

Calorimetric Investigation of Liquid Gallium-based Alloys

D. S. Kanibolotsky^{a,b}, N. V. Golovata^b, O. A. Bieloborodova^b, and V. V. Lisnyak^b

^a Biophysical Department, Academician Bogach Institute,
Glushkova Ave. 2, corp. 12, Kiev 03022, Ukraine

^b Department of Inorganic Chemistry, Kiev National Taras Shevchenko University,
Vladimirskaya Street 64, Kiev 01033, Ukraine

Reprint requests to Dr. V. V. L.: Fax: +38-(0)44-2302505; E-mail: lisnyak@chem.univ.kiev.ua

Z. Naturforsch. **58a**, 473 – 474 (2003); received April 15, 2003

In this work, enthalpies of mixing of binary liquid gallium-gadolinium and gallium-silicon alloys have been measured by high-temperature isoperibolic calorimetry at 1760 ± 5 K. Significant negative enthalpies of mixing have been found for Ga – Gd system, while these values are positive for Ga – Si melts.

Key words: Calorimetry; Mixing Enthalpy; Liquid Alloys; Gallium Alloys; Ga – Gd; Ga – Si.