From:

To:

Dr Richard I Macphail

Institute of Archaeology, University College London, 31-34, Gordon Sq., London, WC1H 0PY, UK (r.macphail@ucl.ac.uk)

13-02-2016

"Rip Rapp Archaeological Geology Award" - Committee
Rolfe D. Mandel (Chair)
Kansas Geological Survey
1930 Constant Ave.
Lawrence, KS 66047-3726
USA

Dear Rolfe,

Panagiotis (Takis) Karkanas

I recommend Panagiotis (Takis) Karkanas for this year's "Rip Rapp Archaeological Geology Award", because this scholar has worked outstandingly in the field of geoarchaeology since the 1990's. Trained originally as a geologist (1980's) he became a specialist in mineralogy which he first applied to caves in Greece; hence his employment as Senior Geologist, Ephoreia of Palaeoanthropology-Speleology (EPS), Ministry of Culture, Greece (1994-2014). In addition to standard geological petrology he developed further skills encompassing landscape reconstruction to the identification of microlaminations of both natural and anthropogenic origin. His span has also included the mastering of soil-sediment micromorphology and applications of micro-FTIR. These skills were especially developed during 1995-2003, when he was Visiting Research Scientist, Kimmel Center for Archaeological Sciences, Weizmann Institute of Science, Israel. All this training and experience both in the field and laboratory has now led to his recent promotion to Director, M. H. Wiener Laboratory of Archaeological Science, American School of Classical Studies at Athens, Greece in 2014.

Karkanas has published extensively since the 1990's both as an individual, or as team leader in multi-author papers. He has also worked with colleagues to produce thematic

cooperations. Only his more recent publications are cited here. For example, cave studies have included mineralogical investigations of both natural (bat guano) and anthropogenic (hearth) sediments and deposits (Karkanas et al., 2000, 2007a; Shahack-Gross et al., 2004, 2014). It is noteworthy that in the current leading book on the application of soil micromorphology, the chapter on phosphatic features was produced by Karkanas and Goldberg (Karkanas and Goldberg, 2010)(a revised version has been written for year - 2016). Open air archaeological site investigations have included lake village, grave monuments, and floors (Karkanas and Efstratiou, 2009; Karkanas et al., 2011, 2012). Experimental studies are always central to his approach to geoarchaeology. This includes the examination and identification of lime plasters, for example (Karkanas, 2007), and the formation processes in hearths (Karkanas et al., 2007a). For the benefit of so many investigators of earth-based sites, such as tells, he has also been involved in the ethnoarchaeology of mud brick structures and their decay (Friesem et al., 2014).

In the world of geoarchaeology, it would be difficult to come across anyone as helpful and cooperative as Panagiotis (Takis) Karkanas. He moves between Europe and the USA, attends many meetings, and he is always willing to share his expertise both in general discussions or more formally, provide some good advice on texts and the latest research. For example, two colleagues gave Paul Goldberg and I the best in depth suggestions on several chapters in our upcoming textbook (Macphail and Goldberg, Submitted/2016) – one of them was Takis.

For these many reasons I recommend Panagiotis (Takis) Karkanas for the "Rip Rapp Archaeological Geology Award".

Yours sincerely,

RI. Marphi

Dr Richard I Macphail (Senior Research Fellow, Institute of Archaeology, University College London, UK)

References

- Friesem, D. E., Karkanas, P., Tsartsidou, G., and Shahack-Gross, R., 2014, Sedimentary processes involved in mud brick degradation in temperate environments: a micromorphological approach in an ethnoarchaeological context in northern Greece: *Journal of Archaeological Science*, v. 41, p. 556-567.
- Karkanas, K., and Efstratiou, N., 2009, Floor sequences in Neolithic Makri, Greece: micromorphology reveals cycles of renovation: *Antiquity*, v. 83, p. 955-967.
- Karkanas, P., 2007, Identification of lime plaster in prehistory using petrographic methods: a review and reconsideration of the data on the basis of experimental and case studies.: *Geoarchaeology*, v. 22, no. 7, p. 775-796.
- Karkanas, P., Dabney, M. K., Smith, A. K., and Wright, J. C., 2012, The geoarchaeology of Mycenaean chamber tombs: *Journal of Archaeological Science*, v. 39, p. 2722-2732.
- Karkanas, P., and Goldberg, P., 2010, Phosphatic features, *in* Stoops, G., Marcelino, V., and Mees, F., eds., *Interpretation of Micromorphological Features of Soils and Regoliths.*: Amsterdam, Elsevier, p. 521-541.
- Karkanas, P., Kyparissi-Apostolika, N., Bar-Yosef, O., and Weiner, S., 2000, Mineral assemblages in Theopetra, Greece: a framework for understanding diagenesis in a prehistoric cave: *Journal of Archaeological Science*, v. 26, p. 1171-1180.
- Karkanas, P., Pavlopoulos, K., Kouli, K., Ntinou, M., Tsartsidou, G., Facorellis, Y., and Tsourou, T., 2011, Palaeoenvironments and Site Formation Processes at the Neolithic Lakeside Settlement of Dispilio, Kastoria, Northern Greece: *Geoarchaeology*, v. 26, no. 1, p. 83–117.
- Karkanas, P., Shahack-Gross, R., Ayalon, A., Bar-Matthews, M., Barkai, R., Gopher, A., and Stiner, M., 2007a, Evidence of habitual use of fire at the end of the Lower Palaeolithic: Site-formation processes at Qesem Cave, Israel: *Journal of Human Evolution*, v. 53, p. 197-212.
- Macphail, R. I., and Goldberg, P., Submitted/2016, *Applied Soils and Micromorphology in Archaeology*, Cambridge, Cambridge University Press.
- Shahack-Gross, R., Berna, F., Karkanas, P., Lemorini, C., Gopher, A., and Barkai, R., 2014, Evidence for the repeated use of a central hearth at Middle Pleistocene (300 ky ago) Qesem Cave, Israel: *Journal of Archaeological Science*, v. 44, p. 12-21.
- Shahack-Gross, R., Berna, F., Karkanas, P., and Weiner, S., 2004, Bat guano and preservation of archaeological remains in cave sites: *Journal of Archaeological Science*, v. 31, p. 1259-1272.