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To: Rolfe D. Mandel (Chair) Kansas Geological Survey 1930 Constant Ave. Lawrence, KS 66047-3726

To Whom It May Concern:

Dr Panagiotis (Takis) Karkanas

I would like to strongly support the nomination of Dr Panagiotis (Takis) Karkanas for the "Rip Rapp Archaeological Geology Award". Dr Karakanas is the recently appointed director of The Malcolm H. Wiener Laboratory for Archaeological Science, American School of Classical Studies at Athens.

I have known Takis for almost 20 years, and we worked closely together for about 5 years after he obtained his PhD in metamorphic petrology and when he joined the Greek Archaeological Service. Our first study was of the site formation processes and diagenesis of a complex cave in northern Greece (Theopetra). This project soon blossomed into a far wider and more fundamental study of the authigenic minerals formed in cave sediments as a result of the degradation of large amounts of bat and bird guano. Takis's deep understanding of mineral stability fields (from his experience in metamorphic petrology) and his exceptionally good ability to make careful geoarchaeological observations in the field, were largely responsible for this study. The outcome was a sort of roadmap for a diagenetic cascade of reactions that occur in caves. This fundamental understanding of the underlying mechanisms involved opened up the ability to transfer this information to other sites and place them into a robust diagenetic perspective. Takis and I applied this approach to several caves, including one in the Dordogne in France. I am still applying this "roadmap" to sites that I am investigating.

In parallel to these studies, Takis essentially taught himself archaeological micromorphology, and then combined the two approaches by taking advantage of information obtained on the sediment microtextures to better understand modes of diagenesis and site accumulation. I vivdly remember a conversation I had with my friend and colleague Paul Goldberg when we shared our impressions of the "young" Takis and concluded that he has successfully integrated both our individual areas of expertise and by so doing is probably better than both of us! In fact if there was one quality that I would identify that distinguishes Takis from many other geoarchaeologists and archaeological scientists, it is this deep and integrative understanding of mineralogy and texture in archaeological sediments.

In the framework of his research and duties in the Greek Archaeological Service, Takis worked at many different sites from many different periods in Greece, China and South Africa. He thus accumulated an almost unprecedented broad bank of knowledge that has enabled him to see the "big picture" and identify key open questions. Big picture aside, he is still a details person. I for example, was most impressed by his scholarly study of plasters and how you recognize them in thin sections. This is a very tricky problem that requires much more than observational skills to resolve. As always he addresses the issue at the underlying level, and combines this with the detailed textural observations.

Takis ranks very high in my estimation amongst all the colleagues I know in the general field of archaeological science. I am not familiar enough with that many geoarchaeologists to rank him in the specific field for which the award is given, but I would be very surprised if he is not among the top 2 or 3 geoarchaeologists. I therefore have no doubt that Takis is very well deserving of this distinguished award in archaeological geology.

Yours sincerely,

Prof Steve Weiner