



October 29th, 2021

Dear colleagues,

Welcome to our 7th newsletter! In this, we bring you news on passed and planned conferences (page 2) as well as on publications in pyroarchaeology of the last 6 months (page 3-6).

We had a very successful and interesting virtual Pyroarchaeology session at this year's UISPP congress and for next year's annual meeting we hope to see you all at the EAA in Budapest!

With our best wishes

Carolina, Chris and Mareike*

Contact us via Email pyroarchaeology@gmail.com

Follow us on Twitter [@pyroarchaeology](https://twitter.com/pyroarchaeology)

Visit us on Facebook <https://www.facebook.com/Pyroarchaeology-2265235893709367/>

or on our UISPP commission website <http://www.uispp.org/pyroarchaeology-0>

* responsible for this newsletter

Conference News

The **XIX Congress of the UISPP** took place virtually September 2nd-7th, 2021, organized by the team in Meknes. Our commission held an exciting session on Pyroarchaeology with many diverse topics – kilns, lamps, speleothems, combustion structures, heated sediments, lithics and dung - and time periods – Paleolithic to Bronze Age - over to experimental and ethnoarchaeological studies. The next, hopefully in person, UISPP congress will be in Timisoara, Romania, in 2023.

At the virtual **27th EAA meeting in Kiel**, September 6th -11th, 2021, Maria-Carme Belarte and colleagues organized an session on “Combustion features in Mediterranean Late Prehistory: Multidisciplinary approaches to their uses and functions”.

Our Pyroarchaeology Commission is planning to participate in the next **EAA Meeting in Budapest, August 31st to September 3rd, 2022, with a session on experimental pyroarchaeology** together with our annual business meeting. More information on this will follow soon.

Publication News

- Audiard, B., Meignen, L., Blasco, T., Battipaglia, G., Théry-Parisot, I., 2021. New climatic approaches to the analysis of the middle Paleolithic sequences: Combined taxonomic and isotopic charcoal analyses on a Neanderthal settlement, Les Canalettes (Aveyron, France). *Quat. Int., Anthracology: Charcoal Science in Archaeology and Palaeoecology* 593–594, 85–94. <https://doi.org/10.1016/j.quaint.2020.11.042>
- Blessing, M.A., Schmidt, P., 2021. On the efficiency of Palaeolithic birch tar making. *J. Archaeol. Sci. Rep.* 38, 103096. <https://doi.org/10.1016/j.jasrep.2021.103096>
- Damm, C.B., 2021. Mesolithic Pyrotechnology: Practices and Perceptions in Early Holocene Coastal Norway. *Eur. J. Archaeol.* 1–18. <https://doi.org/10.1017/eea.2021.31>
- Dennis, E., 2021. The influence of sharp force trauma on fire's alteration of bone. *J. Archaeol. Sci. Rep.* 37, 102968. <https://doi.org/10.1016/j.jasrep.2021.102968>
- Dussol, L., Vanni re, B., Purdue, L., Orange, F., Test , M., Castanet, C., Garnier, A., Lemonnier, E., Th ry-Parisot, I., 2021. How to highlight slash-and-burn agriculture in ancient soils? A modern baseline of agrarian fire imprint in the Guatemalan lowlands using charcoal particle analysis. *J. Archaeol. Sci. Rep.* 35, 102725. <https://doi.org/10.1016/j.jasrep.2020.102725>
- Fuchs-Khakhar, C., 2021. A focus on the hearth: What a detailed investigation of fireplaces in Boncuklu and  atalh y k reveals about Neolithic household practice. *J. Archaeol. Sci. Rep.* 39, 102900. <https://doi.org/10.1016/j.jasrep.2021.102900>
- Gallo, G., Fyhrie, M., Paine, C., Ushakov, S.V., Izuho, M., Gunchinsuren, B., Zwyns, N., Navrotsky, A., 2021. Characterization of structural changes in modern and archaeological burnt bone: Implications for differential preservation bias. *PLOS ONE* 16, e0254529. <https://doi.org/10.1371/journal.pone.0254529>
- Garc a-Redondo, N., Calvo-Rathert, M., Carrancho,  ., Goguitchaichvili, A., Iriarte, E., Blanco-Gonz lez, A., Dekkers, M.J., Morales-Contreras, J., Alario-Garc a, C., Macarro-Alcalde, C., 2021. Further Evidence of High Intensity During the Levantine Iron Age Anomaly in Southwestern Europe: Full Vector Archeomagnetic Dating of an Early Iron Age Dwelling From Western Spain. *J. Geophys. Res. Solid Earth* 126, e2021JB022614. <https://doi.org/10.1029/2021JB022614>

