

3. Diagrams with a Eutectic Point. These are in general three-phase systems (for example, one liquid phase, and two solid crystalline phases with different symmetries), and are described by four equations (equations (17) in /3/). In the complete ab-

Fig. 4. a) Sn-Ga, $U_s = 0.85 \cdot 10^{-13}$ erg/particle ; b) Cd-Tl, $U_o = 1.28 \cdot 10^{-13}$ erg/particle. 1) Experimental ~~par~~ curve ; 2) calculated curve ; 3) $U_o = 0$.

sence of solubility in the crystal phases, the "liquidus" lines are described by the equation;

.....R.p. 390

(9)

Table 2

Key

- 1) System
 - 2) erg/particle
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We checked the agreement between equations (9) and experimental data for four systems * : tin-gallium, aluminum-germanium, cadmium-thallium, and gold-antimony (see Fig. 4). Table 2 contains data relating to the energies of mixing.

* In calculating the cadmium-thallium diagram we neglected the solubility of cadmium in thallium ; in the gold-antimony diagram we only calculated the left-hand branch of the "liquidus" and the position of the eutectic point.