



Mineralogical Society of Great Britain and Ireland

www.minersoc.org

FROM THE EXECUTIVE DIRECTOR

The early part of the year is always a good time. Members interact with the Society around now to pay their membership fees, to order publications, to apply for bursaries, and to make nominations for Society awards. My office is 50 km from the nearest geologist and in a separate country from where the main office is, so communication with members, for the reasons above, or in relation to a paper in a journal, registration for a conference, etc., is always welcome and enjoyable.

This year we are delighted that we have had so many new student members. Students are attracted by *Elements* and other benefits of membership, including bursaries and cheaper registration fees for conferences.

Student Bursaries and Senior Bursary

Between the central Society bursary fund and monies offered by the special interest groups, up to £10,000 per year are paid out in grants. The money can be used to support academic work by allowing attendance at overseas conferences and meetings, encouraging international collaboration involving research of high merit, or supporting fieldwork. At the March 2009 meeting of Council, the following student bursaries were agreed: E. Badenszki, to carry out MCLA-ICP-MS work at Keyworth, Nottingham, UK; A. Baxter and P. Bots, to attend the Goldschmidt Conference in Davos, Switzerland; C. Breheny, to carry out analytical work at Camborne School of Mines, University of Exeter, UK; J. Darling, to attend the AGU joint assembly in Toronto, Canada; L. Duthie and S. Lawther, to attend the EGU conference in Vienna; N. Lloyd, to attend the Asia Pacific Symposium on Radiochemistry in California, USA; I. Neill, to attend the Fall AGU meeting in San Francisco, USA; A. McAnena, to visit the Stable Isotope Laboratory at the University of Maryland, USA; A. D. Sumoondur, to carry out low-T Mossbauer spectroscopy at the University of Copenhagen, Denmark; A. Valdes-Duran, to attend the William Smith Meeting of the Geological Society of London, UK; and V. Vry, to carry out laboratory work at the University of Tasmania.

The Senior Bursary this year is divided amongst the following: R. Cooke, for a research visit to the University of Salzburg; A. Costanzo, to attend the Goldschmidt Conference in Davos, Switzerland; B. O'Driscoll, to carry out field work on the Shetland Isles, Scotland; H. Rollinson, to attend an international discussion meeting on continental geology and tectonics at Northwest University, China; and C. Storey, to carry out collaborative research with colleagues at the University of Stellenbosch, South Africa.

The next deadline for application for Society bursaries is 15 January 2010. However, some of the Society's special interest groups might be able to help with small amounts of money to help with travel costs for a meeting, etc., in the meantime. Please see the SIG web pages at www.minersoc.org.

The George Brown Lecture

The 9th George Brown Lecture of the Clay Minerals Group was delivered at the Macaulay Institute on 11 March 2009 by Dr Paul Nadeau of Statoil Hydro. His lecture "Earth's Energy 'Golden Zone': A Triumph of Mineralogical Research" will be published in paper form in a forthcoming issue of *Clay Minerals*. A summary follows.

The impact of diagenetic processes on petroleum entrapment and recovery efficiency has focused the vast majority of the world's oil and gas reserves into relatively narrow thermal intervals, which we call Earth's energy 'Golden Zone'. Two key mineralogical research breakthroughs underpinned this discovery. The first is the fundamental particle theory of clay mineralogy, which showed the importance of dissolution/precipitation mechanisms in the formation of diagenetic illitic clays with increasing depth and temperature. The second is the surface area precipitation rate models for the formation of diagenetic cements, primarily silica, in reservoirs.



Paul Nadeau (right), receiving the George Brown lecture certificate from Steve Hillier, chairman of the Clay Minerals Group

Understanding the impacts of these processes on permeability evolution, porosity loss, overpressure development, and fluid migration in the sub-surface has led to the realization that exploration and production risks are exponential functions of temperature. Global compilations of oil/gas reserves relative to reservoir temperature have confirmed the 'Golden Zone' theory, and have stimulated further research to determine in greater detail the geological/mineralogical controls on hydrocarbon migration and entrapment efficiency within the Earth's sedimentary basins.

