



Mineralogical Society of Great Britain and Ireland

www.minersoc.org

LONDON'S CALLING

Members who give of their time to help run a society like ours encounter a huge range of items on the average council meeting agenda: budgets, journals, conferences, the current economic climate, electronic communications, ways to improve membership... and the list goes on.

Societies that have the financial wherewithal often find ways to support students, e.g. by subsidizing membership (MinSoc offers membership free of charge to students for one year, and for £10 per year thereafter – including *Elements*. Get it right here folks!); by offering reduced rates or free registration at conferences; and by awarding bursaries/travel grants (see reports below as examples). The cost of supporting students is not inconsiderable, but the initiatives listed above are considered to be 'must have' at budget time. In order to help with the financial outlay, MinSoc members are now being encouraged to offer donations, over and above their membership dues, to help with the cost of supporting students. Later this year you will be invited to pay a little extra, thereby becoming a 'Sustaining Member' of the Society. There is no better way to help secure the future of our field than to help the students who will work in it. More information on this will be circulated in due course.

MINSOC ANNUAL CONFERENCE FOR 2010 ANNOUNCED

Nuclear Waste Management: Research Challenges for the Future

28–29 SEPTEMBER 2010 / FITZWILLIAM COLLEGE, CAMBRIDGE

Continuing the theme of supporting students, the Mineralogical Society and the Geological Society of London have agreed to run an exciting meeting on the future of the nuclear industry in the UK. Management of the UK's nuclear waste presents a major challenge to current and future generations of scientists and technologists, and to existing infrastructure and institutional arrangements. Young researchers entering the field now and over the next four decades will need to build and communicate an integrated understanding of the multi-scale processes involved in the processing, packaging, disposal and regulation of a wide variety of materials designated as nuclear waste. The context of this work is evolving rapidly: the Radioactive Waste Management Directorate of the NDA (Nuclear Decommissioning Authority) has now published its R&D strategy, and CoRWM (Committee on Radioactive Waste Management) will issue its reports to the UK government on R&D and on the geological disposal programme later in 2009.

This conference will address key questions for the next generation of nuclear waste researchers. What are the emerging research priorities, and what progress is being made? How should those in historically distinct disciplines work together to address new challenges? What skills are required for research and delivery of a geological disposal programme, and how can funding and implementation bodies be configured to encourage talented scientists to build long-term careers in this area?

POTENTIAL SESSION THEMES INCLUDE:

- Characterization of wastes
- Stabilization/passivation/wasteforms
- Long-term behaviour: near field; reactive transport; total system performance
- Skills, careers and the development of research communities (this will be a focal part of the meeting)

The convenors are I. Farnan (University of Cambridge), K. Jarvis (Imperial College London) and A. Bath (Intellisci). Go to www.minersoc.org/pages/meetings/nuclear/nuclear.html for further information.

BURSARY REPORTS

Catherine Breheny, National University of Ireland, Galway



I would like to thank the Mineralogical Society for the postgraduate travel bursary which allowed me to travel to and undertake analyses at Camborne School of Mines, Cornwall, in February of this year. This funding contributed toward a research visit, in order to carry out micro-beam analyses of Copper Coast lithologies and elucidate the effects of magma-sediment interaction. This task constituted the last remaining analytical work required for my PhD project, 'Explosive magmatism, peperites, magma-sediment interaction and ore deposits at the Bunmahon Volcano, County Waterford'. The visit to Camborne School of Mines allowed me to complete the geochemical analyses in order to determine overall compositions, to resolve interactions between two end members of peperite and to investigate the relationship between peperite and economic mineralization.

Laura Duthie, University of Glasgow



I attended the European Geoscience Union (EGU) general assembly in Vienna on 19–24 April 2009. Being surrounded by scientists (9000 of them!) allowed me to attend sessions related to my own work, but also on subjects as diverse as 'the critical zone' and 'the structures of the Alpine orogen'. Listening to talks on this broad spectrum of research helped me to look at my own work and to evaluate it critically. I gave a paper at the session 'Geomicrobiology: Geochemical and Molecular Interactions between Microbes, Minerals and Metals'. This was a great chance to state my ideas to a wide community of professionals and receive feedback about the project I have undertaken. Thanks to the Mineralogical Society for its support, without which I would not have had the opportunity to attend an excellent meeting.

See all the bursary reports at www.minersoc.org/pages/awards/bursary.html.

MINERALOGY SENSU LATO



Michele Warren

One of the Society's council members, Michele Warren, has a new position that demonstrates how broadening her interests, from physics to mineralogy, has led to even wider horizons. She now works for the University of Oxford encouraging research using the Diamond synchrotron and other facilities at the Harwell Science and Innovation Campus. Her remit extends across a wide set of departments and institutes and involves identifying ways in which these facilities can enhance research programmes and stimulate new collaborations.

Michele's previous research in computational mineralogy (for which she was awarded the Max Hey Medal) brought her into contact with experimentalists using a range of techniques. In her new role, she splits her time between Oxford and Harwell and is expanding her knowledge of these approaches so that she can advise researchers on the possibilities for their own work.

