

# www.mineralogicalassociation.ca

# **Mineralogical Association** of Canada

#### THE CANADIAN MINERALOGIST ON GEOSCIENCEWORLD



In July, *The Canadian Mineralogist* became the 34<sup>th</sup> journal to join GeoScienceWorld (GSW). It can be accessed at http://canmin.geoscienceworld.org or via the GeoScienceWorld website www.geoscienceworld.org. GSW is an online aggregate of high-impact, peer-reviewed journals in the Earth sciences. They are indexed, linked, and interoperable with the GeoRef bibliographic database. Free 30-day trials to GSW can be set up by contacting a sales agent (www.geoscienceworld.org/subscriptions/subscribe.dtl).

# FRONTIERS MEETING – JUNE 25–28, 2007, CAMBRIDGE, ENGLAND

The first-ever joint meeting of the Mineralogical Society, the Mineralogical Society of America, the Mineralogical Association of Canada, and the Société Française de Minéralogie et de Cristallographie was a great success. Congratulations are in order for Michael Carpenter and his team: everything ran smoothly, the social events were fun, and the technical program was outstanding. MAC sponsored two plenary speakers at the event—Anthony Williams-Jones and Peter Burns both gave excellent talks—and presented two of its medals at the gala dinner. See a full report on pages 362 and 363.

#### **COUNCIL MEETING HIGHLIGHTS**

Council met in the Department of Earth Sciences at the University of Cambridge on Monday June 25. We welcomed Ron Peterson, who was to take over as finance chair following Iain Samson's retirement. This was Iain's last meeting as finance chair. Even though we will miss him, we understand that after nine years in that position, he wishes to move on. A special thanks to Iain for his vision and his careful budget planning during these years.

- The Association ended 2006 with a net income of \$67,642. After the significant loss of 2005, our financial picture now looks brighter. However, the strength of the Canadian dollar continues to be a challenge as about 75% of our income is received in US dollars. For many years we benefited from favourable exchange rates. At the time of writing, the Canadian dollar has reached parity with the U.S. dollar.
- Council voted to keep membership fees at their current level for next year. Institutional subscriptions will remain at \$495 (\$425 for electronic access only). Individual memberships will be as follows: ordinary membership (\$55 for membership only; \$85 for membership and electronic access to the journal; and \$105 for membership, print, and electronic access). Check our website for student and retired member rates.
- The Past-Presidents' Medal, our highest award, will be renamed the Peacock Medal in honor of Professor Martin A. Peacock (1898–1950), a professor at the University of Toronto and the "father of modern mineralogy in Canada."

- A committee under the direction of Kurt Kyser is currently revising our by-laws and should submit its report in November.
- Council voted to change service provider for its electronic access to *The Canadian Mineralogist*. The move to HighWire Press will allow us to provide a mirror site to the content we have on GeoScienceWorld, hence a much improved electronic access.

#### **RON PETERSON, NEW FINANCE CHAIR**



Ron Peterson is a professor of mineralogy at Queen's University, Kingston, Canada. He studies metal-bearing sulfates that occur in nature and in mine wastes. These investigations involve both laboratory and field work. Ron is also interested in the sulfate minerals that are thought to occur on the surface of Mars and has recently described a new mineral, meridianiite (MgSO<sub>4</sub>•11H<sub>2</sub>O) that may exist on the red planet. He was a MAC councilor from 2000 to 2002.

#### YELLOWKNIFE GAC-MAC 2007

Everyone who attended the Yellowknife conference from May 23 to 25 came back enthusiastic and praising the organization of the meeting. Our sincere thanks to the organizing committee! Our short course was very successful. Many thanks to Lee Groat, who organized this short course, and the team of speakers he assembled.

#### **QUÉBEC 2008**

Our next annual meeting will be held jointly with the Geological Association of Canada, the Society of Economic Geologists (SEG), and the Society for Geology Applied to Ore Deposits (SGA) in Quebec City, from May 26 to 28. Because 2008 is the 400<sup>th</sup> anniversary of Quebec City, more tourists than usual are expected, so we urge you to make tentative hotel reservations as soon as possible, even if your plans are not firmed up yet. MAC will sponsor two pre-conference short courses: one on uranium and another on migmatites. Check the program at www.quebec2008.net.

# CALL FOR NOMINATIONS FOR THE 2008 MINERALOGICAL ASSOCIATION OF CANADA AWARDS

#### YOUNG SCIENTIST AWARD

This award is given to a young scientist who has made a significant international research contribution in a promising start to a scientific career. The scientist must be 40 or younger at the time of the award. He or she must be a Canadian working anywhere in the world or a scientist of any nationality working in Canada. The research areas include mineralogy, crystallography, petrology, geochemistry, mineral deposits, and related fields of study.

