



## MAC SPONSORED EVENTS AT THE UPCOMING CIM-GAC-MAC JOINT MEETING

**Resources for Future Generations  
Vancouver, British Columbia, Canada  
16–21 June 2018**

### Short Courses

The MAC has sponsored two short courses which will be held 16–17 June 2018, two days prior to the RFG 2018 CIM-GAC-MAC Joint Meeting technical sessions.

**Geometallurgy.** This course will address: (1) The principles of geometallurgy and critical evaluation of sampling, mineralogical and geochemical methods; and (2) Selected case studies of applications of geometallurgy involving innovative evaluation of mineral deposits, mineral exploration, resource estimation, applications and implementation of quantitative mineralogical and geochemical data, mining and ore processing, energy use, treatment of tailings and waste rock and remediation, and implementation of geometallurgical models in mining and plant operations. The short course will last for 2 days. Organized by Gema Olivo and Tassos Grammatikopoulos.

**Novel Applications of Isotope Geochemistry.** Isotope geochemistry is an integral part of the Earth sciences, particularly in revealing the fourth dimension of our science (time), revealing the processes involved in natural systems, and tracing the flux of elements between the geosphere and biosphere. This course addresses the recent applications of isotope geochemistry in the Earth sciences and how integration with other disciplines represents a paradigm shift in our understanding of the processes that operate in natural systems. Those involved in the course include the top isotope geochemists in Canada. The course will last for 1.5 days. Organized by Bruce Eglington.

### Field Trips

The MAC has sponsored two field trips which will be held after the RFG 2018 CIM-GAC-MAC joint meeting.

**The Tulameen Alaskan-Type Ultramafic-Mafic Intrusion: Architecture, Emplacement Mechanisms and Cr-PGE vs. Cu-PGE “Reef-Style” Mineralization in a Convergent Margin Setting.** The field trip will examine the lithological zoning and temporal evolution of the Tulameen complex, and contrasting styles of chromitite-PGE mineralization in the dunite core versus newly discovered Cu-PGE sulfide mineralization in the more differentiated ultramafic rocks. Highlights include examination of “magmatic avalanche” deposits exposed in the Tulameen River bed, and a 700-m zone of Cu-PGE mineralization similar to occurrences documented from layered intrusions in extensional tectonic settings. This trip complements the Special Session: Advances in the Study of Ultramafic Rocks. Dates: 21–24 June 2018. Organized by Graham Nixon and Dejan Milidragovic.

**Upper Fir Carbonatite-Hosted Nb-Ta Deposit, Blue River Area, East-Central British Columbia.** Participants of this field trip will see representative drill-core sections and outcrops of mineralogically and texturally diverse carbonatites, related alteration and alkaline ultramafic rocks, and the enclosing rocks of the Mica Creek assemblage at Upper Fir. We will discuss the primary igneous features and tectono-metamorphic overprinting of the Upper Fir carbonatites (Late Paleozoic), recorded by their paragenetic relationships, mineral chemistry, dynamic recrystallization and retrograde mylonitization. Highway travel from Vancouver to Blue River transects a number of different Cordilleran terranes. A few stops along the way will show pillowed and massive basalts of the Fennell Formation (Late Paleozoic), Slide Mountain oceanic terrane, and Quaternary volcanic landforms and deposits of the Clearwater valley. Dates: 22–24 June 2018. Organized by Alexei Rukhlov (BCGS), Thomas Chudy (UBC) and the Commerce Resources Corp.

## FIELD WORKSHOP IN THE FRENCH MASSIF CENTRAL

### Granites, Nappes and Migmatites: Anatomy of A Collapsing Orogen

The Société Française de Minéralogie et Cristallographie, the Université Jean-Monnet (Saint-Étienne, France) and the Laboratoire Magmas et Volcans (CNRS) are organizing a field-based workshop in the French Massif Central, which is a Variscan inlier located in South Central France. This fieldtrip will examine the Variscan nappe stack in the Moldanubian core zone of the Variscan belt. The nappe stack has been affected by pervasive partial melting and granite emplacement, and there are exposures of spectacular migmatites. This area offers great opportunities to discuss orogenic processes, anatexis, granite formation, and crustal differentiation and evolution.

The field workshop will take place after the EMPG XVI meeting (held in Clermont-Ferrand). Participants will meet in Saint-Étienne (150 km east of Clermont-Ferrand) on the evening of 21 June 2018, spend 5 full days in the field (22–26 June) and will return on 27 June.



Typical dendritic cordierite texture in the Velay migmatites

Most of the trip will be specifically held in the Ardèche Mountains of Southern France and will offer opportunities to sample other local pleasures, such as country food, local wine, great landscapes and beautiful swimming holes in mountain streams. Participants will be transported by minibuses and be housed in country hotels or bungalows in holiday resorts. We expect the cost to be about €400 per person. For further

information, please contact Jean-François Moyen: [jean.francois.moyen@univ-st-etienne.fr](mailto:jean.francois.moyen@univ-st-etienne.fr).

All researchers interested in these topics are warmly invited to join us!

## NEW PUBLICATION

### Minerals with a French Connection

La Société Française de Minéralogie et de Cristallographie (SFMC) has joined forces with the Mineralogical Association of Canada (MAC) to co-publish *Minerals with a French Connection* (ISBN 978-0-921294-59-7, A4 format, 588 pages). François Fontan (1942–2007) and Robert F. Martin are the co-authors. The book contains information on all minerals with a type locality in France (including New Caledonia), as well as all minerals discovered elsewhere, and named after citizens of France. Each of the 260 or so minerals are presented under the following headings: type locality (or localities), occurrence (what is the geological context?), description of the mineral (with a few words about its structure), name (along with biographical details where the mineral is named after an individual, who is shown in a portrait or photo), type specimens (where are they deposited?), comments, IMA status (along with IMA number, Dana and Strunz classes), and pertinent references. Each mineral is presented on two facing pages; where possible, the colour photos include at least one from the type locality. The book can be ordered online at [www.sfmc-fr.org](http://www.sfmc-fr.org) (for Europe and Africa) and [www.mineralogicalassociation.ca](http://www.mineralogicalassociation.ca) (for the rest of the world).