- Genet, M., Daniau, A.-L., Mouillot, F., Hanquiez, V., Schmidt, S., David, V., Georget, M., Abrantes, F., Anschutz, P., Bassinot, F., Bonnín, J., Dennielou, B., Eynaud, F., Hodell, D.A., Mulder, T., Naughton, F., Rossignol, L., Tzedakis, P., Sánchez-Goñi, M.F., 2021. Modern relationships between microscopic charcoal in marine sediments and fire regimes on adjacent landmasses to refine the interpretation of marine paleofire records: An Iberian case study. *Quat. Sci. Rev.* 270, 107148. <https://doi.org/10.1016/j.quascirev.2021.107148>
- Gheorghiu, D., 2021. Trial by fire: Conclusions. *J. Archaeol. Sci. Rep.* 39, 103183. <https://doi.org/10.1016/j.jasrep.2021.103183>
- Guagnin, M., Shipton, C., Martin, L., Kingwell-Banham, E., Breeze, P., Graham, L., Ott, F., Stewart, M., El-Dossary, S., Zahrani, B., Al-Omari, A., Alsharekh, A.M., Petraglia, M., 2021. A tale of two hearth sites: Neolithic and intermittent mid to late Holocene occupations in the Jubbah oasis, northern Saudi Arabia. *Archaeol. Res. Asia* 26, 100278. <https://doi.org/10.1016/j.ara.2021.100278>
- Jha, D.K., Samrat, R., Sanyal, P., 2021. The first evidence of controlled use of fire by prehistoric humans during the Middle Paleolithic phase from the Indian subcontinent. *Palaeogeogr. Palaeoclimatol. Palaeoecol.* 562, 110151. <https://doi.org/10.1016/j.palaeo.2020.110151>
- Karkanis, P., 2021. All about wood ash: Long term fire experiments reveal unknown aspects of the formation and preservation of ash with critical implications on the emergence and use of fire in the past. *J. Archaeol. Sci.* 135, 105476. <https://doi.org/10.1016/j.jas.2021.105476>
- Koch, T.J., Schmidt, P., 2021. The formation conditions of birch tar in oxygen-depleted environments. *Archaeol. Anthropol. Sci.* 13, 92. <https://doi.org/10.1007/s12520-021-01352-x>
- Lambrecht, G., Rodríguez de Vera, C., Jambriña-Enríquez, M., Crevecoeur, I., Gonzalez-Urquijo, J., Lazuen, T., Monnier, G., Pajović, G., Tostevin, G., Mallol, C., 2021. Characterisation of charred organic matter in micromorphological thin sections by means of Raman spectroscopy. *Archaeol. Anthropol. Sci.* 13, 13. <https://doi.org/10.1007/s12520-020-01263-3>
- MacDonald, K., Scherjon, F., Veen, E. van, Vaesen, K., Roebroeks, W., 2021. Middle Pleistocene fire use: The first signal of widespread cultural diffusion in human evolution. *Proc. Natl. Acad. Sci.* 118. <https://doi.org/10.1073/pnas.2101108118>

