

EVOLUTION OF THE ORE-HYDROTHERMAL SYSTEMS

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The Lesser Caucasus with strong manifestation of the Mesozoic magmatism and ore formation is a fine polygon for settling some important problems. For the first time the author revealed a dual, indirect and direct, evolution of the ore-hydrothermal systems on the background of tectonomagmatic evolution of the region. Through the evolution of magmatism the ore formation suffered as a whole indirect evolution of metal composition of the magmatogene fluids. To each stage of tectonomagmatic evolution there corresponded, by magmatism number, several ore-hydrothermal systems with direct evolution of acidity-alkalinity of the hydrothermal solutions. Full evolution of the solutions is associated with granitoids. This favoured forming various ore-metasomatic formations. The formations of the same name but different ages have their own ore mineralization. Basement heterogeneity also stipulates variety of mineralizations. The study of ontogenesis and phylogenesis of the ore deposits allowed to reveal progressively increasing variety of ore associations. Practically, formation of all ore genetic types of the Mesozoic continues in the Cenozoic with addition of new ones, reverse being not observed. New genetic types coming into existence in later periods of evolution are characterised by their peculiarities and more complicated substantiation and mineralogical composition