Kevin Murphy (kevin@minersoc.org)

MINERALOGICAL MAGAZINE

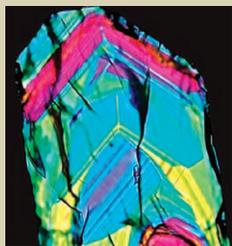
Under the excellent stewardship of Dr Mark Welch, *Mineralogical Magazine* is thriving. We are slowly catching up on the delay in publication, and manuscript turnaround is now as little as **eight weeks** from submission to publication online. Full-colour publication is available free of charge, and authors are given a free e-print at the time of online publication. Each issue now contains a top-rank review, including papers arising from Hallimond Lectures and, in some cases, from Society medallists.

Some long-standing members of the journal's Editorial Board have decided to stand down, and we are extremely grateful to them for their service: A. Brearley, M. Holness and P. W. Scott. The Editorial Board is currently as follows:

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It is largely on account of this group and the large band of reviewers, often times the unsung heroes of journal publishing, that we have such quick turnaround times. Feel free to speak with any of the Editorial Board members. They will be glad to help with enquiries about publishing in *MinMag*.

MICROANALYSIS PROCESSES, TIME



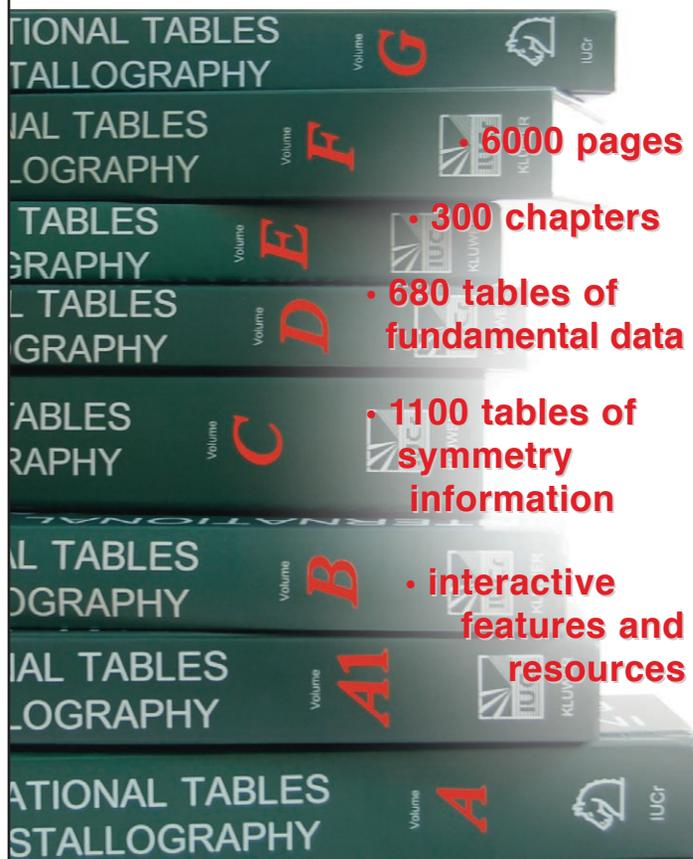
The early-registration deadline for the Society's 2009 annual meeting, **MicroAnalysis Processes, Time**, is 8 July. Please do consider registering and submitting an abstract at www.minersoc.org/pages/meetings/MAPT/MAPT.html

At the time of writing the following sessions, convenors and invited speakers have been confirmed:

