

## **THE NATURE OF ULTRAMAFIC MASSIFS FROM THE LATE ARCHEAN KANSKY GREENSTONE BELT, BASEMENT OF SIBERIAN PLATFORM, RUSSIA.**

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In Kansky greenstone belt gneisses of acid and average composition and amphibolites are dominant. Their protoliths can be similar to volcanics and sediments of marginal basin - island arc settings. The belt is characterized by abundance of ultramafic (90%) and mafic (10%) massifs with the size varying from a few to hundreds meters along the axes. There are no primary contacts due to intense tectonic process. Massifs look like boudins or fragments of bigger bodies. The aim of research is to restore petrogenesis of the massifs, which can be divided into three main groups. i) 50% of massifs could be restored as volcanic sequences of komatiites (shale) and komatiite basalts. ii) 25% of massifs was possibly formed as subvolcanic intrusions of ultramafic magma (sills and dikes). Primary melt was evaluated at the intermediate stage under the olivine control. Pt and Cu-Ni ores in lherzolites and wehrlites were found. iii) The third group is uncommon for greenstone belts. Those are mantle peridotites depleted in different extent (up to mantle garnet lherzolites). They occur along the main strike of geological structures and the evidence of melange zones could be found. Geological and geochemical features allow to restore evolution of the Earth crust and mantle for Siberian platform basement. The Late Archean Kansky block is the perfect object to determine the relationship between the early and the later stages of the continental crust evolution.