

FLUID INCLUSION RESEARCH

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NOTICE OF THIRD INTERNATIONAL COFFI SYMPOSIUM ON FLUID INCLUSIONS

The third international symposium on fluid inclusions, sponsored by the Commission on Ore-Forming Fluids in Inclusions ("COFFI"), will be held on Aug. 22 and 23, 1972, in Montreal, in connection with the 24th International Geological Congress. These two sessions will each be held at 1400 hours so they will not conflict with any regular IGC sessions. Although sponsored by COFFI, these will not be limited to studies of inclusions of ore-forming fluids, but will also include papers on instrumentation, and the interpretation of data for magmatic (silicate melt), metamorphic, and sedimentary inclusions as well, and are open to all.

The titles of all formal papers are given below, in their probable sequence of presentation (approximately 15 minutes per paper), followed by those author's abstracts that were available to the Editor at presstime (arranged alphabetically). Late abstracts will be published in the next issue. Please note that this is the only publication of these abstracts, as they are not included in the IGC Abstracts volume. It is hoped that there will be time for short informal communications as well.

Session 1 Aug 22 1400 hours Duluth room, Queen Elizabeth Hotel.
Chairmen G. Deicha and N.P. Ermakov.

Inclusions in igneous and metamorphic rocks and higher temperature ore deposits

Takenouchi, Sukune, Glass inclusions in quartz of volcanic rocks from mining areas.

Anderson, A.T., Sulfur and chlorine contents of glass inclusions in phenocrysts and basaltic host glasses.

Roedder, Edwin, Interpretation of silicate melt inclusions in lunar, terrestrial, and meteoritic minerals.

Ernst, Th., Mages, G., and Schwab, R.G., Liquid-CO₂ inclusions in

- olivine bombs--generated by decomposition of "orthocarbonates"?
- Poty, B. and Weisbrod, A., Equilibria between minerals and solutions in the Mayres pegmatite (Cévennes médianes, French Massif Central).
- Kozlowski, Andrzej and Karwowski, Lukasz, Bromine in gaseous-liquid inclusions in postmagmatic minerals from Lower Silesia.
- Takenouchi, Sukune, Ore-forming fluids at the Takatori tungsten-quartz veins in Japan.
- Pokrovskiy, P.V. and Purtov, V.K., The main regularities in the formation of quartz veins at crystal-bearing and tungsten deposits of the Urals.
- Logsdon, Mark J., A fluid inclusion study of the porphyry copper deposits at Ray and San Manuel, Arizona.
- Andrusenko, N.I., Timofeevsky, D.A., Grebenchikov, A.M. and Andrianova, S.I., The temperature of formation of the gold deposits in the U.S.S.R. (by inclusions in minerals).
- Drake, W. and Ypma, P.J.M., Fluid inclusion study of the Mineral Park porphyry copper deposit, Kingman, Arizona.
- Trufanov, V.N., Kurshev, S.A., Maisky, U.G. and Ushak, A.T., Experimental investigation of thermal metamorphism of the fluid inclusions in minerals.
- Ypma, P.J.M., Fluid composition and P-T relations in fluid inclusions.
- Sawkins, F.J. and Landis, Gary, Fluid inclusion studies of Andean ore deposits

Session 2 Aug. 23 1400 hours Duluth room, Queen Elizabeth Hotel.

Chairmen E. Roedder and H. Imai

Significance and use of inclusions in lower temperature environments

- Barnes, H.L., Lusk, L., and Potter, R.W., Compositions of fluid inclusions.
- Ermakov, N.P., Geochemical classification of inclusions in minerals.
- Imai, Hideki and Takenouchi, Sukune, Fluid inclusions in quartz in granitic rocks and associated vein-type deposits.
- Rasumny, J., À propos de la rapidité de coalescence des bulles dans les inclusions fluides soumises à la retroebullition.

KOZŁOWSKI, Andrzej and KARWOWSKI, Łukasz, Bromine in gaseous-liquid inclusions in postmagmatic minerals from Lower Silesia, (Institute of Geochemistry, Mineralogy and Petrography, Dept. of Geology, Warsaw Univ., Warsaw 22, al. Zwirki i Wigury 93, Poland).

This paper reports a preliminary investigation of bromine geochemistry in hydrothermal environments. The concentrations of Br^- in aqueous extracts from a number of minerals were determined. Higher concentrations of Br^- were found in samples from lower-temperature solutions. The ratio Cl/Br varies from 1200 to 39. The concentrations of Br^- found, in ppm of mineral, are as follows: albite 0.11-0.96; pegmatitic and drusy quartz - 0.18-2.9; vein quartz - 0.22-1.7; fluorite - about 6; epidote - about 0.6; stilbite - about 2.7; and calcite - about 4. The average concentration of Br^- in the inclusion fluid itself varies from 0.015% to about 0.2%. Part of the postmagmatic solution was trapped in intergranular spaces and as secondary inclusions in granite. This is evident from the fact that higher concentrations of Br^- were found in extracts from granite containing numerous hydrothermal and pegmatitic bodies, in comparison with those which contain neither pegmatites nor hydrothermal veins. The concentrations (in ppm) of Br^- in granites are 0.58-1.05; aplites - 0.36-0.66; and pegmatites as a whole - 0.21-1.1.

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The average concentrations of Li^+ , Na^+ , K^+ in the inclusion fluids were determined by analyses of aqueous extracts.

The samples were mainly from the area of the Strzegom, Strzelin, and Karkonosze massifs, and the Iżera area.

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