



## **MINERALOGICAL DESCRIPTION OF THE SKARN FROM MRACONIA VALLEY, ALMAJ MOUNTAINS, ROMANIA**

Maria Angela Anason, Marincea Stefan, and Dumitras Delia Georgeta

Geological Institute of Romania, Mineralogy, Bucharest, Romania (angela.anason@yahoo.com)

The purpose of this paper is to update knowledge of the investigated area. The research area overlaps of the hidrographic basin of the Mraconia Valley, at north is bounded by the alignment Poiana Mraconia and Lugojistea; at east by the Satului Valley; souther limit is constitutes by the Ponicoval Valley and the western limit is Cracul Radului-Cracul Urzicea.

The skarn was described for the first time in the 1934 by the A. Streckeisan with the name Catramat Series; this series was a kata-mezozonal character, which is the debris of an old canvas with Upper Carbonifer age. The crystalline schist of the Poiana Mraconia Series, are studied by Al. Codarcea, I. Bercia, E. Bercia (1934) and suffered a progressive metamorphism in the amphibolites with almandine facies and the disten-almandine-muscovite subfacies, together revealed the metapelitic paragenesis including disten, green hornblende, andesine and almandine. The primary metamorphism were followed to the regressive metamorphism by the Assyntic orogenic and Varisc cycles (I. Bercia, E. Bercia, 1975). Petrographically exceed the amphibolites paragneiss and the micaceous paragneiss, with biotite and garnet, associated with the quartz-feldspar gneiss and feldspar quartzite, affected by the artritic migmatization. Fine grain, sharp suture, the muscovite are frequent and the pegmatite absence leading to the Poiana Mraconia crystalline differentiation by the Ielova crystalline, but both are included in the Almaj complex. Mineralogical and petrographic study of the Mraconia skarns serves in predicting the relations between the magmatite from the upper basin of the valley (with the mineralization of the W and Mo), and the adjacent formations. This paper wants to emphasize the next petrographic types following: 1. the micaceous paragneiss are characterized by the existing of the quartz, plagioclase, microcline, muscovite, biotite, chlorite and epidote; 2. The micaceous paragneiss with garnet are defined by the paragenesis: quartz, plagioclase, muscovite, biotite, chlorite, garnet, rutile and zircon; 3. The amphibolites are characterized by the paragenesis: hornblende, plagioclase, biotite, chlorite, quartz, epidote, calcite sometimes sphene, apatite and pyrite. They are rocks with oriented texture, sometimes rubanated and nano-nematoblastic structure. The metasomatite from Mraconia perimeter are represented by pseudoskarn after Korjinski (1968), the mineral paragenesis show the evolution of the skarn, from skarn sensu stricto to pseudoskarn due the hydrothermal contribution.

### References:

- BERCIA I., BERCIA ELVIRA (1975): The crystalline of the Danube domain from the Banat (România). Rev. Roum. Geol. Geogr. Geophys. serie Geologie 24., București.
- CODARCEA AL. (1934): Note sur la structure geologique et petrographique de la region Ogradena - Svinita. C.R. Inst. Geol. Roum., XXI, Bucuresti.
- KORJINSKI D.S., (1968) : The theory of metasomatic zoning. Min. Dep. 3, Berlin.
- STRECKEISEN A., (1934): Sur la tectonique des Carpathes Meridionales. An. Inst. Geol. Rom. XVI, București.