

THE MAIN FACTORS, DEFINING THE MINERAGENETIC OF PROFILE AND THE PRODUCTIVITY OF GEOLOGICAL PROVINCE

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The studies of the composition, structure and processes, occurring in mantle as a result it's interaction with Earth's crust allow to reveal the factors that influence on mineragenetical profile of geological provinces and their productivity: The manifestations of the basitic and ultrabasic magmatism as the products of the mantle differentiation are the source and environment of accumulation of the metals genetically connected with them. The lithosphere as an environment makes for the formation of hybrid and granitoid magmas, enriched by the volatile components; these volatile ensure the extraction, transport and of the granitophyle metals. The lithological composition of the continental crust's blocks defines the character of the palingenuous granitoid magmas, composition of volatiles and metallogeny; it accounts for territorial separation of stanniferous and molibdic provinces. An increased level of alcalinity of magmas (from ultrabasic to acid) ensure the formation of the rare and rare-earth deposits. The deep-seated faults particularly the places of their intersection and conjugation are both the most stable ways of the transportation of the mantle material and energy, and the zones of intensive and prolonged development of the crust magmatism; in these places are observed the formation of the plutons with increased vertical extent, the conical monodome structure of their roof, that in total promotes the accumulation of the formation of high-grade and especially rich deposits. The multistage mineralization in tectonic structures increases themselves ore potential and sometimes the potential of the separate ore objects. The favorable facial and geotectonic setting causes the accumulation and concentration of useful components in large and very large scales.