



NEWSLETTER

LGS Newsletter 161.5

27th January 2020

Tuesday 4th February 2020

Lecture by Dr Steve Barrett (University of Liverpool) at 7.30 p.m. in Lecture Theatre 137 of Liverpool John Moores University, Byrom Street, L3 3AF.

Title: Image Analysis in Earth Sciences

Description:

This talk gives an overview of how microscope images can be processed and analysed to provide information about a wide range of materials, including geomaterials. The talk starts by discussing imaging in general, highlighting some of the difficulties encountered when interpreting images. Then a short introduction to the nature of light shows how specialist microscopes can be used to reveal the crystalline structure of rocks.

Tuesday 18th February 2020

Distinguished Visitor's Address by Dr John Nudds (University of Manchester) at 7.30 p.m. in Lecture Theatre 137 of Liverpool John Moores University, Byrom Street, L3 3AF.

Title: Archaeopteryx and the dinosaur - bird transition

Description:

Archaeopteryx was first discovered in 1861 and is currently known from just 13 specimens. Controversy still surrounds this animal: was it really the first bird in the fossil record, or is it just another unimportant theropod dinosaur? Much has been published in the last decade, describing new specimens and re-interpreting some of the early specimens using new techniques. Phylogenetic analyses ('cladistics') have been exhaustively employed using huge datasets, but still come up with conflicting results about where exactly Archaeopteryx sits on the Tree of Life. My colleagues and I have recently performed the first ever synchrotron analysis of Archaeopteryx on one of the least known specimens which provided us with some quite unexpected results.

Saturday 22nd February 2020

The Herdman Symposium 2020 at 9.30 a.m. in the Central Teaching Hub of University of Liverpool, Off Brownlow Hill, Liverpool, L69 3BX.

Title: Climate through Earth's History

Description:

The invited speakers use cutting edge research techniques to probe Earth's climate. They will take us on a journey through geological time and explain how their latest findings inform on our understanding of climate in the past and what this means for the future of our planet. Speakers will be:

Dr Will Hutchison (St Andrews) - Volcanology

Dr Katrien Van Landeghem (University of Bangor) - Marine Geology and Geophysics

Professor Mark Maslin (University College London) - Climatology and Anthropology

Professor Laura Robinson (University of Bristol) - Geochemistry

Dr Chris Stevenson (University of Liverpool) - Sedimentology

Professor Bridget Wade (University College London) – Micropalaeontology.

Tickets:

For Alumni of the Herdman Society, University Staff and LGS Members the ticket price is £10. This event fee includes the Talks, Abstracts, Light refreshments, Sandwich Lunch and Wine Reception.

Tickets will be sold at LGS meetings. Members wishing to book online should book tickets under Package B on the online payment site:

<https://payments.liv.ac.uk/conferences-and-events/events-at-liverpool/school-of-environmental-sciences/herdman-symposium-2020-climate-throughout-earths-history>

Other information:

The Central Teaching Hub is Building number 221 (F6) on the University's Campus Map. Please also see the Campus map for visitor car park locations:

https://www.liverpool.ac.uk/media/livacuk/maps/maps/Campus,Map,2018_all.pdf

Thursday 27th February

Lecture by Iain Henrys for our Joint meeting with NWRG Geol. Soc. at 7.30pm in Lecture Theatre 137 of Liverpool John Moores University, Byrom Street, L3 3AF.

Title: Exploration for a sub-sea coal deposit and the impacts of the 2010 M8.8 Earthquake, Chile

Description:

Around the time of the earthquake, Iain Henrys was working in and around the cities of Arauco and Lota in Bío Bío Region, leading the early stages of an exploration programme focused on evaluating the brownfield opportunities of the sub-sea coal deposits beneath the Gulf of Arauco.

Contractors were carrying out this bathymetric survey in the Gulf when the earthquake occurred. The survey vessel had to ride the subsequent tsunami. Due to circumstances encountered on the boat during the period of the quake, an echo sounder was switched on which ended up inadvertently recording the waveform of the tsunami on to paper. This will be shown during the talk for the first time.

The talk will also describe the geological and geophysical activities carried out before and after the main earthquake which resulted in the identification of differential displacements of the sea floor across the Gulf of Arauco.

Anecdotes of the events and their affects following the earthquake on the exploration crew, local infrastructure and the general population will also be provided. There will also be a lesson on why, when living in earthquake prone regions, one shouldn't procrastinate when it comes to carrying out the weekly shopping!

Other information: Iain Henrys is a mineral exploration geologist with over 20 years' experience in mineral exploration geology and geoscience. His commodity experience includes coal, gold and base metals. He has worked in the UK, West Africa, numerous South American countries, Indonesia, Iran and New Caledonia. The 27th February 2020 will be the 10th anniversary of the earthquake. The talk is dedicated to all of those who died or went missing as a result of the quake and especially to the late Luis Avilla who provided invaluable assistance and friendship to Iain, his family and colleagues before and following the earthquake event.

10th March 2020

Liverpool Geological Society Annual Dinner 2020 at Villa Romana, 6 Wood Street, Liverpool 1.

First Course: Choice of Minestrone Soup, Home-made fishcakes, Risotto Bolognese, Insalata Caprese with mozzarella cheese & tomato.

Main Course: Choice of Breast of Chicken, mushroom, cream, white wine sauce with potatoes & vegetables, Pan-fried fillet of Salmon in a tomato sauce, served with potatoes & vegetables, Calzone, Tortellini Basilico

Desserts: Choice from the trolley.

Cost: £20.00 per head to include service.

Please indicate your choice of food and send with a cheque made payable to Liverpool Geological Society to Gary T Billington, Honorary Treasurer, Liverpool Geological Society, 4 Lewisham Road, Liverpool L11 1EF.

Please respond by Friday 6th March 2020.

Notice about the Churchill Way flyovers

There are road closures and changes to pedestrian ways due to the dismantling of the Churchill Way flyovers. To find out how this might affect your journey to LJMU, visit this site:

<https://www.ljmu.ac.uk/study/undergraduate-students/visit-us/directions/james-parsons-building>

Nominations of members to be on the Society's council for 2020/2021.

The Honorary Secretary would like to have nominations of members to be on the Society's council. You can contact her at lgsecretary19@gmail.com or at: Dr Maggie Williams, Honorary Secretary, Liverpool Geological Society, 2, Hazelwood, Wirral, CH49 2RQ.