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Mineralogical Society of Great Britain and Ireland

FROM THE PRESIDENT



On behalf of the members, I would like to thank outgoing President Ben Harte for his service in leading the Society during the last two years. Ben has presided over the Society during a period of rapid change: our permanent staff are now installed in new, Society-owned office facilities in Twickenham; Kevin Murphy has taken over from Adrian Lloyd-Lawrence as Executive Director; we now have a Distinguished Lecture Programme; we have a new awards committee; and the structure of our membership categories has been overhauled. Ben also presided over 'Frontiers in Mineral Sciences', a very successful joint meeting with the US, Canadian and French mineralogical societies.

While the next two years will not be as full of major decisions for the Society, we should try to maintain some of the positive momentum which Ben has established. I would like to encourage you all to take advantage of what the Society has to offer.

First, there is a new student membership scheme in which students are entitled to free membership for one year. This entitles them to receive *Elements* and gives them access to MinSoc's generous travel bursary programme. Please encourage students around you to join. If you are already in receipt of a free student membership, I hope that you are enjoying the benefits of being part of a vigorous, active, professional organization. I also hope that you will continue your membership to the next level and so contribute to the professional health of our science.

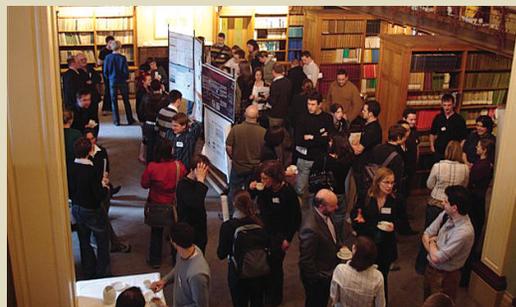
Second, watch for the activities of the special interest groups. For example, the Volcanic and Magmatic Studies Group is organising a field trip to the famous Ardnamurchan ring complex (5–10 September), the Clay Minerals

Group will hold a meeting on the theme 'Aluminium and silicon in soils and the environment' in Aberdeen (3–5 September), and a summer school on synchrotron radiation techniques in Earth and environmental science will be held in Oxford (12–15 August). The Society's main meeting for 2008 is Geochemistry of the Earth's Surface 8 (London, 17–22 August), a joint venture with the IAGC and the Natural History Museum. All the groups welcome volunteers with ideas and energy to promote their subjects – contact details can be obtained from the Society website.

Finally, would you like to publish a review article in *Mineralogical Magazine* or *Clay Minerals*? Council has just agreed on a scheme to publish regular review articles on topical subjects. These will be given significant prominence, including free colour and possible use of striking pictures on the front cover. If you have ideas for an interesting review article, please contact the editors, Mark Welch or John Adams.

Michael Carpenter
MSGBI President

GEOCHEMISTRY GROUP RESEARCH IN PROGRESS MEETING 2008



The 2008 Geochemistry Group Research in Progress Meeting was held on Monday, 3 March, at Burlington House (London). This one-day event was attended by more than 80 delegates, mostly PhD students. The theme of the meeting was 'New Developments and Novel Applications in Isotope Geochemistry'. The meeting received 39 abstracts from researchers in 16 different institutions, with Bristol University, Imperial College London, Edinburgh University and Royal Holloway University, London, being best represented. The organisers set up a full program of 15 student talks and 22 posters.

The theme for the morning session was marine and freshwater geochemistry, and the proceedings began with an invited talk by Julian Andrews (University of East Anglia) entitled 'Stable Isotopes in Sedimentary Carbonates: 60 Years Young and Still a Lot to Learn'. The afternoon's igneous-themed session was kicked off by Tim Elliot (Bristol University) who delivered an invited talk entitled 'Mass-Independent Ni Isotopic Fractionation in Bulk Meteorites'. Prizes were awarded to Julie Prytulak and Romain Guilbaud for the best student talk and poster, respectively.



