www.mineralogicalassociation.ca

Mineralogical Association of Canada

YELLOWKNIFE 2007
MAY 23–25, 2007

Yellowknife will host the first GAC-MAC conference north of 60°. The conference coincides with the beginning of the International Polar Year.

The City of Yellowknife, capital of the Northwest Territories, is located on the north shore of Great Slave Lake and is famous for its Aurora Borealis and midnight sun. Founded in 1935 following the discovery of gold, the city now serves as a hub for mining and transportation, and provides infrastructure support for Canada's diamond mines.

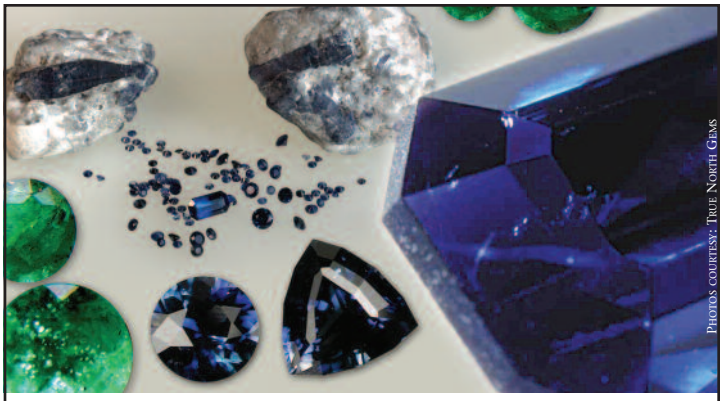
Yellowknife 2007 will feature symposia and special sessions that highlight Canada's North: its climate, its culture, its mining heritage, and its future.

Although the weather can be cold in the North, the hospitality will be warm. We hope you can join us at the Yellowknife meeting from May 23 through May 25, 2007.

Here are some of the symposia and special sessions that will be held:

- Mitigation of Environmental Impact of Mining in the North
- Mineral Deposit Models and Regional Exploration Symposium and Workshop
- Submarine Volcanism and Associated Mineralization: Modern versus Ancient
- Geospatial Information and Tools in Support of Geosciences in the Canadian Arctic
- Recent Advances in the Geology of Laurentia
- Short-lived Magmatic Events of the Slave Province and Environs: Critical Time Markers and Indicators of Tectonic Processes
- Northern Energy and Sedimentary Basins
- Northern Mineral Deposits
- Diamonds: Exploration to Production – a Northern Canada Perspective
- Sustainable Mineral Resources Development: Critical Issues for Canada's North
- Northeast Canada and Greenland: Geology, Correlations, and Resource Potential
- Comparative Planetary Geology: Terrestrial Analogues to Mars and the Moon in the Arctic
- International Polar Year Research
- New Exploration Techniques for Unconventional and Atypical Ore Deposits

The local organizing committee has negotiated special rates for flights to Yellowknife from Edmonton. For more information, check http://www.nwtgeoscience.ca/yellowknife2007/welcome_en.html



Photos courtesy: True North Gems

The Geology of Gem Deposits

Mineralogical Association of Canada short course

21–22 May 2007, Yellowknife, Canada
Short Course organizer: **Lee Groat**, University of British Columbia

This two-day short course will look at gemstones from a geological perspective. It will precede Yellowknife 2007—the joint annual meeting of the Geological Association of Canada and the Mineralogical Association of Canada, in Yellowknife, Northwest Territories, Canada. It will be a unique opportunity to experience a change of climate and a meeting north of 60°. A special session entitled "Diamonds: Exploration to Production – A Northern Canada Perspective" and a post-conference field trip to the Canadian diamond mines, sponsored by BHP and Diavik, will complement the short course.

Gem deposits are rare because in general the conditions that promote their formation are unusual and thus worthy of scientific study. Recently modern geological and analytical techniques have been applied to gem occurrences in Canada and elsewhere, and our models and understanding of their formation are being radically altered. This short course will review our current understanding of diamond, ruby, sapphire, and emerald deposits but will also examine the lesser-known coloured gems.

1. Introduction
2. Diamond deposits (Thomas Stachel, University of Alberta)
3. Gem corundum (ruby and sapphire) deposits (Gaston Giuliani, IRD and CRPG/CNRS)
4. Gem beryl (emerald, aquamarine, etc.) deposits (Dan Marshall, Simon Fraser University)
5. Pegmatite gem deposits (Skip Simmons, University of New Orleans)
6. Jade deposits (George Harlow, American Museum of Natural History)
7. Canadian coloured gem occurrences (Brad Wilson, AlpineGems Ltd.)

Registration fees: CDN$425 (professionnal) and CDN$250 (students)

For more information, e-mail Lee Groat at **lgroat@eos.ubc.ca** or visit the conference website at **www.nwtgeoscience.ca/Yellowknife2007**

CANADA'S NORTH...
ITS CLIMATE, ITS CULTURE,
ITS MINING HERITAGE, AND ITS FUTURE!

LE NORD CANADIEN...
SON CLIMAT, SA CULTURE,
SON HÉRITAGE MINIER ET SON FUTURE!

VISIT OUR WEBSITE - VISITEZ NOTRE SITE INERNET
www.nwtgeoscience.ca/yellowknife2007

GAC | AGC

Mineralogical Association of Canada / Association minéralogique du Canada

UNDERGRADUATE AWARDS 2005–2006

The MAC Undergraduate Awards are given annually to undergraduate students for excellence in one of the fields covered by MAC (mineralogy, crystallography, petrology, geochemistry, and economic geology). The award consists of one free publication and a one-year subscription to the online version of *The Canadian Mineralogist*.

David A. Arsenault, Memorial University of Newfoundland
Stephanie A. Blais, St. Francis Xavier University
Natasha L. Bumstead, University of Western Ontario
Caroline Dennis, University of Windsor
Jill L. Dreger, University of Regina
Cetina Farrugia, McMaster University
Nathan R. Forslund, Lakehead University
Jennifer K. Greville, University of Manitoba
Brett J.H.M. Hamilton, University of Waterloo
Philippe Hurtubise, University of Ottawa
Erin M. Kellough, Mount Royal College
Kerry Klein, McGill University
Marc Laurencelle, Université du Québec à Trois-Rivières
Evelyne Leduc, Queen's University
Jenny A. MacAuley, University of Victoria
Heather E. Menicanin, Brock University
Ryan Noftall, St. Mary's University
Jenna M. Phillips, Brandon University
Lise Robichaud, University of New Brunswick
Kara-Lynn Scallion, Acadia University
Reid Staples, Simon Fraser University
Mavros I. Whissell, Laurentian University

Mineralogical Association of Canada

STUDENT TRAVEL/RESEARCH GRANTS 2007

The Mineralogical Association of Canada will award travel and research grants to assist honours undergraduate and graduate students in the mineral sciences to:

- Present their research at a conference
- Attend a short course or a field trip relevant to their field of study
- Visit a facility, laboratory or field area to gather data for their research
- Pay for analyses or equipment for their research

The maximum grant value is CDN$1200 per student. Grants will fund up to 50% of costs incurred for registration, travel and subsistence, and up to 100% of other research costs (e.g. equipment, analyses). Quotations and receipts may be requested for any equipment purchased.

Eligibility

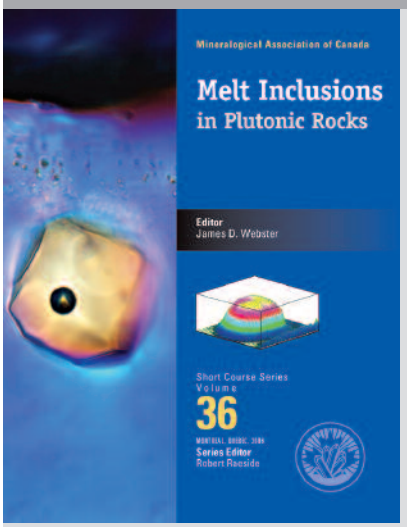
- Graduate students and honours students at the undergraduate level in one of the fields covered in *The Canadian Mineralogist* (mineralogy, crystallography, petrology, economic geology and geochemistry)
- Grant recipients must submit a report of their travel or research for possible publication by MAC.

