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Mineralogical Association of Canada

FROM THE PRESIDENT

The past year has been a banner year for the Mineralogical Association of Canada. Since 1990, the MAC business office had been in Ottawa under the direction of Fran and Bob Pinard, and we are indebted to them for their outstanding contributions to MAC. In the past few years, part of the office was in Quebec City under the direction of Pierrette Tremblay. At the end of 2006, the two offices combined into a single business office in Quebec City under the very competent direction of Pierrette Tremblay and Johanne Caron. The office is graciously supplied by the Québec office of the Geological Survey of Canada and the Institut National de la Recherche Scientifique—federal and provincial organizations respectively—who together have donated space and resources to the MAC. In part, this donation reflects the high regard that government Earth science organizations have for the MAC, its publications, and its associated societies.

The move of the MAC business office to Quebec City was completed last fall, and everything is running efficiently and smoothly. If you have not already done so, I urge you to renew your membership in MAC, and if you are not a member please consider joining to receive all the benefits we provide to our members. These benefits include *The Canadian Mineralogist*, discounts on our special publications and short course volumes, the new and wonderful magazine *Elements*, and discounts to a variety of meetings that MAC sponsors.

Many on the MAC Executive see the expansion of mineralogy into a diversity of new disciplines as strategic in advancing science, particularly Earth science. Mineralogy sits at the interface between geology, biology, physics, and chemistry, and many researchers dance around this interface in their use of mineralogy. MAC would like to highlight the role mineralogy plays at these interfaces. MAC's future efforts will include sponsoring meetings that involve these disciplines and expanding our publications to include them. It is an exciting time for mineralogy, and we see MAC and our sister mineralogical societies as playing a pivotal role in many different fields of science.

Kurt Kyser, President
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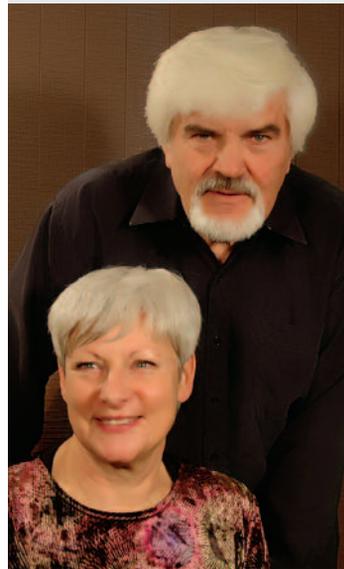
PINCH MEDAL TO HORVÁTH AND PFENNINGER-HORVÁTH

The Pinch medal is awarded every other year since 2001 to recognize major and sustained contributions to the advancement of mineralogy by members of the collector–dealer community. The medal is named for William Wallace Pinch of Rochester, New York, in recognition of his enormous and selfless contribu-

tions to mineralogy. The Mineralogical Association of Canada awarded the 2007 Pinch Medal to László (Les) Horváth and Elsa Pfenninger-Horváth at the 2007 Tucson Gem and Mineral Show.

The Horváths are passionate amateur mineralogists who have had a lasting impact on the development of the mineralogical

sciences in Canada and abroad. Les and Elsa have been heavily involved in the mineralogy of the Montereian alkaline igneous complexes for over thirty years. At Mont Saint-Hilaire, for example, they were the first to find more than 60 of the 365 species known from the locality, including five new mineral species discovered by themselves and two others in cooperation with other colleagues. The dedication of the species horváthite-(Y), discovered in the Poudrette pegmatite dike, recognizes their long-term involvement and impact.



László Horváth and Elsa Pfenninger-Horváth, 2007 Pinch Medalists

Together, the Horváths have systematically documented the mineralogy and paragenetic associations of Mont Saint-Hilaire, the Francon quarry in Montreal, and the Varennes quarry in Saint-Amable, as well as many other Quebec localities. All this knowledge has been chronicled in major publications in *The Mineralogical Record*. Spinoff articles have appeared in *Lapis*, *Rivista Mineralogica Italiana*, and *Mineralien Welt*. The Horváths have generously made available important samples from their collection to researchers worldwide. What sets them apart is the thorough documentation that comes with the samples, including complete information on paragenesis, location within an outcrop, and position with respect to contacts.

Their vast mineralogical knowledge is not the product

of advanced degrees in the Earth sciences at well-established universities. Les studied metallurgy in Hungary and metallurgy and management in Canada. He was born in Hungary in 1937, and came to Canada at age 20 at a time of great upheaval in his country. Elsa was born in Switzerland, arrived in Canada in 1968, and worked for many years as a research technician in the Department of Biochemistry at McGill University. Both are now retired, which allows them to focus on their passion—mineralogy, especially that of alkaline complexes.

Les is responsible for two “public-service-type” items hosted on the MAC website under the heading “Contributions to Canadian Mineralogy.” The most important is a catalog, annually updated, of mineral species occurring in Canada, each entry complete with a reference.

