

**GEOCHEMICAL ASPECTS OF MAJOR ELEMENTS DISTRIBUTION IN VINȚA
GRANITOID (APUSENI MTS.)**

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Abstract

The different textural types of granitoids within Vința intrusion were recognized by older studies.

The aim of this paper is to test if there is any geochemical link between textural and geochemical aspects of the granitoid rocks.

The abundances of major components show the presence of significant differences between massive varieties and gneissic varieties of granitoids especially regarding content of elements that are normally included in the mafic minerals (TiO₂, FeO, MgO, CaO, P₂O₅). The correlations between these elements are strong positive indicating that biotite, the main mafic mineral in the intrusion, together with apatite and calcic plagioclase play an important role in their distribution.

The bivariate diagrams show that the extremes of the composition could be discriminated, the felsic varieties and the mafic varieties being plotted in the opposite corners.

Cluster analysis indicated presence of two subzones within each of massive and gneissic varieties. The resulting four subzones could be also separated on bases of TiO₂+FeO+MgO+CaO+P₂O₅ sum which is different for each of them.

Areal distribution of the data suggest a gradual transition from mafic to felsic types but a reverse crystallization that could be attained taking into account either one batch of melt or two batches of melt.

Key words: Vința granitoid, massive, gneissic, correlation coefficient, cluster analyses, areal distribution, mafic, felsic

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