For more information, see www.mineralogicalassociation.ca

Deadline to apply: January 15, 2007

MELT INCLUSIONS IN PLUTONIC ROCKS

MINERALOGICAL ASSOCIATION OF CANADA ***SHORT COURSE VOLUME 36***



ISBN 0-921294-36-0
248 pages
US$40 (outside Canada)
CAN$40 (in Canada)

EDITOR
James D. Webster

Short course volume 36 provides an accurate account of the current state of knowledge about melt inclusions in plutonic rocks. The volume discusses means to ensure high-quality melt inclusion research, provides practical methods to evaluate and investigate melt inclusions, describes important new analytical techniques and useful examples of their application to natural systems, and summarizes current understanding of plutonic systems ranging from basaltic to rhyolitic in composition.

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www.geochemsoc.org

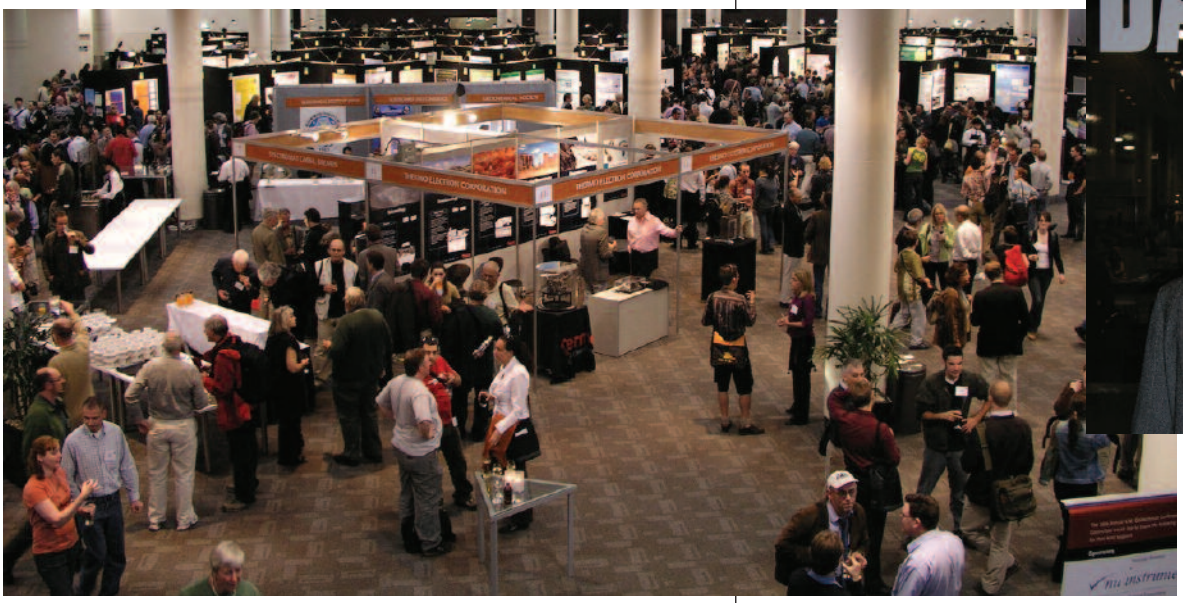
Geochemical Society

2006 GOLDSCHMIDT CONFERENCE

Over 1300 geochemists from 40 countries made the trek down under to the 16th V.M. Goldschmidt Conference in Melbourne, Australia. Delegates enjoyed five days packed full of the latest in geochemistry. The Melbourne Conference Center proved to be an excellent venue and easily accommodated the 996 oral presentations (more than 12 concurrent sessions daily totaling 88 sessions) and 287 posters.

Left to right: Gordon Brown (citationist), Alexis Templeton (2006 Clarke Medalist), and Sue Brantley (GS President)

John Eiler (2006 Gast Lecturer) outside the Batman Theater



The exhibit hall provided a convenient meeting place. Posters were up for the five days of the conference.

The conference was made possible through the efforts of Simon Turner (Macquarie University), members of the programming committee, the session chairs, and the event organizers at Tour Host. Their efforts gave regional geochemists the opportunity to present to an international audience, and geochemistry received some much-needed exposure in Australia.

Several medals and awards were presented during the conference, including the V.M. Goldschmidt Award to Susan Solomon and the F.W. Clarke Award to Alexis S. Templeton. The Gast Lecture was given by John Eiler.

Left to right: Samuel Mukasa (V.M. Goldschmidt Award Committee Chair), Susan Solomon (2006 V.M. Goldschmidt Medalist), and Sue Brantley (GS President)

NOTES FROM SAINT LOUIS

New Logo Unveiled!

After nearly a year of deliberating, the Geochemical Society is proud to announce the winning entry in its logo contest. The selection committee narrowed the field from over 140 entries to just eight. The winning design was then selected by the board after considering the result of a poll of the GS membership.

The winning design was created and submitted by Marijo Murillo, a graphic designer from California. She found out about our logo contest through her husband, who is a geochemist and a member of the Geochemical Society.

In her own words…

My primary goal was to synthesize a newer and fresher image still recalling the main features of the previous one. Thus, the change would not be so abrupt, and geochemists would still associate the new image with your society. The key features of the original with which I worked are the globe and the hexagon. As in the original, the former represents the Earth (geo) while the latter is the structure of many minerals and the backbone of organic aromatic molecules and thus stands for chemistry and mineralogy, respectively. I added curved lines that allow two different interpretations. First, they remind of water and the oceans. What would aqueous geochemistry be without water? In this way, I offer an option to pay tribute to the medium that enabled the development of life and that constantly shapes and reshapes our surroundings (weathering, mass transport). Second, they remind of the dynamic (continental and oceanic) crust, which is the primary field of research of hard-rock geochemists. I submerged the hexagon into a liquid (water, magma) thus evoking the four major solid–liquid interactions taking place on or in the Earth (dissolution, precipitation, melting, crystallization).

Marijo Murillo

Membership Surveys

In August we conducted an online survey of the GS and EAG memberships concerning *Geochemical News*. Your responses were very enlightening and will go a long way in making *Geochemical News* better. In that spirit we will begin conducting regular online surveys. The next one will run through December 31 and will concern the Goldschmidt Conference. The survey will be available on our announcements page: http://www. geochemsoc.org/announce

Annual Membership Drive

If you have not done so already, please take a moment to renew your membership in the Geochemical Society. You may renew online or download a membership form from our website at http://www.geochemsoc.org/join

Please consider making a donation while renewing your membership. Donations are tax deductible where applicable. Remember to indicate how you would like your donation to be used.

For instance, the Student Travel Grants Program is intended for graduate student researchers in geochemistry who are enrolled at an accredited degree-granting university or institution and who intend to present the results of their research activities in a talk or poster format at an upcoming Goldschmidt Conference. Grants awarded through his program are worth up to US$1000 and are applied towards travel costs incurred by applicants attending the conference. This program is open to students involved in all disciplines of geochemistry and petrology. In 2006, through a generous grant from the National Science Foundation, this program distributed US$39,000 to 38 students.

GS Award Nominations Needed

Once again nominations are solicited for the 2007 Goldschmidt Medal, Clarke Medal, Treibs Medal, Patterson Award, and GS/EAG Geochemical Fellow Awards. Please take the time to consider the accomplishments of your valued friends and colleagues and honor them with a nomination. With your help, we can ensure that all of geochemistry is recognized and all deserving geochemists are considered!

For detailed information on nomination requirements, please visit the Geochemical Society website at:

http://geochemsoc.org/archives/nominations.html

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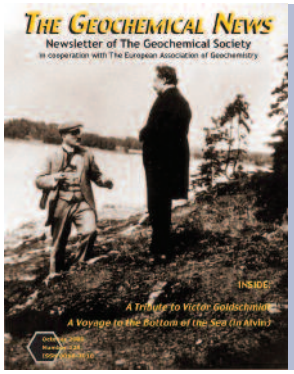
Website: www.geochemsoc.org

Robert C. Aller, Stony Brook University presented the F. Earl Ingerson Lecture at the 2006 GSA Meeting in Philadelphia "Tropical deltaic systems as unsteady diagenetic reactors, global C incinerators, and reverse weathering centers."



In the October issue of Geochemical News

Discover Victor Goldschmidt's British connection

And

Read a personal account of a voyage to the bottom of the sea in Alvin

www.minsocam.org

Mineralogical Society of America

FROM THE PRESIDENT

Sustainability

"Sustainability" permeates our culture. The word is typically used to implore us to become better stewards of the Earth's environment and resources now and for future generations. Maintaining a sustainable Earth will depend on advances in the sciences. One of our greatest scientific challenges is to understand Earth's systems, its materials and processes, and our impact upon both. As they have in the past, MSA members work on critically important societal issues. Sustainability is also necessary for our scientific societies, for they organize our disparate interests into common themes. They promote, support, and validate our endeavors and they help to educate our policy makers and the public.

