

Lyell Meeting 2015

Mud, glorious mud, and why it is important for the fossil record



11 March 2015

The Geological Society, Burlington House

Speakers include:

Derek Briggs
(Yale University)

Paul Pearson
(University of Cardiff)

David Martill
(University of Portsmouth)

Hugh Torrens
(Keele University)

Volke Wilder
(Senckenberg Naturmuseum)

William Gosling (University of
Amsterdam)

Nick McCave (University of
Cambridge)

Convenors:

Angela Coe
(The Open University)

Alan Lord
(Senckenberg Naturmuseum)

Linked Public Lecture

There will be a linked public lecture on the evening of the 10 March by Euan Clarkson (University of Edinburgh) entitled 'The Cambrian Alum Shales of Scandinavia and their remarkable trilobites'.

Mudrocks provide an unrivalled medium for the preservation of fossils. This exceptional preservation has, in turn, enabled significant scientific advances in the functional morphology and evolution of biota throughout life history and, a high resolution record of the ways in which biota adapt and evolve during environmental change.

It has long been observed that mudrocks yield abundant, diverse and well-preserved micro- and macro-fossils. Almost all the strata yielding fossilised soft parts are also from mud-grade deposits. More recent studies have discovered that the seawater chemistry at the time of deposition remains largely unaltered in shells preserved in mudrocks. This enables these fossils to be used as proxies for important Earth surface parameters such as water temperature, salinity, ice volume, rate of chemical weathering and pH. The role of mudrocks in providing an ideal medium for understanding life throughout geological time also applies to lake deposits where terrestrial palynomorphs provide us with records of vegetation change in response to climatic fluctuations. The relative stratigraphical completeness of most mudrock successions makes them ideal for high-resolution studies and hence for understanding the rock record on biological timescales.

The meeting will be of relevance to those interested in marine and terrestrial Earth surface processes particularly periods of extreme environmental change as well as those interested in the exceptional preservation of fossils.

Registration is open

To register and for more information, visit: www.geolsoc.org.uk/lyell-2015

Further information


For further information about the conference please contact:

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