



## 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025

# Scientific Program



KERAMos Research Group  
Department of Geology



*Materializing the past: Narratives via Archaeological Science*



Venue: Foundation for Research and  
Technology Hellas (FORTH), Institute of  
Chemical Engineering Sciences (ICE-HT)

Book of abstracts







## 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025

*Materializing the past: Narratives via Archaeological Science*

### Table of Contents

Organizing Committee

1

Scientific Committee

2

Welcome Note

3

Sponsors -Support

4-7

Invited Speaker

8

Scientific Program

9

Posters

24



## 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025

### Organizing Committee

**Dr Maria Kaparou**, President of HSA, NCSR 'Demokritos'

**Dr Artemios Oikonomou**, Vice President of HSA, German Archaeological Institute

**Prof. Ioannis Iliopoulos**, General Secretary of HSA, University of Patras

**Nelly Kladouri**, Treasurer of HSA, Hellenic National Archaeological Museum

**Prof. Yorgos Facorellis**, Member of the Board, University of West Attica

**Dr Eleni Filippaki**, Member of the Board, NCSR 'Demokritos'

**Dr Eleni Kouloumpi**, Member of the Board, National Gallery of Athens

**Dr Yannis Bassiakos**, Consultant of the Board, NCSR 'Demokritos'

**Dr Theophilos Ioannides**, Director of FORTH/ICE-HT, Patras

**Angeliki Kosmatou**, Public Relations officer at FORTH/ICE-HT, Patras



## 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025

### Scientific Committee

S  
C  
I  
E  
N  
T  
I  
F  
I  
C  
  
C  
O  
M  
M  
I  
T  
T  
E  
E

Prof. S. Bogiatzis (University of West Attica)

Dr. H. Brecoulaki (National Research Foundation)

Prof. M. Geraga (University of Patras)

Dr. A. Hein (INN, NCSR 'Demokritos')

Prof. J. Henderson (University of Nottingham)

Prof. G. Karapanagiotis (Aristotle University of Thessaloniki)

Dr. P. Karkanas (Wiener Laboratory, ASCSA)

Dr. A. G. Karydas (INPP, NCSR 'Demokritos')

Dr. E. Kyriatzi (Fitch Laboratory, British School at Athens)

Prof. M. Martínón-Torres (University of Cambridge)

Assoc. Prof. E. Nikita (The Cyprus Institute)

Prof. I. Papadatos (National and Kapodistrian University of Athens)

Prof. Chr. Papageorgopoulou (Democritus University of Thrace)

Prof. Emeritus V. Perdikatsis (Technical University of Crete)

Dr. E. Photos-Jones (Scottish Analytical SAA)

Prof. Th. Rehren (The Cyprus Institute)

Prof. A. Sarris (University of Cyprus)

Prof. K. Sporn (German Archaeological Institute)



## 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025

Welcome to the **9th Symposium of the Hellenic Society for Archaeometry (HSA)**.

This year's Symposium is **organized in collaboration with the KERAMOS Research Group of the Department of Geology, University of Patras, and the Foundation for Research and Technology – Hellas / Institute of Chemical Engineering Sciences (FORTH/ICE-HT)**. Continuing the successful legacy of the eight previous HSA meetings, this event aspires once again to provide a forum for the exchange of ideas, results, and experiences among researchers from diverse disciplines.

We are honoured to welcome **Professor Mark Pollard (University of Oxford)** as **Keynote Speaker**, whose distinguished contribution to the advancement of archaeological science continues to inspire new generations of researchers and to shape the field of archaeometry worldwide.

This year, the HSA is also proud to honour excellence and contribution through **four awards**: the **Myrto Georgakopoulou Award**, the **Kiki Polikreti Award**, the **Archaeological Science Merit Award**, kindly sponsored by **HERITAGE (MDPI)**, and the **Travel Award**, offered by the **Society for Archaeological Sciences (SAS)**. These awards celebrate innovative research, interdisciplinary collaboration, and the international engagement of the community.

We would like to express our sincere gratitude to the members of the Scientific Committee, our Sponsors and supporters and to all participants for their active involvement which ensures the continuing growth of archaeometric research in Greece and beyond.

We are confident that the **9<sup>th</sup> Symposium of the Hellenic Society for Archaeometry** will once again provide a fruitful and inspiring meeting of our community, and we wish you a stimulating and enjoyable experience in Patras.

With warm regards,

**The Organizing Committee**

**The Board of the Hellenic Society for Archaeometry (HSA)**

W  
E  
L  
C  
O  
M  
E  
N  
O  
T  
E



## 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025

The Organizing Committee would like to gratefully acknowledge  
the support of our sponsors :

### PLATINUM SPONSORS



S  
P  
O  
N  
S  
O  
R  
S



## 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025

The Organizing Committee would like to gratefully acknowledge  
the support of our sponsors :

### GOLDEN SPONSORS



**ΑΝΑΛΥΤΙΚΕΣ ΣΥΣΚΕΥΕΣ Α.Ε.**  
ΔΡ Κ.Ι. ΒΑΜΒΑΚΑΣ - ΕΠΙΣΤΗΜΟΝΙΚΟΣ ΕΞΟΠΛΙΣΜΟΣ



S  
P  
O  
N  
S  
O  
R  
S



## 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025

The Organizing Committee would like to gratefully acknowledge  
the support of our sponsors :

