



Mineralogical Association of Canada



FROM THE PRESIDENT

It is both an honor and pleasure as president of the Mineralogical Association of Canada (MAC) to offer greetings and well wishes to all those who are part of this new magazine venture *Elements – An International Magazine of Mineralogy, Geochemistry, and Petrology*. This occasion marks the beginning of what I sincerely hope will be a long, fruitful, and beneficial collaboration among our societies. Our members share an appreciation of the valuable contribution and significance of the mineralogical sciences to human society. The breadth and scale of the influence of the mineralogical sciences is considerable, as reflected by the diversity of articles in this introductory issue. This magazine provides a welcome opportunity to display the relevance of our members' work to the advancement of society. Let us make the most of this opportunity and work together so that all may benefit!

On behalf of the members of MAC, I convey to the founders of this magazine our support and congratulations for their efforts and, more importantly, their vision that there is a need and place for such a publication. This magazine provides a vehicle for bringing together and uniting many related societies and bridging what geographical gaps exist. It is a unique opportunity and the timing could not be better as communication has never been easier.

Daniel J. Kontak

President, Mineralogical Association of Canada

Come and celebrate the 50th anniversary of the Mineralogical Association of Canada at Halifax 2005, May 15–18, 2005. Check the special program.
www.halifax2005.ca



THE MINERALOGICAL ASSOCIATION OF CANADA

Promoting and advancing the mineral sciences

In 2005, the Mineralogical Association of Canada (MAC) will celebrate its 50th birthday. What better way to celebrate this milestone than by joining with sister societies to produce a brand new magazine highlighting the current and future trends in the mineral sciences!

A bit of history

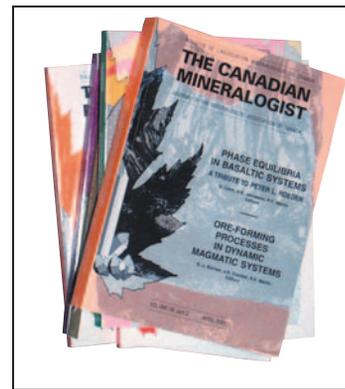
It all started with a meeting of Canadian mineralogists at the Mines Branch, in Ottawa, on August 23, 1954, to discuss the future of *Contributions to Canadian Mineralogy*, which had been published by various sponsors since 1921. It was deemed necessary to form a national organization in order to perpetuate the journal. A steering committee was formed and the Canadian Association for Mineral Sciences was incorporated in 1955 to advance knowledge in crystallography, geochemistry, mineralogy, petrology, and allied sciences. Founding officers were Sydney A. Forman, Solomon Kaiman, and Stephen Clive Robinson, all of Ottawa. In 1957, the name of the organization was changed to the Mineralogical Association of Canada. During its initial years, the office of the fledgling MAC was a lab at the Mines Branch.

In 1975, the MAC office was moved to the Royal Ontario Museum, in Toronto, where Bob Gait and the ROM staff spent many hours stuffing journals into envelopes, sealing them, and taking them to the post office. During this time, subscriptions peaked at 2000. In 1983, Joe Mandarino and his wife took over from the ROM, and they ran the MAC office from their residence in Toronto for the following seven years. Fran Pinard from Ottawa took over the contract to run the MAC office in January 1990. At that time, MAC was selling a total of 22 titles; there was no computer, no printer, and no database!

Today MAC has about 1100 members in 76 countries around the world. MAC is a half-million dollar business and a small, but well-respected, publishing house. It is run on a day-to-day basis by

two contractors – Fran Pinard who acts as business manager and Pierrette Tremblay, as coordinator. Commitment and volunteer spirit are still as strong today as in the beginning. A Council of nine members and an Executive Committee oversee the operations. Council meets once a year in the spring prior to the annual GAC-MAC meeting, while the Executive also meets in the fall. In addition, a lot of business is conducted by e-mail.

