

# THE ELNINSKIY MASSIF OF THE BURINDINSKIY COMPLEX IN THE UMLEKANO-OGODZHINSKIY VULKANO-PLUTONIC ZONE IN TOP PRIAMURYE REGION: NEW GEOCHRONOLOGICAL, GEOCHEMICAL AND ISOTOPE- GEOCHEMICAL DATA

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The paper presents results from isotope and geochronological (U-Pb zircon method using a microsampling), geochemical and isotope-geochemical investigation of rocks from Yelninskiy massif in the Burindinskiy complex of Umlekan-Ogodzhinskiy volcano-plutonic zone. The age of quartz diorite was estimated to be  $117.3 \pm 1.9$  Myr, the root mean square deviation (RMSD) was equal to 0.00118; for granite rocks the age was estimated at  $118.4 \pm 2.1$  Myr, RMSD was calculated at 0.16.

Formation of the massif in the intraplate setting was caused by reactivation of the North-Asian superplume after the whole continent had been formed as a result of isolation of the Mongol-Okhotskiy oceanic basin during the collision between the North-Asian and Sino-Korean cratons. The 1 phase gabbro are the differentiates from the primary magnesian water-saturated subalkaline melts, which are the products from the enriched mantle. Rocks of average and acid compositions are formed due to interaction between high-alkaline basic rocks and low-alkaline Riphean crust according to the AFC model of fractional crystallization and assimilation of the core elements. Mild alkaline leucogranites of the final stage are formed as a result of fractional crystallization of the normal alkaline granite magma.

*Keywords: Umlekan-Ogodzhinskiy zone, granitoids, AFC model, intraplate magmatism.*