Thematic Section: Physico-Chemical Research. Subsection: Phase Equilibrium.

Full Paper Reference Object Identifier - ROI: jbc-02/15-42-6-81 The article is published on materials of the report on "International Scientific Forum Butlerov Heritage - 2015". http://foundation.butlerov.com/bh-2015/ (English Preprint) Submitted on April 08, 2015.

Experiment investigation of partitioning elements KCl-KBr-LiKCrO₄ and KCl-KBr-Li₂CrO₄ in the quaternary reciprocal system Li,K||Cl,Br,CrO₄

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Abstract

In this paper, the quaternary reciprocal system Li,K||Cl,Br,CrO₄ was partitioned into simplexes using geometrical method and graph theory. A tree of phases of the system was constructed, and stable elements were identifies. Phase equilibrium in partitioning triangles KCl-KBr-LiKCrO₄ and KCl-KBr-Li₂CrO₄ were studied by differential thermal analysis. In these systems, the stability of continuous series of solid solutions based on kalium chloride and bromide is preserved.