

# **Metallogeny of geodynamical anomalies and its utilization at the prognosis and evaluation of mineral wealth by remote sensing from space**

ANTIPOV, V.S., Institute of Remote Sensing Methods for Geology, St.Petersburg, Russia

Geodynamical anomalies is stipulated by modern abyssal geological processes which may be revealed by remote sensing and other methods. It was found by author that remote sensing, geophysical and geochemical geodynamical anomalies control the position of metallogenic units at different hierarchical levels hosting the largest ore concentration. The Yano-Kolymsky gold belt and other regional structures hosting unique deposits are controlling by seismic active zones characterized by earthquakes force  $> 6$  in central parts. The examples of ore districts and ore knots hosting the largest deposits, controlling by geodynamical anomalies, are the Streltsovsky, the Kirovogradsky (U), the Talnakhsky (Pt, Au, Cu, Ni), the Pechengsky (Cu, Ni), the Lensky (Au), the Zolotitsky (diamonds) and others. In border of ore districts and knots the most intensive geodynamical anomalies control disposition of large deposits: the Kaula and the Zhdanovskoe (Pechengsky ore knot), pipes Mir the Malo-Botuobinsky and the Lomonosovskaya at Zolotitsky diamondiferous regions, and others.

Evaluation of metallogenic wealth resources into geodynamically anomalies territories is executed by means of hydrochemical survey with plasma mass-spectrometric analysis of chemical elements concentration. Interpretation of obtained data based on regulation of maximum ore concentration determining by correlation between concentration clark and most probable reserves of largest deposits over investigated area. For most metals in a case of favourable geological structure, when the concentration clark is 5 or more such territory has the prospects for discovery of this metal large deposits.