



THE CENTRAL SCOTLAND REGIONAL GROUP OF THE GEOLOGICAL SOCIETY

Notice of event: Thursday 27th February 2020

COWI UK

310 St Vincent Street, 5th floor

Glasgow, G2 5RG

5.45pm for 6:00pm

Note that there is no parking at the venue.

This event is FREE however it requires prior registration.

RSVP to SRME@COWI.com

Getting into hot water: geothermal energy resources explained with a case study focused on the Cheshire Basin

by

Dr Catherine Hirst

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Over the past 20 years, research into geothermal energy extraction from low enthalpy resources within the UK has been increasing year-on-year. Whilst the UK has only one working geothermal system (Southampton), there is scope for geothermal energy to make a more significant contribution to the UK energy portfolio.

A major assessment of UK geothermal resources was undertaken by the British Geological Survey, between 1976 and 1986. This identified low enthalpy resources associated with Permian and younger sedimentary basins. The total resource held within these basins was estimated at 292.6 Exajoules (EJ; Rollin et al., 1995); many times larger than the entire UK heating demand. More recently, work undertaken by Newcastle University and Durham University included drilling two new geothermal exploration wells at Science Central, Newcastle-Upon-Tyne, and Eastgate, County Durham, respectively. These wells both penetrate Carboniferous strata, and in the latter case the Devonian Weardale Granite.

In addition, more novel geothermal sources have been researched, such as the resource contained within abandoned flooded mine workings and produced water from oil fields. The Cheshire Basin lies close to the large population centres of Manchester and Liverpool both of which could benefit substantially from low carbon, district heating schemes.

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Presenter

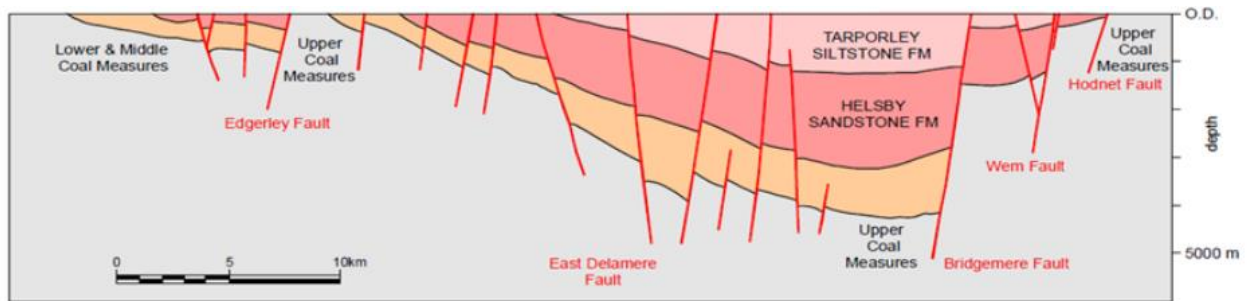


Dr Catherine Hirst

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Catherine is a Geologist with a varied background in environmental (contaminated land), geotechnical, engineering geology, hydrogeology and renewable energy. Her experience spans both industry and academia showing her capability to adapt her working methods to suit individual scenarios.

She has worked in various countries and accumulated a wealth of experience as well as fantastic memories along the way.



More information on the Central Scotland Regional Group can be found on our [webpage](http://www.geolsoc.org.uk).