Programme of Summer 2022 training week

Monday, 11 July 2022

Ancient technological recipes and modern experimental reproduction of historic ceramics

10:00-13:30 **From theory to practice: The production of handmade and wheelmade ceramics.**
At the pottery workshop of traditional potter Michalis Parpas
Address: 2, Ayias Marinas Street, 2059 Strovolos, Nicosia

13:30-15:00 Bus transfer to the Cyprus Institute and lunch break

15:00-16:30 **Reconstructing ancient pottery recipes: A Macroscopic Perspective on Neopalatial Pottery Production in the Mochlos Plain, Crete**
Speaker: Dr Jerolyn E. Morrison, Department of Art and Art History, Baylor University, United States
Location: Andreas Mouskos Auditorium, The Cyprus Institute

Suggested reading by Dr Jerolyn E. Morrison

Morrison, J. E., 2010. A potter's note about the use of raw materials to produce Minoan cooking pots. *Kentro* 13, 6-11 (https://instapstudycenter.net/kentro/).

Nodarou, E., Frederick, C., Hein, A., 2008. Another (mud)brick in the wall: scientific analysis of Bronze Age earthen construction materials from East Crete. *Journal of Archaeological Science* 35: 2997–3015 (https://doi.org/10.1016/j.jas.2008.06.014).

Tuesday, 12 July 2022

Ceramic slips and glazes in pre-modern societies. The technology of decoration and cultural aesthetics

09:30-12:30 **In discussion with the potters: Ceramic slips and glazes. Including a practical component at the pottery workshop of the Cyprus Handicraft Service.**
Present for the discussion and practical component: Dr Demetra Papanicola-Bakirtzis (Medieval pottery specialist, former Director of the Leventis Municipal Museum of Nicosia), Mr Efthymios Symeou (traditional potter) and the craftspeople of the Cyprus Handicraft Service
Address: 186 Athalassas Avenue, 2025 Nicosia

12:30-14:00 Bus transfer to the Cyprus Institute and lunch break

This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under the Marie Skłodowska-Curie grant agreement No 956410.

14:00-14:40 **An introduction to the study of ceramic glazes: A view from archaeology with an emphasis on Byzantine pottery**
Speaker: Dr Anastasia Yangaki, Director of Research, Institute of Historical Research, National Hellenic Research Foundation, Greece
Online lecture
Location: STARC Meeting Room, The Cyprus Institute

For online participation:
https://cyi.webex.com/cyi/j.php?MTID=m75c6ca5c8d85cf42205820c3536126fb
Meeting number: 2742 245 3810
Password: 37fxKpKAMu6

14:40-15:20 **The analytical study of ceramic slips and glazes**
Speaker: Prof. Thilo Rehren, Director of STARC and PlaCe-ITN Coordinator
Location: STARC Meeting Room, The Cyprus Institute

For online participation:
https://cyi.webex.com/cyi/j.php?MTID=m75c6ca5c8d85cf42205820c3536126fb
Meeting number: 2742 245 3810
Password: 37fxKpKAMu6

Suggested reading by Dr Anastasia Yangaki

Armstrong, P., Hatcher, H., Tite, M., Changes in Byzantine glazing technology from the ninth to thirteenth centuries, in G. Démians d'Archimbaud (ed.), La céramique médiévale en Méditerranée. Actes du VIe congrès de l'AIECM2 Aix-en-Provence (13-18 novembre 1995), Aix-en-Provence 1997, 225-229. http://aiecm3.com/wp-content/uploads/2021/10/Aix_p225_229R.pdf

Armstrong, P., The earliest glazed ceramics in Constantinople: A regional or international phenomenon?, Journal of Archaeological Science: Reports 29 (2020), 102078. https://doi.org/10.1016/j.jasrep.2019.102078

