

PhD studentship: Luminescence chronologies for lacustrine sedimentary records from East Africa

Supervisors: Dr Helen Roberts, Professor Henry Lamb



Project outline

A PhD student is sought to work on developing luminescence chronologies for lake sediments in East Africa.

The successful applicant may join field expeditions to Ethiopia and Kenya to core lacustrine sediments. Using the state-of-the-art luminescence dating laboratories at Aberystwyth, the student will develop appropriate dating methods for core sediments up to 200,000 years in age.

The project is part of a wider research effort aimed at understanding how past environmental changes influenced the emergence and evolution of humans in East Africa, and their dispersal into Eurasia. Luminescence dating will help provide a crucial chronological framework for relating past environmental changes to the archaeological record of human physical and cultural evolution in the region.

The project is collaborative with the Universities of Cologne and Addis Ababa, and is in part supported by ICDP, the International Continental Drilling Program. Deep drilling for 0.5 - 3.5 million year records from five sites in Kenya and Ethiopia has been completed. The core sites are adjacent to well-known hominin fossil localities, including the Omo Valley in south Ethiopia, site of the earliest known fossils of anatomically modern humans. Cores from lake basins in the Ethiopian Rift Valley and the adjacent highlands are also available for study.

Key skills

Full training in research and discipline-specific skills will be provided, including field, laboratory and statistical methods. The successful applicant will have had some previous training in the earth sciences, and fieldwork experience.

Supervisors

The project will be supervised by Dr Helen Roberts, and Professor Henry Lamb, Department of Geography and Earth Sciences, Aberystwyth University. Material and potential field support for the project is provided by Professor Frank Schäbitz (Centre of Quaternary Science and Geoarchaeology, University of Cologne), and by Dr Asfawossen Asrat (School of Earth Sciences, Addis Ababa University). Further information about the wider programme is available at <http://www.sfb806.uni-koeln.de/> and at <https://www.facebook.com/HSPDP>

Applications

Applicant should have, or expect to receive, a first or upper second class BSc or MSc degree in an appropriate discipline. Successful applicants will be considered for full-time funding for 3 years from Aberystwyth's Doctoral Career Development Scholarships (DCDS). Self-funded students are also welcome to apply.

Applications should be accompanied by an outline research proposal, 1000 -1500 words in length. It should include (i) Title; (ii) Key research questions; (iii) Proposed methods. Applicants are strongly advised to contact the project supervisors before constructing a research proposal.

Applications must be received by January 30th 2015

Further details about applying for postgraduate research at Aberystwyth University can be found at:

<http://www.aber.ac.uk/en/postgrad/>