

GOLD DEPOSITS OF THE DONETS FOLD AREA (UKRAINE)

Shumlyanskyy, V. O., Aleksandrov, O. L. and Ivantyshyna, O. M. The Institute of Fundamental Studies, Kyiv, Ukraine

The Donets Fold Area is the inversional-folded segment of the Dnieper-Donets intracratonal paleorift. Deposits and the most significant occurrences of gold are disposed along the linear anticlines complicated by faults. Ores are localized within the Carboniferous terrigenous-carbonaceous strata altered by quartz-sericite-ankerite metasomatism. There are two gold deposits (Hosry Bugor and Bobryckove), several gold manifestations and base metal deposits with a high silver and gold content. A few types of gold mineralization are defined: the Vilkhovatka type is gold-pyrite one in berezites hosted in Middle Carboniferous sandstones near axial part of the Vilkhovatka anticline; the Yesaulovka type is gold-silver-sulphoantimonide one, which contains boulangerite, bournonite with base metal sulphides with a small quantity of gold. It is localized in Middle Carboniferous limestones and claystones of the Northern anticline branch of the Nagolny Ridge; the Bobryckove type is gold-base metal one deposit of which are placed within the Southern anticline branch in Low-Middle Carboniferous claystones (sometimes in sandstones). Native gold in ankerite-quartz veinlets associated with pyrite, galena, sphalerite, tetrahedrite, gersdorffite and chalcopyrite. Isotope and other data evidence that gold ores are probably related to latent magmatism.