Berti, G., Gelichi, S., Mannoni, T., Trasformazioni technologiche nelle prime produzioni italiane con rivestimenti vetrificati (secc. XII-XIII), in G. Démians d'Archimbaud (ed.), La céramique médiévale en Méditerranée. Actes du VIe congrès de l'AIECM2 Aix-en-Provence (13-18 novembre 1995), Aix-en-Provence 1997, 383-403. http://aiecm3.com/wp-content/uploads/2021/05/Aix_p383_403R.pdf

Matin, M., Watson, O., On the origins of tin-opacified ceramic glazes: new evidence from early Islamic Egypt, the Levant, Mesopotamia, Iran, and Central Asia, Journal of Archaeological Science 97 (2018), 42–66. https://doi.org/10.1016/j.jas.2018.06.011

Palamara, E., Zacharias, N., Xanthopoulou, M., Kasztovszky,, Zs., Kovács, I., Palles, D., Kamitsos, E.I., Technology issues of Byzantine glazed pottery from Corinth, Greece, Microchemical Journal 129 (2016), 137- 150. https://doi.org/10.1016/j.microc.2016.06.008

Panagopoulou, A., Vroom, J., Hein, A., Kilikoglou, V., Production Technology of Glazed Pottery in Chalcis, Euboea, during the Middle Byzantine Period. Heritage 2021, 4, 4473-4494. https://doi.org/10.3390/heritage4040247

This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under the Marie Skłodowska-Curie grant agreement No 956410.

Ting, C., Vionis, A., Rehren, T., Kassianidou, V., Cook, H., Barker, C., The beginning of glazed ware production in late medieval Cyprus, Journal of Archaeological Science: Reports 27 (2019) 101963. https://doi.org/10.1016/j.jasrep.2019.101963

Tite, M. S., Freestone, I., Mason, R., Molera, J., Vendrell-Saz, M, Wood, N., Lead Glazes in Antiquity—Methods of Production and Reasons for Use, Archaeometry 40.2 (1998), 241-260. https://doi.org/10.1111/j.1475-4754.1998.tb00836.x

Tite, M. S., The production technology of Italian maiolica: a reassessment, Journal of Archaeological Science 36 (2009), 2065-2080. https://doi.org/10.1016/j.jas.2009.07.006

Waksman, S.Y., Bouquillon, A., Cantin, N., Katona, I., The first Byzantine "Glazed White Wares" in the early medieval technological context, in S. Y. Waksman (ed.), Archaeometric and Archaeological Approaches to Ceramics (BAR International Series S1691), Oxford 2007, 129-135. https://www.arar.mom.fr/sites/arar.mom.fr/files/annuaire-du-personnel/waksman-yona/EMAC05_2007_Waksman_et_al.pdf

Suggested reading by Prof. Thilo Rehren

Tite, M.S., Freestone, I.C., Mason, R., Molera, J., Vendrell Saz, M., and Wood, N. 1998, Lead glazes in antiquity methods of production and reasons for use, Archaeometry, 40 (2), 241-260. https://doi.org/10.1111/j.1475-4754.1998.tb00836.x

Paynter, S., Tite, M., 2001. The Evolution of Glazing Technologies in the Ancient Near East and Egypt. In: Shortland, A. J., (ed.), The Social Context of Technological Change. Oxford: Oxbow books, 239-254. https://www.jstor.org/stable/j.ctt1kw299c

Giorgetti, G., Gliozzo, E., Memmi, I., 2004. Tuscan black glosses: A mineralogical characterization by high resolution techniques. European Journal of Mineralogy 16, 493-503. https://doi.org/10.1127/0935-1221/2004/0016-0493

Charalambous, A., 2014. Cypriot Medieval Glazed pottery: a study on provenance and manufacture. Cypriot Medieval Ceramics, Nicosia, 279-298.

Pradell, T., Molera, J., 2020. Ceramic technology. How to characterise ceramic glazes. Archaeological and Anthropological Sciences 12:189. https://doi.org/10.1007/s12520-020-01136-9

Rasmussen, K.L., Milner, G.R., Delbey, T., Ivalu Jensen, L.K., Witte, F., Rehren, Th., Kjaer, U. and Grinder-Hansen, P. 2022. Release of lead from Renaissance lead-glazed ceramics from southern Denmark and northern Germany: implications from acetic acid etching experiments. Heritage Science 10, 63, 1-18. https://doi.org/10.1186/s40494-022-00703-8

This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under the Marie Skłodowska-Curie grant agreement No 956410.