I'm thrilled to be part of MSA, a society that embraces the many aspects of mineral science and fosters advances that enrich other disciplines ranging from art to medicine and forensics to physics. *Elements*, the shared worldwide magazine, illustrates this in every issue. Yet for all the ways MSA sustains science, its own future is clouded by a need to sustain two critical, but fortunately renewable, resources: funds and the next generation(s) of mineral scientists.

Financial sustainability has already improved. Recent challenges by Past Presidents Hazen and Valley have been matched with generosity by other past presidents and by the characteristic generosity of members (as reported in the August issue of *Elements*). To all, thank you—your contributions have substantially helped move MSA toward a sustainable financial future. But we are not there yet.

There are many other ways that you can help balance the MSA budget, such as by

- paying *American Mineralogist* page charges. The creation cost per page is ~$250, yet our page charges remain at a relatively low $68. Without this financial contribution, costs will soon require increases in paper and electronic subscriptions, our dedicated and hard-working staff cannot receive cost-of-living raises, and our prestigious journal may starve. Alternatively, increasing revenue could add more color to the journal.
- directing colleagues requesting reprints to GeoScienceWorld's website (of course first asking if their libraries subscribe to GSW), where articles can be downloaded directly. MSA receives income for every *American Mineralogist* and *Reviews in Mineralogy and Geochemistry* article downloaded from GSW.
- renewing early and online. This helps MSA save postage and staff costs as well as paper (= trees).
- becoming a "sustaining member." This provides a $150 gift to the society along with your membership dues.

Our financial resources maintain our worldwide programs. Additional income could enable us to expand our lecture series further and improve our website. MSA is a lean operation. Our councilors, officers, and editors do not receive expense-paid trips to meetings. They donate their time, like many of you, and travel at their own expense to help the society function.

Ultimately, it is our members that make MSA sustainable. From the Society's beginnings in 1919, we have, and must continue to have, members from around the globe (see "Notes from Chantilly"). Our records indicate that MSA has one 80-year member, Dr. James Martens, who joined MSA in 1924, and six 70-year members. These colleagues embody MSA's sustainability! Today, MSA has 116 fifty-year members and 527 student (new generation) members!

Sustaining our numbers and ensuring that our young colleagues join may be a more difficult task than giving a credit card number. Here are a few simple actions that you can take:

- Consider giving student memberships (only $10 in 2007) to your top students as departmental awards, to your graduate students, and at raffles.
- Consider giving gift memberships to other students. For the last eight years, many members have discussed MSA with mineral science students at professional meetings, then offered those students $5, an MSA pamphlet, and an MSA membership application (available on the website), with directions to the MSA booth. For 2007, the student membership fees will rise to $10, but it's still a great value—for $100, you and your enthusiasm for MSA could give the Society the potential gift of ten future members! I challenge you to sign up students. For every new student membership contributed from now until 1 March 2007, I will personally reimburse you for half of the cost. E-mail me at dutrow@lsu.edu for details.
- Nominate outstanding undergraduates for the American Mineralogist Undergraduate Award. Winners receive a year's membership, a certificate, *Elements*, *American Mineralogist* online, and an MSA book publication of their choice! Get them hooked early. Some of us became members as students and have never wavered.
- At meetings or mineral shows, offer to treat your favorite mineral dealer to a "friendship year" with MSA.
- Students, encourage your peers to join.

Sustainability. As MSA nears its 100th anniversary as a terrific international society, it is now that we must act together to sustain MSA well into its next 100 years.

Please send your feedback, ideas, or insights to: dutrow@lsu.edu or president@minsocam.org. Or, if you wish anonymity, visit www.minsocam.org, where we have set up an anonymous comments page. I look forward to working with you.

Barb Dutrow
2007 MSA President

The Mineralogical Society of America

2008 Grants for
Research in Crystallography, Mineral Physics or Chemistry, and Mineralogy

from the Edward H. Kraus Crystallographic Research Fund with contributions from MSA membership and friends

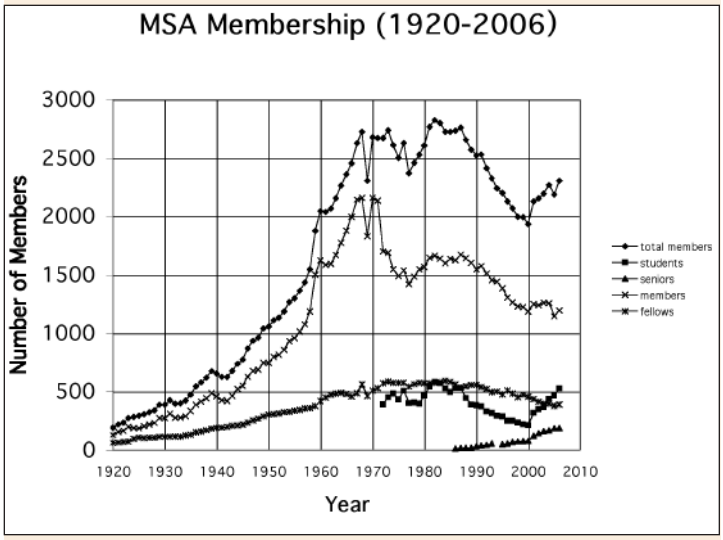
Student Research in Mineralogy and Petrology

from an endowment created by MSA members

Selection is based on the qualifications of the applicant, the quality, innovativeness, and scientific significance of the research of a written proposal and the likelihood of success of the project. There are three US$5000 grants with no restrictions on how the funds may be spent, as long as they are used in support of research. Application instructions and forms are available from the MSA home page, http://www.minsocam.org, or the MSA offices. Completed applications must be received by June 1, 2007.

NOTES FROM CHANTILLY

On August 31, 2006, MSA had 2308 members, an increase from 2005 and the highest number since 1993 (2326). The number of regular members has been relatively flat or decreasing over the last ten years. The number of fellows has been declining slowly. The total membership increase is due to a jump in student members and, to a lesser degree, in senior members. This is illustrated in the accompanying plot of number of members per year.



Regular (non-life) members and fellows are important components of the membership because they comprise the financial base of the Society. Their loss is of concern. Students pay subsidized dues, but they are the future of the society. At 527, the number of student members in 2006 is the highest it has been since 1986 and 1987 when the numbers were 528 and 529. However, the percentage of student members is greater in 2006 (23%) than in 1986–1987 (19%).

The graph reflects events both in the larger world and in the Earth sciences. Dips in membership occurred during the Great Depression and World War II. There was a tremendous increase in membership as a result of the government's focus on physical sciences after the war, and then a steady drop from 1983 to 1998, brought on by changes in spending priorities. The flat but erratic pattern at the top of the membership peak reflects the handling of MSA affairs by AGI (1969–1972), then AGU (1972–1985), before a separate MSA business office was established in 1985.

Not plotted here is the change in the number of institutional subscribers over the same time period. What is interesting in that trend is the steady growth of institutional subscribers during the Depression years, from 199 in 1929 to 366 in 1939. Today it is often remarked that loss of institutional journal subscriptions is a result of tight budgets. The Depression trend would suggest that today's large-scale journal cancellations may be more a matter of priorities than lack of money. During the war years, the number of institutional subscribers dipped because most overseas subscribers were what was euphemistically referred to as "out of mail contact." Shipments of non-war materials overseas were prohibited in order to provide space for more critical materials. The numbers rebounded to 545 in 1946.

In 2006, 69% of MSA members subscribed to the journal in some form. This is little different from last year's 70%. There is a continuing trend in which increasing numbers of members purchase electronic access only.

year	% paper	% online	% no journal
1995	94		6
1996	94		6
1997	92		8
1998	89		11
1999	88		12
2000	90		10
2001	78		22
2002	67	12	21
2003	61	15	24
2004	42	24	34
2005	47	23	30
2006	41	28	31

What might the future be for member journal subscriptions? The newest members of MSA might give an indication. Of the 178 new members who joined in 2006, 86 (48.3%) elected not to get the journal in any form, 71 (39.9%) chose electronic access only, and 21 (11.8%) chose both paper and web access.

