

**Structural control of microdiamond manifestations
in metamorphic complexes of the Kokchetav massif
(Northern Kazakhstan).**

PETCHNIKOV, V. A. , Central Research Institute of Geological
Prospecting for Base and Precious Metals, Moscow, Russia

At present problem of diamondbearness of metamorphic rocks attract attention of many specialist, so it have big scienific and applied meaning. In the last twenty years since the discovery of the microdiamond deposit Kumdykol it was yet found a few of the microdiamond objects in limits of the Kokchetav massif. They are situated in crystalline rocks (Zerendinskaya series) metamorphised amphibolite facies.

In massif basement it is distinguished several types of structures of different ages: Proterozoic granite-gneiss domes, Early Ryphean narrow graben-shaped fault-bounded structures occupied by volcano-sedimentary rocks as well as ancient deep faults. Analysis of setting of the microdiamond deposit Kudykol and series of manifestations show that in majority occasions they are disposed along the Krasnomaisky deep fault zone of sublatitudinal tranding.

Besides, detal researches showed that the deposit Kumdykol and microdiamond occurence Barchi are situated in N-E tranding fault zones which are, apparently, feathering faults with regard to the Krasnomaisky deep fault. These faults are well displaid by conjugate zones of intense transformed metamorphic host rocks. Maximum diamond and graphite contents are connected with these zones and they independ from rock compositions.

So, it may suppose that with regard to microdiamond manifestations the Krasnomaisky sublatitudinal deep fault and feathering its faults of N - E tranding are by ore-incurrent and ore-enclosing structures accordingly.