

Deep factors of occurrence of large deposits of endogenic ores in the upper lithosphere

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Analysis of forecast-minerogenic map of occurrence of ore and oil-gas condensate deposits of Russia in the system of non-uniformities of tectosphere (Editor V.A. Amantov) indicates that large endogenic deposits are confined to the local parts of anomalous lithosphere repeatedly heated by thermo-fluid flows of subcrustal tectosphere. Ore-bearing "hot points" are conjugated with the most important transregional Δg , ΔT gradient zones and are localized in places of their interference.

Intrusions and protrusions of ultramafites precede polystage series of the majority of magmatic and metasomatic systems (Au, Pb-Zn, with Au and Ag, Sn, Mo-W-Be etc.). The growth of deep heating at ore stage is fixed by picrites. Elements-satellites: Ba, Sr, Co, Ga, Te, Se Hg, Y, lanthanoides, etc. help to typify perspective blocks. For copper-pyrite ores connection of ore-bearing "hot points" with axes of crust-mantle arches in ophiolite-ensimatic volcanogenic zones of rifting was determined. At the margin of arches pyrite-polymetallic ores predominate. By debasification of magmatic hearthes of the basic composition alkaline metasomatism promotes the formation of "fluidporphyries".

The main tin ore objects are confined to the rear zones of the Eastern-Asian world geodivision and boundary zone of Pacific transital. Copper-pyrite and complex rare-metal (Mo, W, Be, Fl) deposits occur in the zones of show of disperse rifting in transcontinental zones of anomalous lithosphere.

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