Julie Prytulak

Prize for Best Talk: 'Melt Productivity of Ocean Island Basalt Source: Evidence from U-Series'

I am a final-year PhD student at the University of Bristol. I presented my work on the determination of melt productivity of ocean island basalt sources, in which I developed an eclogite 'double-distillation' process. The award money will help finance my attendance at the Goldschmidt Conference in Vancouver, where I will present these findings. The Research in Progress Meeting provides an ideal forum for students to present their work to an audience from a wide range of geochemical research fields. The meeting is therefore uniquely suited to developing clarity of presentation, in addition to learning what other PhD colleagues are actively researching. – Julie Prytulak



Romain Guilbaud

Prize for Best Poster: 'Fe Isotope Fractionation and Diagenetic Pyrite Formation'

The Research in Progress Meeting of the Geochemistry Group was my first opportunity to present the research I began last September at the University of Edinburgh. My poster presented the strategies I wish to adopt to experimentally investigate Fe isotope fractionation in geochemistry. As a first-year PhD student, this meeting allowed me to witness the variety of studies being carried out in the UK and to converse constructively with people working in research areas similar to my own. The prize will encourage me to continue working hard and communicate my research. I hope to put the grant money towards buying academic books useful to my research. – Romain Guilbaud

BURSARY REPORT

The traditional interpretation of the Antarctic Peninsula is that it represents a complete Andean-type arc-trench system. The main tectonic elements are accretion-subduction complexes on the western Pacific margin of the peninsula, a magmatic arc represented by the Antarctic Peninsula batholith, and thick back-arc and retro-arc basin sequences on the eastern, Weddell Sea side. Complete arc-trench systems are infrequent in the geological record. This makes the Mesozoic history of the Antarctic Peninsula appear in marked contrast with that of New Zealand (divided into several regional terranes), especially when one considers that they were both probably once part of the Mesozoic Pacific rim. In recent years a new paradigm has emerged for the Mesozoic evolution of the Antarctic Peninsula. This paradigm attempts

to resolve the contrasting interpretations of the Antarctic and New Zealand sectors of the once-continuous proto-Pacific margin of Gondwana. This new interpretation is based on the discovery of a major fault zone in the magmatic arc, thought to be a suture that separated one or more arc terranes from the Antarctic sector of the once-active margin of a Gondwana plate. These terranes are thought to be of parautochthonous or allochthonous origin. The exact continuation of these terranes into northern Graham Land remains uncertain.

Northern Graham Land geology is dominated by the plutonic and hypabyssal rocks of the Andean Intrusive Suite (AIS), which is mostly Cretaceous to Eocene in age. These 'granitoids' were emplaced into the earlier volcanic

rocks of the Antarctic Peninsula Volcanic Group (APVG) which is largely Late Jurassic in age, although volcanism on the Antarctic Peninsula did continue into Cenozoic times. In Graham Land the APVG unconformably overlies a turbiditic sequence of possible Upper Carboniferous – Triassic age known as the Trinity Peninsula Group (TPG). In addition to successfully mapping and sampling new outcrops of AIS rocks and their associated hypabyssals, we were able to gather samples from the TPG. In other parts of Graham Land, these rocks have been shown to have a Permian detrital zircon population age – but no known Permian arc is present in the region under consideration. So where did the TPG sediments come from? It is hoped that analysis of the detrital zircon characteristics of these new samples will shed light on this

problem and lead to a better understanding of the terrane-accretion history of this part of Antarctica. Geochemical analysis of samples of the various magmatic products will build on previous research into the tectonomagmatic evolution of the Peninsula.

My work involved several weeks exploring the Danco Coast and Palmer Archipelago area of the Antarctic Peninsula, with the aim of mapping the geology of this poorly accessible region and collecting samples for analysis back home. I am grateful to the Mineralogical Society for a bursary, which helped with the costs of my travel.