J. Alex Speer, MSA Executive Director
j_a_speer@minsocam.org

2006–2007 MSA DISTINGUISHED LECTURERS

The Mineralogical Society of America is pleased to announce that its Distinguished Lecturers and their lectures for 2006–2007 are:

Jane A. Gilotti
University of Iowa, Iowa City, IA, USA

Diamond and coesite: Forcing a new paradigm for continental collisions

Clues to high pressure melting of metasedimentary rocks deep in the heart of mountain belts

Tim K. Lowenstein
Binghamton University, Binghamton, NY, USA

Reviving ancient organisms in crystals: Jurassic Park or Fantastic Lark?

Tracking changes in the chemistry of ancient seawater: Mammal blood, salt, and sea shells

High pCO_2 in the Eocene greenhouse world from Green River Na-carbonates

Stephen W. Parman
Durham University, Durham, United Kingdom

The history of the Earth written in helium

Squinting at the Archean: Komatiites and the thermal evolution of the Earth

The schedules of the Lecturers' tours are given on the MSA website (www.minsocam.org). Check to see if they may be at a location near you. MSA expresses its appreciation to these individuals for undertaking such a service to our science.

www.minersoc.org

Mineralogical Society of Great Britain and Ireland

NOTES FROM LONDON

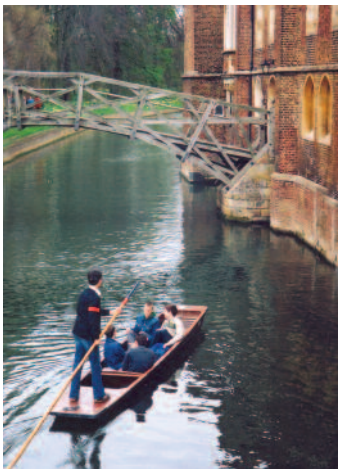
New Lower-Cost Membership Scheme

In 2007, the Society is offering lower-cost membership to all members. This will be accompanied by a general re-structuring of the membership categories aimed at simplifying the present scheme. In future the Society will have four main categories of members: Student Members, Members, Fellows and Honorary Fellows. The Associate Member category will be abolished. One of the goals of the re-structuring is to open up membership in the Society to a wider community, thus welcoming amateurs as well as professionals interested in the mineral sciences. It also allows greater flexibility in terms of choice of journals.

Earlier this year the Bye-laws were changed to make Fellowship a professional category of membership of the highest order. In future, members will be invited to apply for this professional grade of membership. This will include demonstration of at least 5 years' relevant post-graduate experience and a commitment to continuing professional development.

Students studying mineral sciences are particularly welcome as members. To encourage the new generation of mineral scientists, free membership in the Society is being offered to students for one year. This will include six free issues of *Elements* magazine.

Cost of basic membership in 2007 will be only £30.00 for members and fellows and £10.00 for students (other than new joiners). This cost will include six issues of *Elements* magazine. If members require access to one or all of the Society's three online journals, there is an additional fee of £20.00. Members wishing to receive a paper copy of either *Mineralogical Magazine* or *Clay Minerals* are charged £30.00 per journal per year or £50.00 for both journals, still a very attractive price.



Frontiers 2007

Now is the time to pen your abstract for the Frontiers in Mineral Sciences 2007 meeting to be held 26–28 June 2007 at Fitzwilliam College in Cambridge. Remember the **abstract and registration deadline is 28 February 2007**. You can submit your abstract and register online at **www.minersoc.org/Frontiers2007.html**. Online credit card payment is secure because your data are encrypted as soon as you click the submit button. The number of rooms available at Fitzwilliam College is limited, so remember to register early to avoid disappointment.

FOCUS ON *CLAY MINERALS*

Clay Minerals – Journal of Fine Particle Science is one of the Mineralogical Society's three journals. The Principal Editor is Prof. J.M. Adams of Exeter University. John comes to the journal from a background in industry.

Coverage

Clay Minerals is an international journal, published four times a year, and includes research papers about clays, clay minerals and related materials, natural or synthetic. The journal publishes papers on Earth processes, soil science, geology/mineralogy, chemistry/materials science, colloid/surface science, applied science and technology and health/environment topics. The journal has an international editorial board with members from fifteen countries.

How to Obtain a Subscription

Libraries can subscribe to *Clay Minerals* by purchasing an institutional subscription from the Society, either direct or via a bookselling agent. See **www.minersoc.org/pages/publications/subsrates.html** for subscription rates.

Online

Clay Minerals is available online at *www.minersoc.org/pages/e_journals/clay.html*. Instructions on how to set up individual or institutional access are available from that web page. If your library receives a paper copy of *Clay Minerals*, please ensure that it has also set up e-access. This will increase readership and make the journal more useful and more used. *Clay Minerals* is also one of the journals in the very successful e-journals aggregate *GeoScienceWorld* (**www.geoscienceworld.org**). This has increased its international audience. Libraries that subscribe to the journal via GeoScienceWorld can receive the printed version for 50% of the normal price. When placing your paper-copy order with the Society, please state that you have a subscription to GSW in order to benefit from the discount.

High Impact

Here is a list of some of the high-impact review papers published in *Clay Minerals* in recent years:

Joussein E, Petit S, Churchman J, Theng B, Righi D, Delvaux B (2005) **Halloysite clay minerals – a review**. Clay Minerals 40: 383-426

Gardolinski JEFC, Lagaly G (2005) **Grafted organic derivatives of kaolinite: I. Synthesis, chemical and rheological characterization**. Clay Minerals 40: 537-546

Gardolinski JEFC, Lagaly G (2005) **Grafted organic derivatives of kaolinite: II. Intercalation of primary n-alkylamines and delamination**. Clay Minerals 40: 547-556

Meunier A (2006) **Why are clay minerals small?** Clay Minerals 41: 551-566

Grandjean J (2006) **Solid-state NMR study of modified clays and polymer/clay nanocomposites**. Clay Minerals 41: 567-586

Wilson IR, De Souza Santos H, de Souza Santos P (2006) **Kaolin and halloysite deposits of Brazil**. Clay Minerals 41: 697-716

Srodon J, Kotarba M, Biron A, Such P, Clauer N, Wojtowicz A (2006) **Diagenetic history of the Podhale-Orava Basin and the underlying Tatra sedimentary structural units (Western Carpathians): evidence from XRD and K-Ar of illite-smectite**. Clay Minerals 41: 751-774

Future review papers to appear in the journal include:

Recent advances in computer simulations of clay–fluid systems, by Neal Skipper

Molecular-scale architecture of hybrid nanoparticles, by Cliff Johnston

Special Issue

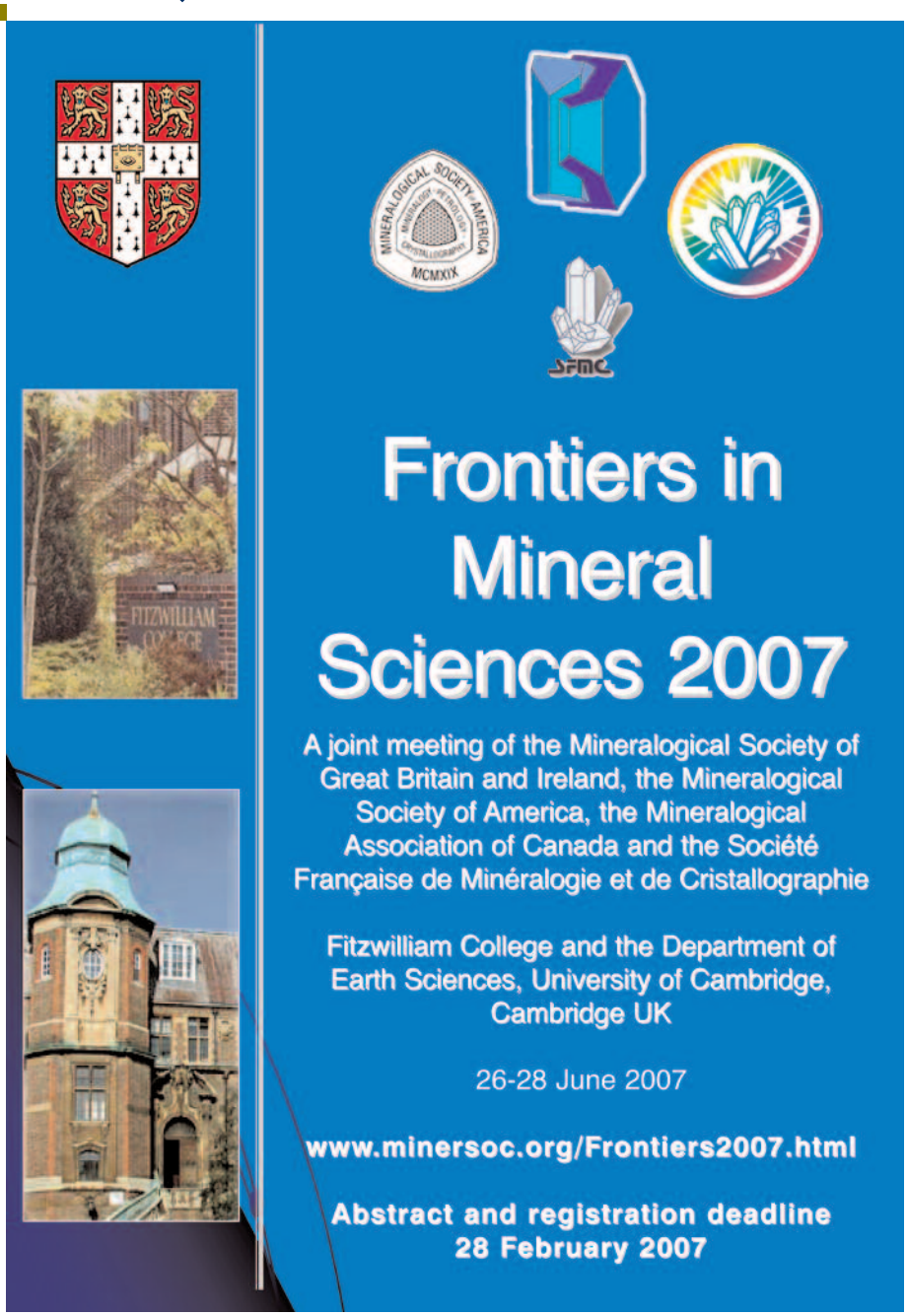
In March 2006, a special issue of the journal was published: *Clay minerals in onshore and offshore strata of the British Isles: origins and clay mineral stratigraphy*, vol. 41, 512 pp. This issue was painstakingly put together by the authors, with guidance from editors Christopher Jeans and Dick Merriman, and has taken several years to compile. It contains many thousands of new analyses and will provide clay mineralogists, particularly those with an interest in stratigraphy, with much food for thought. It will be of interest to UK and non-UK researchers alike as there will be many opportunities for correlation with clays in the strata from elsewhere. Copies of the special hard-back version of this special issue are available from the Mineralogical Society office at a list price of £70. Readers of *Elements* are eligible for the reduced rate of £49.

Authors are encouraged to submit their papers to the Principal Editor, Prof. J.M. Adams, at: john@treviles.com. Instructions to authors are available from www.minersoc.org/pages/e_journals/cm_authors.pdf.

IMAGES OF CLAY

An ongoing project of the Mineralogical Society's Clay Minerals Group and The Clay Minerals Society.

Please go to the website at **www.minersoc.org/pages/gallery/** to download high-quality electron micrographs of clay minerals that are freely available for teaching purposes.



CALL FOR BURSARY APPLICATIONS FOR 2007

A sum of £6,000 is available in 2007 for bursary awards – £4,000 to post-graduate students and £2,000 to qualified research workers to help them attend a conference to present their work or carry out fieldwork. Preference may be given to members of the Society, but membership is not mandatory to receive an award. Bursaries are awarded up to a maximum of £500 or 50% of the total cost of the project, whichever is less.

Full details on how to apply for a Postgraduate Student or Senior Travel Bursary can be found on the website **www.minersoc.org.pages/awards/awards.html.** Applications should be sent to the Executive Secretary, Dr Adrian Lloyd-Lawrence, to arrive by **19 January 2007**.

www.eag.eu.com

European Association for Geochemistry

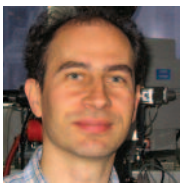
EAG INTRODUCES ITS NEW OFFICERS AND COUNCIL MEMBERS

The European Association for Geochemistry (EAG) elected two new officers and five new councilors at its general assembly held at the annual Goldschmidt meeting in Melbourne, Australia. Eric H. Oelkers was elected new EAG vice-president and Susan Stipp was elected EAG secretary. Chris Ballentine, Bernard Bourdon, Lara Duro, Michael Walter, and Bernhard Wehrli were selected as councilors to serve from 1 January 2007 to 31 December 2009.

Eric H. Oelkers, EAG's new vice-president, is a CNRS research director and the chair of the Experimental Geochemistry and Biogeochemistry Department in Toulouse, France. Eric has previously served the EAG as a councilor and treasurer. He has also served as a director of the Geochemical Society, co–Editor in Chief of *Chemical Geology*, and associate editor of *Geochimica et Cosmochimica Acta*. Eric has also co-edited four special journal issues over the past year, including the 2005 *Chemical Geology* issue 'Geochemical Aspects of CO_2 Sequestration'. His primary research area is experimental determination of the thermodynamics and kinetics of mineral–fluid reactions. He has recently raised over 5 million euros to create two Europe-wide training and research networks (MIR and MIN-GRO) aimed at quantifying the reactivity of mineral–fluid interfaces.

Susan L.S. Stipp, EAG's new secretary, is professor of geochemistry and leader of the NanoGeoScience Group at the University of Copenhagen. Her research focuses on defining the mechanisms that control the uptake and release of trace components by mineral surfaces, typically in groundwater regimes. Recently, she began the Nano-Chalk Venture, which provides funding for a cooperative effort by 30 to 40 physicists, chemists, mineralogists, molecular biologists, engineers and students to apply nanoscale technology to improve oil recovery. Susan brings to her EAG position a good measure of organisational background. She has previously served as councilor for EAG and on governing boards and executive committees in several research networks, scientific societies and government advisory panels. In 2004, she convened the Copenhagen Goldschmidt Conference, and in January 2007, she will begin a term as principal editor of *Elements*.

Chris Ballentine is a professor of isotope geochemistry at The University of Manchester. His research is aimed at developing the inert noble gases as a tool to trace fluid origin and process in a wide range of geological settings, from the origin and evolution of planetary volatiles to basin fluids. Past work has included quantifying the role of the regional groundwater system in the basin-scale transport of oil and gas, and identifying the origin of CO_2 and N_2 in natural gases. More recently, his work has resulted in the development of models that provide a quantitative understanding of the interaction between natural gas and groundwater in various targets or analogues for the geological storage of anthropogenic CO_2.



Bernard Bourdon is a professor of isotope geochemistry at the ETH Zurich, Switzerland. His main research interests are in the field of isotope geochemistry, with a focus on understanding magma generation, the processes of early planet evolution (including the Earth's), and the application of isotopes for understanding processes at the surface of the Earth. He has been involved in developing new applications of U-series geochemistry for understanding chemical weathering and transport in aquifers. He completed his PhD at Columbia University, New York (1994), then was at the Institut de Physique du Globe de Paris (France) before moving to ETH Zurich in 2005.

Lara Duro completed a PhD at the Universitat de Barcelona (1996) on the coupling between Fe(III) and U(VI). She started her professional career in 1994 in the newly created Spanish office of INTERA, an environmental consultancy specialised in radioactive waste management. Since 2000 she heads the Waste Management Department of ENVIROS Spain, a scientific-technical consultancy whose main area of work is related to nuclear waste management, and since March 2006 she is the deputy managing director of the same company. Her main technical areas of expertise are the geochemical modeling of heavy metals and trace elements (including radionuclides) in natural waters, thermodynamic and kinetic modeling of laboratory-scale and pilot-scale experiments, development of chemical models to understand the behaviour of spent nuclear fuel under repository conditions, reactive transport modeling to predict the evolution of contaminant plumes and input to global risk and performance assessment.

Michael J. Walter is currently employed as a reader at the University of Bristol. His interests are in high-P–T experimental petrology, geochemistry, and mineral physics. High-P–T experiments on model terrestrial compositions are used to simulate conditions ranging from shallow crustal levels to planetary cores. Phase equilibrium, element partitioning, and thermoelastic data from such experiments help to constrain modern theories for the origin and evolution of Earth and other planetary bodies. In recent years, his work has focused on three general areas: (1) the generation of mafic and ultramafic magmas and residual peridotite in the upper mantle, (2) the differentiation of the mantle and core in the early Earth, and (3) subsolidus deep mantle phase relations and crystal chemistry

Bernard Wehrli is currently a professor of aquatic geochemistry at the ETH Zurich. His main area of interest involves biogeochemical processes in surface waters, including rivers, lakes, and wetlands. In part, his efforts are directed towards developing solutions for the integrated management of aquatic systems.