### SILVER SPONSORS



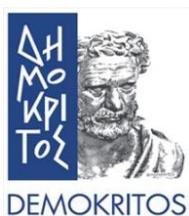
ATTIC  
BLACK



*heritage*



**TITAN**



DEMOKRITOS

S  
P  
O  
N  
S  
O  
R  
S



## 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025

The Organizing Committee would like to gratefully acknowledge  
the support of:

S  
U  
P  
P  
O  
R  
T



Laboratory  
Archaeometry



ΠΕΡΙΦΕΡΕΙΑ  
ΔΥΤΙΚΗΣ  
ΕΛΛΑΔΑΣ

*ζεμάτη αντιδέσεις!*



ΠΑΝΕΠΙΣΤΗΜΙΟ  
ΠΑΤΡΩΝ  
UNIVERSITY OF PATRAS



**Oceanus-Lab**  
University of Patras



ΙΝΣΤΙΤΟΥΤΟ ΕΠΙΣΤΗΜΩΝ  
ΧΗΜΙΚΗΣ ΜΗΧΑΝΙΚΗΣ



# 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> HSA Symposium for Archaeometry

Patras, 5-8 November, 2025

**Professor Mark Pollard (University of Oxford)** is one of the leading scholars in the field of **archaeological science**. His pioneering research has fundamentally shaped the application of chemical and isotopic analysis to archaeology, transforming our understanding of ancient technologies, provenance studies, and human–environment interactions.

As Edward Hall Professor of Archaeological Science and Director of the Research Laboratory for Archaeology and the History of Art (RLAHA) at the University of Oxford, Professor Pollard has led numerous interdisciplinary projects bridging the natural sciences and the humanities. His extensive body of work spans the analysis of ancient metals, ceramics, glass, pigments, and human remains, while also advancing theoretical and methodological frameworks for interpreting scientific data in archaeological contexts.

Author of over 250 scientific publications and several landmark textbooks—including *Analytical Chemistry in Archaeology* and *Archaeological Chemistry*—he has played a defining role in establishing archaeometry as a global and conceptually mature discipline. Professor Pollard’s research continues to inspire innovation, collaboration, and critical reflection on the integration of science within archaeology.

I  
N  
V  
I  
T  
E  
D  
  
S  
P  
E  
A  
K  
E  
R



## 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025

Wednesday, November 5<sup>th</sup>

- 09:00–10:00** Registration
- 10:00–10:10** Opening - Welcome Remarks
- 10:10–11:50** **Foreign Archaeological Schools in Greece**  
*Chair: Y. Sun, A. Oikonomou*
- 10:10–10:30** **American School of Classical Studies at Athens**  
**The Swiss School of Archaeology**  
*A geoarchaeological investigation of ritual practices in the Temple of Artemis Amarysia in Amarynthos, Euboea. D. Roussos, P. Karkanas\*, M. Gkouma, T. Saggini, J. André, S. Verdan, T. Theurillat, A. Simosi, S. Fachard, O. Kyriazi*
- 10:30–10:50** **British School at Athens**  
*The Marc and Ismene Fitch Laboratory, British School at Athens: Advancing Archaeological Science through Ceramic Research and Beyond. E. Kiriati and S. Menelaou*
- 10:50–11:10** **French School at Athens**  
*Archaeometry at the École française d'Athènes: a research program on Aegean Bronze Age burning utensils. B. Rueff*
- 11:10–11:30** **Austrian Archaeological Institute at Athens**  
*Ceramics and Beyond: Austrian Archaeometrical Research in Greece. W. Gauß, V. Anevlavi, Chr. Baier, L. Berger, M. Brandl, B. Eder, E. Erkul, S. Fischer, P. Fragnoli, G. Forstenpointner, A. Galik, A. Hein, A. Heiss, Th. Jakobitsch, F. Kanz, E. Kiriati, G. Klebinder-Gauß, G. Ladstätter, W. Prochaska, W. Rabbel, A. Sokolicek, E. Trinkl, I. Trinks*
- 11:30–11:50** **German Archaeological Institute**  
*Archaeological Science at the German Archaeological Institute in Athens: The example of the Sanctuary at Kalapodi. A. Oikonomou, K. Christodoulou, D. Grigoropoulos, Th. Bilis, K. Sporn\**



## 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025

Wednesday, November 5<sup>th</sup>

- 11:50–12:10** **Chinese School of Classical Studies at Athens (CSCSA)**  
*Beyond Timelines and Routes: The Social Significance of Chinese Millet Diffusion in Eurasia.* Y. Sun
- 12:10–12:40** **Coffee break**
- 12:40–13:20** **Geoarchaeology**  
*Chair: Y. Bassiakos, P. Karkanis*
- 12:40–13:00** *Assessing the evolution of the ancient coastal area at Kastrouli, Phokis, Greece.* M. Geraga, D. Christodoulou, G. Polymeris, X. Dimas, K. Merkouris, S. Sergiou, C. Cantu, R. Norris, T. Levy, I. Liritzis, G. Papatheodorou
- 13:00–13:20** *Multi-Sensor UAV Remote Sensing Workflow for Detecting Buried Archaeological Features at Thermi (Lesvos) and Its Application to Arisvi (Lesvos).* A. Asvestas, Chr. Vasilakos
- 13:20–14:20** **Special Session: “By the Vehemence of fire: Exploring ancient technology through colour” / Ceramics – Glass**  
*Session Organisers/Chair: M. Kaparou, N. Kladouri, A. Marketou*
- 13:20–13:35** *Maiolica from the “Well of Wonders” (Orvieto, Italy): Exploring Medieval ceramic technology and colour production.* E. Gliozzo, D. Leone, V. Valenzano
- 13:35–13:50** *Islamic glazed ceramics from Mértola (Portugal): An archaeometric study of metallic lustre glazed wares.* S. Nikologianni, M. Beltrame
- 13:50–14:05** *Shades of blue in Mycenaean glass firing: The case of Voudeni.* M. Kaparou
- 14:05–14:20** *Glass technology at the service of the dead? Blue glass jewellery and ornaments in Mycenaean burials.* K. Nikita



