



Mineralogical Society of Great Britain and Ireland

www.minersoc.org

THE MSGBI WELCOMES ITS NEW PRESIDENT: PROF. HILARY DOWNES



The society's next president will be Prof. Hilary Downes. We welcome her*. For many years, Hilary's research has concerned the origin and evolution of the Earth's sub-continental lithospheric mantle. More recently, she has started to study lower crustal xenoliths from kimberlite pipes in ancient areas of continental crust, such as Siberia, the Baltic Shield (in Europe), and Montana and Michigan (USA). In the past ten years, Hilary has moved into studying meteorites,

specifically ureilites, which are a rare type of achondrite that has possibly formed in the mantle of another body in the Solar System. Hilary is using these ureilites to investigate processes that may have affected small planetary bodies (asteroids) in the early Solar System, notably the formation of compositional layering in 'differentiated' asteroids that possess a core, mantle and crust similar to the layered structure of the Earth. Hilary writes below.

FROM THE PRESIDENT

Many thanks to the council of the Mineralogical Society for putting their trust in me as the new president, and many thanks to our outgoing president Frances Wall who has been steering us through some choppy waters in the past two years.

My election made me think about mineral sciences in general and our society's contribution to them. Mineralogy is an incredibly broad science, permeating and underpinning much of our technology and culture, and extending back to the dawn of the Solar System. The oldest minerals we can study directly are pre-solar grains, formed in stars which died as our Solar System was being born. Astromineralogists have revealed the existence of minerals in nebulae around other stars, so our science covers deep space as well as deep time. Even the most ancient relics of terrestrial material are minerals – detrital zircons in ancient metamorphosed sediments which tell us of the Hadean from which no rocks remain. We live in exciting times for our science, when instruments such as NanoSIMS, SHRIMPs and atomic force microscopes can reveal structures, compositions and ages of such significant material. But, we are not just living in the past. As mineral scientists we contribute to advancing our present day technology and culture, studying carbon sequestration, authigenic mineral deposition in oil reservoirs, remediation of contaminated land, and geomicrobiology.

All of this reflection has led me to realise that there are many areas of our activity in the Mineralogical Society about which I would like to know more, and so I plan to attend as many Special Interest Group meetings over the next two years as my timetable and budget can stand, in addition to my usual areas of interest. In this way I hope to meet many of the grassroots members of the society and find out what we can do to help them in their activities. I also plan to find out what can be done to increase society membership at a time when most people would rather join Facebook. A third area of great importance for us is our publishing work, and I will be encouraging more members to publish in *Mineralogical Magazine* and *Clay Minerals* to contribute to thematic special issues and review papers. Ideas about possible short courses or new books are always welcome! I look forward to two very exciting and interesting years as your president.

Hilary Downes (h.downes@ucl.ac.uk)
MSGBI president

* Prof. Karen Hudson Edwards was sadly forced to withdraw her candidacy as president owing to ill health. We wish her well.

METAMORPHIC STUDIES GROUP



A Geochronology Workshop and the 2016 Research in Progress meeting of the Metamorphic Studies Group will take place at the British Geological Survey, Keyworth, (UK), on 14th and 15th March 2016, respectively. More information can be found at <http://www.minersoc.org/msg.html>

NAC+ 2016

21–23 March 2016



Edinburgh, UK

The North Atlantic Craton and surrounding belts: a craton-specific approach to exploration targeting.

Following on from the successful first North Atlantic Craton meeting in St Andrews in March 2014, the organising committee invites you to attend the second meeting in Edinburgh in 2016.

The registration deadline is **15 March 2016**.

The second circular is available from the conference website: <http://www.bgs.ac.uk/nac2016/>

The confirmed invited speakers are:

- Prof. Nick Arndt (University Joseph Fourier, Grenoble, France)
- Dr Alana Hinchey (Newfoundland and Labrador Geological Survey, Canada)
- Dr Simon Jowitt (Monash University, Australia)
- Prof. Raimo Lahtinen (Geological Survey of Finland)
- Dr Bo Møller-Stensgaard (GEUS, Denmark)

GEOCHEMISTRY GROUP



The next Research in Progress meeting of the Geochemistry Group will take place 30–31 March 2016 at the University of Leeds (UK). More information can be found at <http://www.minersoc.org/geochem.html>.

SPECIAL ISSUES OF CLAY MINERALS AND MINERALOGICAL MAGAZINE

In recent months, special, additional issues of both *Mineralogical Magazine* and *Clay Minerals* have been published in Open Access and are available online only.

