

# THE GEOCHEMISTRY OF GROUNDWATERS FROM MOLDAVIAN PLATEAU(ROMANIA)

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The aim of this study is to find a relationship between the chemical composition of the groundwaters and the weathering reactions of rocks (reconstruction of the source minerals). The Moldavian Plateau was a lacustrine and a coastal plain hydrogeological importance presenting only the Cretaceous-Eocene sedimentation cycles. The saline efflorescences, which appear in this area, were interpreted as proceeding from the remanent salts, which were kept by the deposits, formed (by evaporation and colmatage) during the retirement of the Sarmatian Sea. For the hydrogeochemical balance was used the material test of the ions from the water. In this way 980 samples of rocks, water and soil were analysed in accordance with the Romanian standards. The atmospheric input was determined by chemical analyses of soil. The hydrogeochemical balance was made starting from two elements: a)-the geological and hydrogeological characteristics of the region; b)-the chemistry of the groundwaters.

The association between some constituents of the water was demonstrated statistically by correlation analysis. The reconstruction of source minerals showed that the final product of the alteration is a clay mineral (usually kaolinite) and it is supposed the reactions of reverse transformation for the reconstitution of feldspars, micas and carbonates.