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Experiment investigation of partitioning elements NaF-Na_2MoO_4-KI in the quaternary reciprocal system Na,K||F,I,MoO_4

© **Elizaveta V. Terentyeva**,[+] **Ekaterina M. Dvoryanova**,*
Ivan K. Garkushin,* and **Mikhail A. Krasnov***
Chair of General and Inorganic Chemistry. Samara State Technical University.
Main Building. Molodogvardeyskaya St., 244. Samara, 443100. Samara region. Russia.
Phone: +7 (846) 242-36-92. E-mail: Here.and.now-1@yandex.ru

*Supervising author; [+]Corresponding author

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Abstract

The quaternary reciprocal system Na,K||F,I,MoO_4 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 NaF-Na_2MoO_4-KI were studied by differential thermal analysis. Defined eutectic composition (EQ. %): NaF-2%, Na_2MoO_4-60%, KI-38% with a melting point of 506 ^oC. The melting specific and molar enthalpies were identified for eutectic composition.