



# Mineralogical Association of Canada

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

## HAWLEY MEDAL WINNERS

The Hawley Medal is awarded to the best paper published in the *Canadian Mineralogist*. The 2016 award went to Sarah C. Gordon and Andrew M. McDonald for the following paper:

"A STUDY OF THE COMPOSITION, DISTRIBUTION, AND GENESIS OF PYRRHOTITE IN THE COPPER CLIFF OFFSET, SUDBURY, ONTARIO," *Canadian Mineralogist* Vol. 53, part 5, September 2015.

This paper describes how different analytical approaches could be combined to identify and quantify pyrrhotite polytypes. In addition, the authors show how powder X-ray diffraction can be applied to evaluate the ratio between two polytypes and use polytype distribution within geological units to explore different ore-body types. As such, this paper is truly "applied mineralogy": it combines everything from structure to trace element data. The authors are well aware of some problems associated with the use of quantitative Rietveld refinements. To get around these, they have analysed the same samples multiple times and compared the results with other techniques, something that has allowed them to estimate the actual uncertainty of their analyses. This is something that is hardly ever done: many researchers simply rely on uncertainties provided by the software, without checking it against the real world.



**Sarah C. Gordon** holds an MSc in geology from Laurentian University (Canada), where she studied hexagonal and monoclinic pyrrhotite from the Copper Cliff Offset Dike in Sudbury, Ontario (Canada). She attended the University of New Brunswick [UNB] (Canada) for her Bachelor of Science (Hon.) and completed an undergraduate thesis on shoshonitic lamprophyres from Mali (West Africa). She has been the recipient of several entrance scholarships, as well as UNB's

Tech Scholarship. She won the Frank Shea Memorial Award for the best paper presented at the Atlantic Universities Geoscience Conference in 2010. Since 2008, she has been working with industry and government surveys in Canada, including Nunavut, Ontario, Manitoba and New Brunswick. She is currently working with TerraX Minerals in the Yellowknife Greenstone Belt (Slave Craton, Northwest Territories, Canada) and is hoping to begin a PhD project looking at gold mineralization throughout that belt.



**Andrew M. McDonald** is an applied mineralogist in the Department of Earth Sciences at Laurentian University (Canada). His background is firmly planted in the crystal chemistry of minerals, which he uses to solve geologically relevant problems, specifically those in the areas of high field strength element (Ti, Zr, Nb) mineralogy, platinum-group minerals and sulfides from magmatic ore deposits. He obtained a BSc (Hons.) from the University of Toronto (1987) and two

postgraduate degrees from Carleton University (MSc in 1989; PhD in 1992). He joined the faculty at Laurentian in 1992 and currently holds the rank of Full Professor there. He volunteers his time with the International Centre for Diffraction Data (Pennsylvania, USA); he is the Canadian member of the International Mineralogical Association Commission on Ore Mineralogy (IMA COM); he was former Associate Editor of the *American Mineralogist* (2010–2013); he has also served as the Vice-Chair of IMA COM (2010–2013) along with serving on the former IMA Commission on the Classification of Minerals (1996–2002). Within the MAC framework he has served as Secretary (2000–2006); was an Associate Editor of the *Canadian Mineralogist* (2006–2009); was

a guest editor for the special volume, "The Mineralogy and Beneficiation of PGM-Cu-Ni Ores" (v49 pt6); served as a member of the Hawley Medal Committee (2012); and was Vice-Chair for the Sudbury 1999 GAC-MAC meeting. He organized the Berry Summer School on Optical Mineralogy with Prof. Jim Nicolls (University of Calgary, Canada), which was held 25–28 May 2014 at the University of Ottawa (Canada).

## 2017 MAC AWARDS – CALL FOR NOMINATIONS

### 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 the awardee's contributions to 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 during the early part of their scientific career. The scientist will have received his/her PhD not more than 15 years before 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, or related fields of study.

### Leonard G. 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 an 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.

Nominations for the 2017 medals and award are to be submitted to **Ron C. Peterson** (Department of Geological Sciences and Geological Engineering, Queen's University, 99 University Avenue, Kingston ON K7L 3N6, Canada; e-mail: [peterson@queensu.ca](mailto:peterson@queensu.ca)).

Please submit your nominations by 31 December 2016. Check our website, [www.mineralogicalassociation.ca](http://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 for equipment needed for an independent research project.

The maximum grant value is CDN\$1,200 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.

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

**Deadline to apply: 15 January 2017**