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## РЕДКОЗЕМЕЛЬНЫЕ МИНЕРАЛЫ ЩЕЛОЧНЫХ МЕТАСОМАТИТОВ ГЛАВНОГО САЯНСКОГО РАЗЛОМА

V. B. SAVELYEVA, N. S. KARMANOV. RARE EARTHS' MINERALS OF ALKALINE METASOMATITES  
IN THE MAIN SAYAN FAULT ZONE

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Composition of accessory REE minerals (allanite, chevkinite, fergusonite, REE-carbonates, etc.) in alkaline metasomatites of the Main Sayan Fault zone (quartz-albite-microcline-riebeckite-aegirine, quartz-albite-microcline-magnetite, and clinopyroxene-albite) was studied with use of back-scattered scanning electron microscopy. Chevkinite occurs only in quartz-albite-microcline metasomatites, as well as, instead of chevkinite, the paragenesis of allanite and titanite is stable in clinopyroxene-albite metasomatites. Allanite and fergusonite are typical for all zones of metacomatic column. In their turn, chevkinite and allanite are often altered due to interaction with a hydrothermal fluid; and in this way both of them loss an amount of  $TR_{Ce}$ . At the same time, secondary bastnasite, synchysite, ancylite are formed after allanite, and secondary monazite — after chevkinite. Presumably, the low-temperature alteration of allanite and chevkinite under action of  $F^-CO_3^{2-}$ - and  $PO_4^{3-}$ -bearing fluids had not any significant influence upon the total REE-content in those metasomatites.