Ceramic Seriation and Styles. The A-to-Z in Ceramic Studies

Wednesday, 13th July 2022

The Archaeological Research Unit
University of Cyprus
(Please note that the time of lectures is provided in EET/GMT+2, Nicosia, Cyprus)

09:30-10:30 **Approaches to the hands-on study of pre-modern ceramic assemblages: a case study on Cypriot and Mediterranean Late Bronze Age ceramics**
Dr Artemis Georgiou
Assistant Research Professor, Archaeological Research Unit, University of Cyprus

10:30-11:00 Coffee Break

11:00-11:30 **Introduction to macroscopic pottery analysis**
Dr Charalambos Paraskeva
Specialist Archaeologist and Cultural Heritage Digitisation Expert, Filokalia NGO, Church of Cyprus

11:30-12:30 **Macroscopic pottery analysis of fabric, surface and shape: part I**
Dr Charalambos Paraskeva

12:30-13:30 Lunch Break

13:30-15:30 **Macroscopic pottery analysis of fabric, surface and shape: part II**
Dr Charalambos Paraskeva

All four presentations and practicals will take place with physical presence at the Archaeological Research Unit of the University of Cyprus on 12 Gladstone Street, Nicosia.

This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under the Marie Skłodowska-Curie grant agreement No 956410.

Our trainers for the day

Dr Artemis Georgiou is Assistant Research Professor at the Archaeological Research Unit of the University of Cyprus. She is the Principal Investigator of the research project 'ComPAS', a European Research Council Starting Grant, which aims at investigating interregional and intercultural connectivity in the Late Bronze Age-Early Iron Age eastern Mediterranean. Georgiou completed her BA at the Department of History and Archaeology of the University of Cyprus and continued with Masters' and Doctoral studies at the University of Oxford. She received a postdoctoral Marie Sklodowska Curie Career Integration Grant for the research project 'ARIEL', which was implemented at the University of Cyprus, between the years 2013-2017. In 2018-2020, she held a University of Cyprus Internal Research and Teaching fellowship, and during 2020-2021 she was the Edgar Peltenburg Postdoctoral Fellow for Cypriot Prehistory at the Cyprus American Archaeological Research Institute. Artemis Georgiou participated in a number of archaeological fieldwork projects in Cyprus and Greece. In recent years, she has been collaborating with several missions for the study of pottery remains, such as the Palaepaphos Urban Landscape Project, the Kalavasos and Maroni Built Environment Project, the French Mission at Kition, the Lefkandi-Xeropolis project, the Archaeological Committee's excavations at Mycenae and the Hazor Lower Acropolis project.

Dr Charalambos Paraskeva is an archaeologist specialising in the prehistoric archaeology of Cyprus, archaeological theory, GIS, statistics, and digital humanities. He holds a degree in History and Archaeology (2004-2008) from the University of Cyprus, an MSc in Mediterranean Archaeology (2008-2010), and a PhD in Archaeology (2010-2015) from the University of Edinburgh. In the past, he worked as an external associate at the Cyprus Food and Nutrition Museum (2014-2016), a special scientist (2016, 2020-2021), postdoctoral researcher (2016-2019), and research associate (2019-2020, 2022) at the University of Cyprus, research associate at the Hellenic Foundation for Research and Innovation (2018-2019), the Edgar Peltenburg Fellow at the Cyprus American Archaeological Research Institute (2021-2022), while he currently works as a Specialist Archaeologist and Cultural Heritage Digitisation Expert at Filokalia, Holy Archbishopric of Cyprus (2019-2023). Additionally, he is associate director at the Chlorakas-Palloures excavations, co-director of the Western Cyprus Survey, has collaborated with a number of research projects (ARCANE-RG3, CARMA, SL, SeSaLaC, CyCoMed, UnSaLa-CY, RURAL-CY, ReCult, ReCult Magnum, NCMP), participated in several excavation projects (Palaepaphos Urban Landscape Project, Prastio-Archaeological Excavation, Erimi-Pamboula excavations, Souskiou Project, Kissonerga-Skalia Excavation, Elaborating Early Neolithic Cyprus, Geroskipou-Agioi Pente Excavations, Paphos Theatre Archaeological Project) and surface surveys (Settled and Sacred Landscapes of Cyprus, Lophou Archaeological Survey); while to date, he has edited a journal volume, published several studies in peer-reviewed scientific journals and volumes, and developed numerous archaeological software packages.

