

*M. N. PETROVSKIY, L. S. PETROVSKAYA.* NEOARCHAEAN ALKALINE ROCKS  
OF THE CENTRAL-KOLA BLOCK — THE CHAGVEUAIVE MASSIF:  
GEOLOGY AND AGE

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The article presents the results of geological, geochronological and isotope-geochemical studies of the Chagveuaive alkaline massif in the Kola Alkaline Province. The massif consists of clinopyroxenites and nepheline syenites (the first phase); alkaline syenites, quartz syenites and their pegmatites (second phase); alkaline albite quartz syenites and granosyenites, as well as zirconium quartzolites (the third phase). The rocks are of Neoarchaeon age. The crystallization ages determined by the U-Pb method for zircons are  $2667 \pm 4$  Ma for the alkaline syenites of the second phase, and  $2601 \pm 12$  Ma for the third-phase quartzolites. According to their isotope-geochemical Sm-Nd and Rb-Sr characteristics, the rocks of the Chagveuaive alkaline massif have a mantle origin, and the source of their melts was apparently the mantle of the BSE type.

*Key words:* neoarchaeon, Kola Alkaline Province, nepheline syenites, alkaline syenites, mantle.