She says, "I'm very grateful to the Mineralogical Society for all the stimulation and support through my career so far", and she credits her experience in mineralogy both with making her aware of the power of synchrotron and neutron techniques and with increasing her enthusiasm for explaining how physics can be of use in other disciplines.

Kevin Murphy
Executive Director

APPLIED MINERALOGY GROUP FIELD EXCURSION TO CORNWALL, UK

Prof. Peter Scott, Society vice-president and chairman of the Applied Mineralogy Group, has offered to lead a field excursion to classic localities in Cornwall. The excursion will provide an introduction to the wide range of geology found in Cornwall, including the tectonics of the Devonian metasediments, the granites, the Lizard Ophiolite and the mineralization. The event will begin on Monday, 28 June 2010, with an evening lecture on the geology of Cornwall and conclude on Saturday, 3 July. Each of the days in between will be packed with visits to places such as St. Stephen (for an overview of china clay pits), Wheal Coates (to see the Engine House and the Sn/Cu mineralization), and the Tresayes pegmatite (to see large K-feldspar crystals in pegmatite, formerly used in glass-making), to name but a few. Go to www.minersoc.org/pages/meetings/cornwall-fieldtrip/cornwall-field.html for more information. Attendance at the field trip is open to all, but preference will be given to those who are members of the Mineralogical Society of Great Britain & Ireland.



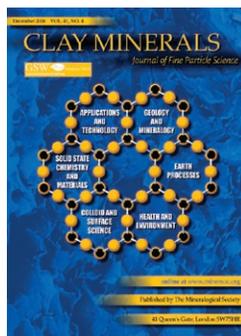
MEETING REPORT

Environmental Mineralogy Group Research in Progress Meeting 2009

A successful Research in Progress meeting of the Environmental Mineralogy Group (EMG) was held at the University of Leeds on 8 May 2009. The meeting brought together geochemists, mineralogists, chemists, environmental scientists, and civil and environmental engineers to discuss recent research in areas related to contaminated land, characterization of 'environmental' minerals, minerals and waste disposal, and bacterial-, fungus-, lichen- and worm-mineral interactions. Fifty-one delegates attended the one-day meeting, which featured ten oral presentations and twelve posters in a dedicated poster session. The keynote lecture was delivered by Professor John Farmer from the University of Edinburgh: "Environmental Chromium Contamination and Remediation: New Solutions to an Old Problem?" Dr Karen Hudson-Edwards (chair of the EMG) awarded prizes for the best student posters to Rebecca Fraser from the University of Sheffield ('Fluorescent Imaging of Permeable Reactive Barriers for Remediation of Radionuclide Contaminated Groundwater') and to Wan Asrina Yahaya from the University of Nottingham ('Arsenic Solubilization and Species Transformation from Contaminated Soils under Reducing Conditions'). The meeting was organized by I. Ahmed, with help from Verity Payne, Sarah Wallace and Vu Hong at the School of Earth & Environment, University of Leeds.

I. Ahmed
University of Leeds

GEORGE BROWN LECTURES



In 2010, the George Brown Lecture enters its 10th year. This year's talk will be delivered by Prof. Joe Stucki of the University of Illinois at Urbana-Champaign. For more information about the Futuroclays meeting in December 2009, go to www.minersoc.org/pages/groups/cmg/cmg.html#falipal.

Below is a list of the George Brown presentations to date. Those highlighted in bold are available on an Open Access basis from the Society website. Go to www.minersoc.org/pages/awards/brown.html for a list of links.

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| 2010 | 10 th | Joe Stucki, University of Illinois | Evolution of the Study of Redox Reactions of Fe in Smectites |
| 2009 | 9 th | Paul Nadeau Statoil, Stavanger, Norway | Earth's energy "Golden Zone": A triumph of mineralogical research |
| 2008 | 8 th | Roger Parfitt, Landcare Research, New Zealand | Allophane and imogolite: their influence in biogeochemistry |
| 2007 | 7 th | Dave Bish, University of Illinois | Phase transitions in 1:1 dioctahedral phyllosilicates; the importance of the interlayer region |
| 2005/2006 | 6 th | Alain Manceau, LGIT Grenoble, France | Smectic clays: Nature's own nanoparticles |
| 2004 | 5 th | Cliff Johnston, Purdue University, USA | Molecular-scale architecture of hybrid nanoparticles |
| 2003 | 4 th | Jeff Wilson, Macaulay Institute | Products, processes and rates of primary mineral weathering |
| 2002 | 3 rd | Victor Drits, Geological Institute Russian Acad. Sci. | Structural and chemical heterogeneity of layer silicates and clay minerals |
| 2001 | 2 nd | Peter Komadel, Slovak Acad. Sci. Bratislava | Chemically modified smectites |
| 2000 | 1 st | Alain Plançon, Université d'Orléans, France | Order-disorder in clay mineral structures |