This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under the Marie Skłodowska-Curie grant agreement No 956410.

OPTIONAL

Wednesday, 13 July 2022, 16.00 pm

Lecture by Prof. Thilo Rehren as part of STARC seminar series

Title: *Similar like black and white: Pre-industrial crucible steel and the ceramic connection*

Abstract: Throughout the Middle Ages, crucible steel was a highly-prized material unique to Central and South Asia, famous in the West as much for its beautiful 'damascene' surface pattern when worked, as for its unsurpassed hardness, sharpness and toughness. Used for tools as much as for weapons, it attracted scientific as well as metaphoric attention in the West and (Middle) East alike.This lecture will introduce crucible steel as a material, and then sketch out what we know about the two main industries making this material, and how they differ in their basic production processes. Early 2nd mill CE Central Asian crucible steel making relied on the availability of highly refractory white-firing clay and the addition of various minerals and other additives to the crucible charge, while the mid- to late 2nd mill CE South Asian technology used a similarly refractory but black-firing clay tempered with abundant rice husks, and no addition of mineral or other substances beyond the necessary carbonaceous matter – most likely leaves and twigs. At the end, I will discuss what this means for the quality and identification of crucible steel objects, and emphasize the cross-craft, cross-material and cross-cultural interactions of these industries.

Note to fellows: If you are interested in attending this lecture, please email Melanie, our project officer, place-ITN@cyi.ac.cy . If there are many fellows interested in attending the lecture, we will arrange for a mini-bus transfer from the Archaeological Research Unit to the Cyprus Institute.

Thursday, 14 July 2022

10:30-11:30 **The use of scanning electron microscopy for the study of archaeological materials**
Speaker: Dr Brunella Santarelli, Research Technical Specialist, STARC, The Cyprus Institute
Location: STARC Meeting Room and SEM laboratory, The Cyprus Institute

Suggested reading by Dr Brunella Santarelli

Frahm, E., 2014. Scanning Electron Microscopy (SEM): Applications in Archaeology, in: Smith, C. (Ed.), Encyclopedia of Global Archaeology. Springer New York, New York, NY, pp. 6487–6495. https://doi.org/10.1007/978-1-4419-0465-2_341

Ponting, M., 2004. The scanning electron microscope and the archaeologist. Physics Education 39, 166–170. https://doi.org/10.1088/0031-9120/39/2/004

11:30-12:00 Coffee break

12:00-12:45 **Micro-computed tomography for the detection of clay fabric microstructures and the study of pottery forming techniques**
Speaker: Dr Vanna Lisa Coli, Postdoctoral researcher, Cultures et Environnements Préhistoire, Antiquité, Moyen Âge, CNRS, UMR7264, France
Location: STARC Meeting Room, The Cyprus Institute

For online participation:
Zoom link: https://us06web.zoom.us/j/87123223961
Meeting ID: 871 2322 3961
Passcode: 171192

Suggested reading by Dr Vanna Lisa Coli

V. L. Coli, L. Gomart, D.F. Pisani, S. Cohen, L. Blanc-Féraud, J. Leblond, D. Binder. Micro-computed tomography for discriminating between different forming techniques in ancient pottery: new segmentation method and pore distribution recognition, Archaeometry, 64(1), 84–99, 2022. https://onlinelibrary.wiley.com/doi/epdf/10.1111/arcm.12693

