Life and the Planet

earthsciences UCL

NERC SCIENCE OF THE ENVIRONMENT

The Geological Society

Co-evolution of Life and the Planet Ice-Breaker

5.30pm, November 4th
J Z Young Lecture Theatre, UCL

Professor Lee Kump

Penn State University

Oxidation of the biosphere:

The best laid scheme of life and planet

The transformation of Earth's biosphere from an oxygen-free to an oxygen-replete surface environment is perhaps the best example of co-evolution of life and planet. Molecular oxygen exists on Earth in substantial concentration only because of the activity of cyanobacteria or their descendants, the chloroplasts, and the presence of free oxygen dictates the chemistry of much of the biosphere. However, the cyanobacterial innovation was likely not sufficient for the establishment of a globally aerobic biosphere; the appearance of free oxygen in the environment may have postdated the innovation by hundreds of millions of years because of suppression by an overabundant supply of reductants from Earth's interior...

The Ice-breaker is coorganised by Long-term Co-evolution of Life and the Planet (NERC Research Programme) and the Department of Earth Sciences, UCL.

5th and 6th November, 2014 The Co-evolution of Life and the Planet meeting will be at The Geological Society, London

Programme Manager:

Ying Zhou, University College London, (y.shields-zhou@ucl.ac.uk)

For more information, please see

http://www.lifeandplanet.net

http://www.geolsoc.org.uk/lifeandtheplanet14

Convenors:

Dr Alistair Crame, British Antarctic Survey
Dr Gavin Foster, University of Southampton
Professor Tim Lenton, University of Exeter
Professor Richard Twitchett, Natural History Museum, London
Professor Graham Shields, University College London

Twitter hashtag: #LATP14