



**1<sup>st</sup> November 2023**

**LGS Newsletter 165.5**

## **Liverpool Geological Society Lecture**

**Tuesday 14<sup>th</sup> November**

**Lecture by Prof. Peter L. Falkingham (Liverpool John Moores University)**

**Title: What fossil footprints can tell us about extinct animals**



### **Summary:**

In his talk, Peter will be looking at the ways fossil footprints can tell us about the animals that made them, with a particular emphasis on dinosaurs.

We can't watch extinct animals move, so their trackways are the best evidence we have for how they moved and interacted with their environment. This can extend from grand scale interpretations about migrations and herd movements, all the way down to the motions a specific foot made in a very specific type of mud, hundreds of millions of years ago.

## **Liverpool Geological Society Practical Session**

**Tuesday 28<sup>th</sup> November**

**Practical Session with Dr Maggie Williams (University of Liverpool)**

**Title: Microfossils**

In this practical you will be using zoom microscopes to investigate microfossils. You will be provided with worksheets to familiarise yourself with the characteristics of samples of different microfossils in grain mounts. You should bring your own writing pens/ pencils/ rulers etc. - and you may find it useful to bring a usb drive to save images that you capture.

This practical session will be held in the ENVS lab in the CTL and will start at 7.30 pm. **Meet at 7.20 outside Lecture Theatre C in the Central Teaching Hub, University of Liverpool.** Entrance will be via the main door.



**Please note: The maximum number for this session is 16. If you wish to reserve a place, please contact Maggie Williams (Hon. Secretary), by mobile: 07784 720 551, or email: [lgssecretary19@gmail.com](mailto:lgssecretary19@gmail.com)**

## **LGS Indoor Meetings: update**

There are two additions to the programme of indoor meetings for the 2023-2024 session. These are:  
**Tuesday 20<sup>th</sup> February 2024.** Hazel Clark (Liverpool John Moores University) will give a talk on Iceland.  
**Tuesday 5<sup>th</sup> March 2024.** Amanda Hughes (Edge Hill University) will give a talk on the magmatic evolution of the Pingmulu Central Volcano, East Fjords, Iceland.  
Details of these talks will be sent to LGS members via the LGS Newsletter.

## Down to Earth

Hard copies of this publication are not being produced, but electronic copies are available, which we have permission to email to LGS members. If you would like a pdf copy of the most recent publication for November (DTE Extra number 131), please email Maggie Williams (Secretary) at [lgssecretary19@gmail.com](mailto:lgssecretary19@gmail.com) and a copy will be sent to you.

## Geological Society of London

Tuesday 7<sup>th</sup> November 2023 from 6.00 – 7.00 pm.

**Public lecture: Tin and Lithium Granites - From The Bottom Up by Nick Gardiner (University of St Andrews)**

**Venue: Hybrid - in person at Burlington House, Piccadilly and Virtual via Zoom**

**Outline of event:** The transition to a renewable energy platform requires a sufficient supply of key metals, in particular the so-called “battery metals” tin and lithium. These metals are primarily sourced from magmatic-hydrothermal deposits, which form when mineralising fluids exsolve from evolved, volatile-saturated magmas. Although historically studied, there is now a renewed interest in both tin granites and lithium pegmatites due to their economic importance, and there is an opportunity to deploy modern crustal evolution techniques – both analytical and modelling – to understand their genesis.

We show how geochemical microanalysis of accessory minerals can help shed light on the processes of crustal melting and of fractional crystallisation, which together lead to mineralization, and how such a bottom-up approach may help us build better models for the formation of these deposits. We also discuss how in a global mining context these battery metals are relatively small-scale, with a fragile supply pipeline, and by taking the example of tin in the 2000’s, explore the current rush for lithium. Registration is now open for this event.

Details: <https://www.geolsoc.org.uk/11-Public-Lecture-Granite>

Tickets are available until 6 November 2023.