## 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025

Wednesday, November 5<sup>th</sup>

- 14:20–15:20** Lunch break
- 15:20–17:20** *Special Session: “By the Vehemence of fire: Exploring ancient technology through colour” / Glass - Metals – Pigments*
- 15:20–15:35** *Technology, provenance and colours of Byzantine glass bracelets from the 11th–12th century Braničevo and Morava (Serbia).* R. Balvanovic, Ž. Šmit, I. Sylachev, M. Marić-Stojanović, D. Spasić-Đurić, T. Branković, R. Avanzinelli
- 15:35–15:50** *As Long as It's Blue: Crafting Arsenical Copper in the Bronze Age Balkans.* M. Radivojevic, Th. Rehren, M. Kuzmanović, M. Desai
- 15:50–16:05** *Metallurgical technology and the aesthetics for ritual deposition.* N. K. Kladouri, V. Orfanou, A. G. Karydas
- 16:05–16:20** *Atramentum: crafting carbon-based black pigments in the Hellenistic and Roman world.* A. Marketou
- 16:20–16:35** *Exploring the impact of firing time on Egyptian blue crystallization.* J.T. Pietras, T. Rust, H. Becker
- 16:35–16:50** *Vases from the Gruppo di Vanth: Analysis of the Chemical Composition of Pigments and the Symbolism of their Colours.* M. Zubajová, L. Ceccarelli, R. Paolini
- 16:50–17:20** Discussion



## 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025

Wednesday, November 5<sup>th</sup>

### ARCHAEOLOGICAL MUSEUM OF PATRAS

**18:00–18:30** *Thematic presentation of Patras Archaeological Museum*

- *Artworks and Materials*. E. C. Partida

**18:30–18:40** **Addresses by Officials**

**18:40–18:50** **The Prospective 10<sup>th</sup> Symposium- I. Karapanagiotis**

**18:50** **Keynote lecture- M. Pollard**

*After more than 150 years of scientific studies of provenance, where are we now?*

**19:30** **Welcome Reception**



## 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025

Thursday, November 6<sup>th</sup>

- 08:30–09:00**    **Registration**
- 09:00–11:00**    **Bioarchaeology**  
*Chair: K. Christanis, M. Geraga*
- 09:00–09:20**    *Organic Petrology as a tool servicing Archaeology.* K. Christanis, S. Kalaitzidis, M. Papailiopoulos, M. Georgaki, K. Perleros
- 09:20–09:40**    *A taphonomic approach to human activity, from the Neolithic to the Helladic Period, in Cave of Lakes, Achaea, Greece.* A. Papagiannopoulos, G. Iliopoulos, St. Katsarou
- 09:40–10:00**    *2,000 years of urban dietary diversity in Europe through a thorough computational approach.* E. Ganiatsou, M.N. Choupa, A. Souleles, A. Aidonis, Chr. Kakasa, S. Protopsalti, S. Tzevreni, K. Konstantinidou, S. Vaseiliadou, Chr. Papageorgopoulos\*
- 10:00–10:20**    *Urban Kinship and Genetic Diversity in Thessaloniki: A Genomic Perspective.* A. Souleles, F. Gentilin, Chr. Kakasa, E. Ganiatsou, S. Tzevreni, K. Konstantinidou, S. Vasileiadou, L. Vallini, J. Blöcher, J. Burger, Chr. Papageorgopoulos
- 10:20–10:40**    *Semi-automated histological tool for age-at-death estimation of inhumed and cremated human individuals (MICROAGE).* P. Bantavanou, A. Souleles, Efstr. Valakos, P. Pavlidis, K. Moraitis, T. Protopsalti, Chr. Papageorgopoulos



## 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025

Thursday, November 6<sup>th</sup>

- 10:40–11:00** *The essence of things! Investigations of oils and fatty substances in Minoan burning utensils through spectroscopic and spectrometric techniques.* M. E. Konstantinou, B. Rueff, M. Roumpou, S. Sotiropoulou, D. Agglos
- 11:00–11:30** **Coffee break and Poster Session I**
- 11:30–13:30** **Absolute dating and paleoenvironment**  
*Chair: G. Papatheodorou, G. Polymeris*
- 11:30 -11:50** *Preliminary results on the calculation of the Marine reservoir effect during the Palaeolithic period based on samples from coastal caves in Karavostasi Manis, Peloponnese, Greece.* Y. Facorellis, M. Fedi, M. Ntinou, E. Vardala-Theodorou, S. Katsarou, A. Darlas
- 11:50–12:10** *Assessing site-wide events at multi-phase sites through the lens of 14 C dating: A pilot study from Prehistoric Phaistos, Crete.* S. Todaro, G. S. Polymeris, Y. Maniatis
- 12:10–12:30** *Absolute Dating of Cave Sediments Using Geomagnetic Field: New Insights into Paleoenvironmental Change and Human Occupation in the Mediterranean from Grotta Romanelli (Southern Italy).* E. Tema, L. Lanci, , G. S. Mariani, P. Pieruccini, I. Mazzini, R. Sardella



