

GEOCHEMICAL CRITERIA FOR THE INVESTIGATION OF FACIES FEATURES OF PONTIAN BASINS IN EASTERN AZERBAIJAN

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ABSTRACT.- In this study, distributions and environmental conditions of the mollusc fauna which lived in the evolution of Pontian seas of Azerbaijan were investigated. The research of the environment conditions were based on the determination of conditionuos geochemical relation which was between the organism and environment. Interpretation of the distribution differences of the Ba, Sr, Mg and Ca in the shell and deposits were indicated the salinity, temperature and paleofacies of the basin at the Ponsien age mentioned above. Detailed investigations indicated that, the reason of the widely appearances of in marine environments depended on the lithofacies properties of deposits, such that in the shallow marine facies deposits contain more barium. In any case the barium content of mollusc species belong to this facies are more than the other ones. Absolute temperatures of fauna and deposits formation environments were determined by Ca/Mg method during the development of the Ponsien seas. These are, in the early Ponsien age the temperature was 21-22° C, in the Middle Ponsien age the temperature was 20.6-21.5 C and in late Ponsien age the temperature was 21.5-22° C and it was determined that the temperatures were constant. In fact, it was proved that there is no balance between the Sr distribution of shell and deposits Sr amount in the deposits is less than the Sr amounts in the shells as a results, it is seen that the main parameter which controls the distribution of the Sr is the salinity rate of the environment. That is why, it is concrete that the lacustrine mollusc Sr amount is poor than the marine mollusc. Hence, Sr is an element which determines the salinity regime of the environment. It can be seen that, in the determination of the environment conditions of biogeochemical methods can also be used together with the other methods.