



The
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Speaker:
Dr Peter Brabham
Cardiff University

Date:
Wednesday 16th May
2018

Meeting timings:
Tea/coffee 17:30
Start 18:00

Location:

Free to attend.

Live streaming available:
link TBC??

For further information please
contact the event convenor:
Jon Race,

jrace@southernesting.co.uk

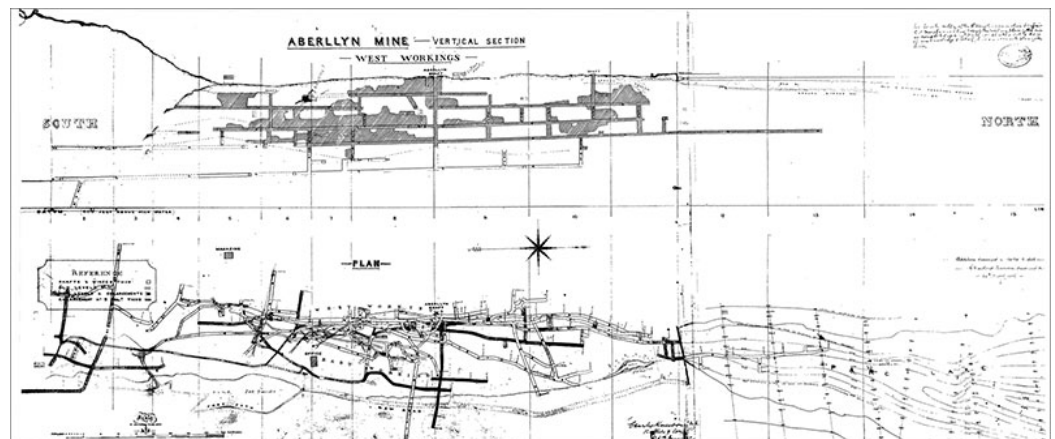


Tapping the industrial legacies of Carboniferous coal geology in South Wales – Is there heat energy potential in minewater?

An evening meeting organised by the Engineering Group of the Geological Society (EGGS)

This lecture will look in detail at how the coal was historically mined across South Wales by over 1600 mines and the industrial markets for the different types of coal and its many bi-products. The coalfield can be zoned, based on the spatial distribution and dates of historical mining, the types (rank) of coal mined, the markets for that coal and the complexity of geological structures. There are still some geographical areas of the coalfield remain unmined, why is this? The impact of the rise and fall of industrial growth of coal mining from 1750-2000 and its impact on population migration in and out of South Wales will be explored. Today, with no working underground coal mines left in South Wales there are 21st century environmental legacies that still need to be tackled.

Is there possibly also opportunities that can be explored for extracting future sustainable heat energy from the abandoned coal mines across South Wales? The lecture will conclude with the results of a recent FLEXIS / Bridgend CC feasibility study into the heat potential of mine water in abandoned coal mines. The results of this feasibility study look positive and may lead onto a £10 Million working system providing community heating to over 150 houses.



Peter Brabham has a B.Sc. in Applied Geophysics from Cardiff University and a Ph.D. in the application of high-resolution seismic techniques applied to coal exploration from Durham University. Peter is the Director of Taught Postgraduate programmes in the School of Earth and Ocean Sciences at Cardiff University. Peter has worked with the Cardiff University Geo Environmental Research centre for over a decade and is presently on part-time secondment to the FLEXIS project to provide his geological and geophysical expertise in support of FLEXIS project areas. Peter has a lifelong interest in the historical mining of coal in South Wales. This interest, which having laid dormant for many years due to the demise of conventional mining in the UK, is now in demand again for the creation of accurate geological models to support FLEXIS in directing future ground energy initiatives.

