

Minerals accompanying diamonds from the Middle Ural deposits, Russia

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Garnets, spinels and zircons from Rassol'naya and Dresvianka deposits were investigated. They are small-sized (< 0.5 mm) and commonly surfaces of the grains are dissolved and worn. Some grains are fresh. Kimberlitic and non-kimberlitic minerals were distinguished according to peculiarities of morphology and chemical composition.

Chemical-genetic groups of garnet and spinels were established by statistical discrimination method of the analysis. High- middle- and low-chromium garnets from diamond-bearing and low diamond-bearing equigranular lherzolites, garnets from diamondiferous peridotites, and garnets from diamond-bearing ilmenite-rutile Mg-Fe eclogites were present. High-chromium spinels from lherzolites and sheared peridotites were determined. It is a lot of spinels from chromite-bearing ultra-basic rocks of green-stone formation.

The presence of minerals from high diamond-bearing paragenesis testifies high potential for diamond reserves of investigated deposits and requires further investigation.