

www.minersoc.org

Mineralogical Society of Great Britain and Ireland

NOTES FROM LONDON

How We See Ourselves



The famous Scottish poet Rabbin Burns once said: "O wad some power the giftie gi'us, tae see o'orsels as ithers see us", or "Oh would some power the gift give us, to see ourselves as others see us".

During an October 2007 meeting of the associated and allied societies of the Geological Society of America, there was a suggestion that one possible reason for the decline in the number of students in the geosciences is that our colleagues in the exploration and extraction industries may be giving us a bad reputation. The perception of the damage to the environment done by the gases emitted by burning oil, gas and coal etc. does not present us well in these days of awareness of climate change. This, in spite of the many environmental aspects of the work that members of our scientific community do.

However, during a meeting of the UK Science Council in November 2007, recent statistics were presented about how other communities, including physics, chemistry and mathematics, are also suffering reductions in the numbers of students. So it's not just the Earth sciences!

Minister Speaks at UK Science Council

On November 5, the British Government's Minister for Science and Innovation, Ian Pearson, delivered the inaugural 'Sir Gareth Roberts Lecture'. In it, the Minister discussed a number of key themes of relevance to the Mineralogical Society:

- The enduring importance of the STEM (science, technology, engineering and mathematics) agenda
- Measures to get young people involved in science
- The 'science and society' agenda
- The growing importance of multi-disciplinary research
- How science can best help us to respond to the major challenges we face over the next decade and beyond



Minister Ian Pearson with Lady Roberts, at the inaugural 'Sir Gareth Roberts Lecture'

Pearson described his vision for science as follows: "A society that is excited about science, values its importance to our economic and social well-being, feels confident in its use, and supports a representative, well-qualified scientific workforce."

The Mineralogical Society is a member of the Science Council, and I plan to continue to report some of its activities in these pages in forthcoming issues of *Elements*, as I feel the Council plays a valuable umbrella-type role in linking small organizations like the Mineralogical Society to the larger scientific societies/scientific community and to society in general.

Kevin Murphy
Executive Director

DECEMBER 2007 ISSUE OF CLAY MINERALS



J.P. NGUETNKAM, R. KAMGA, F. VILLIÉRAS, G.E. EKODECK AND J. YVON – Pedogenic formation of smectites in a vertisol developed from granitic rock from Kaélé (Cameroon, Central Africa)

V. SUCHÝ, I. SÝKOROVÁ, K. MELKA, J. FILIP AND V. MACHOVIČ – Illite 'crystallinity', maturation of organic matter and microstructural development associated with lowest-grade metamorphism in the Teplá-Barrandian unit, Czech Republic

J. MADEJOVÁ, S. ANDREJKOVIČVÁ, J. BUJÁK, A. ČEKLOVSKÝ, J. HRACHOVÁ, J. VALÚCHOVÁ AND P. KOMADEL – Characterization of products obtained by acid leaching of Fe-bentonite

M. YENIYOL – Characterization of a Mg-rich and low-charged saponite from the Neogene lacustrine basin of Eskişehir, Turkey

T. CLAYTON AND R.B. PEARCE – Rapid chemical analysis of the <2 µm clay fraction using an SEM/EDS technique

S. ZIESMER AND G. LAGALY – Surface modification of bentonites. VI. Sol-gel transitions of sodium and calcium montmorillonite dispersions in the presence of anionic end-capped poly(ethylene oxides)

A. MEUNIER, P. SARDINI, J.C. ROBINET AND D. PRÊT – The petrography of weathering processes: facts and outlooks

W. WIRIYAKITNATEEKUL, A. SUDDHIPRAKARN, I. KHEORUENROMNE, M.N. SMIRK AND R.J. GILKES – Iron oxides in tropical soils on various parent materials

