



**Circular 383
November 2009**

Registered Charity No: 503617

President: Tim Colman

www.emgs.org.uk

INDOOR LECTURE PROGRAMME **2009/2010**

Saturday, 12th December 2009 - 6.00 pm

"My house fell in a hole - problems with soluble rocks"

Speaker: Tony Cooper

(Followed by our Christmas Cheese and Wine Evening) **Please remember to bring a glass!**

Saturday 23rd January 2010 - 6.30 pm

"A Geotour of Oman - world class geology and a great tourist attraction"

Speaker: Professor Hugh Rollinson

Saturday 13th February 2010 - 6.00 pm

Presidential Address "Gold in Britain - past, present and future

followed by the Annual Society Dinner – BOOKING FORM ENCLOSED

Please ensure all applications are submitted by Friday 5th February at the latest

Saturday 13th March 2010 - 6.00 pm

Annual General Meeting followed by Members Evening

LECTURE VENUE

Indoor meetings will take place in lecture theatre B3 of the Biology building at the University of Nottingham. If you require to use the lift to B3, please speak to the security attendant who will assist you. B3 is equipped with induction loop hearing assistance. If you are attending meetings or joining a coach at the University of Nottingham, enter from the South Entrance on University Boulevard. Cars should be parked in the car park on the bend in the road just beyond the security point after Science Road. The entrance to the Biology building is at the right hand side of the rear of this car park.

Saturday, 12th December 2009 - 6.00 pm

"My house fell in a hole - problems with soluble rocks"

(Followed by our Christmas Cheese and Wine Evening)

(The inspiration both for Alice in Wonderland and Witches in Cheshire?)

Alice fell down- down- down- deep into the earth, following the white rabbit. Curiouser and curiouser she thought, in this underground wonderland the walls are made of sparkly gypsum - $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$ (with apologies to Lewis Carroll). Yes, there is a strong connection between gypsum, subsidence, and the life and inspiration of Lewis Carroll. The "Bottomless" pits, collapsing ground and steaming springs that inspired the writer are all linked to evolving gypsum karsts and collapsing caves. Gypsum is rapidly soluble and caves formed in it enlarge at an alarming rate causing active subsidence. This gives a planning and engineering headache for the town of Ripon in North Yorkshire, where collapses occur on a regular basis. It also affects developments on the Permian rocks between Doncaster and Darlington and gives rise to numerous sulphate-rich springs.

In Cheshire and Worcestershire, salt springs from natural Halite dissolution are also linked to subsidence and building damage. Place names give clues as to where this is occurring. Roman sites were called Salinae and Medieval places with names endings of wich and wych are indicative of salt springs, many of which are recorded as salt houses in the Domesday Book. More recent brine extraction has left a legacy of linear subsidence lakes or "flashes" running in the directions of the salt works. Modern mapping and the use of Geographic Information Systems (GIS) are helping in the understanding of the distribution and mechanisms of collapse that affect the soluble rocks in the UK.

Saturday 23rd January 2010 - 6.30 pm

"A Geotour of Oman - world class geology and a great tourist attraction"

Speaker: Professor Hugh Rollinson

Hugh Rollinson was Professor of Earth Sciences at Sultan Qaboos University in Oman from 2002-2008. In this talk he provides a tour through the geological highlights of the country. Oman is a modern and developed country on the edge of the Arabian plate. It is a mountainous country and its desert scenery provides spectacular outcrops, while good roads provide easy access to the geology. Oman is famous for its 100Ma ophiolite, but it also provides the outcrop which links to the subsurface petroleum geology of the area, and it is an important source of meteorites. The geomorphology provides evidence of rapid uplift, and provides evidence of a changing climate in the last few 1,000 years.

Saturday 13th February 2010 - 6.00 pm

Presidential Address: Gold in Britain - past, present and future

Gold in Britain was certainly known to the Romans who worked the famous Dolaucothi mine in mid-Wales. Much gold in prehistory is thought to have come from Ireland, the sources of which are obscure, and the record is then very uncertain until the working of gold at Crawfurd Muir in the Southern Uplands in the 16th Century. There are sporadic records of gold in various places in Britain in the succeeding centuries, usually without substance, until the discovery of the Dolgellau gold field in the middle of the 19th Century. Mining there continued for 50 years. There was a short-lived alluvial gold rush to Helmsdale in Sutherland in the 1860s, and attempts were made to reopen Dolaucothi mine in the 1930s and the Dolgellau field in the 1980s. Entirely new areas were discovered in the 1980s and 1990s in the highlands of Scotland, the Sperrin Mountains of Northern Ireland and the Crediton area of Devon, and a small mine has begun production near Omagh.

The talk will briefly review these developments and then discuss the geological setting of a number of types of mineral deposit that contain gold in Britain. These will include the Cambrian porphyry copper-gold prospect of Coed y Brenin in Snowdonia, unconformity-related gold in the Permian rocks of the Crediton Trough, Devonian epithermal hot-spring type mineralisation at Rhynie in Aberdeenshire and the new mesothermal quartz-sulphide vein discoveries in the Dalradian rocks of Scotland and Northern Ireland as well as the Dolgellau deposits. Finally old and new methods of prospecting for gold from the gold pan to the computer will be discussed.

Subscriptions

Subscriptions will be due on 1st February 2010. The rates remain the same. Members who do not pay by Standing Order could please consider doing this as it eases the administrative load. Please also consider paying your subscription by way of a Gift Aid declaration. It costs you nothing but benefits the Society considerably and helps to keep our subscription rates down. A blank Gift Aid form and Standing Order Authority are available by request from the Secretary or Treasurer.