EAG HONORS ITS 2006 AWARD WINNERS

The EAG awarded its annual Urey Medal to Herbert Palme and its Houtermans Medal to James Badro during the annual Goldschmidt meeting in Melbourne, Australia.

Herbert Palme receiving the 2006 Urey Medal from Bruce Yardley, EAG President

James Badro accepting the 2006 Houtermans Medal from Bruce Yardley, EAG President

CALL FOR NOMINATIONS FOR THE 2007 UREY AND HOUTERMANS MEDALS

Urey Medal

The H.C. Urey Medal is given annually by the European Association for Geochemistry and is intended to honour established scientists for outstanding research contributions to any field of geochemistry. The award is based solely on scientific merit without regard to nationality, and will normally be presented at the V.M. Goldschmidt Conference. Nominations for the H.C. Urey Medal should be accompanied by a brief statement from the nominator outlining the reasons for the nomination and should include an abbreviated curriculum vitæ and bibliography of the proposed candidate, as well as several letters of support. Recent recipients are H.C. Helgeson (2004), A. Navrotsky (2005), and H. Palme (2006).

Nominations for the 2007 H.C. UREY MEDAL should be submitted **before 15 January 2007** to:

Eric H. Oelkers
Experimental Geochemistry and Biogeochemistry
LMTG/CNRS
14 ave Edouard Belin
31400 Toulouse, FRANCE
E-mail: oelkers@lmtg.obs-mip.fr

Houtermans Medal

The Houtermans Medal is given annually by the European Association for Geochemistry and is awarded in recognition of an outstanding publication or series of publications by a young scientist under the age of 35 in the fields of geochemistry or cosmochemistry. The award consists of a medal and a certificate. The 2005 recipient was James Badro.

Nominations for the HOUTERMANS MEDAL should consist of a brief statement from the nominator outlining the reasons for the nomination and should include an abbreviated curriculum vitæ and bibliography of the proposed candidate. They should be submitted **before 15 January 2007** to:

Bruce W.D. Yardley
School of Earth Sciences
University of Leeds
Leeds LS2 9JT, UK
E-mail: bruce@earth.leeds.ac.uk

www.clays.org

The Clay Minerals Society

SOCIETY COUNCIL FOR 2006–2007

The Executive of The Clay Minerals Society for 2006–2007 comprises

Richard K. Brown (President) rbrown@wyoben.com

Ray Ferrell (Vice President) rferrell@lsu.edu

Andy Thomas (Treasurer) andrew.thomas@chevron.com

Warren Huff (Secretary) warren.huff@uc.edu

Derek Bain (Editor in Chief, *Clays and Clay Minerals*) clayed@macaulay.ac.uk

Cliff Johnston (Past President) clays@purdue.edu

The council members are James Amonette, Steve Hillier, Heather Dion, Christopher Breen, James Kubicki, Patricia Maurice, Victoria Hover, Richard Lahann, Douglas McCarty, Sridhar Komarneni, Lynda Williams, and Michael Velbel.

FROM THE TREASURER

Andrew Thomas

Howdy! It has been my pleasure to be the treasurer of The Clay Minerals Society, and I am now in my fifth and transition year. Many consider treasuring to be a task fraught with concern, adding machines, and tax forms. In fact, the position of CMS treasurer is rather one of horizon-viewing, and involves financial oversight and guidance rather than bookkeeping. I receive valuable assistance from the CMS Finance and Budget Subcommittee, currently chaired by Reed Glassman and chaired in the past by Richard Brown.

Our income continues to meet expenses through a varied set of income streams. Member dues and institutional subscriptions make up over 60% of the Society's income, and these traditional sources have been with us since the beginning. The Society has many more varieties of expenses than it does sources of income. Though this sometimes causes headaches, it is reassuring that we can afford to maintain our Student Grants Program, to support publication of the Short Course Notes volumes, and to engage in projects such as digitizing the entire CCM archive, for example. The CMS spends its money judiciously, and with continued careful management, we look forward to many more years of working with and for the clay community.

One of the income streams for the CMS is the Source Clays Repository (www.clays.org/sourceclays/SourceClays.html), located near Purdue University and ably run by Cliff Johnston and Darrell Schulze, with help from G.S. Premachandra. These Source Clays and their documentation in the CCM Source Clay Volume contribute to the greater body of phyllosilicate knowledge and are a well-characterized set of materials, ready for further research projects. Most laboratories consider their standards collection incomplete without the Source Clays, so thank you all for that.

Our Society's masthead is our journal, *Clays and Clay Minerals*. Producing a journal of this caliber requires money, yet through the diligent efforts of Derek Bain and Kevin Murphy, clever measures to reduce cost and maintain quality have been found continually. I am pleased to say that today *Clays and Clay Minerals* costs ~95% of what it cost to produce in 2000. Considering our more colourful format and five years of inflation, that is quite a feat.

Our society office recently moved from Aurora, Colorado, to Chantilly, Virginia, and is now run by Alex Speer and Michelle Johnson. The CMS Executive Committee feels that this transition, which saves us money, will probably also pay longer-haul dividends in terms of membership and new ideas. We constantly seek new ideas regarding finance and welcome feedback from any member regarding our financial process, examined each year at the CMS annual meeting.

Andrew Thomas, Treasurer
andrew.thomas@chevron.com

OBITUARY – VERNON JAMES HURST

Vernon Hurst, 83, Research Professor Emeritus in the Department of Geology at the University of Georgia at Athens (UGA), died on July 28, 2006.

Dr. Hurst was born on July 18, 1923, in Glenmore, Georgia. A member of the 97th U.S. Infantry, Hurst served in both the combat European theatre and during the occupation of Japan. Following World War II, Hurst received his BSc degree from the University of Georgia and MS from Emory University. Hurst worked with Ernst Cloos, as well as with Hatton Yoder at the Geophysical Laboratory of the Carnegie Institution to earn his PhD in geology from the Johns Hopkins University in high-P–T hydrothermal mineralogy. He founded the Geology Department at UGA in 1965 and served as department head for eight years and chairman of the Physical Sciences Division for four years. Hurst held a University Research Professorship for 22 years, trained 9 PhD and 26 MS students, and published over 150 scientific papers.

An early proponent of transmission electron microscopy, Hurst studied mineral weathering and crystal growth, incorporating fundamental research findings into such economic applications as improved clay mineral beneficiation via selective flocculation and magnetic separation. In addition to basic and applied mineralogical research, Hurst performed extensive fieldwork and helped pioneer geologic mapping of highly saprolitized terrains. During his long career, he published many details on the stratigraphy and mineralogy of Georgia's Cretaceous and Tertiary sediments and contributed significantly to our understanding of the role of microbial processes and the origin of Georgia's world-famous soft and hard kaolins. Hurst was first to recognize classic Barrovian metamorphism in Georgia and published geologic maps of twelve counties. He also published on the gold districts and talc deposits in Georgia. He was a 50-year fellow of the Geological Society of America and the Mineralogical Society of America. He was also a member of Sigma Xi and Phi Kappa Phi. The Clay Minerals Society, in recognition of a lifetime of scientific achievements, selected him as a Pioneer in Clay Science Lecturer in 2003.

W.W. Barker

CMS PEOPLE IN THE NEWS

Robert J. Reynolds Jr. Research Award to Deb Jaisi

The Robert J. Reynolds Jr. Research Award is an annual grant made for the best proposal for student research. This year's grant went to Deb Jaisi from Miami University, Ohio. Deb's work is described in the paragraph below. The Society is pleased to be able to help further Deb's research.

^{99}Tc has been released into the environment during weapon testing and waste disposal. The long half-life (2.13×10^5 years), high mobility (as stable TcO_4^-), and subsequent uptake into the food chain cause Tc(VII) to be a significant contaminant and hence a threat to our society. As it is now realized that physical (pump and treat), chemical (adsorption, ion-exchange), and biological (enzymatic reduction) methods are inappropriate for the long-term containment of the contaminant, the scientific communities are increasingly concerned about finding reliable alternatives. Clay minerals, the foe in existing remediation practices, can be turned into friend by reducing its Fe(III) to Fe(II) by chemical or biological means. The multifaceted Fe(II) (on variably charged sites, exchange and structural sites) in reduced clay is very good at reducing Tc(VII) to Tc(IV) and hence immobilizing Tc in groundwater and soils. The increased charge due to Fe(III) reduction in clays promotes accelerated aggregation of clay particles and hence provides an effective means for in situ containment of reduced Tc(IV).

