

IMA
Working Group on Inclusion in Minerals
(WGIM)
2008 Annual report to IUGS

<http://www.ima-mineralogy.org/com-wg/WGIM/WGIM.html>

The major aims of the Working group on inclusions in minerals in 2008 was the participation in organization of Symposium at 33 IGC in Oslo, Norway, Asian Conference on Current Research of Fluid Inclusions (ACROFI) in Kharagpur, India and renewal of the group members.

1) Working group sponsored the organization of Symposium MPM-13 “Inclusions in minerals” at the 33 International Geological Congress in Oslo, Norway.

Conveners: Sergey Smirnov, Institute of Geology and Mineralogy SB RAS, Russia, WGIM IMA

Pei Ni, Nanjing University, China, WGIM IMA

Number of presentations: Orals – 5; Posters - 13

Symposium summary:

Minerals contain a variety of different phases that were entrapped in the course of their formation and then isolated as inclusions. All of them can be divided into three groups: mineral inclusions, fluid, and melt inclusions. Recently they are believed to be an important source of geochemical and petrological information. They give to geologists an opportunity to trace past geological processes from the nano- and microscale up to the rock formation scale. As isolated phases the inclusions frequently bring geological information that was erased from rocks by later overprinting processes. In spite of the fact that the inclusions were studied for more than 150 years, they still trigger hot discussions on their origin, properties and importance. On the other hand they proved their importance in revealing P-T-X conditions of mineral and rock formation from the Earth mantle depths to the surface of the Earth and even in the Solar system.

The session was addressed to those who deal with inclusions in minerals for reconstruction of geological processes - magma evolution, metamorphism, ore formation, sedimentary basin evolution, etc.

The abstracted papers were devoted to problems of inclusion microanalysis, age and isotopic study of microinclusions. Majority of the presented papers were dedicated to inclusion evidences of magma evolution and its relations to ore formation. One of the important topics, represented at the IGC was development of melt inclusions study methods.

2) Asian Conference on Current Research of Fluid Inclusions (ACROFI-II) is now in progress in Indian Institute of Technology in Kharagpur, India. Conference includes 67 oral presentations, 3 pre-conference and 1 post-conference field trips. Oral presentations are organized in 10 sessions: Fluids in metamorphism, Fluid in deformation of rocks, New techniques and PVTX relationships, Auriferous ore fluids, Ore fluids in Granite-Pegmatite environment, Fluid inclusions in mineral exploration, Fluid inclusions in ore environment (PGE, U, base metals), Fluid inclusions in ore environments (non metallic), Melt inclusions, Basinal fluids and hydrocarbon exploration.

Participants of this conference generally represent scientific communities of India, China, Russia, Australia and some important delegates from European countries.

3) Dr. S. Smirnov and Prof Pei Ni prepared the list of new WGIM members and invitation for them. It was decided to leave those old members which will agree with prolongation of their participation in WGIM and add new members in order to have representatives of scientific communities with strong groups of inclusion's scientists.