## 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025

Thursday, November 6<sup>th</sup>

- 12:30–12:50** *The end of the Neolithic period in central and southern Greece through the use of absolute radiocarbon dates: towards a better understanding of the 5th and 4th mill. BCE Aegean.* Aik. Psimogiannou, G.S. Polymeris\*, Y. Maniatis
- 12:50–13:10** *Beyond the Horizon – Transdisciplinary Approaches to the Early Settlement of the Canary Islands between Seafaring, Sacred Architecture, and trans-Atlantic Plant Dispersal.* D. Görlitz
- 13:10–13:30** *Exploring the Archaeoastronomical Significance and Age of Tenerife's Stepped Structures: A Preliminary Multidisciplinary Approach.* M. A. Rappenglück, D. Görlitz
- 13:30–14:30** **Lunch break and Poster Session I**
- 14:30–15:10** **Absolute dating and paleoenvironment**  
*Chair: Y. Facorellis, J. Sanjurjo-Sánchez*
- 14:30–14:50** *On the chronology and interpretation of occupational phases in Tenerife (Canary Islands, Spain); current status and future endeavours.* J. Sanjurjo-Sánchez, M. A. Rappenglück, D. Görlitz, G.S. Polymeris\*
- 14:50–15:10** *Chemical Traces of Guanche Mummification: Investigating Alkaloids and Plant-Based Balsamation Techniques.* D. Görlitz, J. Sanjurjo-Sánchez



## 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025

Thursday, November 6<sup>th</sup>

**15:10–16:50** **Stones, Mortars and Pigments**

*Chair: C. Galiotis, V. Anevlavi*

**15:10–15:30** *Molluscan Purple: A Chromatic Journey from Red to Blue Shadows.* I. Karapanagiotis

**15:30–15:50** *Physicochemical methods for the recognition and identification of inorganic and organic pigment compounds and binders from wall painting fragments of the Vlatadon Monastery of Thessaloniki.* M. Agathou, D. Lazidou, E. Kampasakali, E. Pavlidou, V. Melfos

**15:50–16:10** *Restoration of the stoa at the diagonal road of the academic excavational area at Philippi: Archaeological documentation and column analysis.* E. Pazarka, A. Tantsis, M. Stefanidou

**16:10–16:30** *Analysing Pigments in Art: A Non-Destructive Approach.* E. Christidi, A. Alexopoulou, A. Kaminari

**16:30–16:50** *The analysis of the mortar substrates of Roman floor mosaics in Chalkis. The use of thin section petrography and cathodoluminescence for materials identification and technological characteristics research.* E. Mantzana, E. Zimi, I. Iliopoulos



## 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025

Friday, November 7<sup>th</sup>

**08:30–09:00** Registration

**09:00–10:00** **Stones, Mortars and Pigments**

*Chair: I. Karapanagiotis, G. Gorgolis*

**09:00–09:20** *The Marble Inventory of the City of Roman Pautalia (BG) through the Lens of Archaeometric Results. V. Anevlavi, W. Prochaska, K. Petkova, P. Katsarova, P. Andreeva*

**09:20–09:40** *Thermal Cycling Effects on Structural Integrity and Porosity of Greek Marbles: Insights from Multiscale Experimental Analysis. M. Lyu, R. Ševčík, D. Majtás, L. Zárbybnická*

**09:40–10:00** *Μελέτη χρωστικών της εικόνας του Αγίου Ιωάννου (1674). Σ. Νάκου, Θ. Γκανέτσος, Ι. Βαραλής*

**10:00–11:00** **Digital methods in Cultural Heritage**

*Chair: K. Nikolakopoulos, V. V. Panagiotidis*

**10:00–10:20** *Η αρχαία Εγνατία οδός από τη δυτική Μακεδονία μέχρι την Αμφίπολη. Α. Ν. Παλιατσή, Δ. Καϊμάρης, Γ. Καραδέδος*

**10:20–10:40** *Integration of Structure from Motion Photogrammetry and Terrestrial Laser Scanning for Cultural Heritage Documentation: An Archaeometry Oriented Approach. A. Kyriou, K. Nikolakopoulos, P. Tsikas, Chr. Pappas and E. Lyros*



