

INTRODUCTION

ARCHAEOLOGY SESSION AT THE 20TH WORLD CONGRESS OF THE INTERNATIONAL UNION OF PREHISTORIC AND PROTOHISTORIC SCIENCES (UISPP) – INTERDISCIPLINARITY IN ARCHAEOLOGY

**AZ INTERNATIONÁLIS UNIÓN OF PREHISTORIC AND PROTOHISTORIC
SCIENCES (UISPP) 20. VILÁGKONGRESSZUSÁNAK ARCHEOMETRIAI
SZÉKCIÓJA – INTERDISZCIPLINARITÁS A RÉGÉSZETBEN •**



The International Union of Prehistoric and Protohistoric Sciences (UISPP) brings together all disciplines that contribute to the study of Prehistory and Protohistory. The study of mechanisms of adaptation and behavioural dynamics of human societies is the core of the scientific interest of the UISPP. To achieve these goals, the UISPP organises periodically a world congress on prehistoric and protohistoric sciences, to develop the progress of knowledge and to define common research objectives. For this purpose, the UISPP installs scientific commissions dedicated to specific research themes.

The 20th anniversary World Congress of the organisation was held in Timisoara from 5 to 9 September 2023, hosted by the West University of Timișoara (<https://uispp2023.uvt.ro/>). This major event was organised two years after the previous hybrid congress, which was postponed for a year due to the Covid pandemic, instead of the "usual" three years between congresses.

The slogan of the 20th World Congress was "Exploring the world's prehistory" and the general theme was "Interdisciplinarity in Archaeology".

The Commission "Archaeometry of Pre- and Protohistoric Inorganic Artefacts, Materials, and their Technologies" was founded in 2015 and has been one of the largest and most active commissions of the UISPP since its inception (<https://uispp.net/en/commissions/archaeometry>).

At the 2018 Paris congress and the 2021 Meknes (hybrid) congress, we held a full-day archaeometry session with a large number of presentations and a high level of professional interest, so naturally we have submitted a proposal for a dedicated archaeometry session for the 20th congress as well. Our session (Archaeometry of prehistoric and protohistoric stone, metal, ceramics, and glass) was held on 7 September at the West University in Timisoara.

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The main goal of the session was to cover all aspects of analytical approaches applied to the study of archaeological finds of stone, metal, ceramics, and glass. Materials of all periods from Prehistory to medieval protohistoric cultures and civilizations were taken into consideration. Special cases on how general problems concerning the various materials can be solved by applying diverse analytical methodologies, case studies on ancient quarries, the production of stone artifacts from various contexts, research on mining, analyses of smelting remains, metal finds, metal workshop remains, ceramics of all kinds and periods, and research on glass production, colouring of glass/glaze and pigment were collected and presented. A further aim of this session was to share the latest results and experiences that can provide useful information, the comparison of several methods and technologies, and the possibilities of standardization of test and database protocols.

The programme of the session consisted of 17 papers, two of which were poster presentations, making it one of the largest sections of the 45 sessions of the World Congress. It was chaired by the president (the author of these lines) and the secretary of the Commission (Alessandra Giumlia-Mair). The presentations ranged from case studies to research on a general topic or papers on the experience of a specific archaeometric method of investigation. The speakers of ten presentations were members of our scientific UISPP commission for archaeometry. We have tried to provide the opportunity to publish papers as early as possible in the year following the session, at the same time, we have made every effort to ensure that the articles are published in a peer-reviewed journal of an appropriate level of archaeometric science. This is the first time that the articles of an organised scientific event of the UISPP commission for archaeometry have been published in a special issue of *Archaeometry Workshop*. Unfortunately, for various reasons, only six presentations were finally received and reviewed. Nevertheless, these papers are good representatives of the full professional spectrum of the section, both in terms of types of materials and methods of analysis.

A team of researchers from the Department of Prehistory and Archaeology at the University of Granada, together with Ignacio Montero-Ruiz, present the results of metallographic and microhardness analyses of metal assemblages from several sites of the Bronze Age Argar culture (South-Eastern Iberia). Compositional analysis of

more than 700 copper-based artefacts revealed a clear correlation between the use of tin bronze for decoration and the use of arsenic copper for functional objects.