Kozatsas, J., Kotsakis, K., Sagris, D., David, K., 2018. Inside out: Assessing pottery forming techniques with micro-CT scanning. An example from Middle Neolithic Thessaly, Journal of Archaeological Science 100,102-119. https://doi.org/10.1016/j.jas.2018.10.007

Gomart, L., Weiner, A., Gabriele, M., Durrenmath, G., Sorin, S., Angeli, L., Colombo, M., Fabbri, C., Maggi, R., Panelli, C., Pisani, D. F., Radi, G., Tozzi, C., & Binder, D. (2017). Spiralled patchwork in pottery manufacture and the introduction of farming to Southern Europe. Antiquity, 91(360), 1501–14 https://doi.org/10.15184/aqy.2017.250

Kahl, W.-A., & Ramminger, B (2012). Non-destructive fabric analysis of prehistoric pottery using high-resolution X-ray microtomography: A pilot study on the late Mesolithic to Neolithic site Hamburg-Boberg. Journal of Archaeological Science 39(7), 2206–19 https://doi.org/10.1016/j.jas.2012.02.029

12:45-13:30 Lunch break at Andreas Mouskos Auditorium, The Cyprus Institute

This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under the Marie Skłodowska-Curie grant agreement No 956410.

PlaCe-ITN Midterm meeting
Organised by the Science and Technology in Archaeology and Culture Research Center (STARC)
The Cyprus Institute

14-15 July 2022

Andreas Mouskos Auditorium, The Cyprus Institute
20 Constantinou Kavafi Street, 2121 Nicosia

This meeting is a hybrid event. For online participation please use Webex links and credentials as shown below. Please note that the time of activities is provided in EET/GMT+2, Nicosia, Cyprus)

Thursday, 14 July 2022

Project Midterm Meeting – Part A

Online participation:
https://cyi.webex.com/cyi/j.php?MTID=m86c793e77fcd92ce7974b7ede8bf7684
Meeting number: 2740 352 5962
Password: mMDmnvnY788 (66366869 from video systems)
Join by video system
Dial 27403525962@cyi.webex.com
You can also dial 62.109.219.4 and enter your meeting number.
Join by phone
+49-619-6781-9736 Germany Toll
Access code: 274 035 25962

13:30-13:40	Tour de Table: Introduction & presentation of beneficiaries, research teams, partner organisations, ESRs and Project Officer
13:40-14:10	Project Report by Project Coordinator
14:10-14:30	Presentation by Project Officer
14:30-14:50	Q&As
14:50-16:00	Fellows' presentations (ESR01-ESR07)
16:00-16:20	Coffee break
16:20-17:40	Fellows' presentations (ESR08-ESR15)
17:40-18:00	Round table discussion, including Q&As

20:30 Project dinner at ESOBGA
Adddress: 4, Stelios Mavrommatis Str, 1085 Nicosia
(https://goo.gl/maps/qTXe6tvxxYmn4Tjh7)

This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under the Marie Skłodowska-Curie grant agreement No 956410.

Friday, 15 July 2022

Project Midterm Meeting – Part B

09:30-11:30	Restricted meeting of the project officer with the ESR fellows Location Andreas Mouskos Auditorium, The Cyprus Institute
11:30-12:00	Coffee break
12:00-13:00	Concluding remarks, feedback from project officer and final Q&As

Online participation of PlaCe beneficiaries for concluding remarks:
https://cyi.webex.com/cyi/j.php?MTID=m545b96cf2645dcd68c25006cf8dcca1f
Meeting number: 2743 671 5988
Password: BcfRB3MjM32 (22372365 from video systems)
Join by video system
Dial 27436715988@cyi.webex.com
You can also dial 62.109.219.4 and enter your meeting number.
Join by phone
+49-619-6781-9736 Germany Toll
Access code: 274 367 15988

This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under the Marie Skłodowska-Curie grant agreement No 956410.