Z. LI, K. HE, L. YIN, F. XIONG AND Y. ZHENG – Crystallochemistry of Fe-rich palygorskite from Eastern China

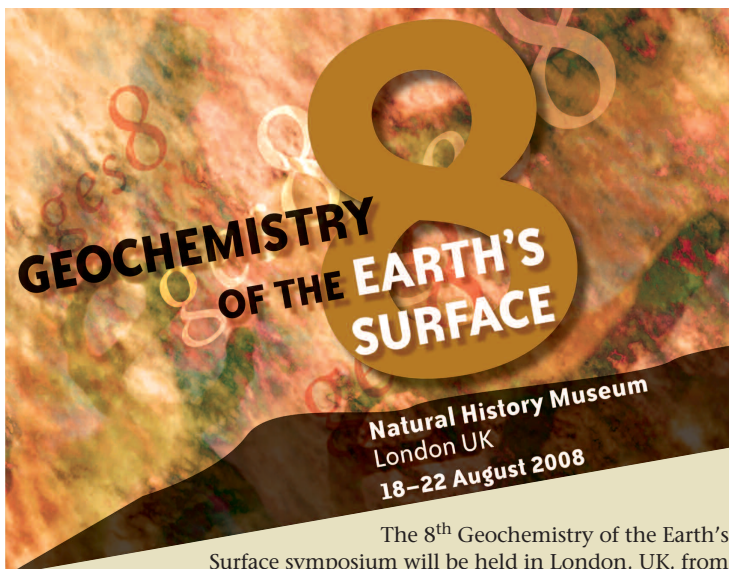
Y. HUANG, X.Y. MA, G.Z. LIANG AND H.X. YAN – Interactions in organic rectorite composite gel polymer electrolyte

P.C. BANDOPADHYAY – Interpretation of authigenic vs. allogenic green peloids of ferric clay in the Proterozoic Penganga Group, South India

ENVIRONMENTAL MINERALOGY GROUP

The Environmental Mineralogy Group (EMG) is holding an image competition to raise awareness of minerals in the environment. A £100 Amazon voucher prize will be offered for the best image (photograph, line image) of a mineral that tells an interesting environmental story. Copyright of the winning image must be assigned to the Mineralogical Society. The image must be no less than 5 cm x 5 cm at a resolution of not less than 300 dpi (JPEG or TIFF formats are acceptable). The image must be accompanied by a text (up to 100 words) explaining the importance of the image. This text should be written for a non-specialist audience, in the style of *New Scientist*.

The closing date for the competition is June 1, 2008. Please send your images to the EMG Secretary, Kevin Taylor (k.g.taylor@mmu.ac.uk). The winner will be announced on the Mineralogical Society's web page and in *Elements*. The Environmental Mineralogy Group reserves the right to use the winning image in its publicity.



The 8th Geochemistry of the Earth's Surface symposium will be held in London, UK, from 18 to 22 August 2008. The meeting is being organized by Mark Hodson on behalf of the International Association of GeoChemistry, the Mineralogical Society of Great Britain & Ireland, the European Association for Geochemistry and the Natural History Museum, London. Other supporters include the Diamond Light Source, and the Applied Mineralogy, Mineral Physics, Environmental Mineralogy, and Geochemistry special interest groups of the Mineralogical Society.

There will be five main themes at this meeting, and the speakers who have accepted invitations to attend are listed below.

Mineral Weathering (Convenors: Steve Banwart, Vala Ragnarsdottir, Joel Blum)

- Anna Rosling – Uppsala
- Jonathan Leake – Sheffield
- Stefano Bernasconi – ETH Geological Institute
- Kurt Haselwandter – Innsbruck
- Suzanne Prestrud Anderson – Colorado

Synchrotrons and Environmental Science (Convenors: Sam Shaw, Dave Polya, Eva Valsami-Jones)

- Jürgen Thieme – Göttingen
- Peter Heaney – Penn State
- Fred Mosselmans – Diamond Light Source
- Gordon Brown – Stanford

Global Geochemical Cycles and Climate Change (Convenor: Klaus Wallmann)

- Fred MacKenzie – Hawai'i
- Bob Berner – Yale
- Klaus Wallmann – IFM Geomar
- Eric Oelkers – Toulouse

Contaminated Environments, Toxicology, Human Health (Convenors: Mark Hodson, Kym Jarvis)