#### PEACOCK MEDAL

The Peacock Medal (formerly known as the Past-Presidents' Medal) is awarded to a scientist who has made outstanding contributions to the mineralogical sciences in Canada. There is no restriction regarding nationality or residency. The medal is intended to recognize the breadth and universality of these contributions in mineralogy, applied mineralogy, petrology, crystallography, geochemistry, or the study of mineral deposits, rather than in a narrow area of expertise.

#### **BERRY MEDAL**

The Leonard G. Berry Medal is awarded annually for distinguished service to the Association. The award recognizes significant service in one or more areas, including leadership and long-term service in an elected or appointed office. The medal is named after Leonard G. Berry (1914–1982), a founding member of MAC, editor of *The Canadian Mineralogist* and its predecessor for 25 years, and first winner of MAC's Past-Presidents' Medal

#### Please submit your nominations by December 31, 2007.

Check our website for additional details:

www.mineralogicalassociation.ca

#### **MAC SHORT COURSE ON THE GEOLOGY OF GEM DEPOSITS**

The Mineralogical Association of Canada's short course on the geology of gem deposits took place May 21-22, immediately prior to the GAC-MAC joint annual meeting, in Yellowknife, in Canada's Northwest Territories. Registrants (16 professional and 8 students) were from Canada, the United States, France, Portugal, Russia, and Sweden.

The short course began with introductory remarks by Lee Groat of the University of British Columbia. He opened with the statement that gem deposits are rare because the geological conditions needed to produce them are exceptional and therefore worthy of scientific study. Groat then noted that although diamond production in 2004 was an estimated 156 million carats (worth US\$11.8 billion) and the world colored gem trade in 2001 was worth about US\$6 billion, traditional sources are becoming depleted. Despite this situation, little has been done to develop exploration protocols for gem materials except for diamond, and this is another area worthy of study.

Thomas Stachel (University of Alberta) then spoke on diamond deposits, covering their origin, the various "types" of diamond, stable isotopes, mineral inclusions, and inclusion-based geothermometry. Gaston Giuliani (IRD and CRPG/CNRS) gave a presentation on the geology and genesis of gem corundum (ruby and sapphire) deposits. He covered primary magmatic, metamorphic, and placer deposits, and spoke about the use of oxygen isotopes to determine the origin of individual stones.

After lunch, Lee Groat spoke on the crystal chemistry of emerald, the origin of emerald deposits, and the use of stable isotopes, perhaps complemented by trace element compositions, in determining the origin of emerald deposits and of individual stones. Next up was David Turner (UBC),

who talked about non-emerald gem beryls—aquamarine, heliodor, morganite, pezzottaite, red beryl, and stoppaniite. The recently discovered True Blue aquamarine occurrence in Yukon Territory, where beryl occurs in quartz veins filling tension gashes, was described in detail. The day ended with considerable discussion on a number of topics. Dinner was at Bullock's Bistro, where the entrée of choice was musk ox.

Day two began with a presentation by Dan Marshall (Simon Fraser University) on chrysoberyl, tanzanite, tsavorite, and topaz deposits. He was followed by William "Skip" Simmons (University of New Orleans), who spoke on pegmatites, the main source of more than 40 different gem minerals. Skip began with a definition of "pegmatite," then followed up with a discussion of classification, zoning, the importance of volatiles, cooling histories, and gem-bearing pockets. He finished by discussing the minerals of the beryl and tourmaline groups in pegmatites.

George Harlow spoke on jade, beginning with a brief etymology of the word, followed by discussion of the varieties, lithological settings, conditions of formation, and isotopic geochemistry. The final talk, by Brad Wilson of Alpine Gems Ltd., was on colored gemstones in Canada. After his talk Brad showed some of the samples he has collected and faceted stones he has fashioned over the past 25 years. The short course ended with more discussion, which continued into the evening at one of the local bars.



Short Course Series Volume 37, Geology of Gem Deposits, available online at Lee A. Groat www.mineralogicalassociation.ca/.

the Gem and Mineral Show.

## Mineralogical Association of Canada

### STUDENT TRAVEL/RESEARCH GRANTS

'he 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, 2008

## Interested in the Critical Zone?

We have publications for you! Order online at

www.mineralogicalassociation.ca





- SP3 Atlas of Micromorphology of Mineral Alteration and Weathering – Jean Delvigne, 1997 – A classic
- SC 34 Mercury: Sources, Measurements, Cycles and Effects Editors: Michael B. Parsons and Jeanne B. Percival
- SC30 Synchrotron Radiation Editors: Grant S. Henderson and Don R. Baker
- SC25 Biological-Mineralogical Interactions - Editors: Julie M. McIntosh and Lee A. Groat

ELEMENTS OCTOBER 2007