

# Session: #496

## Theme & Session Format

**Theme:**

2. Archaeological Sciences, Humanities and the Digital era: Bridging the Gaps

**Session format:**

Regular session

## Title & Content

**Title:**

From Micro to Macro: Integrating Micromorphology and Microcontextual Analyses for Archaeological Insights

**Content:**

What is today's role of archaeological soil/sediment micromorphology in unearthing human narratives from different contexts? Soil micromorphology has proven to be a powerful tool for investigating the minute details of natural and archaeological deposits. This method offers a unique perspective, revealing "microscopic whispers" that echo across time and provide essential insights into formation processes, human activities, and environmental conditions.

Rooted in Soil Sciences, micromorphology's scope has expanded to encompass diverse fields of study, from Natural to Social Sciences, broadening its potential and helping us to understand past human cultures and their interactions with the surrounding environment. Micromorphological observations have thus become a recognised and shared basis of the geoarchaeological approach, paving the way for its integration with emerging state-of-the-art methodologies and analytical techniques concerned with the microscopic or sub-microscopic scale. To date, we might be talking about microarchaeology, considering it a 'pocket knife' to decipher context-based archaeology. In this session, we will explore the integration of micromorphological analyses with other micro-contextual techniques within geoarchaeological investigations, as this integration provides valuable insights that enhance our interpretations of complex archaeological contexts. Therefore, we invite global case studies spanning all chronologies to foster discussions on (A) how micromorphology can be implemented with other micro-contextual analytical tools and (B) how these micro-scale analyses can help us shed light on macro-scale archaeological questions.

This session calls for contributions that not only highlight the current state of the field but also explore its future potential. By examining how micromorphology adapts to emerging methodologies, we aim to chart a course for the ongoing integration of micro-contextual techniques in the ever-expanding realm of archaeology. Together, we envision the continued growth of micromorphology as a cornerstone of archaeological inquiry, enriching our understanding of human history and environmental dynamics across diverse contexts and epochs.

**Keywords:**

Micromorphology, Micro-contextual Analyses, Microarchaeology, Microstratigraphy, Site Formation Processes, Geoarchaeology

**Session associated with MERC:**

no

**Session associated with CIfA:**

no

**Session associated with SAfA:**

no

**Session associated with CAA:**

no

**Session associated with DGUF:**

no

**Session associated with other:**

## Organisers

**Main organiser:**

Opeyemi Adewumi (Portugal) <sup>1,2,3</sup>

**Co-organisers:**

Irini Sifogeorgaki (Netherlands) <sup>4</sup>

Miguel Soares (Portugal) <sup>5</sup>

Laura Tomé (Spain) <sup>6,7</sup>

Maurizio Zambaldi (Portugal) <sup>8</sup>

**Affiliations:**

1. Geosciences Center (CGEO), Department of Earth Sciences, University of Coimbra, P-3030, 790 Coimbra, Portugal

2. Instituto Terra e Memória, Mação, Portugal

3. Instituto Politécnico de Tomar, Portugal

4. Human Origins Group, Leiden University, Faculty of Archaeology. Einsteinweg 2, 2332EC, Leiden, Netherlands

5. The interdisciplinary Center for Archaeology and Evolution of Human Behaviour, Universidade do Algarve, Campus de Gambelas, 8005-139 Faro, Portugal

6. Archaeological Micromorphology and Biomarkers Laboratory (AMBI Lab), Instituto Universitario de Bio-Orgánica “Antonio González”, Universidad de La Laguna, 38206, Tenerife, Spain

7. Área de Prehistoria, Departamento de Geografía e Historia, Facultad de Humanidades, Universidad de La Laguna, 38206, Tenerife, Spain

8. University of Coimbra, Centre of Studies in Geography and Spatial Planning (CEGOT), FLUC, Department of Geography and Tourism, Coimbra, Portugal