**Session Proposal**

# Session Title

Micromorphology as a Tool for Understanding the Evolution of Soils and Environments in Natural and Human-Impacted Landscapes

# Session Organizers

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# Session Description

Despite rapid advancements in various methods for studying soil and environmental history, micromorphology remains one of the most powerful, sensitive, and high-resolution tools for paleoenvironmental research. Unlike most techniques that rely on homogenized bulk samples, non-destructive micromorphological analysis uniquely enables the detection of faint traces of initial and/or weakly developed soil processes and the reconstruction of sequences of both natural and anthropogenic soil and sedimentary transformations over time.

This session welcomes case studies on soil and environmental history in both natural and human-altered landscapes. We invite contributions on the evolution of soil and soil-sedimentary systems driven by climate and landscape changes, as well as human impacts such as agriculture, manufacturing, diverse construction activities, and settlement. Special attention will be given to the role of micromorphology in studying soils, sediments, and artifacts from archaeological sites.

Our goal is to bring together specialists applying micromorphology to investigate soil-sedimentary and environmental history in buried paleosols, exposed polygenetic soils, and archaeological contexts.

# Format

Oral presentations

# Proposed Speakers

Rosa Maria Poch Claret, University of Lleida Lleida, Spain, a leading expert in soil micromorphology for understanding soil genesis, soil environmental changes, and soil management practices, rosa.poch@udl.cat

Sergey Sedov, Institute of Geology National Autonomous University of Mexico, Mexico, serg\_sedov@yahoo.com

Ricard Macphail, key specialist in archaeological micromorphology, University College London, Institute of Archaeology, r.macphail@ucl.ac.uk, London, Great Britain

Yannick Devos, Vrije Universiteit, Brussel, Belgium, micromorphology of Dark Earth, medieval urban soils, yannick.george.devos@vub.be

Marina Lebedeva micromorphology for soil genesis and evolution, soils of arid, extra-arid and cryo-environments nowadays and in the past, Dokuchaev Soil Institute, Russia, m\_verba@mail.ru

Paul Goldberg, Boston University, Department of Archaeology, 675 Commonwealth Ave. Boston, MA 02215 World known specialist in geoarchaeology and archaeological micromorphology, paulberg@bu.edu