

U3A GEOLOGY REPORT

Bob Tuddenham

Meetings on April 28th and May 19th

We had two very interesting meetings in April and May, both of which were useful for those relatively new to the subject and there was some valuable revision for more experienced members of the group.

In our April meeting, Trevor Morse gave us a basic introduction to petrology - the structure and composition of rock. Trevor explained and illustrated the value of thin sections when viewed with a microscope under polarized and non-polarised light to establish the mineral composition of rocks.

We looked at a range of igneous rocks from granite to peridotite and were shown how to recognise the signature appearance of some common minerals in thin sections. We could also see the direction characteristic in metamorphic rocks as a result of changes under enormous pressure. Microfossils such as coccoliths in chalk could be seen in the thin sections

Trevor also briefly talked about some of the recent devastating earthquakes particularly in Myanmar and Istanbul and the recent volcanic activity on Etna and in Iceland.

In May, David Saville continued his excellent series on the introduction to Geology. In this meeting David gave a presentation on 'Life in the Silurian and Devonian' with a comprehensive overview of these two geological periods. Sometimes called the Silurian-Devonian Terrestrial Revolution, there were major evolutionary changes in this time span including jawed fishes, the colonisation of the land by plants and animals and the rise of more complex ecosystems. In Britain, there was considerable igneous activity at the end of the Caledonian Orogeny and we can see this locally with the Lake District batholith, the Shap granite and the Weardale granite. David also provided a helpful information sheet which was sent out to members after the meeting.

Our next meeting will be at The Witham on Monday morning July 28th at 10 am. All are welcome to join us. Please contact the convenor for details.