The research of Mohammadamin Emami and colleagues will focus on the characterisation of the typical Shahdad (Iran, 3rd millennium BC) pottery styles, the metallurgical slags scattered in the area, and the remains associated with metallurgical activity such as copper ores, moulds, crucibles, furnaces, and metal residues. The study of the slags and ceramic fragments presented in this paper may provide new information on the preparation techniques, microchemistry, and possible uses of ceramics for metallurgical processes.

Carlo Bottaini and Dirk Brandherm present a recent research project aimed at investigating and identifying the primary ore sources used for copper production in Late Bronze Age Ireland, with a particular focus on the analytical methods used in the research.

Michał Krueger's paper presents observations based on the use of a handheld XRF spectrometer in ceramic research in recent years and attempts to highlight both the advantages and disadvantages of the instrument. To illustrate the possibilities, he draws on the results of two archaeological sites in Western Andalusia, the settlement and necropolis of Setefilla, which are located in close proximity to each other.

The joint complex project of archaeologists from the Institute of Archaeology of Eötvös Loránd University and researchers from the Archaeo-metallurgical Research Group of the University of Miskolc includes the metallographic analysis of samples selected from large amounts of iron raw material pieces at the Early Iron Age fortified settlement of Dédestapolcsány-Verebce-bérc in North-Eastern Hungary. One of the main questions of the research was which step of the ironworking process these raw materials belong to.

The Institute of Archaeology of the Russian Academy of Sciences carried out an intensive architectural and archaeological excavation of the Cathedral of St. George in Veliky Novgorod (Russia), collecting a large number of wall painting fragments. The study of these fresco fragments is reported in a joint paper by the Russian and Italian researchers involved in the project, with a special focus on the most common lapis lazuli pigment and its origin.



Fig. 1: Internal meeting of the Commission for Archaeometry. Participants from left to right: E. Ottenwelter (invited guest), M. Krueger, I. Montero-Ruiz, B. Török, A. Giumlia-Mair, M.P. Riccardi, G. Moiraghi (invited guest), A. Arena, A. Abdrabou, J. Hošek.

1. ábra: Az Archeometriai Bizottság zártkörű ülése. Résztvevők balról jobbra: E. Ottenwelter (meghívott vendég), M. Krueger, I. Montero-Ruiz, B. Török, A. Giumlia-Mair, M.P. Riccardi, G. Moiraghi ((meghívott vendég), A. Arena, A. Abdrabou, J. Hošek.



Fig. 2: UISPP Executive Committee meeting

2. ábra: AZ UISPP bizottsági ülése

An internal meeting of the UISPP Archaeometry Commission was also held during the Congress on 8 September (Fig. 1). The meeting was attended in person by those commission members who were in Timisoara, and votes were also sent by those who were on the original programme of the section but could not attend. By unanimous vote, the 19-member commission was enlarged by two new members who had been speakers in the previous day's session. Thus, the Commission on Archaeometry closed the year 2023 with 21 members from 16 countries on four continents. Since the term of office of the board of each commission always runs until the current UISPP Congress, it was necessary to renew the leadership for the term until the next Congress. No nominations were received for any of the leadership positions other than the current individuals, so the question put to the vote was to re-elect the current board (President: Béla Török, Secretary: Alessandra Giumlia-Mair, Treasurer: Maria Pia Riccardi). The result of the vote was a unanimous 'yes'.

At the Executive Committee meeting (Fig. 2), held on the same day, composed of the board of the UISPP and the leaders of the scientific commissions, a vote was taken on the location of the 2026 World Congress. Of the two candidates, Poznań and Tübingen, the former received the most votes and the 21st UISPP World Congress will be held in Poland.

Béla TÖRÖK
President of the UISPP Commission
"Archaeometry of Pre- and Protohistoric Inorganic
Artifacts, Materials and their Technologies"