ON THE EXISTENCE OF A STRUCTURAL TRANSITION IN ALUMINUM AT THE PRESSURE OF ~ 1.5 MBAR AND TEMPERATURE OF ≥ 1000 K.

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The paper presents some results of the calculations of thermodynamic functions for crystalline aluminum. It is shown, that compression of an *fcc* aluminum crystal at the temperatures above ~1000K shall lead to a structural transition either into the *bcc* structure or into some intermediate structure. This structural transition will take place at the pressures of the order of 1.5 MBar. At the modern level of high-pressure equipment it is possible to experimentally test this conclusion.