



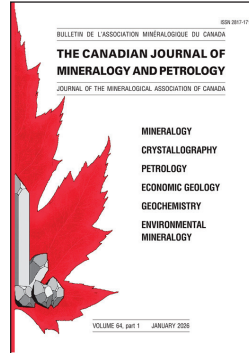
Mineralogical Association of Canada

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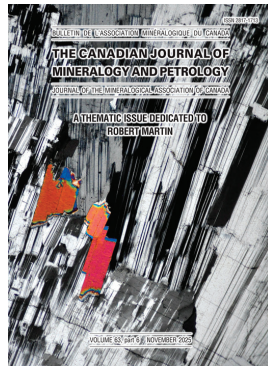
NEWS FROM THE CANADIAN JOURNAL OF MINERALOGY AND PETROLOGY (CJMP)

Highlights

The *Canadian Journal of Mineralogy and Petrology* (formerly *The Canadian Mineralogist*) commences 2026 with something of a tongue-twister, with a review of Oaxaquia, a Grenvillian crustal fragment in Mexico provided by colleagues from Querétaro, Mexico. And if you think it's tricky in Spanish, in the isiXhosa language indigenous to the area from which I write this account, in the Eastern Cape Province of South Africa, both the X and the Q are pronounced as click sounds (different ones). So count your blessings. Furthermore, possibly Oaxaquia might not have been located where previously thought during the assembly of Rodinia. No more spoilers.



Donnelly Archibald reports on a new spodumene occurrence, this one from pegmatites in New Brunswick. Other articles include an assessment of polyphase zinc mineralization from the Grenville in Québec, and titanium mobilization in a carbohydro-thermal pegmatite from British Columbia. Although Ti is notoriously immobile and insoluble, typically, the key here is titanite breakdown. I've said too much. Colleagues from Germany, Czechia, and Austria provide thermodynamic constraints on PGE-arsenosulfides, increasingly important PGE carriers in low-temperature systems in particular. Finally, we are introduced to cloudite, a Ba-Fe³⁺ phosphate sulfate hydroxide mineral of the alunite supergroup. It was named for Thomas Cloud, turn-of-the-century assayer and mineralogist in South Australia.



The November issue, which appeared in between *Elements* press releases, features a thematic issue on pegmatites and pegmatite minerals in honour of Robert (Bob) F. Martin, mineralogist and esteemed former editor of *The Canadian Mineralogist*. This issue content follows on from the PEG conference held in Canada in 2024, and comprises 18 papers on pegmatites and pegmatitic minerals. For the very coarse-grained mineral-lover in your life.

The most read paper in *CJMP* lately is, in fact, the aforementioned newly published examination of **Oaxaquia: A Grenvillian Crustal Fragment in Mexico. A Review and New Approaches**, by Guillermo Espejo-Bautista, Luis Elizondo-Pacheco, Víctor Leal-Cuellar and Luigi A. Solari. In second and third place, staying near the top for at least a year now, are the tourmaline in porphyry Cu systems studies, entitled **Recognizing Tourmaline in Mineralized Porphyry Cu Systems: Textures and Major-Element Chemistry and Trace Element Characteristics of Tourmaline in Porphyry Cu Systems: Development and Application To Discrimination**, both by Christopher Beckett-Brown, Andrew McDonald, and Beth McClenaghan, published in issue 1 of 2023 (vol. 61).

November 2025 MAC Annual General Meeting Highlights

November's 2025 AGM welcomed record attendance and produced thoughtful, valuable input from Members. Staff and Council are now working together to implement these suggestions and further enhance Member benefits and communication. Stay tuned for updates!



BENEFITS OF BECOMING A MAC MEMBER

- 01 Subscription to *Elements Magazine*
- 02 20% discount at MAC Bookstore
- 03 Discounted registration for our annual meeting
- 04 Option to purchase an online subscription to our journal (CJMP)
- 05 Get in on all the latest news with monthly newsletters

Our annual memberships follow the calendar year and are valid from January 1st - December 31st.

Our most cited paper is now **Structural Controls on the Origin and Emplacement of Lithium-Bearing Pegmatites**, by Silva et al. (2023), followed by **On the Attributes of Mineral Paragenetic Modes** (Hazen et al., 2023).

To register for this event, visit: <https://event.fourwaves.com/stjohns2026/registration>.

GAC-MAC 2026
FROM SHORE TO GORE
ST. JOHN'S
MAY 25-28

Mac is happy to welcome you to St. John's for GAC-MAC 2026!

We are excited to co-host the 2026 annual meeting of GAC and MAC in St. John's, Newfoundland and Labrador from May 25th to 28th, 2026. You can expect an exciting scientific program including technical sessions and symposia, as well as a number of pre and post conference field trips, workshops and short courses.

The meeting will be hosted at the **St. John's Convention Centre** in the heart of downtown St. John's, close to hotels, restaurants and bars.

