

Mineralogical Association of Canada

www.mineralogicalassociation.ca

PUBLICATION NEWS

2012 Thematic Issues of The Canadian Mineralogist

Two exceptional individuals, Emil Makovicky and Petr Černý, will be given a tribute in volume 50 of *The Canadian Mineralogist*. They have in common their decision to leave their country of origin, Czechoslovakia, in the late sixties, and to come to Canada to pursue their ambitions in the Earth sciences. Both Emil and Petr have gone on to be leaders in their respective fields. In these days of virtual thematic issues, I planned real *festschrifts* that could be bound and presented to the honorees and their families at an appropriate momentous occasion.



Emil Makovicky chose McGill University in Montreal to gain proficiency in the area of structural crystallography. He had begun his academic career at Comenius University in Bratislava fifty years ago. For his PhD thesis (1970), he worked on the very challenging structure of the sulfosalt *cylindrite*, under the guidance of Prof. Alfred Frueh Jr. Dr. Frueh was then at the forefront of crystallographic studies of complex sulfides and silicates showing non-Bragg reflections. By today's standards, gathering data with the film techniques then available was very laborious. Progress was slow, but this allowed Emil to acquire a solid grounding with which to

tackle future systematic investigations of the sulfosalts. He went on to define homologous series important in the common sulfosalts, to propose a modular classification of sulfosalts, and to focus on incommensurate misfit-type structures. He teamed up with Milota, his wife, to establish the solubility of platinum-group elements in common sulfides. He spent his academic career at the University of Copenhagen as Professor of Crystallography and Mineralogy, and chose to publish many of his authoritative articles in The Canadian Mineralogist. In this way, Emil contributed significantly to the strength of this journal in he mineralogy of ores. Thus it was natural that his colleagues Tonci Balić-Žunić and Yves Moëlo came to me with a proposal for a thematic issue as a tribute to Emil on the occasion of his "retirement." The illustration chosen by Emil for the alluring cover of the April 2012 issue is a reflection of another aspect of Emil's fascination with symmetry operations, the ones displayed in ancient Islamic art. The example chosen was traced from a mosque in Maragha, Iran, and dates back to the late tenth century.



Petr Černý had a PhD from the Geological Institute of the Czech Academy of Science in Prague when he came to the University of Manitoba as a postdoctoral fellow. For his thesis (1966), he studied two granitic pegmatites from Věžná, in what is now the Czech Republic. Arriving in Winnipeg in 1968, Petr wasted no time in getting familiar with the enormous Tanco granitic pegmatite, then, as now, exploited for tantalum, cesium, and lithium. To date, Černý has published 46 articles, chapters, and reports dealing specifically with the Tanco mine, and many others in which the Tanco pegmatite is assessed in

relation to other rare-element deposits around the world. Petr's impact lies in the broad area of the mineralogy, petrology, and geochemistry of granitic pegmatites. Many of his contributions have appeared in *The Canadian Mineralogist* and have contributed to the strength of the journal in this field. His work on Tanco culminated with a definitive statement of the bulk composition of the Tanco pegmatite, by now

clearly acknowledged as the best-studied zoned pegmatite in the world. He organized a memorable short course on granitic pegmatites for the MAC in 1978. In 1990, he wrote about the anatomy of a pegmatite and about the influence of tectonic forces on the processes at work. In view of his strong focus and prolific output on matters pegmatitic, it was fitting that the organizers of the PEG2011 conference, Miguel Á. Galliski and María Florencia Márquez-Zavalía, dedicated the meeting to Petr. The response to a call for contributions to a thematic issue of The Canadian Mineralogist designed as a tribute to Petr was immediate and overwhelming, to the extent that I proposed to split the tribute into two separate issues, with Miguel Galliski, David London, and Milan Novák as guest editors. The August issue (volume 50, part 4) will be a 375-page festschrift covering mineralogical, petrological, and geochemical themes. The second installment will be our December 2012 issue. We anticipate presenting both issues to Petr in May 2013, at the MAC luncheon during the GAC-MAC meeting in Winnipeg. A special session in honor of Petr Černý and an excursion to the famous Tanco pegmatite will be feature attractions.

> Robert F. Martin, Editor The Canadian Mineralogist

Quantitative Mineralogy and Microanalysis of Sediments and Sedimentary Rocks



A two-day short course entitled Quantitative Mineralogy and Microanalysis of Sediments and Sedimentary Rocks was held on May 25–26, 2012, immediately prior to the Geological Association of Canada– Mineralogical Association of Canada joint annual meeting in St. John's, Newfoundland. The course was presented to some two dozen attendees by an accomplished group of international experts in the fields of mineralogy, analytical geochemistry, and exploration geology. It included lectures, discussion, and a tour of the analytical geochemistry labs for microanalysis in the Bruneau Centre for Research and Innovation at Memorial

University of Newfoundland. Funding for the course was received from the MAC, Memorial University of Newfoundland, Apatite to Zircon Inc., Isomass Scientific Inc., and Bruker Ltd.

The course introduced participants to a variety of analytical instrumentation and methods for understanding the mineralogy of sediments and sedimentary rocks. Instructors demonstrated how these techniques are being used to address a variety of topics in sedimentary geology, such as quantitative mapping of clastic and diagenetic minerals at various scales; determining the chemistry of organic matter, nanoporosity, nanopermeability, 3D grain size, and shape distribution in coarse- and fine-grained sedimentary rocks; documenting changes in paleofluid composition during growth of clays and carbonate cements; and characterizing reactive and bioavailable metals in minerals of contaminated environmental media. A particular application of many of the techniques presented was mineral provenance for paleodrainage models, stratigraphic correlation, and petroleum and mineral exploration. These studies rely on quantitative measurements of the abundances, morphology, and chemical and isotopic compositions of detrital grains in sedimentary systems, particularly refractory "heavy" minerals. Uranium-lead geochronology of zircon and apatite, the hafnium isotope composition of zircon, the lead isotope composition of feldspar, and fission track dating of apatite were explained in some detail.

An attractive, 299-page short course volume summarizing all the technical information covered in the course is available from the MAC at www. mineralogicalassociation.ca/index.php?p=25#SC42.

Paul Sylvester

Memorial University of Newfoundland, Canada

CALL FOR NOMINATIONS 2013 MAC AWARDS

Peacock Medal

The Peacock 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.

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' (now Peacock) Medal.

Pinch Medal

The Pinch Medal has been 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 contributions to mineralogy through the identification of ideal specimens for study and through his generosity in making them available to the academic community.

Please submit your nominations by December 31, 2012 (November 30 for the Pinch Medal). Check our website, www.mineralogicalassociation.ca, for additional details.

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 on their travel or research for possible publication by MAC.

For more information, see www.mineralogicalassociation.ca.

Deadline to apply: January 15, 2013

Uranium: Cradle to Grave



May 20-21, 2013

ORGANIZERS Peter C. Burns and Ginger E. Sigmon University of Notre Dame

The focus of this short course, which will immediately precede the GAC-MAC meeting, will be the many aspects of uranium, an element that changed the course of the world like no other. Content will span the mineralogy, geochemistry, and ore deposits of uranium, and will include nuclear waste challenges and solutions, weapons proliferation, and nuclear forensics for attribution and nuclear security.

Interested in Rare Earth Elements? We have publications for you!



ELEMENTS

OCTOBER 2012