



# **Home Counties North Regional Group**

### DOUBLE EVENT - CURRY NIGHT AND ANTARCTIC EVENING

# 3 weeks on the Scotia Arc: a snapshot field trip in Antarctica

### **Helen Nattrass**

This talk will give a brief account of the Field Excursion with the Geological Society of America to the Scotia Arc in January 2013. It will include an overview of the tectonics of the Scotia Arc, some information about current research and recent advances in understanding the region's geology, ecology and evolution. The locations visited include the Falkland Islands, South Georgia, the South Shetland Islands, the Antarctic Peninsula and Argentinian Tierra del Fuego. This will be essentially an overview presentation without the expert back-up of the academics who accompanied the excursion.





**Helen Nattrass** is a Chartered Geologist and a Chartered Engineer. She studied Geology at the Royal School of Mines, Imperial College, London, specialising in engineering geology. Working principally with civil engineering contractors, her professional life has straddled the interface between geology and infrastructure. Work in tunnels such as the Channel Tunnel and London's Jubilee Line Extension were milestones in her early career.

More recent employment with Sir Robert McAlpine has moved the focus to deep basements, foundations and ground movements. Whilst working essentially as a civil engineer, she retains a wide-ranging interest in geology for its own sake.

# A geologist in Antarctica: reflections after 50 years

### **David Brook**

This talk will try to give the full flavour of the whole experience of being a young geologist working in Antarctica almost 50 years ago.

The geology was, firstly, highly folded and faulted volcanic sediments (and raised beaches) on South Georgia, the most northerly island of the Scotia Arc, which formerly linked the South American Andes to the Antarctic Peninsula. Moving onto the Antarctic continent proper, the geology in the Theron Mountains comprised continental, fluviatile sediments of Permian age intruded by thick sills of Jurassic dolerite with distinct associations with similar igneous rocks elsewhere in Gondwanaland.







Stromness Bay, South Georgia, 26-12-65

Geologist at work

The Theron Mountains

However, most of the time was not spent doing geology and the talk will include the wildlife, a bit of history and an illustration of what it was really like and how things have changed a little since then.

**Dave Brook** joined the British Antarctic Survey immediately after graduating from the University College of Swansea because, as he said in his interview for the job, "I'd rather do a PhD on £1,000 a year (the BAS salary at the time) rather than £500 a year (the postgraduate grant then available) and it will be new geology that has not been studied in any detail before". He spent 2 months on South Georgia and a further 2 years at Halley Bay, during which time he carried out geological fieldwork in the Theron Mountains. After a period of laboratory work and writing up for publication (including for his PhD at Birmingham University), Dave joined the Minerals Planning Division at the Department of the Environment and its successors. Since retirement he has operated as an occasional consultant.

**Date: Tuesday 16 September 2014** 

Venue: Sir Robert McAlpine, Eaton Court, Maylands Avenue, Hemel Hempstead HP2 7TR

 $Refreshments\ 18.00$  Meeting starts with  $1^{st}$  talk at 18.30, followed by curry and then the  $2^{nd}$  talk

It is expected to finish by about 21.00

To assist with the catering, please register in advance by emailing homecountiesnorthregionalgroup@gmail.com

For more information on the Home Counties North Regional Group visit the website at http://www.geolsoc.org.uk/hcnrg

# Sir Robert MCALPINE

### Sir Robert McAlpine

Eaton Court, Maylands Avenue, Hemel Hempstead, Hert HP2 7TR

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### Public Transport

By Rail
Hemel Hempstead Station is on the Silverlink line from Euston taking approximately 35 minutes. Trains run 4 per hour. Our offices are then a 15 minute drive.

## By Air

Luton Airport (M1 Junction 10) Approximately 30 minutes drive away.

