

**221500 ELEMENT ANALYSES OF 5500 VOLCANIC ROCK SAMPLES INCLUDED IN THE FIRST GEOCHEMICAL DATABASE ON THE KAMCHATKA ISLAND ARC SYSTEM: LOW-K, CALC-ALKALINE, HIGH-K, SHOSHONITE, ULTRA-POTASSIC AND K-NA ALKALINE BASALT SERIES (LITERATURE AND AUTHORS' DATA).**

Kablukov A., Perepelov A. Vinogradov Institute of Geochemistry SB RAS, Irkutsk, Russia. e-mail: [region@igc.irk.ru](mailto:region@igc.irk.ru)

Data on volcanic rock series of the Kamchatka island-arc system have been brought together into first Geochemical Database, including information on ages and geologic position of rocks, their association with specific bodies and strata, isotope and rare-element composition. In total Database contains 221,500 original and published element analyses on 5,500 volcanic samples, input in different formats convenient for FoxPro, Paradox, and Access users. Database was developed with regard to available determinations on Late Oligocene to Holocene low-K tholeiitic and calc-alkalic series of Eastern and Southern Kamchatka, calc-alkaline series of the Sredinny Ridge, high-K and calc-alkalic series of back parts of Southern Kamchatka, Sredinny Ridge, and transform faults, shoshonite-latitic series of the axial and back zones of the Central volcanic belt and Western Kamchatka, unique potassic alkaline volcanics, and rift-related alkalic olivine basalts of the East Kamchatka lava plateau. The total assemblage of geochemical and geochronological data on Kamchatka volcanic series permits regional-scale time correlation of magmatic events. The main conclusions are as follows. The Kamchatka island arc system consists of seven major lithospheric blocks, namely, Northern block (from the latitude of Kharchensky and Shiveluch volcanoes) bounded in the north by structures of Koryak isthmus, Central Kamchatka depression, Eastern volcanic belt, transform fault zones (including the Malko-Petropavlovsk zone), Southern Kamchatka volcanic belt, Central volcanic belt (Sredinny Ridge), and Western Kamchatka magmatic province. Database does not include geochemical data on older granitoid and metamorphic basement rock complexes, which are supposed to be a subject of further studies. Correlation among ages and geochemistry of different rock complexes of the island-arc system confirms close relationship of magmatism with the geodynamic history of separate lithospheric blocks and the region as a whole. The study was supported by grant 97-05-65671 from the Russian Foundation of Basic research. Symposium 6.8