The Investigation of Phase Diagrams of Erbium Pnictides

M. N. Abdusalyamova and O. I. Rachmatov

The Institute of Chemistry of Tajik Academy of Science, Aini St. 299/2, 734063 Dushanbe, Tajikistan

Reprint requests to Prof. M. N. A.; Fax: 992372210404; E-mail: dali@ac.tajik.net

Paper presented at the NATO Advanced Study Institute, May 4–14, 2001 (Kas, Turkey)

Z. Naturforsch. 57a, 98–100 (2002); received December 28, 2001

The phase diagrams of Er-Sb and Er-Bi have been obtained. Erbium forms three compounds with antimony as well as bismuth. The antimonides and bismuthides Er₅Sb₃ (1640°C), Er₅Bi₃ (1427°C), ErSb₂ (650°C) and ErBi₂ (595°C) are formed by peritectic reactions. ErSb (2040°C) and ErBi (1860°C) melt congruently.

Key words: Rare Earth Elements; Phase Diagram.