CMS Student Research Grant to Pankaj Kulshrestha

A CMS student research grant was awarded to Pankaj Kulshrestha, from the State University of New York at Buffalo for his project on the development of nanocomposites of titanium dioxide and silicate particles as photocatalytic green oxidants for the mineralization of methyl *tertiary*-butyl ether.

Methyl *tertiary*-butyl ether (MTBE) has been used as a gasoline additive in the United States since the late 1970s when it was introduced as a means of maintaining adequate octane ratings during the phase-out of alkyl lead additives. By 2000, MTBE had become the fourth highest organic chemical carcinogen, with an aggregate production of ~60 million metric tonnes. MTBE has a solubility exceeding 5000 mg/L at room temperature, making it very mobile in groundwater systems, and is the second most frequently detected compound after chloroform in groundwater, surface water, and storm water. MTBE is regarded as recalcitrant because it is not biodegradable in water, and there are no widely accepted estimates of its half-life. Stable nanocomposites of titanium dioxide and silicate particles could be used in the photocatalytic mineralization of MTBE. These nanocomposites have large surface areas because of the introduction of surfactants in their synthesis. With metal and non-metal doping, these nanocomposites could use light in the visible range of the solar spectrum to effectively mineralize MTBE in the aqueous environment.

Jill Banfield elected to National Academy of Science

For 2006, the U.S. National Academy of Sciences announced the election of 72 new members and 18 foreign associates from 16 countries in recognition of their distinguished and continuing achievements in original research. Included in the election was Prof. Jill Banfield, CMS member. "Election to the Academy is considered one of the highest honors in American science and engineering," said Ralph Cicerone, who became president of the Academy in 2005. Barbara Schaal, an NAS member since 1999 who was elected last year as the Academy's first woman vice president, noted, "This year's new class represents outstanding accomplishment in a wide variety of disciplines." The new elections bring the total number of active members to 2013.

In 2000 Banfield received the Marion L. and Christie M. Jackson Mid-Career Clay Scientist Award of the Clay Minerals Society and in 2005 she delivered the Pioneer Lecture at the CMS annual meeting.

Jill's research involves study of the interactions between microorganisms and minerals and the impact of microorganisms on mineral weathering and crystal growth. Specific topics of current interest include microbial controls on silicate, phosphate, and sulfide mineral dissolution reactions, the roles of microorganisms in geochemical cycling of nutrients, and metals in the environment. Approaches include application of molecular biological (including genomic) analyses to understand the biochemical pathways that underpin biogeochemical processes. She is also interested in microbial evolution and the mechanisms by which microorganisms adapt to environmental challenges. Other current research focuses on the thermodynamics and kinetic behavior of nanocrystalline materials produced by biomineralization and mineral weathering (structure, phase stability, crystal growth kinetics, morphology evolution, and microstructure development).

Enchanted Clays -The 44th Annual Meeting of the Clay Minerals Society will be held June 2007 in beautiful and historic Santa Fe, New Mexico, USA. Santa Fe provides an idyllic location in the southwestern United States for attendees to enjoy technical and social sessions while soaking up the diverse culture and wonderful climate of New Mexico-The Land of Enchantment. We encourage you to attend, to share knowledge and ideas, to benefit from technical interactions, and to relax in the wonderful historic and enchanted environs of Santa Fe. www.sandia.gov./clay

CLAYS AND CLAY MINERALS

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December 2006

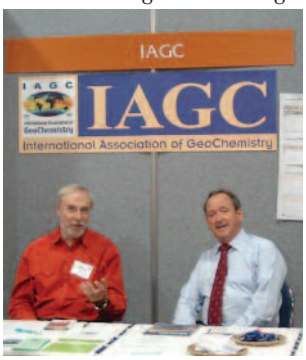
www.iagc.ca

International Association of GeoChemistry

IAGC NEWS

IAGC at Goldschmidt

The IAGC was well represented at the recent Goldschmidt Conference in Melbourne, Australia. IAGC council members and working group chairmen attending the meeting included Ron Fuge, Alakendra Roychoudhury, Shaun Frape, Jan Kramers and Martin Novak. The booth received many visitors and became something of a retreat for some of the conference delegates who had become saturated by five days of up to twelve parallel sessions, many of which were on high-temperature geochemistry topics! An additional attraction at the booth was the variety and quantity of candies available (known as 'lollies' in Australia) and the free IAGC embossed key rings. Over 30 new members signed up, most of them Australians, and daily draws for a free membership in IAGC and subscription to *Applied Geochemistry* kept delegates returning daily to the booth to put their name in once more for the draw!



Ron Fuge (Executive Editor of *Applied Geochemistry*, the one with the tie) sitting at the IAGC booth with Mel Gascoyne. Winners of the daily draws are posted on the right.

International Symposium on Environmental Geochemistry (ISEG-7)

This conference took place in Beijing, China, 25–27 September, 2006. The meeting was supported by the IAGC, and about 400 geochemists attended, about half of them from countries other than China. The meeting was held in the Beijing Grand Continental Hotel, next to the Olympic Park, which is currently under construction for the 2008 Olympics.

The abstracts of papers given at ISEG-7 have been published in the *Chinese Journal of Geochemistry* (volume 25, ISSN 1000-9426), Brill Academic Publishers, Leiden, The Netherlands.

Water–Rock Interaction Symposium – New Dates!

Note that the timing of WRI-12 has been changed from August 13–18 to **July 31–August 5, 2007**. The conference is to be held in Kunming, China. The dates for WRI-12 were changed to avoid an unfortunate clash with the 17th Goldschmidt Conference (August 19–24).

The Water–Rock Interaction Working Group of the IAGC is inviting scientists to attend WRI-12. Kunming is in the center of the Yunnan-Guizhou plateau of southwestern China. WRI-12 will feature all aspects of weathering, with emphasis on karst geochemistry, hydrothermal systems of tectonically active regions and water–rock–gas interactions on other planets. The website www.wri12.org provides details on the oral and poster sessions, accompanying guest program, social activities and field trips. The final circular containing the final version of the scientific and social programs for WRI-12 will be handed out to participants at registration. The website also provides information on Kunming. We look forward to seeing you there!

Yanxin Wang
Secretary General

Goldschmidt 2007 and IAGC's 40th Birthday

The IAGC will hold a special celebration to commemorate its 40th anniversary on Saturday, 18 August 2007, in conjunction with the 17th annual Goldschmidt Conference in Cologne, Germany, August 19–24, 2007. Information about the celebration can be found at www.iagc.ca

The Goldschmidt Conference (www.goldschmidt2007.org) will be held in association with the annual meeting of the German Mineralogical Society. Sixteen broad themes have been selected covering the full range of geochemical research, from the formation of the solar system to environmental research, and from biogeochemistry to mineralogy (see page 383). Suggestions for symposia or ideas for general symposia should be addressed to the International Program Committee (IPC) members responsible for the relevant theme as soon as possible, or sent to the chair of the IPC (Herbert Palme, herbert.palme@uni-koeln.de).

AIG7

The 7th International Symposium on Applied Isotope Geochemistry will be held in the beautiful countryside of Stellenbosch, in the Western Cape of South Africa. Stellenbosch is South Africa's premier wine district and boasts spectacular scenery, including the world famous Table Mountain, Cape of Good Hope and Cape Point.

More information will be available shortly on the website. Dr. Jodie Miller is the conference chair, and enquiries should be sent to her at aig7@sun.ac.za

The 12th International Symposium on Water–Rock Interaction (WRI-12)
July 31–August 5, 2007
Kunming, China

The first circular is out (see website www.wri12.org), and the second circular is due out in October 2006, with abstracts due in December. A list of conference topics can be found on the website.

www.sfmc-fr.org

Société Française de Minéralogie et de Cristallographie

NEW FACILITY AVAILABLE SOON TO THE EARTH SCIENCES COMMUNITY IN FRANCE

SOLEIL, the new third-generation French synchrotron radiation source located near Paris, will be operational in 2007. This new national research facility will allow unprecedented opportunities for Earth sciences research. Our community has been well identified in the review committees for beamtime allocation. Two review panels cover our scientific areas: Physical chemistry/diluted matter/astrophysics/atmosphere, and Earth sciences (geophysics, geochemistry)/environment/archeology/cultural heritage. This is a consequence of the implication of various mineralogy and crystallography laboratories in shaping the scientific requirements at several beamlines.

