

Editorial

A Special Session on "Fluid Inclusions in Minerals" was organised and chaired by E.A.J. Burke, M.L. Frezzotti, and I. Samson during the 17th I.M.A. General Meeting, held in Toronto from 9 to 14 August 1998. The scope of this session was to provide an open forum to discuss the contribution of fluid phases to the understanding of petrogenetic and ore-genetic processes. This session attracted approximately 60 participants, and it consisted of an oral session with invited contributions, and an open poster session. The six invited speakers focused on general themes related to fluid- and melt-inclusions techniques, such as the use of fluid inclusions in the exploration of porphyry copper and Carlin-type gold deposits, the identification of nuclear-waste repositories, and the study of radiogenic isotopes applied to fluid inclusions to identify the genetic scenarios for hydrothermal deposits. Two presentations dealt more specifically on melt-inclusion techniques in intrusive and effusive rocks: the complex interactions between fluid, melt and rocks in granulites, and the relationships between the volatile contents of magma and the eruptive behaviour of volcanic systems. The poster session gathered 13 case histories of wide petrological interest, from the deep crust and upper mantle to near-surface environments. Fluid and melt inclusions are a necessary investigation tool for a modern interdisciplinary approach to the study of geological problems. Although specialistic, this technique should be an integral and necessary part of any petrological and ore-genetic study.

The present E.J.M. issue contains four papers from the invited and poster contributions of the Toronto meeting, to give a representative sample of the topics discussed during the Special Session.

Ernst Burke, Maria Luce Frezzotti, Iain Samson