

HARROW & HILLINGDON GEOLOGICAL SOCIETY

A Local Group of the Geologists' Association

Founded 1973

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Lecture Series 2025

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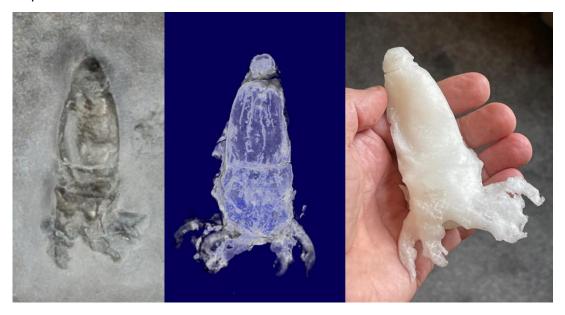
Wednesday 8th January 2025 at 8pm on Zoom

"3D X-Ray Vision: An exceptionally preserved Jurassic Vampire Squid and Where it Lived"

by Prof Ru Smith (University of Malaya)

Only under exceptionally unusual circumstances are fossils of soft bodied organisms found preserved in three-dimensions with internal structures largely intact.

In the talk, I'll share a remarkable example of such a case, a Jurassic vampire squid (Vampyronassa rhodanica) completely preserved in pyrite. 3D X-ray imaging (micro computed tomography) enables visualisation of the animal and allows a virtual 'extraction' of the fossil and its internal structures such as beaks and cartilage. Results can be scaled up and printed out in 3D for closer inspection.



Considering the basinal context and associated fauna, there is a fascinating story to be revealed on where the vampire squid lived and how it came to be preserved in such exquisite detail. The results have important implications for models of how and when this group of animals migrated from shallow into deep water oxygen-deficient habitats.