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## **Abstract**

Many of archaeology's enduring questions cannot be addressed by material or cultural evidence alone. We know that understanding how humans interacted with their environments, how archaeological sites formed, and how landscapes evolved over time requires an integrated approach that bridges the natural and social sciences. Within this context, geoarchaeology provides this connection by combining geological, geomorphological, and pedological perspectives (in their broader sense) with traditional and state of the art archaeological and anthropological ones to reveal the environmental contexts of human behaviour.

This session aims to highlight the indispensable role of geoarchaeology in addressing problems that archaeology alone cannot fully solve. Through the analysis of sediments, soils, and stratigraphic sequences, geoarchaeology helps reconstruct landscape evolution, site formation processes, and the dynamic interplay between humans and their environments over time. We invite contributions that demonstrate how geo-related perspectives deepen our understanding of human–environment relationships across different spatial and temporal scales. A discussion on the current role of geosciences in the study of Prehistory is encouraged. Case studies that employ analytical techniques to address this issue, such as micromorphology, geochemistry, dating methods, or modelling approaches, are welcome.