The ring will cover the entire spectral domain from infrared to hard X-ray, and the available techniques will include diffraction, spectroscopy, and imaging. The design of the beamlines has been driven by the scientific requirements. Among the 24 beamlines scheduled, seven should be very attractive to our community.

The AILES-SMIS project concerns two IR stations, one dedicated to far-IR spectroscopy and one to IR microspectroscopy and microscale imaging. These two beamlines will make possible IR investigations in several geological applications, such as studies of interstellar dust particles and identification of organic matter in fluid inclusions. With the GALAXIES beamline, XAS spectra of light elements can be obtained in intrusive sample environments, such as in a high-pressure cell, thanks to the high penetration depth of hard X-rays. The high- pressure beamline, dedicated to diffraction with hard X-rays, integrates a panel of cells, such as diamond-anvil cells with laser heating and large-volume cells. Research in environmental sciences will be supported by microXAS beamlines (LUCIA, SAMBA), and by imaging beamlines in the soft and hard X-ray domains (MICROSCOPIUM and STXM beamlines).

For more information, and especially if you are interested in an exciting experiment using SOLEIL, visit http://www.synchrotron-soleil.fr/anglais/

Jean-Louis Hazemann,
CNRS Grenoble, France,
jean-louis.hazemann@grenoble.cnrs.fr

FINAL MEETING OF THE RESEARCH GROUP TRANSMET

Eighty persons participated in the final meeting of the Research Group TRANSMET (CNRS BRGM and IRD; M. Cathelineau, Director), held at Nancy (6–7 July 2007) with the support of SFMC. Several French laboratories participate in this group. Their two main scientific objectives are:

1) Understanding the origin of hydrothermal gold concentrations. Five approaches are used: (i) development of analytical techniques for fluid inclusions (LIBS, synchrotron); (ii) concentration and speciation measurements of gold both in the vapour and liquid phases using XANES and EXAFS spectroscopy; (iii) experiments on gold solubility in dacite melts; (iv) determination of the source of gold-bearing fluids using SIMS lead isotopes on sulfide-bearing minerals; (v) study of the relationships between granites and gold deposition in the Brues deposit (Galicia, Spain).

2) Understanding the dispersion of metals around natural deposits. Different forms of metal transport at low temperature have been investigated (dissolved species, particles, colloids). X-ray fluorescence, micro-EXAFS, and micro-XRD spectroscopy using a synchrotron source are essential techniques to precisely locate metals in neoformed minerals (oxides, clay minerals, etc.). Metal complexation and interactions with bacteria was also an important topic. A case study in New Caledonia showed that chromium is transported both as dissolved species and as particles during chromite alteration; thermodynamic modeling of the transformation of Ni-olivine to Ni-goethite was carried out. New complexes of uranium with humic acids and functional groups that allow metal trapping on colloids were discovered.

In conclusion, people from different disciplines (geochemists, geochronologists, experimentalists, ore geologists) have come together in this research group to study transport and deposition mechanisms involved in both the formation of ore deposits, —a permanent need of society—, and in the extraction of metals in the mining industry.

Jean Dubessy,
G2R, Nancy, France
Jean.Dubessy@g2r.uhp-nancy.fr

ACROFI-I MEETING

The first Asian Current Research on Fluid Inclusions meeting was held at Nanjing University, 26–28 May 2006. The meeting was organized by Professor Pei Ni from Nanjing University and Professor Zhaolin Li from Zhongshan University, with the support of three Chinese laboratories: the State Key Laboratory for Mineral Research (Institute of Geofluid Research, Nanjing university), the Research Division of the Earth's Interior Material and Geofluid Geochemistry Laboratory of the Chinese Academy of Sciences, and the State Key Laboratory of Marginal Sea Geology of the Chinese Academy of Sciences. ACROFI-I gathered scientists from 14 countries, including Sergey Smirnov, who chairs the IMA Working Group on Fluid Inclusions in Minerals.

A total of 163 presentations were made in seven sessions: (1) hydrothermal processes and ore deposits; (2) igneous processes; (3) metamorphic fluids; (4) sedimentary systems and oil geology; (5) fluid flow and deformation and fracturing; (6) new developments in analytical and experimental techniques; (7) thermodynamics of geological fluids. The basics of the geochemistry of fluid inclusions were also covered, with the objectives of giving an important impulse to fluid inclusion research in China and other Asian countries and favouring scientific cooperation.

The meeting was attended by many young Chinese scientists or PhD students, showing that this field of research is expanding in China. It was followed by a field trip to the Yellow Mountains, a magnificently scenic granite massif shaped by erosion. Nobody will forget the sunrise at 5 a.m.! The meeting was friendly, the organization was perfect, and the excellent chinese cooking deserves a special mention. Congratulations and many thanks to our Chinese colleagues for this initiative. The next ACROFI meeting will be in India.

Jean Dubessy,
G2R, Nancy, France
Jean.Dubessy@g2r.uhp-nancy.fr

www.ima-mineralogy.org

International Mineralogical Association

THE END OF CNMMN AND CCM —LONG LIVE THE CNMNC!

Two commissions of the International Mineralogical Association (IMA), the Commission on New Minerals and Mineral Names (CNMMN) and the Commission on Classification of Minerals (CCM), jointly proposed to the IMA Council in 2005 to merge their activities into a single, new commission to be named the Commission on New Minerals, Nomenclature and Classification (CNMNC). The main reason for this proposal was the conflicting control over certain tasks in the field of mineralogical nomenclature.

In the early 1990s, the then-chairman of the CCM embarked on a plan for the CCM to develop an overall classification system for minerals, probably the scheme currently in use by the International Centre for Diffraction Data. This proposal sparked an immediate response from the then-chairman of the CNMMN who forcefully expressed the view that the proposal was in conflict with the jurisdiction of the CNMMN over all matters affecting mineralogical nomenclature. Following some acrimonous debate, which culminated during the 1994 IMA general meeting in Pisa (Italy), the issue was ultimately resolved by the IMA deposing the then-chairman of the CCM.

In another area of possible conflict, the CCM has never played, surprisingly, an active part in developing or revising classification schemes for specific mineral groups. This role has, instead, been assumed from the start of the IMA by the CNMMN, which established special subcommittees to review the classification and nomenclature of large mineral groups, such as amphiboles, micas, pyroxenes and zeolites.

In the early 2000s, some officers and members of CCM and CNMMN renewed efforts to arrive at a necessary standardisation of mineral groups and their nomenclature. A joint working paper was drafted for this purpose and submitted to both commissions. During the 2004 Paris (France) meetings of the two commissions (on the occasion of the 5th Conference on Mineralogy and Museums), it again became clear that classification of minerals is inseparable from mineral nomenclature and that CCM and CNMMN cannot function independently on this issue. Ernest H. Nickel, vice-chairman of the CCM and former vice-chairman of the CNMMN, then came up with the logical proposal to amalgamate the two commissions.

The proposal to merge the two commissions into a new commission was voted on in 2005 and was approved with overwhelming majorities by the members of both commissions. There were many suggestions for the name of the new commission. The name that was chosen – Commission on New Minerals, Nomenclature and Classification – was proposed by Gheorghe Udubasa, who represented Romania in both commissions. This name encompasses all fields of interest and activities of the new commission. And moreover, as pointed out Gheorghe, the acronym CNMNC is symmetric, as befits a mineralogical name.

The IMA council members expressed their agreement with the proposed merger in May 2006, and the final decision was made during the business meeting of the IMA in Kobe (Japan) in July 2006. A play on words was necessary to obtain this result because the IMA Statutes and By-Laws do not consider the possibility of a merger of two commissions, only 'termination' and 'initiation'. Closing down both commissions would have had a serious drawback: a new commission must be initiated as a working group, which does not have the same status as a commission. It was therefore decided to terminate one commission and to rename the other commission as the CNMNC.

In order to avoid a heavier workload for the officers of the new commission with its expanded duties, the CNMNC has decided to add an additional officer – a second vice-chairman who will specifically be responsible for classification matters.

Ernst A.J. Burke
Chairman CNMNC