## 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025

Friday, November 7<sup>th</sup>

- 10:40–11:00** *Materializing the Inaccessible: Structured-Light 3D Scanning, Digital Repositories, and 3D Printing for Inclusive Heritage Engagement.* N. Morales-Glenn, G. Rigas, V. Panagiotidis
- 11:00–12:00** **Coffee break and Poster Session I**
- 12:00–13:20** **Digital methods in Cultural Heritage**  
*Chair: M. Katsianis, A. Kyriou*
- 12:00–12:20** *The Defensive Network of Samos During the Early and Middle Byzantine Period. Fortifications' Visibility and Connection.* G. Delli, G. Malaperdas
- 12:20–12:40** *Emerging technologies in Orthodox monumental art: The case of St. Andrew's frescoes of Patras, Greece.* V. V. Panagiotidis, A. Kazolias, K. Karoussos
- 12:40–13:00** *Μελέτη χρωστικών νεοκλασικών κτηρίων στην Καλαμάτα.* Θ. Γκανέτσος, Ξ. Φουλίδη, Ε. Παπακίτσος, Γ. Χειρχαντέρη
- 13:00–13:20** *Role of digital payments and making Indian Cultural Heritage accessible to all.* Suparna De, Priyank Gupta
- 13:20–14:20** **Conservation Science**  
*Chair: A.G. Alexopoulou, E. Zimi*
- 13:20–13:40** *The Corrosion Scenario of the Bronze Antikythera Mechanism from the Time of Its Sinking (~87 BC) Until Its Recovery in 1900 AD and Beyond: Impacts and Consequences* A. Voulgaris, Chr. Mouratidis, A. Vossinakis



## 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025

Friday, November 7<sup>th</sup>

- 13:40–14:00** *Green and Sustainable Innovations in Cultural Heritage Conservation: The GREENART Project and the Role of Non-Destructive Testing.* A.G. Alexopoulou, S. Theochari, Chr. Papapostolou, A. A. Kaminari, G. P. Mastrotheodoros, P. Banou
- 14:00-14:20** *Exploring Iconography and Materials: A Post-Byzantine Icon of Saint Anna with the Virgin and Child .* D. Zaprzalska, A. A. Kaminari, D. Peel, A. Sampatakos, A. G. Alexopoulou\*, G. P. Mastrotheodoros\*
- 14:20–15:20** **Lunch break and Poster Session II**
- 15:20–16:00** **Conservation Science**  
*Chair: A. Moropoulou, G. P. Mastrotheodoros*
- 15:20– 15:40** *The emblematic initiative ‘Evlogon’ and the significance of archaeometry in tracing the history of emblematic monuments of Christianity.* A. Moropoulou
- 15:40–16:00** *Archaeometric analysis of ecclesiastical monuments within the ‘Evlogon’ project: The case studies of Hagia Sophia and the Holy Sepulchre.* E. Zimi, E. Palamara, M. Kylafi, E. T. Delegou and A. Moropoulou

S  
C  
I  
E  
N  
T  
I  
F  
I  
C  
P  
R  
O  
G  
R  
A  
M



## 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025

Friday, November 7<sup>th</sup>

**16:00–17:20**

### **MATERIALS**

#### **Glass- Glazes- Ceramics**

*Chair: M. Pollard, R. Balvanovic*

**16:00–16:20**

*Trace element analysis and Sr-Nd isotopic signatures of core formed glass from central Greece: New analytical data. A. Oikonomou, S. Merkel, M. Kaparou, S. Oikonomidis, N. Skoumi, G. Davies*

**16:20–16:40**

*Contributing to the study of early-glazed wares of Byzantium. An analytical approach from Greece and Cyprus. T. K. Vasileiou*

**16:40–17:00**

*Glazes, pigments and slips in the ceramics from the production centre of Almazán (Soria, Spain), 16<sup>th</sup>–18<sup>th</sup> centuries. A. Panagopoulou, J. Buxeda i Garrigós, J. Coso Álvarez, A. López Murcia, A. Ruiz Arias, P.J. Cruz Sánchez*

**17:00–17:20**

*A Comparison between Athenian and Boeotian Black Glosses on Pottery Dated from c. 600 BCE to c. 100 BCE. Yen-Hua Chen, I-Jui Hsu, Yoshiyuki Iizuka, Chun-Jung Chen, Jia-Cheng Ni, Chia-Lin Hsu\**

**20:00**

### **GALA DINNER**



## 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025

Saturday, November 8<sup>th</sup>

**08:30-09:00 Registration**

**09:00-11:40 Materials- Ceramics**

*Chair: I. Iliopoulos, D. F. Anagnostopoulos*

**09:00-09:20** *Imaging  $\mu$ -XRF in cultural heritage (Invited lecture). A. Asvestas, I. V. Patakiouta, A. Tzima, D. F. Anagnostopoulos*

**09:20-09:40** *Ritual Meals and Shifting Traditions: Culinary Vessels in the Sanctuary of Kalapodi from Late Mycenaean to Early Iron Age through Analytical Techniques. K. Christodoulou, A. Hein*

**09:40-10:00** *Characterizing a Rare Clay Feature from Early Helladic Helike: An Archaeological and Archaeometric Study. D. Katsonopoulou, V. Xanthopoulou, I. Iliopoulos*

**10:00-10:20** *The Sino-Hellenic Project at Kastrouli: Comparative Study of Mycenaean Ceramics and Anyang, China. A. J. D. Westra, I. Iliopoulos, I. Liritzis*

**10:20-10:40** *Investigating technological and cultural transmission between Greek metropolises, colonies and indigenous populations in Southern Italy and Sicily through ceramic production (ca. 800-550 BC). X. Charalambidou*

**10:40-11:00** *Investigating Handmade Pottery in Roman Thrace through an Integrated Analytical Approach. P. Tušlová, S. Amicone, N. S. Müller, R. Thér, V. Brychová, K. Králová, M. Kohoutková, E. Kiriati*

**11:00-11:20** *From Kiln to Clay: Tracing Local Amphora Production in Roman Patras through Archaeometric Analysis. N. Kougia, I. Iliopoulos*