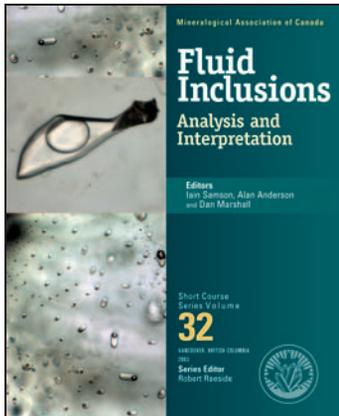
Here is an overview of our most important programs.



THE CANADIAN MINERALOGIST

The Canadian Mineralogist is the *raison d'être*, the flagship of MAC. Our journal has had only four editors since it was founded: Leonard Berry, John L. Jambor, Louis Cabri, and Robert F. Martin. Few journals can claim such stability. Under the stewardship of Bob Martin, at the helm for 27 years, the journal has grown in size (more than 1700 pages a year) and in stature, and is now a leading journal in the mineral sciences. Its authorship and readership are international, and the topics published cover a broad range. Since 2000, MAC has a no-cost-to-authors color policy and offers an electronic version of the journal at no additional cost to institutions.

In 1997, MAC published the first special publication of *The Canadian Mineralogist*. This series, under the editorship of Bob Martin, provides reference volumes and textbooks in the mineral sciences. The series has grown to six titles, and five new titles are expected in the near future, including the much-awaited *Atlas of Minerals in Thin Section*.



SHORT COURSES AND SHORT-COURSE VOLUMES

Since the early seventies, MAC has sponsored many successful short courses devoted to specific aspects of mineralogy, petrology, and geochemistry. Traditionally, these have been held in conjunction with our annual meeting, but this is changing. The first MAC-sponsored short course to be held outside Canada is being organized by Jim Mungall of the University of Toronto and will be held in Finland in the summer of 2005.

STUDENT AWARDS AND SCHOLARSHIPS

In 1997, the MAC Foundation was formed as a separate entity and registered as a charitable organization. Money was transferred from the MAC Treasury Reserve Fund to the MAC Foundation account in order to provide for a \$10,000 student scholarship, awarded since 1999. In 2004, MAC also started awarding student travel/research grants. The application forms and terms of references for these awards can be found on our website www.mineralogicalassociation.ca

MERIT AWARDS

MAC presents four awards annually and a fifth one biannually. The Past Presidents' Medal is awarded to a scientist who has made significant contributions to the mineral sciences in Canada; there is no

restriction regarding nationality or residency. The Young Scientist Award recognizes a scientist who has made a significant international research contribution in a promising start to a scientific career. The areas of research considered are any or all of those covered by the Mineralogical Association of Canada. The Hawley Medal is presented to the author(s) of the paper deemed to be the best published in *The Canadian Mineralogist* during the



previous year. The Berry Medal recognizes distinguished service to the Association in leadership or long-term service in an elected or appointed office. The Pinch Medal has been awarded biannually since 2001 to a member of the collector-dealer community in recognition of his or her major and sustained contributions to the advancement of mineralogy.

MEETING SPONSORSHIPS

Traditionally, MAC has held its annual meeting jointly with the Geological Association of Canada. In recent years MAC has been very active in sponsoring special sessions and symposia to invigorate its annual meeting. However, we are currently becoming involved in other meetings: we have sponsored PACROFI VIII, Halifax, 2002 and we are a co-sponsor of the next Goldschmidt Conference (Moscow, Idaho, 2005).

LEN BERRY SUMMER SCHOOL

In 2002, the Mineralogical Association of Canada Council enthusiastically endorsed a proposal by Ron Peterson, Queen's University, to start a series of in-depth workshops that promote the vision of MAC and encourage student participation. Council also endorsed the suggestion to name the workshop series in

honor of Leonard G. Berry, the founding editor of *The Canadian Mineralogist* and one of the early pioneers of the Association. Thus, it was fitting that the first Berry Summer School on Powder Diffraction, organized by Ron Peterson and Mati Raudsepp (University of British Columbia), be held at Queen's University, where Len Berry had a distinguished career teaching mineralogy. The informal format, the small number of attendees, the stand-alone nature, and the fact that these workshops are taught by recognized world authorities and geared to meeting the needs of students have made the Berry Summer Schools very successful.

