

David L Nieland

Subject: PhD Project on Taxonomy and ecology of Caspian dinocysts - a tool to reconstruct the past at Brunel University, London

The Queen's Anniversary Prize winning Institute for the Environment at Brunel University, London, is offering an innovative PhD project on "Taxonomy and ecology of Caspian dinocysts: a tool to reconstruct the past" via the NERC London Doctoral Training Partnership in collaboration with the Natural History Museum (Dr Steve Stukins).

Project Description:

Since the Caspian Sea (CS) has long been isolated from global ocean, a diverse endemic fauna and flora has developed. The CS is an area that exhibits rapid sea-level changes, a hundred times faster than global ocean. To appreciate these past dynamics one needs to extend the short records made by instruments by information trapped in sediment. The cysts of small organisms (dinocysts) are a good tool to reconstruct salinity (hence sea-levels), temperature (hence climate) and nutrients. However, in order to use modern assemblages as analogs for past conditions, it is essential to establish a robust taxonomy to be used by all researchers of the region and to establish the ecological conditions that drive their spatio-temporal fluctuations.

This project proposes to address this by studying surface sediment sampled across diverse ecological zones of the modern CS; developing the dinocyst taxonomy; establishing their ecology by comparing to in-situ physico-chemical measurements.

Suitable candidates should have a first degree in geography, geology, biology, or a closely related environmental science.

Applicants should apply via the NERC London DTP website:

<http://london-nerc-dtp.org/2014/11/03/applications-are-now-open/>

The NERC DTP studentships are available to UK nationals and other EU nationals that have resided in the UK for three years prior to commencing the studentship. If you meet this criteria, funding will be provided for tuition fees and stipend. If you are a citizen of a EU member state you will be eligible for a fees-only award. There are however a limited number of studentships offered by the consortium that will fund EU nationals for both fees and stipend.

More information about the Institute for the Environment can be found at:

<http://www.brunel.ac.uk/ife>

The deadline for applications is midnight on Monday 11th January 2015

Informal enquiries can be made to Prof. Suzanne Leroy, suzanne.leroy@brunel.ac.uk

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The past is all we know of the future. (Barbara Kingsolver)