**11:20-11:50 Coffee break and Poster Session II**



## 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025

Saturday, November 8<sup>th</sup>

### 11:50–14:30 **Materials-Metals**

*Chair: G. Papadimitriou, E. Filippaki*

**11:50–12:10** *Kokkino Vouno, Akrotiri Thera: Archaeometallurgical Insights from a Prehistoric Site.* A. Vlachopoulos, G. Varsanis, E. Tsakalos, M. Kazantzaki, I. Iliopoulos, F. Hulek, A. Xenaki, Y. Bassiakos

**12:10–12:30** *Lead and silver isotopic signatures of mended pottery in LBA Ofrynio, Northern Greece.* M. Vaxevanopoulos, D. Malamidou, I., Soukantos

**12:30–12:50** *Not every cloud has a silver lining: a study of complex extractive metallurgical practices at Pistyros, northern Greece during the Hellenistic period.* N. Nerantzis and E. Photos-Jones

**12:50–13:10** *Determining the Thickness of Gold Leaf in Post-Byzantine Icons Using X-ray Fluorescence (XRF).* I. V. Patakiouta, G. Chantas, G. P. Mastrotheodoros, A. Asvestas, A. Likas, A. G. Karydas, D. F. Anagnostopoulos

**13:10–13:30** *Study of ancient slags and metallurgical production process of copper-arsenic master alloys (speiss) from the prehistoric period at Laurion-Greece*  
G. D. Papadimitriou and H. Katsaros

**13:30–13:50** *Late Bronze Age crucible fragments from the metalworkers' workshop at Gonur Tepe, Turkmenistan, Central Asia: An integrated archaeometric study.*  
A. Nikolopoulou, E. Filippaki, O. Papakhristu and Y. Bassiakos



## 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025

Saturday, November 8<sup>th</sup>

- 13:50–14:10** *The Iron Metallurgy in Ancient Eretria. First Results and Perspectives.* J. Gravier
- 14:10–14:30** *Metal Technology of Deccan Chalcolithic Culture: A Critical Review and Prospects for Future Research.* R. Milind Hampe
- 14:30–15:00** **Closing Ceremony**  
**Awards**  
**The Prospective 10<sup>th</sup> Symposium**
- 15:00** **Lunch break**



## 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025

Thursday- Friday, November 6<sup>th</sup> – 7<sup>th</sup>

### Bioarchaeology

*P1. You Are What You Eat: Materializing the Past Through Isotopic Analysis.* Th. Panagiotopoulou

*P2. 'Life stories within walls': An osteobiography of two adult male skeletons from the LBA Mycenaean settlement of Chaladrítsa, Greece.* A.-P. Koutougera, K. Soura, G. Iliopoulos

*P3. A Multidisciplinary Osteoarchaeological Study of a Hellenistic Infant Burial in Lefkada.* M.- V. Konstantopoulou, I. Pappa, N. Psonis, D. Vassou, E. Tabakaki, N. Poulakakis, G. Iliopoulos, V. Staikou

*P4. Investigating the urban-rural dichotomy in Greek Roman times through the study of 3D mandibular morphology and biomechanics.* Chr. Tsimopoulou, A. Aidonis, E. Kalliga, T. Protopsalti, Chr. Ziota, F. Alexandros Karakostis, Chr. Papageorgopoulou

### Absolute dating and paleoenvironment

*P5. An Integrated Archaeomagnetic and Thermoluminescence Study of an Ancient Kiln at Ceva, Italy: A Model for Transdisciplinary Cross-Dating.* E. Tema, G. S. Polymeris, M. Casola, S. G. Lerma

*P6. Atlantic Crossroads: First C 14 Results from Pico Island and Their Implications for Pre-Colonial Settlement of the Azores.* D. Görlitz, N. Ribeiro

### Stones, Mortars and Pigments

*P7. The painted decoration of the tombs of Derveni in Thessaloniki Region.* Sv. Vivdenko, M. Tsiapali, Chr. S. Katsifas, V. Michalopoulou\*, L. Malletzidou, A. Vasileiadou, K. Tzanavari, G. T. Stamkopoulos

*P8. Examination of the organic pigments in the excavation findings and monuments of the Thessaloniki Region.* Sv. Vivdenko, M. Tsiapali, M. Tsimpidou-Avlonitou, A. Vasileiadou\*, V. Michalopoulou, G. T. Stamkopoulos, I. Karapanagiotis



## 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025

Thursday- Friday, November 6<sup>th</sup> – 7<sup>th</sup>

*P9. Study of religious panel paintings using imaging  $\mu$ -XRF.* M. Myriouni, I. V. Patakiouta, A. Asvestas, A. Tzima, G. P. Mastrotheodoros, D. F. Anagnostopoulos

*P10. Physicochemical analysis of anthropogenic sediments from the Neolithic layers of the Pan's Cave in Marathon.* V. Liakakou, S. Boyatzis, E. Tziamourani, A. Mari and Y. Facorellis\*

*P11. Preliminary Results of Mortar Analysis from Byzantine Monuments on Samos.* G. Delli, E. Mantzana, E. Zimi

*P12. Unlocking the Ras Serpentinite Quarry (Tinos, Greece): Provenance analysis, 3D Digital Documentation, and Educational Value.* A. Sideridis, V. Anevlavi V., A. Kyriou, T. Jakobitsch, K. Nikolakopoulos, S. Tombros, A. Aggelopoulou