1	Advances in the application of accessory mineral analysis to understanding crustal processes	SIMON HARLEY (UNIVERSITY OF EDINBURGH) JEAN-MARC MONTEL (LMTG TOULOUSE AND CRNS NANCY) LUTZ NASDALA (UNIVERSITY OF VIENNA)
2	Decoding polymetamorphism in mountain belts: from P-T-t records to geodynamic models – Keynote: Romain Brouquet (Potsdam)	TOM ARGLES (OPEN UNIVERSITY) CLARE WARREN (OPEN UNIVERSITY) MARK CADDICK (ETH ZÜRICH)
3	Deep subduction and exhumation of continental and oceanic crust	CEES JAN DE HOOG (UNIVERSITY OF OXFORD) SIMON CUTHBERT (UNIVERSITY OF WEST OF SCOTLAND) GASTON GODARD (UNIVERSITY OF PARIS 7) PADDY O'BRIEN (POTSDAM)
4	Mantle processes: insights from peridotite massifs, xenoliths, xenocrysts and diamonds – Keynotes: Frank Brenkner, Ofra Klein Ben David	GILLES CHAZOT (UNIVERSITY OF BREST) GRAHAM PEARSON (UNIVERSITY OF DURHAM) THOMAS STACHEL (UNIVERSITY OF ALBERTA)
5	Deep Earth mineral physics and experimental petrology I: probing geochemical and physical processes (recent developments from nano-beam and in situ techniques)	ANNE-LINE AUXENDE (UNIVERSITY OF PARIS 7), CHRISTÈLE SANLOUP (UNIVERSITIES OF PARIS 6 AND EDINBURGH) DAVID DOBSON (UNIVERSITY COLLEGE LONDON) FALKO LANGENHORST (UNIVERSITÄT BAYREUTH)
6	Deep Earth mineral physics and experimental petrology II: the fate of subducted material from lithosphere to core	FALKO LANGENHORST (UNIVERSITÄT BAYREUTH) ANNE-LINE AUXENDE (UNIVERSITY OF PARIS 7) CHRISTÈLE SANLOUP (UNIVERSITIES OF PARIS 6 AND EDINBURGH) DAVID DOBSON (UNIVERSITY COLLEGE LONDON)
7	Pushing the limits of high-precision radioisotope geochronology: techniques, tools and applications	DAN CONDON (BRITISH GEOLOGICAL SURVEY) BLAIR SCHOENE (UNIVERSITY OF GENEVA) SIMON KELLEY (OPEN UNIVERSITY)
8	LA-ICPMS isotopic and trace element analysis: techniques and applications to solid Earth studies – Keynote: Takafumi Hirata	CRAIG STOREY (UNIVERSITY OF BRISTOL) MATT HORSTWOOD (BRITISH GEOLOGICAL SURVEY) FRANCK POTTRASSON (LMTG TOULOUSE)
9	Light element isotopes: analysis and applications to mass fluxes in the Earth	SIMONE KASEMANN (UNIVERSITY OF EDINBURGH) TIM ELLIOTT (UNIVERSITY OF BRISTOL)
10	Fingerprinting exhumation: advances in thermochronology and sediment provenance analysis	FIN STUART (SUERC, UK) CORNELIA SPIEGEL (UNIVERSITY OF BREMEN)
11	Recent advances in metamorphic and igneous petrology	HORST MARSCHALL (UNIVERSITY OF BRISTOL) MARK JESSELL (LMTG TOULOUSE)
12	The role of microanalysis and microtextures in understanding magmatic processes	JON DAVIDSON (UNIVERSITY OF DURHAM) MARIAN HOLNESS (UNIVERSITY OF CAMBRIDGE) DAN MORGAN (UNIVERSITY OF LEEDS)
13	Electron microscopy, microstructural analysis and grain scale processes: insights and frontiers – Keynotes: Dave Prior; Carol Trager-Cowan; Rainer Abart	KATE BRODIE (UNIVERSITY OF MANCHESTER) ALAN BOYLE (UNIVERSITY OF LIVERPOOL) FLORIAN HEIDELBACH (UNIVERSITÄT BAYREUTH) DAVID MAINPRICE (UNIVERSITY OF MONTPELLIER 2)
14	New advances in transmission electron microscopy characterisation and preparation of minerals	PATRICK CORDIER (UNIVERSITY OF LILLE 1) FALKO LANGENHORST (UNIVERSITÄT BAYREUTH) MICHAEL CARPENTER (UNIVERSITY OF CAMBRIDGE)
15	Mineral microstructures: their implications and applications – Keynote: Andrew Walker	IAN PARSONS (UNIVERSITY OF EDINBURGH) ALAIN BARONNET (PAUL CÉZANNE UNIVERSITY AND CENTRE INTERDISCIPLINAIRE DE NANOSCIENCE DE MARSEILLE) RAINER ABART (FREIE UNIVERSITÄT BERLIN)
16	New advances in mineral deposit geology – Keynotes: Marcel Guilong; David Selby	MARTIN SMITH (UNIVERSITY OF BRIGHTON) GAWEN JENKIN (UNIVERSITY OF LEICESTER)
17	Mineralogy of nuclear wastes – Keynote: B. Grambow	FERGUS GIBB (UNIVERSITY OF SHEFFIELD) IAN FARNAN (UNIVERSITY OF CAMBRIDGE)

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