For the *Mineralogical Magazine*, the November 2015 issue comprises 42 papers plus an introduction, which arose out of the Geodisposal of Radioactive Waste 2014 (IGD-TP) meeting, held in Manchester (UK). The Implementing Geological Disposal – Technology Platform (IGD-TP) is composed of European waste-management organizations and has a vision that ‘by 2025 the first geological disposal facilities for spent fuel, high-level waste and other long-lived radioactive waste will be operating safely in Europe’. The event received funding from the European Atomic Energy Community (EURATOM) as part of the European Union’s Seventh Framework programme FP7 (2007–2013). The content is divided into seven sections: (1) Radionuclide and Gas Behaviour; (2) Natural Systems including Biogeochemistry, Biosphere and Geosphere; (3) Monitoring; (4) Engineered Barriers, Wasteforms and Criticality; (5) National Programmes for Geological Disposal; (6) Safety Case; (7) Disposal Concept and Technology Development. The content is available on both the Ingenta (<http://www.ingentaconnect.com/content/minsoc/mag>) and GSW (<http://minmag.geoscienceworld.org/>) platforms.



For *Clay Minerals*, 12 papers from the 2014 Mid-European Clay Conference (Dresden, Germany) were published in the August 2015 issue. Funding for the publication of this issue was made available by the **German Clay Group**. The guest editors were Helge Stanjek, Katja Emmerich and Michael Plötze. The 12 papers are the following:

- Does the nucleation of clay minerals control the rate of diagenesis in sandstones? **M. Wilkinson**
- Recommendations for Kübler Index standardization. **L. Warr & R. Ferreiro Mählmann**
- Parametric Rietveld refinement of coexisting disordered clay minerals. **C. Ufer & R. Kleeberg**
- Crystal chemistry of Na-rich rectorite from North Little Rock, Arkansas. **J. Dietel, A. Steudel, L.N. Warr & K. Emmerich**
- Realistic molecular cluster models for exfoliated kaolinite. **A. Táborosi & Robert K. Szilagyi**
- Preparation and characterization of kaolinite nanostructures: reaction pathways, morphology and structural order. **B. Zsirka, E. Horváth, É. Makó, R. Kurdi & J. Kristóf**
- Functional nanostructures montmorillonite/conducting polyaniline. **J. Tokarsky, P. Peikertová, L. Kulhánková, K. Mamulová Kutlákova, L. Neuwirthová, V. Matějka, V. Stýskala & P. Čapková**
- Surface structure of organoclays as examined by X-ray photoelectron spectroscopy and molecular dynamic simulations. **B. Schampera, R. Solc, S.K. Woche, R. Mikutta, S. Dultz, G. Guggenberger & D. Tunega**
- Process tomography of diffusion with PET for evaluating anisotropy and heterogeneity. **J. Kulenkampff, M. Gründig, A. Zakhnini, R. Gerasch, & J. Lippmann-Pipke**

- Hydro-mechanical properties of Calcigel-polyacrylamide composites. **H. Haase & T. Schanz**
- High-density bimodal bentonite blends for hydraulic sealings at the Ibbenbüren coalmine. **F. Wolters, W. Baille, K. Emmerich, E. Schmidt, C. Wolters, F. Königer, J. Kunz, V. Krase & M. Schellhorn**
- Kaolin from Acoculco (Puebla, Mexico) as raw material: Mineralogical and thermal characterization. **M. Garcia-Valles, T. Pi, P. Alfonso, C. Canet, S. Martinez, A. Jimenez-Franco, M. Tarrago & B. Hernandez-Cruz**

SOCIETY AWARDS

Make a nomination for the 2017 awards (closing date 22 April 2016). Visit www.minersoc.org/Awards.html for more information on the following awards:

Hey Medal	Collins Medal	Mineralogical Society-Schlumberger Award



At the same time, please consider a nomination for the Howie Award

An award will be made annually to ‘the lead author of the “best paper” published (in English) in a mineralogical journal (*sensu lato*) within three years of award of his/her PhD’. Details of the nomination process are given at: <http://www.minersoc.org/best-paper1.html>.

The award will take the form of a bursary (£1,000) to attend an international conference (to be agreed with the society) to present a paper which will be entitled the ‘R.A. Howie Memorial Lecture’. The money will be paid on receipt of an official confirmation of registration for the conference.

The ‘R.A. Howie Memorial Lecture Award’ is named in honour of Prof. R. A. Howie (1923–2012), a distinguished professor of mineralogy at Kings College London and Royal Holloway University, London (UK).

EMC 2016



The European Mineralogical Congress 2016 is entitled ‘Minerals, Rocks and Fluids: Alphabet and Words of Planet Earth’ and will take place from 11–15 September 2016 at the Palaeocongressi in Rimini (Italy). The national mineralogical societies of Europe are coming together for the second time in Italy. Up to 1,000 scientists are expected to attend. This will be the main meeting for the Mineralogical Society in 2016.

The conference will cover areas such as mantle petrology and geochemistry; magmatism and volcanology; metamorphism; applied mineralogy and material science; thermodynamics, kinetics and mineral physics; and mineralogical crystallography. For a detailed list of sessions and more on registration and submitting an abstract, please go to emc2016.socminpet.it/.