P  
O  
S  
T  
E  
R  
  
S  
E  
S  
S  
I  
O  
N  
  
I



## 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025

Friday- Saturday, November 7<sup>th</sup> – 8<sup>th</sup>

### Digital Methods in Cultural Heritage

P13. *Digital Landscapes: Storymapping the Archaeology and Archaeometry of Wine in the Peloponnese.* V. Valantou, V. V. Panagiotidis

### Conservation Science

P14. *The assessment of the efficacy of paintings' cleaning interventions through p-XRF analysis.* G. P. Mastrotheodoros, M. Dimaki, A. G. Alexopoulou

P15. *Conservation of a cooking pot from the Isthmia Archaeological Museum using 3D imaging and printing technologies.* A. Kandri, Th. Ganetsos, J. L. Rife

P16. *Μελέτη χρωστικών βιομηχανικών κτηρίων του 20ου αιώνα στην Καλαμάτα.* Θ. Γκανέτσος, Ξ. Φουλίδη, Γ. Χειρχαντέρη, Μ. Κατσαντόνη, Ε. Παπακίτσος

P17. *Multiscale investigation at the Kalo Nerò magoula (Larissa, Thessaly): from context to materials.* D. Giuffrida, K. Karpeti, K. Pantzouris, R.C. Ponterio

P18. *The challenge of 3D scanning and printing copies in natural history museum exhibits.* N. Gioldasis, K. Stoupathis, Th. Ganetsos, A. Kantaros, P. Xelmis

P19. *Digitizing Hellenistic Thessaly: Techniques, Applications, Models and Use.* K. Karpeti



## 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025

Friday- Saturday, November 7<sup>th</sup> – 8<sup>th</sup>

### Materials

#### (Ceramics - Metals - Glass - Glazes)

P20. *A first insight into clayey raw materials of Lesbos island through a petrographic and geochemical approach.* A. M. Pollatou, A. Hein, E. Kiriati and I. Iliopoulos

P21. *Pottery Production at Early Iron Age Gortyn, Crete: First Archaeometric Characterization on Ceramic Fragments from the Sanctuary of Apollo Pythios.* B. Costi Farias\*, A. Bertelli\*, L. Maritan, J. Bonetto

P22. *Tracing technological choices for pottery production in Late Bronze Age-Early Iron Age central Epirus: preliminary petrographic results.* S. Menelaou, E. Vasileiou

P23. *Experimental Clay Mixtures as a Diagnostic Tool for Ancient Ceramic Production in the Northern Peloponnese.* P. Skintzi, V. Xanthopoulou, A. Varotsos, I. Iliopoulos

P24. *Early Iron Age and Archaic Pottery from Karabournaki of the Thermaic Gulf. Archaeometric Analysis of Local and Imported Pottery Samples.* A. Panti, Sv. Vivdenko, V. Michalopoulou\*, G. T. Stamkopoulos

P25. *Ceramic Identities and Cultural Interaction in Classical Western Achaea: An Integrated Archaeological and Archaeometric Study.* N. Kougia, V. Argyropoulos, I. Iliopoulos

P26. *Seeing the Unseen: Machine Learning in Ceramic Petrography for Clay Mixing Identification.* A. Varotsos, A. Hein, V. Xanthopoulou, P. Skintzi, I. Iliopoulos

P27. *Preliminary Results from Geometric Morphometric Analysis of the Mycenaean Shaft Graves: Investigating Standardisation and Diversity in a Synchronic and Diachronic Context.* D. Brown



## 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025

Friday- Saturday, November 7<sup>th</sup> – 8<sup>th</sup>

P28. *Ceramics supply in Bronze Age Crete (1700-1200 BC). An interdisciplinary approach to pottery traditions.* N. Dauby

P29. *NDT measurements of Low-fired Native American Earthenware from Central Virginia, United States.* M. Kagka, Th. Ganetsos, Ch. Theodorakopoulos, Chr. M. Stevenson, E. Sideras-Haddad

P30. *Study of the manufacturing technology and physicochemical analysis of surface encrustations of ceramic sherds from the Early-Middle Neolithic site of Koutroulou Magoula excavation near Neo Monastiri and Vardali in Fthiotida, Central Greece.* V. Ioannou, S. Boyatzis, A. Stefanis, Y. Hamilakis, N. Kubarissi-Apostolika, S. Katsarou, Y. Facorellis\*

P31. *Συγκριτική μελέτη τεχνολογίας βυζαντινής εφυσλωμένης κεραμικής σε ευρήματα ανασκαφών στην πόλη και την περιφέρεια της Θεσσαλονίκης.* Α. Σοφianoπούλου, Τ. Γρ. Σταμκόπουλος

P32. *Compositional analysis of Early Iron Age pottery from Etruria: Insights on the development of proto-urban centres.* E. A. Andreadakis, B. Costi Farias, G. Deimichei, M. Diakatu, S. Grosso, L. Maritan, L. Morandi, B. Solard, S. Amicone

P33. *A preliminary study with pXRF of Byzantine gold jewelries from the Canellopoulos Museum in Athens.* A. P. Panagopoulou, A. Hein, S. Gerogiorgi, B. Klekachkoska, A. Goumas

