



**Circular 389
January 2011**

Registered Charity No: 503617

President: Tim Colman

www.emgs.org.uk

SPRING 2011
LECTURE PROGRAMME

Saturday, 12th February 2011 - 6.00 pm

The last 50 years of Mineral Exploration in Britain

Speaker: **Tim Colman**

Saturday, 12th March 2011 - 6.00 pm

Annual General Meeting to be followed by:

Multiphase in Volcanoes

Speaker: **Barry Azzopardi**

followed by the Annual Society Dinner (booking form attached)

Please ensure all applications are submitted by Friday 4th March 2011 at the latest

Saturday, 26th March 2011

Joint meeting with the Yorkshire Geological Society at BGS Keyworth on the theme of "Carbon Capture & Storage"

(Details in next Circular)

Saturday, 16th April 2011 - 6.00 pm

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.

INDOOR LECTURES

Saturday, 12th February 2011 - 6.00 pm

The last 50 years of Mineral Exploration in Britain

Mineral exploration in Britain faces unusual challenges: privately owned mineral rights whose ownership is frequently unknown, no Ministry of Mines, with mineral developments being administered by a variety of Ministries, and a small island where every hectare is precious to somebody!

Nevertheless over one hundred UK and overseas companies have carried out exploration projects for a variety of metals and deposit types in Britain over the past 50 years. Several have resulted in mines and there are currently at least five projects which may soon develop into mines for gold, tungsten, tin, copper or zinc.

The talk will describe how the exploration focus changed from uranium and lead in the 1950s to copper and tin in the 1960s then to nickel and fluorspar in the early 1970s before a hiatus in the mid to late 1970s. Gold has been the main target from the 1980s to the present day.

Saturday, 12th March 2011 - 6.00 pm

ANNUAL GENERAL MEETING

AGENDA

1. Apologies for absence;
2. Minutes of AGM held on 13th March 2010;
3. Matters Arising;
4. Secretary's Report;
5. Treasurer's Report;
6. Annual subscriptions;
7. Appointment of Auditor;
8. Editorial Report;
9. Election of Officers for 2011;
If there are no other nominations, it will be proposed from the chair that the following will serve:
President - Tim Colman;
Vice-President - John Travis;
Secretary - Janet Slatter;
Treasurer - Colin Bagshaw;
Editor - Tony Waltham.
10. Election for Council 2011
Re-election - Keith Ambrose, David Bate, Ian Sutton, Neil Turner, Geoff Warrington
New Members - Gerry Shaw plus 4 vacancies;
11. Vote of thanks to retiring Council members;
12. Appointment of Trustees to East Midlands Geological Society Trust Fund;
13. Any Other Business.

The Minutes of the last AGM and the Treasurer's Report will be distributed at the meeting, followed by:

Multiphase in Volcanoes - 6.30 pm

The behaviour of volcanoes is driven by gas/magma mixture within it. A simple description was given by Bonney more than 110 years ago. However, it is only recently that disciplines with multiphase flow expertise have been drawn into the field. The work at Nottingham focuses on two aspects of volcano

behaviour. In the first, there is the recent observation that volcanoes emit infrasound. Though this is not audible, it can be recorded and analysed. However, though volcanoes have different signatures, there is not the knowledge base to interpret this. To provide that knowledge base we have set up columns with viscous liquids through which we bubble gas. I will report on what we are observing. The second activity relates to those cases where, as well as the main vent emitting magma, there is a side vent. We have proposed an explanation and have carried out modelling studies which predict the field observations well.

Saturday, 16th April 2011 - 6.00 pm

Members Evening

Title: LA Scandinavian Rock Tour

Speaker: Ian Thomas

Abstract: Ian was fortunate in being awarded a prestigious Churchill Fellowship to tour Scandinavia in 2009. The purpose of his trip was to explore traditional building craft skills and materials (particularly stone) in the context of modern limitations eg arising from health, safety, environmental and other policy considerations. In 4000 miles of travel he visited over fifty masonry workshops, universities/colleges, building sites, government departments, trade bodies and of course quarries, and had discussions with about eighty people

Starting in Trondheim with its grand restored Nidaros Cathedral, his route took him southwards to the quartzite quarries at Oppdal and after a diversion to two historic mining towns, on to the massive larvikite operations in southern Norway. Around the Swedish border were granite quarries and masonry-shops, still surprisingly using semi-traditional methods in these high wage economies. A whirlwind trip around the Danish hard rock island of Bornholm (worth a fortnight alone) was followed by more visits to a variety of quarries along and off the Swedish Baltic Coast. An overnight sailing to Finland started with a 7am tour of the Balmoral Quarries in the South West and later, rapakivi workings in the South East. One day was spent at the impressive Finnish Stone Center and another, accompanied by the local mayor, seeing spectrolite (gem quality labradorite) diggings very close to the Russian border.

