NOBLE-METALBEARING PARAGENESIA OF SULFIDES AND THEIR ANALOGUES IN IRON ORE DEPOSITS OF KMA (the Central Russia)

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The leading role of mineral paragenesia of sulfides and their analogues in the distribution of noble metals and their numerous independent mineral phases is established: native Au, Ag, Os, Ru, ruthenіridosmine, platruthenosmiridium, iridruthosmide, minerals of the series Ru, Ir, Os, Pt → Ru, Pt, Rh → Os, Ru, Ir, electrum, kustelite, Au-Ag alloys, prassoite, mackinstryite, moncheite, sperrylite, petzite, hessite, krennerite, etc. in ferruginous quartzites of KMA deposits. Sulfides (pyrrhotite, pyrite, chalcopyrite, galena, bornite, etc.), sulfoarsenides, antimonides, tellurides and bismuthides are characterized by significant admixture concentrations of noble metals. A number of different temperature conditions of the formation of mineral paragenesia are revealed: Au- krennerite -pyrite (T=380-300°C); gold-polymetallic (Au- chalcopyrite - galena - bornite; T=280-180°C); Aupetzite - hessite (T=250-150°C and 100°C at the occurrence of mackinstryite in this paragenesis).