ORE CONTENTS OF BLACK-SHALE SEQUENCES OF RUSSIA.

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The problem of ore contents of black-shale sequences is widely discussid in geological literature. It is connected with commercial prospects of revealing deposits of uranium, vanadium, copper, gold, platinum group metals and other elements within these sequences. In all the cases black carbonaceous shales are a favourable ore-enclosing medium, which provides the localization of the above elements under conditions of reducing reactions.

Ores of the black-shale sequences are rather poor, but their prognostic resources ore characterized by large volumes. The commercial valuability of the ores is related to zones of enrichment caused by the development of epigenetic ore-metasomatic processes. Contents of the platinum group elements and gold in these zones are tens ppm, against the general background of deposits *o.n* ppm. Ore bodies are sheet-stockwork deposits several meters thick.

Distinguished are several types of deposits differing in paragenetic associations of metals and age ranges of formation for instance platinum-gold ore: (Sukhoy Log type) - Middle-Late Riphean; platinum-pyrite-polymetallic (Sette Daban and Patom types) - Riphean-Early Paleozoic; uranium-vanadium-gold-platinum-bearing (Onega type) - Early-Middle Proterozoic and so on.

Uranium mineralizathion of black carbonaceous-siliceous shales is usually represented by uraninite, coffinite and secondary uranium vanadates. Uranium-ore bodies mainly of Proterozoic and Early Paleozoic age occur as echelon lenses and veins which form zones with irregular distribution of mineralization.

The most favourable conditions of metalliferous shale accumulation occur in marginal-continental basins-pericratonal and epicratonal troughs of old platforms and in riffogenic belts.

In Russia promising geological settings are Karelia, the Bashkir Upland and Urals, the Sette Daban and Baical-Patom Elevation of Siberia.