



# Mineralogical Association of Canada

[www.mineralogicalassociation.ca](http://www.mineralogicalassociation.ca)

## FROM THE PRESIDENT



### *Hello Solid-State Geochemistry*

Rod Ewing, past-president of the Mineralogical Society of America and founding editor of *Elements*, provided a provocative Triple Point in the most recent past issue of *Elements* (4: 205). Read his article for details, but Rod observes that the geochemical research community is vibrant and populated with many young scientists and students, whereas for some decades the discipline of mineralogy has declined in population, stature, and impact. Few graduate students and young researchers identify themselves as mineralogists today, and even fewer are likely to in the coming years.

Why has mineralogy as a discipline declined while a broader discipline that actually encompasses it, geochemistry, has flourished? One could argue that mineralogy is simply too narrow and too sparsely populated academically to have critical mass—as certainly seems to be the case today. As Rod noted in Triple Point, mineralogy is not a subdiscipline of geology in the ongoing National Research Council ranking of graduate programs in the United States. Recall the electronic hand-wringing on the MSA list serve when universities requested that faculty engage in the NRC data-gathering exercise and mineralogists realized their field does not exist! Perusal of the U.S. National Science Foundation website confirms there is no program dedicated to funding mineralogical research, but there are at least two covering geochemistry. Given that research universities demand that faculty bring in ever increasing levels of research funds and advise more graduate students, the future for academic mineralogy is clear in the United States. Or, at least, it is clear that young academics at research universities are not going to self-identify as mineralogists—so how about solid-state geochemists?

The marginalization of mineralogy as a scientific discipline is a simple reality of the evolution of science. Minerals that make up the bulk of Earth's crust have largely been characterized and are reasonably well understood. Sure, there are still fascinating research problems in mineralogy, but think of what has been accomplished. Mineralogists created the knowledge that underpins geochemistry and petrology. The discipline of mineralogy is a victim of its own success.

What is the future of mineralogical research in a world where funding agencies demand transformational research and where mineralogy is maturing? Rod may have a solution in that he plans to be a geochemist of solids. I do too, but I will call myself a solid-state geochemist, a materials scientist, or an inorganic chemist, whichever suits the current purpose. Those of us who grew up (or are growing up) as mineralogists have a scientific tool kit that makes us at home in the interdisciplinary arena of materials research. Our minds have been developed to think about highly complex solids in multiple dimensions, and we have created and adapted a wide range of state-of-the-art experimental and theoretical approaches.

Rod and I are moving forward as solid-state geochemists, but not much will change in how we do our science and train our students. An undergraduate course in mineralogy is a better place than most to start to learn about the complexities of the solid state, and graduate studies in solid-state geochemistry will continue the tradition of applying complex theories and techniques to important solids. In fact, a new generation of solid-state geochemists will go on to contribute to the solutions of some of science's and society's most vexing problems.

**Peter C. Burns**, University of Notre Dame  
MAC President

## 2008–2009 UNDERGRADUATE AWARDS

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 one-year subscription to *Elements* and the online version of *The Canadian Mineralogist*. We congratulate the 2008–2009 awardees.

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## CALL FOR NOMINATIONS 2010 MINERALOGICAL ASSOCIATION OF CANADA AWARDS

### 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 recognizes 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.

### 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.

### 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 for 25 years of *The Canadian Mineralogist* and its predecessor, and first winner of MAC's Past-Presidents' Medal.

Please submit your nominations by December 31, 2009. Check our website, [www.mineralogicalassociation.ca](http://www.mineralogicalassociation.ca), for additional details.

## AESRC 2009

The 8<sup>th</sup> Advances in Earth Science Research Conference (AESRC) was held March 27–28 at Queen's University in Kingston, Ontario. The conference is designed to showcase undergraduate and graduate student research in the Earth sciences. Over 50 delegates from Queen's University, the University of Ottawa, and Carleton University took part in the conference. They attended numerous talks, poster presentations, and social activities, making many new friends in the process. The event was a huge success thanks to the countless volunteer hours contributed by numerous graduate students from Queen's University.

The talks covered nearly the entire spectrum of the Earth sciences. Subjects included studies of forest rings in northern Ontario, the composition of the Bermuda shelf wall, and the genesis of precious- and base-metal mineralization in Mexico. Highlights of the conference were keynote talks by esteemed speakers from Queen's University. Dr. Mark Diederichs started with a fantastic talk entitled "Tunnelling at Niagara—Past and Present." Dr. Herb Helmstaedt followed with an informative talk titled "Diamonds in Canada—Where Are They, How Were They Discovered, and What Is the Future Outlook?" Dr. Noel James wrapped up the keynote presentations with a talk entitled "The Beauty of Being Cool: Carbonate Sedimentation and the Southern Ocean."

The conference was also a success in bringing students and industry together. The conference was attended by delegates from the Mineralogical Association of Canada, Imperial Oil Canada, and the Canadian Society of Petroleum Geologists. Students were able to meet with these representatives in a more casual atmosphere, including an evening wine-and-cheese event and a conference dinner held at the Kingston Brew Pub.

The organizing committee of the 2009 AESRC would like to thank all the sponsors, including the Mineralogical Association of Canada, for their support in making this year's conference a great success.

## Mineralogical Association of Canada

## STUDENT TRAVEL/RESEARCH GRANTS

The Mineralogical Association of Canada awards travel and research grants to assist honors undergraduate and graduate students in the mineral sciences to:

- Present their research at a conference
- Visit a facility, laboratory, or field area to gather data for their research
- Pay for analyses that cannot be acquired at their university or equipment for an independent research project

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

For more information, see [www.mineralogicalassociation.ca](http://www.mineralogicalassociation.ca).

**Deadline to apply: January 15, 2010**

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