Subscription rates are: £12.00 ordinary
 £15.00 joint membership
 £ 5.00 student membership

Other Society Programmes

Mineralogical Society Distinguished Lecturer

3rd December 2009 - 6.00 pm - Geographical, Earth and Environmental Sciences, Kedleston Road Site, University of Derby, Room OL1 (adjacent to the main tentance at Kedleston Road)

Professor David Manning Newcastle University on Mineral Solutions to Global Problems

British Geological Survey

Archives Awareness Saturday 5th December at BGS

'Voyages of Discovery - from Darwin to the Moon and Beyond

A unique opportunity for the public to see displays and demonstrations using some of the vast collections of records, specimens, archives and latest computing technology at the BGS. There will be ten 90-minute tours throughout the day. They will follow a geological timeline through the Library, Fossil Museum, National Geological Records Centre, Material Collections storage hall and end in the 3D visualisation suite.

Please note: Booking essential as numbers are limited. For more information about the event and the Booking Form, contact Becky White via the website at <http://www.bgs.ac.uk/news/diary.html>

The Open University Geological Society East Midlands Branch - Saturday 12th December 10.30 - 15.30

A day of talks at BGS Keyworth, which will include *Volcanic fluids in the Solomon Islands*, *Mapping Doggerland in the southern North Sea* and *Modelling Glacial Dynamics*.

Contact Don Cameron on 0115 936 3489 or e-mail at dqca@bgs.ac.uk

Information for Other Societies

We hold information of lectures and field meetings for other local societies such as the NSSGA, Black Country Geological Society and Leicester Lit & Phil Society. If you would like details of any of these, please contact the Secretary.

Society Publications

- (1) **Leicester Building Stones Guide;**
 - (2) **East Midlands Field Guide;**
 - (3) **Sandstone Caves of Nottingham** (new full colour edition) .
- Copies available by contacting the Secretary or at Indoor Meetings.

We are still looking for volunteers please in the Leicester area to help in distributing the Leicester Building Stones Guide. If you can help, please contact the Secretary (details below).

EMGS Website

A plea for past EMGS Field Trip Photographs please for a gallery on the website. Pictures can be e-mailed to website@emgs.org.uk or sent to the Secretary.

New Members

Keith Coxon, Edwalton, Nottingham
Mrs Gillian Phillips, Belper.

Marketing the Society's Publications

We are still in need of a volunteer to promote the marketing of the Society's publications such as the East Midlands Field Guide, Leicester Building Stones Guide and the Sandstone Caves of Nottingham books. If you have any expertise in this field, or even if you haven't but would like to volunteer to help, please contact the secretary or any other member of Council.

The National Stone Centre

Are looking for volunteers for guiding and other activities on the site at Wirksworth. If you can help, please contact Ian Thomas on 01629 824833 or ian@nationalstonecentre.org.uk

e-mail addresses

To minimise postal costs and photocopying charges which amount to approximately £4.00 each year for every member who still receives their Circular by post, we would very much like to send you your Circular by e-mail. If you have not already done so, please send your e-mail address to the Circular Editor, sue.miles@freethcartwright.co.uk.

Please can you also confirm your name and address when sending your e-mail so we can correlate these details with our membership listing.

The next Circular will be published in early January 2010.

The next Council Meeting will be held on 15th January 2010.

Secretary: Mrs Janet Slatter, 100 Main Street, Long Whatton, Loughborough, Leicestershire LE12 5DG
e-mail: janet.slatter@btinternet.com . tel. no. 01509 843297.

Treasurer: Mr Colin Bagshaw, 150 Scalpcliffe Road, Burton-on-Trent, Staffordshire DE15 9AD, e-mail: Colin.bagshaw@yahoo.co.uk tel. no. 01283 564520

EAST MIDLANDS GEOLOGICAL SOCIETY

46th Anniversary Dinner
13th February 2009 at 8.00 pm

The 46th Anniversary Dinner will be held in the University of Nottingham Club after the Presidential Address. Join other members on this special occasion for a complimentary glass of wine or soft drink before the meal, a three course dinner and coffee. Cost is **£20.00** per person.

Starter Melon Trio with Winter Fruits Coulis
Moroccan Style Carrot Soup with Chermoula Oil (V)
Cured Salmon with Watercress, Yoghurt and Lemon dressing

Main Chicken Breast with Dauphinoise Potato, Café au Lait Sauce
Haddock Mornay with Fine Beans
Roasted Shallot Tart Tatin with Cauliflower Puree, Basil Oil

(A Family Service of Potatoes and Steamed Vegetables)

Dessert Steamed Chocolate Sponge Pudding with Vanilla Ice Cream
Lemon Tart with Raspberry Sorbet

Cheese Course with Pickled Walnuts, Biscuits

Coffee

Please indicate your choice of starter and main courses below.

Booking form: 46th Anniversary Dinner

Please reserve places

My/our choice of the three courses are as follows:

Starter.....

Main.....

Dessert.....

Name & Tel. No:

Cheque payable to EMGS enclosed for £.....

Please send to: Ian Sutton, at 30 Alford Road, West Bridgford, Nottingham NG2 6GJ
Tel. No: 0115 923 2360 e-mail – ian.sutton@idsgeo.demon.co.uk