

MICROARCHAEOLOGY

TRACKING THE HIDDEN ARCHAEOLOGICAL RECORD THROUGH MULTIDISCIPLINARY ANALYSIS

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During the excavation process archaeologists focus on the visible record to make field decisions and establish stratigraphic and chronological correlations. Despite this is the best way to proceed in archaeological excavation, there is still a lack of sense about the importance of what is not visible, because it is usually assumed that it is missing. However, little by little this concern is growing, especially when taking into account the sampling possibilities that will help us to supplant our eye limitations and achieve the observation of these micro-components of the archaeological record.

Microscopic constituents are important because they provide a huge amount of information that can be the key to understand the complete archaeological context. The microscopic record is composed of the materials of which the macroscopic artefacts are made, as well as the sedimentary matrix in which the artefacts are buried. Thus the investigation of the archaeological record as a whole involves the integration of both the macroscopic and microscopic records.

The study of the invisible archaeological record involves a wide range of equipment and analytical techniques, which is only possible when incorporating multi-technique characterization from other sciences. This micro perspective will contribute to the current archaeological debate by answering questions related to e. g. chronology, trade, subsistence strategies, diet, migration, kinship ties and origins of communities. Ultimately, these approaches are essential to correctly infer the human behaviour in the past societies, as well as their palaeoenvironmental context, from the archaeological record.

Current archaeological research is in need for implementation of new methodologies and technologies from the natural sciences and interdisciplinarity is essential in order to achieve an accurate interpretation of the record. Therefore, this session has focused on the archaeological information that can be extracted from the microscopic record and, in particular, from the materials commonly found in most archaeological sites such as ceramics, bones, rocks, ash and sediments. Multiple aspects of archaeological research at a micro-scale were subject of debate.

Session 6 had a great number of international contributions, which can be more attentively read in the next pages. Topics are about archaeobotany (pollen); palaeoenvironmental reconstructions (stable isotopes, sediments, biogenic indicators); site formation processes (sediments, micromorphology); residue analysis (phosphates, lipids); paleodietary reconstruction (stable isotopes, lipids), use-wear lithic as well as paleogenetics (DNA sequences).