Conor Ryan

Centre for Exploration Targeting,
School of Earth and Geographical
Sciences, University of Western
Australia, Crawley, Australia

LATEST ISSUE OF MINERALOGICAL MAGAZINE



- R.H. MITCHELL AND J.B. DAWSON – The 24th September 2007 ash eruption of the carbonatite volcano Oldoinyo Lengai, Tanzania: mineralogy of the ash and implications for formation of a new hybrid magma type
- M. POLGÁRI, B. BAJNÓCZI, V. KOVÁCS KIS, J. GÖTZE, G. DOBOSI, M. TÓTH AND T. VIGH – Mineralogical and cathodoluminescence characteristics of Ca-rich kutnohorite from the Úrkút Mn-carbonate mineralization, Hungary

- LING WANG, HUA FAN, JING LIU, HUI DAN, QIAOMING YE AND MIAO DENG – Infrared spectroscopic study of modern and ancient ivory from sites at Jinsha and Sanxingdui, China
- E. SCHINGARO, F. SCORDARI, S. MATARRESE, E. MESTO, F. STOPPA, G. ROSATELLI AND G. PEDRAZZI – Phlogopite from the Ventaruolo subsynthem volcanics (Mt. Vulture, Italy): a multi-method study
- A.A. FINCH AND N. ALLISON – Coordination of Sr and Mg in calcite and aragonite
- J. MAJZLAN AND R. MICHALLIK – The crystal structures, solid solutions and infrared spectra of copiapite-group minerals
- C.H. YODER, T.M. AGEE, K.E. GINION, A.E. HOFMANN, J.E. EWANICHAK, C.D. SCHAEFFER JR., M.J. HARNER, R.W. SCHAEFFER AND P.F. MCCAFFREY – The relative stabilities of the copper hydroxyl sulphates
- A. GUASTONI, F. NESTOLA, G. MAZZOLENI AND P. VIGNOLA – Mn-rich grastonite, ferrisicklerite, staněkite and Mn-rich vivianite in a granitic pegmatite at Soè Valley, central Alps, Italy
- D.G.W. SMITH AND E.H. NICKEL – Codification of unnamed minerals

MARCH 2008 ISSUE OF CLAY MINERALS



A Special Issue in Honour of Dr Enver Murad

- M.D. DYAR, M.W. SCHAEFFER, E.C. SKLUTE AND J.L. BISHOP – Mössbauer spectroscopy of phyllosilicates: effects of fitting models on recoil-free fractions and redox ratios
- J.L. BISHOP, M.D. LANE, M.D. DYAR AND A.J. BROWN – Reflectance and emission spectroscopy study of four groups of phyllosilicates: smectites, kaolinite-serpentines, chlorites and micas
- J.L. BISHOP, M.D. DYAR, E.C. SKLUTE AND A. DRIEF – Physical alteration of antigorite: a Mössbauer spectroscopy, reflectance spectroscopy and TEM study with applications to Mars
- H. STANJEK AND C. MARCHEL – Linking the redox cycles of Fe oxides and Fe-rich clay minerals: an example from a palaeosol of the Upper Freshwater Molasse
- J.D. CASHION, W.P. GATES AND A. THOMSON – Mössbauer and IR analysis of iron sites in four ferruginous smectites
- S. KREHULA AND S. MUSI – Influence of cobalt ions on the precipitation of goethite in highly alkaline media
- P. KOMADEL, A.S. ANASTÁCIO, S. ANDREJKOVIČOVÁ AND J.W. STUCKI – Iron phases identified in bentonite from the Lieskovec deposit (Slovakia) by variable-temperature Mössbauer spectroscopy
- C. VAN CROMPHAUT, E. VAN RANST, V.G. DE RESENDE, R.E. VANDENBERGHE, E. DE GRAVE AND G. LAMBIV DZEMUA – Characterization by Mössbauer spectroscopy of Fe phases in highly weathered serpentinitic soil from southern Cameroon
- R.B. SCORZELLI, L.C. BERTOLINO, A.B. LUZ, M. DUTTINE, F.A.N.G. SILVA AND P. MUNAYCO – Spectroscopic studies of kaolin from different Brazilian regions
- C.E.G.R. SCHAEFFER, J.D. FABRIS AND J.C. KER – Minerals in the clay fraction of Brazilian latosols (oxisols): a review