P34. *Detecting Alloys and Technological Choices in Archaic and Classical period Copper-Based Votive offerings from the Sanctuary of Demeter at Thea Patras.* L. Pappa, S. Nestoridou, V. Orfanou \*, A.G. Karydas, N. Nerantzis



## 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025

Friday- Saturday, November 7<sup>th</sup> – 8<sup>th</sup>

*P35. Micro-invasive XRF analysis of copper-based artefacts from the Altar and Baths complex on Mount Lykaion in Arcadia, Greece.* N.K. Kladouri, Th. Christophoridou, G. Smerou, A.G. Karydas, N. Karra, A.V. Karapanagiotou

*P36. Technical Examination and Analysis of Roman Gold Jewelry from the Archaeological Museum of Thessaloniki.* V. Michalopoulou, Chr. S. Katsifas, Ev. Tsangaraki, Gr.-T. Stamkopoulos

*P37. Study of the alloy composition of metal artifacts and analysis of slags from the excavation of the prehistoric settlement of Strofilas on Andros.* T. Papageorgiou, Y. Facorellis\*, I. Papamagkana and Chr. Televantou

P  
O  
S  
T  
E  
R  
  
S  
E  
S  
S  
I  
O  
N  
  
II

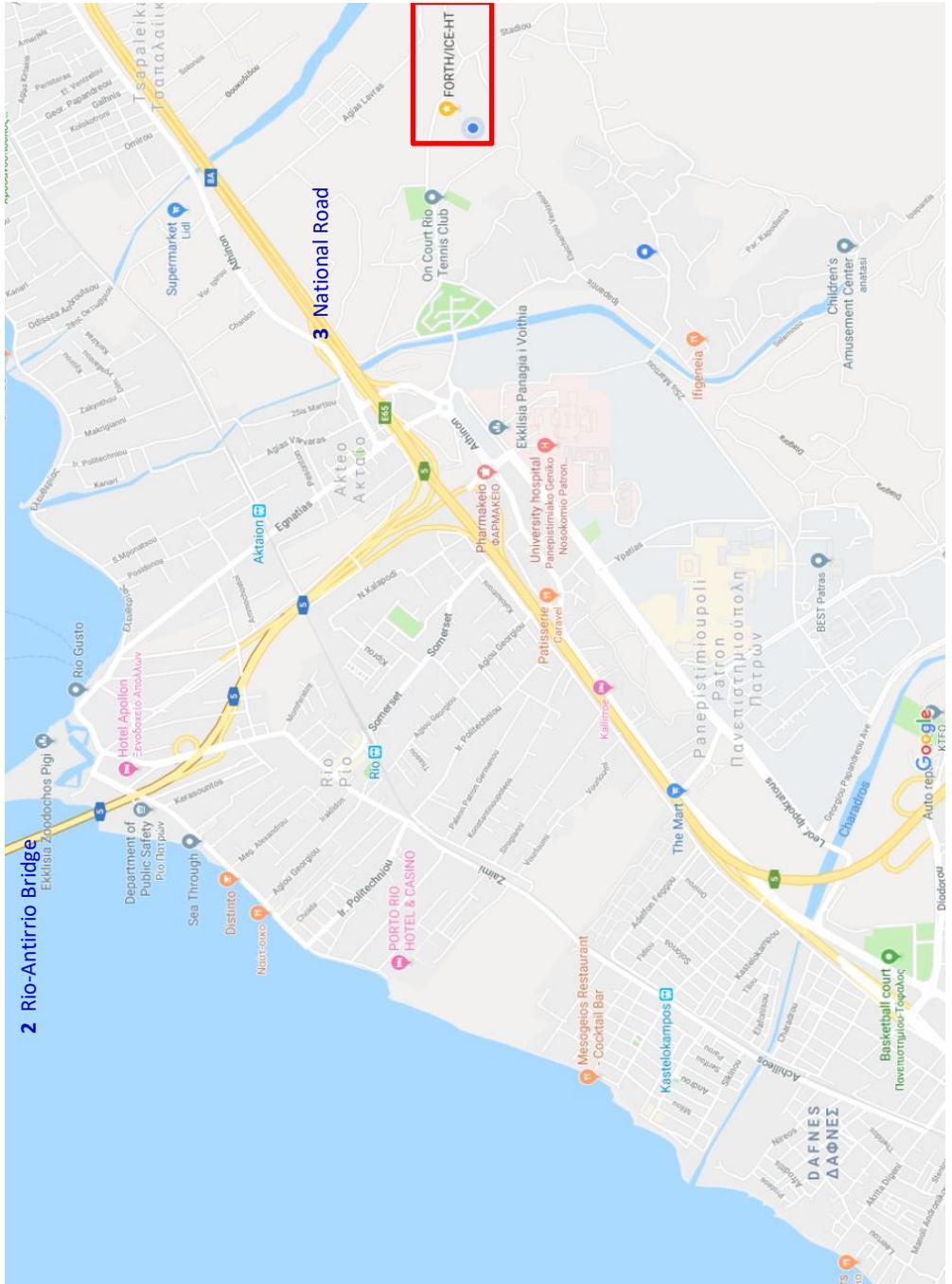


# 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

## 9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025





## 9<sup>ο</sup> Συμπόσιο Αρχαιομετρίας της ΕΑΕ

Πάτρα, 5-8 Νοεμβρίου, 2025

---

9<sup>th</sup> Symposium for Archaeometry of the HSA

Patra, 5-8 November, 2025