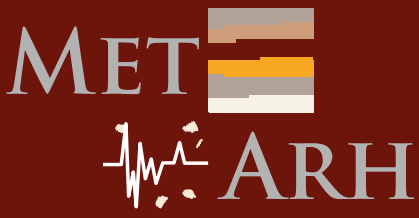

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10TH INTERNATIONAL SCIENTIFIC CONFERENCE

METHODOLOGY & ARCHAEOMETRY

Zagreb, 1st – 2nd December 2022

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Book of abstracts

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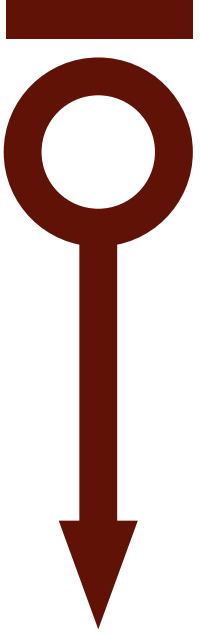

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MET ARH

The scientific conference *Methodology and Archaeometry* is being organised by the Department of Archaeology, Faculty of Humanities and Social Sciences since 2013. The goal of the conference is to entice interdisciplinarity, critical thinking, new insights and approaches as well as new theoretical frameworks in contemporary archaeological science.

Coverage of a wide spectrum of themes and scientific disciplines has resulted in papers and discussions that promote scientific issues in the fields of methodology, documentation and interpretation of archaeological data.

The interdisciplinary character of the conference brings together archaeologists and researchers from other scientific disciplines with whom archaeologists collaborate closely; and who – through their work, projects and ideas – promote new insights about Interpretation of the human life in the past.

Section Methodology

Obtaining and collecting data is an essential part of the archaeological research process. How we collect and interpret data defines the validity of our interpretation. We use different techniques, approaches and tools which help us to reconstruct past processes and to give a more objective and comprehensive picture of the past. Contemporary interpretation tools alleviate and speed the data collection and also provide us with countless possibilities for the interpretation, protection and presentation of archaeological sites and the landscapes encompassing them.

Section Archaeometry

Having in mind the limited information we obtain from archaeological excavations and from the classification of archaeological material, cooperation with other scientific disciplines becomes necessary, to obtain as much information as possible on the conditions and the way in which humans lived in the past. Contemporary archaeology is a very heterogeneous discipline encompassing interest groups focussed on various periods, regions, theoretical frameworks and methodological techniques. Aside from the description of mechanical and physical features of a specific artefact or material, various arhaeometrical analyses help us to direct our scientific focus to questions regarding the ways and features included in the social and cultural life of people who made, used, exchanged and discarded those objects. Cooperation with the natural sciences provides answers to many questions, but it also demands an additional level of caution when selecting adequate scientific analysis for a specific archaeological problem. It also demands continuous cooperation of a specific expert and an archaeologist from sample collection to the final interpretation.

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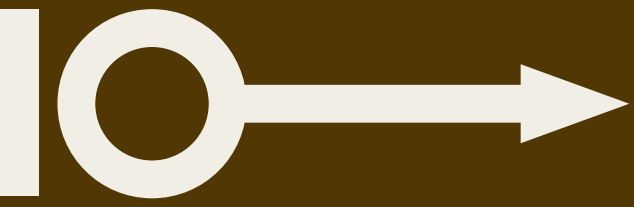
POSTER ABSTRACTS



dense, uniform, bright and "wet" surface sheen. The analysis performed for the production of this paper was done at a relatively low microscopic magnification of 200×. Various phases of the formation of sickle gloss were identified on 19 blades, blade fragments or blade tools from the Galovo site in Slavonski Brod, and on a truncated bladelet and a flake from the Dužine site in Zadubravlje. The distribution of gloss on individual specimens at these sites exhibits the characteristic appearance of harvesting tools.

Emilija Nikolić[1], Ivana Delić-Nikolić[2], Ljiljana Miličić[2], Nevenka Mijatović[2], Mladen Jovičić[1] & Snežana Vučetić[3]

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Searching for elements – creating a composition: from archaeometry to conservation of Roman constructions on the Danube in Serbia

Roman mortars have long been one of the most intriguing topics in the field of construction history, which together with archaeology has embraced many sciences and professional practices in order to unravel the technologies and knowledge of ancient builders. Among them, geology occupies a special place in the investigation of the origin of raw materials. At the same time, with the help of chemistry, it looks for their mutual relationships, which eventually led to composites with the use of which the most monumental Roman buildings were erected.
Through the project Mortar Design for Conservation – Danube Roman Frontier 2000 Years After, the characterisation of more than 120 samples of Roman mortars originating from buildings erected along the former Danube Limes in Serbia, in the period from the 1st to the 6th century, was carried out. Research executed in laboratories in order to get mineralogical-petrographic and chemical characterization, and determination of physical and mechanical characteristics of samples brought completely new data about the use of building materials for the purpose of preparing mortar in this period on the outskirts of a Roman province. The results enabled materials scientists to prepare over 60 models of compatible conservation mortars using detected raw materials, which were then experimentally applied in the field. The promising results of the behaviour of applied conservation mortars show the importance of previous multidisciplinary scientific research for the needs of architectural conservation of monuments. At the same time the entire project process - from characterization to conservation, can present a valuable contribution to the nomination dossier for the Frontiers of the Roman Empire – Danube Limes in Serbia which the Republic of Serbia is currently preparing with the aim of recognising these precious ancient archaeological sites along the great river as properties of the UNESCO World Heritage List.

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