LOOKING TOWARDS THE FUTURE

As we reflect on the first 50 years, we are proud of MAC's growth and its establishment as a vibrant, financially secure organization with an enviable track record of accomplishment. MAC can count on many dedicated members involved in advancing the role of the mineralogical sciences on many levels, through meetings, short courses, publications, etc. We are also concerned with the future of the organization and realize that its success depends on the young scientists. Thus, we will continue our efforts to encourage the participation of students in the Association and its meetings. The recent successes of the Len Berry Summer Schools are an indication that we are headed in the right direction in this regard.

MAC is also interested in expanding its horizons. Our recent outreach to sponsor meetings outside of the regular GAC-MAC annual meeting reflects this commitment, and we look forward to continuing in this direction. Finally, our participation in *Elements* is a significant move towards bridging with like-minded organizations that see the importance, relevance, and broad influence of the mineralogical sciences on many fronts and various scales. MAC looks forward to a bright future in this collaborative venture, knowing that the synergies will benefit the societies and their members.

Pierrette Tremblay
and Daniel J. Kontak

MERCURY SOURCES, MEASUREMENTS, CYCLES, AND EFFECTS

Mineralogical Association of Canada Short Course

Co-sponsor: Environmental Earth Sciences Division, Geological Association of Canada

May 14-15, 2005, prior to the GAC-MAC-CSPG-CSSS Joint Annual Meeting
Halifax, Nova Scotia, Canada

Conveners: Michael B. Parsons and Jeanne B. Percival, Natural Resources Canada

OVERVIEW

Mercury and mercury compounds are of significant human and environmental health concern because of their toxicity and ability to accumulate in fish and wildlife. Levels of mercury in the environment have risen considerably since the onset of industrialization, and even remote locations such as the Canadian Arctic have been adversely affected by the long-range atmospheric transport of mercury. This short course will discuss the current state-of-knowledge regarding:

- (1) natural and anthropogenic sources of mercury;
 - (2) sampling protocols and analytical methods;
 - (3) transport and transformation of mercury in the environment; and
 - (4) effects on ecosystems and human health.
- Most of the course material will be presented at a level suitable for senior undergraduate and graduate students and should appeal to all scientists interested in environmental issues. A two-day Special Session on 'Mercury in the Environment' will complement the short course.

Approx. registration fees (PRIOR TO APRIL 15, 2005): **CDN \$400** (regular) and **CDN \$250** (students). For more information e-mail Michael Parsons (Michael.Parsons@NRCan.gc.ca) or visit the conference website: www.halifax2005.ca. To download a registration form or to register online: www.mineralogicalassociation.ca

TOPICS

History of Hg and its environmental impact (M. Parsons and J.B. Percival, GSC); Geogenic sources of Hg (J. Rytuba, USGS); Anthropogenic sources and global inventory of Hg emissions (J. Pacyna and E. Pacyna, NIAR); Field sampling and analytical protocols for Hg (G. Hall, GSC); Inorganic Hg speciation methods (C. Grégoire, GSC); Speciation of Hg using synchrotron radiation (C. Kim, Lawrence Berkeley Laboratory); Measurement of gaseous Hg flux (P. Rasmussen, Health Canada); Overview of biogeochemical Hg cycles (D. Krabbenhoft, USGS); Hg methylation and demethylation reactions (D. Lean, Univ. Ottawa); Atmospheric distribution and long-range transport of Hg (C. Banic, Environment Canada); Hg in the marine environment (G. Gill, Texas A&M Univ.); Differentiating natural and anthropogenic Hg in biota (P. Outridge, GSC); Hg in biota and its effects (N. Burgess, Environment Canada); Exposure and effects of Hg on human health (M. Barlow, E. Easson, and J. van Oostdam, Health Canada); Hg management in Canada: domestic and global dimensions (G. Howland, T. Bender, and L. Hayes, Environment Canada).