- Herb Allen – Delaware
- Susan Stipp – Copenhagen
- Susan Carroll – Lawrence Livermore
- Alain Manceau – Grenoble
- John McArthur – UCL
- Jane Plant – Imperial College

Biomineralisation (Convenors: Martin Lee, Vern Phoenix)

- Liane Benning – Leeds
- Jean Dominique Meunier – Aix-en-Provence
- Jan Veizer – Ottawa
- Maggie Cusack – Glasgow
- Hallimond Lecturer, Julian Gale, Curtin University

The conference will take place over five days in the Flett Lecture Theatre, which is in the Natural History Museum, London. Good-quality student accommodation will be available in nearby Imperial College and in local hotels.

The oral presentations given at this GES meeting comprise the invited talks listed above. All other presentations will be in the form of posters. There will be five scheduled poster sessions, allowing ample time to meet key people in your field.

Wednesday afternoon will be devoted to two social events: a trip to Fullers' Brewery in Chiswick and, alternatively, a flight on the London Eye. The conference banquet on Thursday evening will take place during a cruise on the river Thames. The Mineralogical Society's medal awards will be made at this prestigious event.

Register now at
www.ges8.com



ALUSIV: ALUMINIUM AND SILICON IN SOILS AND THE ENVIRONMENT

Clay Minerals Group and the British Society of Soil Science

3–5 September 2008, Aberdeen, Scotland

The mineralogy and chemistry of aluminium and silicon in soils and the wider landscape are important in the context of many of the processes that are key to the environmental functions performed by soils. These include sustainable soil fertility, soil and water acidification and the genesis of soil types. This meeting focuses on the movement, distribution and fate of aluminium and silicon within the pedosphere and the wider environment, the processes and products involved and the ways in which these can be effectively characterized. Of particular interest are the nature and rates of the chemical and biological processes involved in the release of these elements from primary soil minerals, their incorporation into secondary mineral products, their uptake by plants and their removal from the soil in solution or by colloidal transport to the wider landscape. The meeting is being held to commemorate the life and work of V.C. Farmer who, during his career at the Macaulay Institute, made major contributions to our understanding of the mineralogy and chemistry of aluminium and silicon in soils. He also pioneered the use of infrared spectroscopy in the identification, characterization and investigation of the reactivity of the amorphous or poorly crystalline secondary minerals involved. The latest developments in these issues will be addressed by a number of eminent keynote speakers, including:

- ROGER PARFITT (Landcare Research, New Zealand)
The 9th George Brown Lecture 'Allophane and imogolite: Their influence in biogeochemistry'
- JON PETER GUSTAFSSON (Royal Institute of Technology, Stockholm, Sweden) 'Aluminium and silicon solubility in forest soils – Discussion of the relevant mechanisms'
- JANA MADEJOVÁ (Institute of Inorganic Chemistry, Bratislava, Slovakia) 'Possibilities of near I-R spectroscopy in investigation of reduced charge smectites'
- SABINE PETIT (University of Poitiers, France)
'Contribution of IR spectroscopy to clay minerals studies'
- MICHAEL SOMMER (Institute for Landscape Research, Müncheberg, Germany) 'Lateral podzolization at landscape scale – phenomena, concepts, and process quantification'

The meeting will include two days of talks and a one-day field trip to examine aspects of podzolization in northeast Scotland.

Registration opens 1 March 2008 at

www.minersoc.org/pages/groups/cm/g/cm/g.html

For further information, contact Steve Hillier or Jane Lund by e-mail at **AluSiV@macaulay.ac.uk**

Organizing Committee: Steve Hillier, Jeff Wilson, Derek Bain, Jim Gauld, Tony Fraser, Allan Lilly and Jane Lund

IMPORTANT DEADLINES FOR FORTHCOMING MINERALOGICAL SOCIETY ACTIVITIES:

Registration for GES8
15 March 2008

Nominations deadline for the Schlumberger Medal
30 April 2008

Nominations deadline for the Max Hey Medal
30 April 2008