



Mineralogical Association of Canada

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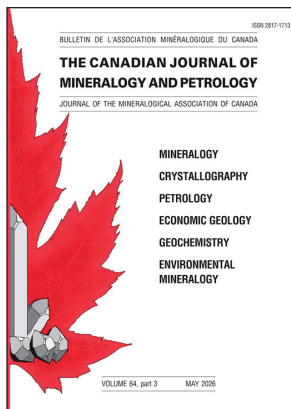
The May issue of *The Canadian Journal of Mineralogy and Petrology (CJMP)*, the latest to hit the magazine racks, starts us off with two papers with direct economic mineral exploration application. Rebecca Morris and colleagues from the University of Victoria (Canada) provide functional guidelines for the collection of trace element data from magnetites as a provenancing vector tool in porphyry copper deposit exploration. Complementing this, research from the Memorial University of Newfoundland (Canada) and the Gemological Institute of America (California, USA) examines how the identification of mineral inclusions and host chemistry in subeconomic corundum can be used to provenance economic corundum (sapphires) of volcanogenic to subvolcanic origin.

Having applied our minds to mineral exploration, we then shift gears to mineral crystallography and chemistry. The disordered layer structure of the aluminum phosphate hydrate mineral vashegyite is elucidated by researchers from Australia and Czechia. Researchers from Saskatchewan and China assess the valence states and site occupancies of arsenic, important as a soil contaminant risk due to weathering of the carbonate skarn or granofels mineral vesuvianite ($X_{19}Y_{13}T_{10-5}Z_{18}O_{68}W_{10}$, or alternatively $Ca_{10}(Mg, Fe)_2Al_4(SiO_4)_5(Si_2O_7)_2(OH, F)_4$, which is not a mineral formula you would welcome encountering on an undergrad mineralogy exam). The ever-fecund Redmond Mine in North Carolina (USA) delivers a new secondary sulfate mineral, sigogglinite, a lead-zinc sulfate hydroxide, the 11th new mineral to date from this deposit. Finally, we present two new glycolate minerals, domitrovicite and puschrIDGEITE, with one featuring zinc, the other manganese, respectively, from the Tucson area, Arizona (USA).



Not a cross section of a banana, because this is a mineralogical and petrological journal, and we're not writing this on an empty stomach. This is in fact vashegyite, $Al_5(PO_4)_4(OH)_3(H_2O)_7 \cdot nH_2O$, $n \sim 9$, from Chvaletice, in Czechia, as featured by Grey et al. in this issue of the *CJMP*.

Our most recently read papers continue to be **Trace Element Characteristics of Tourmaline in Porphyry Cu Systems: Development and Application To Discrimination** (Beckett-Brown et al., 2023), followed by **Growth and Stability of Stratiform Carrollite ($CuCo_2S_4$) in the Tenke-Fungurume Ore District, Central African Copperbelt** by Von Der Heyden et al. (2024). In terms of putting money where one's mouth is, our most recently cited paper is **Structural Controls on the Origin and Emplacement of Lithium-Bearing Pegmatites** by David Silva and colleagues (2023).



GAC-MAC 2026 HIGHLIGHTS



Fred Ford, Mary Macquistan (Hawley Medal Winner), and Lee A. Groat (Hawley Medal Winner)



Andrew McDonald and Andrew Conly (Berry Medal Winner)



Hawley Medal Winners:
Lee A. Groat and Mary Macquistan



Cathy Nadjawon and Becky Calabakas



Philippe Belley, Lee A. Groat (Peacock Medal Winner), and Tania Martins



Lee A. Groat (Peacock Medal Winner)



2026 Travel Grant Attendees

**APPLY FOR A MAC SCHOLARSHIP AND/OR
MAC TRAVEL & RESEARCH GRANT**
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MAC Scholarship deadline: Nov. 29/2026 Travel/Research Grant deadline: Dec. 20/2026

MAC TRAVEL & RESEARCH WINNERS 2025



Sisara Samaradiwakara is a PhD student in the Department of Geological Sciences at the University of Manitoba, whose research focuses on understanding metal contamination and geochemical behaviour in smelter-impacted environments. Her work combines field sampling with laboratory analyses to understand the geochemical and mineralogical processes by which Pb is released from primary sources, retained within specific soil constituents, and mobilized through the soil solution into water systems. She combines macro-scale environmental measurements with advanced electron microscopic techniques to investigate processes down to the atomic level, offering a multi-scale view of the interconnected release, retention, and mobilization processes, particularly under dynamic, real-world conditions.

Supported by this research grant, she carried out fieldwork in Trail, British Columbia, one of Canada's major smelter-affected regions. During her visit, she collected soil, sediments, and surface water samples across various topographies to examine metal distribution patterns, including wet and dry deposition processes along the valley. These samples are a central part of her PhD research, enhancing understanding of geochemical processes in contaminated environments and aiding in the development of better environmental monitoring and remediation strategies.



Jonathan Spence completed his HBS thesis in May of 2022 at McMaster University (Hamilton, Canada). He is currently a PhD student in the Earth and Atmospheric Sciences department at the University of Alberta (Canada) under the supervision of Dr. Sasha Wilson. He was awarded the MAC travel grant to attend the Goldschmidt 2025 geochemistry conference in Prague, Czechia, where he was invited to present his research on the "Life Cycle Assessment and Techno-Economic Analysis of Enhanced Rock Weathering Deployment." While at the conference, he also convened a session on the use of software tools in geochemical research. This grant was instrumental in allowing Jonathan to attend the Goldschmidt conference, at which he was given insightful feedback and suggestions for his work, as well as making great contacts with other researchers and those working in the carbon capture industry.



Verônica Marcon Rosa completed her BSc at the Federal University of Paraná, in her hometown of Curitiba, Brazil. She is currently a MSc student in environmental mineralogy and geochemistry at the University of Alberta in Canada under the supervision of Dr. Sasha Wilson. She was awarded the MAC Travel Grant to attend the 2025 Japanese Association of Mineralogical Sciences meeting at the University of Yamaguchi, where she presented about her microbially induced carbon dioxide removal experiments on mine tailings. This conference provided Verônica with exposure to global academic trends. Furthermore, it also offered an opportunity to receive expert feedback on her current research experiments, which will significantly benefit her ongoing work.

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The Geological Association of Canada (GAC®) and the Mineralogical Association of Canada (MAC) will be returning to Whitehorse, Yukon for our Joint Annual Meeting from June 13th to 16th, 2027.

<https://event.fourwaves.com/whitehorse2027>

Lowell Forefield, Yukon. Photo by Quinn Worthington.