MAC TRAVEL & RESEARCH GRANT WINNERS 2025

Maria O'Neill



Maria O'Neill completed her BSc (Hons) in Earth Sciences at Memorial University of Newfoundland in 2025 under the supervision of Dr. Donnelly Archibald and Dr. Gregory Dunning. Her BSc research is on the age, petrogenesis, and tectonic significance of the Top Pond pluton, southern Newfoundland. Maria was awarded the MAC travel grant to attend the 2024 Atlantic Geoscience Society Colloquium in Dartmouth, Nova Scotia. At the colloquium, she presented her results including petrography,

geochemistry, mineral chemistry, and two new U-Pb zircon dates from the Top Pond pluton. This experience was extremely helpful for Maria as she gained lots of valuable feedback on her honours project and was able to have discussions with many people to help with the understanding and interpretation of her results.

Vanessa Jones



Vanessa Jones is an MSc student at Memorial University's Department of Earth Sciences. She used her MAC Travel Grant to attend the 2025 GAC-MAC-IAH-CNC conference in Ottawa to present the findings from her MSc research in the session on mafic intrusions, associated magmatism, and metallogenesis in anorogenic settings. She also gained valuable knowledge listening to others' presentations and was able to make new connections in the geoscience community. Her project focuses on determining

a possible correlation between the San Pedro and Soubre mafic dyke swarms in western Africa with the Karoo-Ferrar large igneous province. This was accomplished using high-precision U-Pb dating of baddeleyite with TIMS, as well as lithochemical and Nd-Sm and Rb-Sr isotopic analyses. Her results also provide insights about the relationship between LIP magmatism and the breakup of supercontinents.

Sam Ghantous



Sam Ghantous is a MSc student at Memorial University of Newfoundland (Canada) under the supervision of Dr. Eric Thiessen. The MAC research grant allowed him to perform in situ Rb-Sr LA-ICP-MS/MS geochronology of muscovite. This was used to date deformation in recrystallized muscovite, and date the emplacement of pegmatite intrusions. Microstructural characterization of analyzed muscovite was also used to describe mechanisms of Sr mobility in muscovite during heating and finite strain.

His research aims to constrain the timing and kinematics of the Dover Fault—the boundary between the microcontinents of Ganderia and Avalonia in northeastern Newfoundland—and to understand the timing and setting of pegmatites in collisional settings. Muscovite geochronology, in combination with U-Th-Pb zircon and monazite geochronology, was used to constrain a tectonic framework for the Dover Fault. Understanding the age and structural orientation of pegmatite emplacement will lay the framework for further pegmatite exploration in a regional kinematic model.

Serena Formenti



Serena Formenti is a PhD candidate at the University of British Columbia under the supervision of Dominique Weis and Lauren Harrison. She is a 2021 graduate of McMaster University's limited enrollment Integrated Science program (Hamilton, Ontario). Serena's PhD research focuses on the fine-scale structure and long-term evolution of the Hawaiian mantle plume, using high-precision trace element compositions and radiogenic isotopes. She was awarded the MAC travel grant to attend the international

Goldschmidt geochemistry conference in Prague, Czech Republic, to present new research on the effects of acid leaching on submarine basalts. By presenting her work with international scholars, Serena was able to gain insight into the geochemical mechanisms by which submarine basalts are altered and forge new connections with potential collaborators.

Diana Carolina Paz



Diana Carolina Paz is a PhD candidate in Earth and Environmental Sciences at the University of Ottawa, working under the supervision of Dr. Brian O'Driscoll. Her doctoral research investigates the scale, origin, and geodynamic significance of mantle heterogeneities preserved in the Bay of Islands Ophiolite Complex (BOIC) in Newfoundland. By integrating whole-rock major and trace element geochemistry with mineral chemistry, Re-Os isotopic systematics, and highly siderophile element (HSE)

abundances, her work aims to (1) quantify chemical and isotopic variations within and between mantle domains using a systematic meter-scale grid-based sampling strategy, (2) apply high-precision Re-Os-HSE geochemistry to reconstruct the melting, depletion, and metasomatic history of the mantle section, and (3) combine mineralogical and geochemical data with petrographic observations to constrain the geometry, scale, and evolution of mantle heterogeneities. This multi-scale approach provides a novel framework for assessing mantle variability from the mineral to the lithospheric scale.

The MAC Student Research Grant supported a key analytical phase of the project by funding laser-ablation ICP-MS analyses of chromite, olivine, orthopyroxene, and clinopyroxene from the North Arm Mountain massif. These in situ trace-element measurements yield sensitive indicators of mantle melting reactions (e.g., Ti, Al systematics), melt-rock interaction, and cryptic metasomatism not resolvable through whole-rock data alone. Combined with existing Re-Os-HSE datasets, the new mineral-scale information enhances interpretations of mantle residue evolution and domain-scale variability in the BOIC.

Support from MAC significantly increased the analytical resolution of the project and strengthened Carolina's technical training in laser-ablation microanalysis and isotope geochemistry.