Title: Why we need a national Mines and Quarries database -Identification of historic stone sources available for building and conservation in England

Speakers: Don Cameron, Joseph Mankelov Emma Crew and Graham Lott

The current mineral planning system emphasises the importance of sustainable development in mineral extraction. In England, MPS1 sets out national policy for safeguarding minerals. At the same time, English Heritage has developed a policy on mineral extraction and the historic environment. This links the historic significance of landscape and quarrying sites, impact on the environment caused by mineral extraction, with provision of mitigation measures, the supply of natural stone to conserve the historic environment and the need to preserve local distinctiveness. In many parts of England, natural stone extraction has long ceased, and distinctive local stones for building and conservation use are very difficult or impossible to source.

BGS is currently systematically adding mineral working sites to the BRITPITS mines and quarries database, not only in England, but also covering Scotland and Wales. As a result, BGS has been the choice for English Heritage to work with local geological teams to collate a spatial database of building stone quarries and significant buildings for England in order to assist in the identification and protection of sustainable stone resources for building and conservation purposes. Specific building stones are being identified and their sources and patterns of use determined. In addition, the information will allow planners and other interested parties to examine sources of other types of mineral found in their Authorities.

The information will be publicly available through the BGS MineralsUK webpage to allow searches by local authorities, conservators and other interested parties to find potential sources of building stones, and other resources, and to make sure that they are safeguarded for the future good of the country.

Title: The Ostracod Fauna of Groby Pool, Leicestershire

Speaker: Katy Gosling

Abstract: Found throughout the fossil record, the ostracod, though small, has a lot to offer. These diverse and abundant microfossils have long been used in biostratigraphy, however there has been increased interest amongst Quaternary geologists in studying the diversity and distribution of *living* ostracod species. With an estimated 20,000 living species and found in practically all aquatic environments, this is no mean feat.

This talk will introduce a survey of the ostracod fauna of Groby Pool, Leicestershire, a Site of Special Scientific Interest. We are all familiar with traditional geological field work, equipped with hammer and notebook, so a project involving jars, nets, wellington boots, and alcohol provided an entertaining variation for the undergraduate geologist. The talk will include a selection of scanning electron microscope images that were generated to aid identification. These show some of the fascinating anatomical and behavioural features of this peculiar creature.

Information for Other Societies

The Geology Section of Leicester Literary and Philosophical Society will be holding their annual Saturday Seminar on "**Cool Geology: Ice Sheets Past and Present**" on 19th March 2011 commencing 9.00 am at the Seminar Lecture Theatre 1, Bennett Building, University of Leicester. Cost £14.00 without lunch, £20 including lunch. Further details on their website: www.charnia.org.uk or contact Dr Joanne Norris on 0116 283 3127 - e-mail: j.e.norris@ntlworld.com

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.

New Members

Mr Steven Chambers, Hilton, Derbyshire
Prof. Michael Rosenbaum, Ludlow

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.

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 March 2011.

The next Council Meeting will be held on 24th March 2011.

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

47th Anniversary Dinner
12th March 2011 at 8.00 pm

The 47th Anniversary Dinner will be held in the Hemsley Restaurant (formerly the Nottingham University Club) after the March lecture. 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 **£22.95** per person.

Starter

Poached Pear, Stilton & Toasted Walnut Salad
Pomegranate Dressing
Roasted Plum Tomato Soup
Black Olive Tapenade, Basil Oil
Prawn Salad
Red Pepper Rouille, Lemon Oil

Main

Turkey Escalope Saltimbocca
Garlic & Shallot Creamed Potato, Marsala Reduction
Roasted Salmon Supreme
Fine Beans, Confit Tomato & Hollandaise Sauce
Mushroom Stroganoff
Braised Pilaff Rice

(Family Service of New Potatoes and Vegetables)

Dessert

Apple Tart Tatin
Crème Anglaise
Dark Chocolate Mousse
Pistachio Ice Cream
Selection of British Cheeses
Biscuits, Celery & Grapes

Coffee

Please indicate your choice of starter and main courses below.

Booking form: 47th 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