

GEOCHEMISTRY OF METABASITES FROM CRYSTALLINE COMPLEXES OF TRANSDANUBIA BELT, HUNGARY: GEODYNAMIC IMPLICATIONS.

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Neogene or Permian and/or Mesozoic sediments covered South Hungarian poly-metamorphic crystalline basement/socalled "Tisza Unit"/is composed by medium and high grade Barrow - type gneiss-mica schist complexes which are interbedded by 0,5-18 m. thick amphibolite bodies and infrequent arble-dolomite marble lenses as well as scarce leptinolite/medium and high grade acidic metatuff/intercalations. Characteristic paragenese of amphibolites: hornblende+plagioclase/An₂₄₋₅₅ /+albite±quartz±chlorite with ilmenite±sphene±leucoxene accessories. Actinolitization and/or epidotization mainly in the sheared or fractured amphibolitic rocks are not rare.

Major, minor and trace elemets (Sr, Rb, Ba, Nb, Zr, Y, 3d and rare earth elements) of metabasites from Transdanubian area and from drillings in the Great Hungarian Plain region (Hungary) have been studied.

The metabasites show variable geochemical contents. The major element amounts are quite variable, e.g. SiO₂ varies from 39 to 59 wt%, TiO₂ from 0.13 to 4 wt%, Na₂O from 1.6 to 4.19 wt%. The classificative diagrams based on major and minor elements give contrasting answers, i.e. alkaline and subalkaline affinities as well as only subalkaline character. The same variability is obtained using the discriminative diagrams as far the geodynamic environment. Conversely, the REE abundances and patterns are quite homogeneous. This fact suggests a possible post-magmatic geochemical mobilization of certain elements.

The geochemical behaviour of major, minor and trace elements is discussed in trying to define the nature of the pre-metamorphic protolith as well as the geodynamic environment.

STRUCTURAL GEOLOGY AND TECTONICS: MAPS OF CAUCASUS

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General and simplified map 1:2.500.000 was prepared. It contents following