Les is the author of *Mineral Species First Discovered in Canada*, Special Publication 6 of *The Canadian Mineralogist*, published in 2003. Les insisted on making the book a useful original contribution in many ways. First, it covers the development of the mineralogical sciences in Canada right from the beginning. Second, Les (and Elsa) visited as many type localities as possible to improve the first-reported coordinates with their GPS device. Third, Les acquired catalog numbers of all holotype and cotype specimens in the major museums of the world, so that future generations would not waste time tracking down material for further study. Finally, he acquired photos and biographical details about all people honored by having a mineral species named after them.

Elsa and Les Horváth have given a great boost to mineralogy in Canada, and indeed worldwide. Both are still very active, as they extend their activities to the ophiolite belt of southern Quebec, in particular in the Asbestos and Thetford Mines area. We can look forward to more valuable contributions from the Horváths to the advancement of mineralogy on the national and international scenes.

Robert F. Martin

2006 STUDENT TRAVEL AND RESEARCH AWARDS



MAC awarded eight travel and research grants to students in 2006 for a total of \$5595. We would like to recognize these deserving students by presenting highlights of their reports (full reports available on our website).

Laurel Basciano received a research grant to enable the purchase of a Parr pressure bomb. Laurel is currently working on the mineralogy and crystal chemistry of minerals of the jarosite group for her PhD at Queen's University, Kingston, ON. To synthesize end members of this mineral group, samples were ion-exchanged at 2000C in the Parr pressure bomb. This exchange was successful, and samples were analyzed using X-ray diffraction and Rietveld refinement to determine unit cell dimensions and atomic coordinates. Knowing how these minerals control metals in mine waste settings or in industrial processes will help us understand and remediate polluted sites.

Beverley C. Coldwell attended the MAC short course on melt inclusions in plutonic rocks, held in Montreal prior to the GAC-MAC meeting in May 2006. Her PhD research at Kingston University, UK, focuses on the generation of adakitic magmas in Peru and on the tectonic setting of the melt source region. To unravel this mystery, she is studying melt inclusions found in quartz phenocrysts in an adakitic

batholith and a related ignimbrite deposit. The short course enabled her to meet many of the scientists who have made significant progress in the field. She came away with new ideas on how to approach the problems she was encountering, as well as a much clearer understanding of how to interpret her observations.

Skya Fawcett travelled to the Argonne National Laboratory in Chicago, IL, to determine the oxidation state of Sb model compounds (sulfides, oxides, sulfosalts, and metal), mine waste material, and sediment, using the synchrotron light source. As part of her PhD thesis at Queen's University, she has sampled surface water, sediment pore water, and the associated mining-impacted sediments near the Giant Mine near Yellowknife, NWT. She was able to determine that the Sb(V), Sb(III), and Sb(0) absorption edges are distinguishable (i.e. the resolution is adequate). In addition, preliminary observations suggest the presence of Sb(III) in the environmental samples. This work will be continued in 2007 at the Canadian Light Source.

Nils Peterson, MSc student at the University of British Columbia (UBC), traveled to Dr. Penny King's lab at the University of Western Ontario (UWO) for one week in June 2006. He brought samples of spinel-bearing mantle

xenoliths from the British Columbia Cordillera to find hydroxyl and quantify the water content of the peridotites. There he became acquainted with the operation of and particular methods used on the FTIR spectrometer. Even more exciting was the discovery of quantifiable amounts of hydroxyl in the olivine. Using what he learned at UWO, he is pursuing the application of these methods at UBC.

Geneviève Robert attended the 11th Experimental Mineralogy, Petrology and Geochemistry Conference, in Bristol, United Kingdom, in September 2006. The EMPG offered her a chance to interact with experimentalists from different fields of expertise. She learned a great deal from the many presentations by prominent researchers and came back with many ideas for her project. As part of her MSc at the University of British Columbia, she studies the rheological behavior of porous volcanic rocks under both anhydrous and hydrous conditions. She has designed, built, and calibrated a new experimental apparatus capable of holding fluid pressures relevant to volcanologic processes. At the conference, she presented preliminary results from the new experimental apparatus, as well as its design and calibration.

Heather Wilson received a travel grant to present her research as a honours student at the University of Calgary at the 2006 GAC-MAC conference in Montreal. She gave her talk, "Physical Properties as a Means for Investigating Changes in the Dynamics of the 2360 BP Eruption of Mount Meager, BC," to an audience of interested and enthusiastic researchers. She reports that subsequent presentations have been easier thanks to the confidence she gained from her experience at the GAC-MAC!

Siobhan (Sasha) A. Wilson, University of British Columbia, received a research grant to fund some analytical work towards determining the crystal structure of dypingite. Knowledge of the crystal structure of dypingite will enable one to quantify the amount of natural and enhanced carbon sequestration occurring in ultramafic mine tailings and to account for it in terms of the global carbon budget. See *Elements* 2: 318.

Heather Wolczanski presented the results of her honours thesis at Acadia University at the 2006 GAC-MAC meeting in Montreal. She reports that the poster session was fun and challenging. Her poster, entitled "Petrology and Regional Tectonic Implications of The Wolves Islands, Offshore Southwest New Brunswick," won third place in the Jérôme H. Remick III Poster Competition.

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