

## **Pegmatites from Metamorphic Rocks of Gilău Mts. (Romania). A Geochemical Approach**

STUMBEA, D. University "Al. I. Cuza", Iași, Romania

Pegmatites from medium grade metamorphic rocks of Gilău Mts. belong to the Gilău-Muntele Mare Pegmatite Subprovince. At W and S the metamorphic formations are enclosed by the Muntele Mare Granite body. In terms of geochemistry and genesis, a granite-like composition and a metamorphic genesis respectively have been noticed.

In order to make a geochemical characterisation of pegmatite bodies, wet-chemical analysis and emission spectrography analysis (PGS-2 JENA) have been performed.

Following up the geochemical behaviour of major elements some conclusions could be noticed:  $\text{SiO}_2$ ,  $\text{Al}_2\text{O}_3$ ,  $\text{Na}_2\text{O}$  and  $\text{K}_2\text{O}$  data make the difference between pegmatites hosted by granite and by metamorphic rocks respectively; plagioclase-microcline pegmatites from metamorphic rocks have an intermediate geochemical position between inner-granite pegmatites and inner-metamorphic rocks ones; most samples belong to the alkaline type, but alkaline to calco-alkaline transitions have been noticed as well; the K-feldspars participation in pegmatites decreases as follows: microcline-bearing pegmatites (graphic texture) → plagioclase-microcline-bearing pegmatites (PM) → plagioclase-microcline (+muscovite)-bearing pegmatites (PMm) → muscovite-bearing pegmatite; similarly, the muscovite participation increases; the gneiss/inner-gneiss PM as well as the gneiss/inner-gneiss PMm geochemical balances have the features of a granitization process; the analysis of the geochemical distribution of major elements, positive geochemical anomalies for  $\text{SiO}_2$ ,  $\text{Al}_2\text{O}_3$ ,  $\text{Na}_2\text{O}$  and  $\text{K}_2\text{O}$  has revealed.

In terms of minor elements, positive geochemical anomalies for Ba, Pb, Li, Sn have been noticed; their spatial distribution superposes on  $\text{SiO}_2$ ,  $\text{Al}_2\text{O}_3$ ,  $\text{Na}_2\text{O}$  and  $\text{K}_2\text{O}$  anomalies.