- Maezumi, S.Y., Gosling, W.D., Kirschner, J., Chevalier, M., Cornelissen, H.L., Heinecke, T., McMichael, C.N.H., 2021. A modern analogue matching approach to characterize fire temperatures and plant species from charcoal. *Palaeogeogr. Palaeoclimatol. Palaeoecol.* 578, 110580. <https://doi.org/10.1016/j.palaeo.2021.110580>
- Marques, M.P.M., Gonçalves, D., Mamede, A.P., Coutinho, T., Cunha, E., Kockelmann, W., Parker, S.F., Batista de Carvalho, L. a. E., 2021. Profiling of human burned bones: oxidising versus reducing conditions. *Sci. Rep.* 11, 1361. <https://doi.org/10.1038/s41598-020-80462-3>
- Monetti, L., Gafner, K.B., Thompson, T.J.U., 2021. Burning issues with the archaeology of fire. *J. Archaeol. Sci. Rep.* 39, 103156. <https://doi.org/10.1016/j.jasrep.2021.103156>
- Moník, M., Hadraba, H., Milde, D., Chlup, Z., Nerudová, Z., Schnabl, P., 2021a. Heat treatment and mechanics of Moravian Jurassic cherts. *Archaeol. Anthropol. Sci.* 13, 158. <https://doi.org/10.1007/s12520-021-01388-z>
- Moník, M., Nerudová, Z., Schnabl, P., 2021b. Investigation of heat-treated artefacts from Pleistocene sites. *J. Archaeol. Sci. Rep.* 37, 102920. <https://doi.org/10.1016/j.jasrep.2021.102920>
- Ptáková, M., Šída, P., Kovačiková, L., 2021. What was on the menu? Mesolithic cooking and consumption practices in inland central Europe based on analysis of fireplaces. *Quat. Int.* 586, 90–104. <https://doi.org/10.1016/j.quaint.2021.01.017>
- Puech, E., Bamford, M., Porraz, G., Val, A., Théry-Parisot, I., 2021. Evaluating sampling methods in charcoal-rich layers and high diversity environment: A case study from the Later Stone Age of Bushman Rock Shelter, South Africa. *Quat. Int., Anthracology: Charcoal Science in Archaeology and Palaeoecology* 593–594, 36–49. <https://doi.org/10.1016/j.quaint.2020.11.018>
- Rodríguez de Vera, C., Herrera-Herrera, A.V., Jambrina-Enríquez, M., Sossa-Ríos, S., González-Urquijo, J., Lazuen, T., Vanlandeghem, M., Alix, C., Monnier, G., Pajović, G., Tostevin, G., Mallol, C., 2020. Micro-contextual identification of archaeological lipid biomarkers using resin-impregnated sediment slabs. *Sci. Rep.* 10, 20574. <https://doi.org/10.1038/s41598-020-77257-x>
- Stamatakis, E., Kontopoulos, I., Salesse, K., McMillan, R., Veselka, B., Sabaux, C., Annaert, R., Boudin, M., Capuzzo, G., Claeys, P., Dalle, S., Hlad, M., Sengeløv, A., Vercauteren, M.,

- Warmenbol, E., Tys, D., De Mulder, G., Snoeck, C., 2021. Is it hot enough? A multi-proxy approach shows variations in cremation conditions during the Metal Ages in Belgium. *J. Archaeol. Sci.* 136, 105509. <https://doi.org/10.1016/j.jas.2021.105509>
- Thompson, J.C., Wright, D.K., Ivory, S.J., Choi, J.-H., Nightingale, S., Mackay, A., Schilt, F., Otárola-Castillo, E., Mercader, J., Forman, S.L., Pietsch, T., Cohen, A.S., Arrowsmith, J.R., Welling, M., Davis, J., Schiery, B., Kaliba, P., Malijani, O., Blome, M.W., O'Driscoll, C.A., Mentzer, S.M., Miller, C., Heo, S., Choi, J., Tembo, J., Mapemba, F., Simengwa, D., Gomani-Chindebvu, E., 2021. Early human impacts and ecosystem reorganization in southern-central Africa. *Sci. Adv.* 7, eabf9776. <https://doi.org/10.1126/sciadv.abf9776>
- Vidal-Matutano, P., Henry, A., Carré, A., Orange, F., Théry-Parisot, I., 2021. Prehispanic fuel management in the Canary Islands: A new experimental dataset for interpreting *Pinus canariensis* micromorphological degradation patterns on archeological charcoal. *Rev. Palaeobot. Palynol.* 295, 104537. <https://doi.org/10.1016/j.revpalbo.2021.104537>
- Watson, S., Nasoordeen, S., Grote, M.N., Mackay, A., Schmidt, P., 2021. What causes differences in fracture rates of silcrete during heat treatment? A near-infrared study of water-related transformations in South African silcretes. *J. Archaeol. Sci. Rep.* 39, 103162. <https://doi.org/10.1016/j.jasrep.2021.103162>
- Wright, E., 2021. Beyond cremation: Theorising fire in funerary contexts. *J. Archaeol. Sci. Rep.* 38, 102953. <https://doi.org/10.1016/j.jasrep.2021.102953>