

COMPOSITION OF THE UPPER MANTLE UNDER THE UKRAINIAN SHIELD

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In the ukrainian shield there are blocks of archean (dnieprian, ros-tikichian) and proterozoic (polissian, volynian, podolian, kirovogradian, azovian) age. kimberlites are found only in polissian, azovian and kirovogradian blocks. In the first and second ones kimberlites are devonian, and in the third one they are late proterozoic (1.8 ga). But haloes of dispersion of kimberlite indicator minerals are spread in sedimentary covers in all blocks. investigation of kimberlites and haloes of dispersion their minerals evidences for distinctions of upper mantle under different blocks on degree of differentiation, depletion and metasomatic alteration as well as on composition and correlation of peridotites, pyroxenites and eclogites. pyrope lherzolites predominate, pyrope dunites and harzburgites occur constantly in the upper mantle under all blocks of the ukrainian shield. Besides such deep-seated rocks are comparatively widely spread under different blocks accordingly: websterites – volynian; websterites, eclogites and eclogite-like rocks – podolian; chrome-spinel dunites and peridotites – kirovogradian; ilmenite peridotites – polissian and asovian. the mostly differentiated and depleted mantle is under the polissian block. The mostly metasomatized mantle is under asovian and kirovogradian blocks.