

## As – Cd (Arsenic – Cadmium)

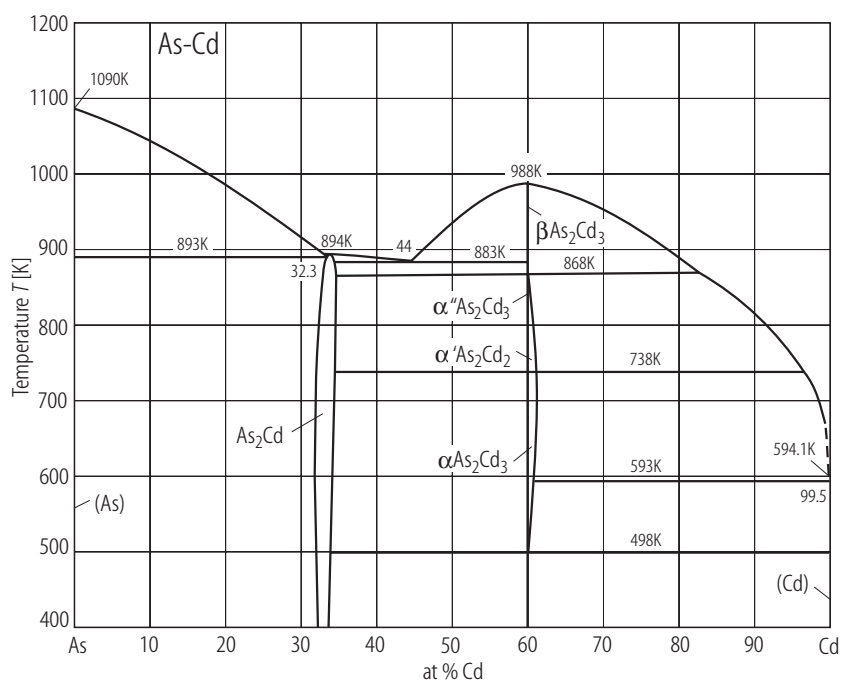
### Phase diagram

On the basis of results published by [70 Guk], [13 Zem], Okamoto (in: [Massalski]) has constructed an assessed phase diagram from where information has been obtained to draw Fig. 1.

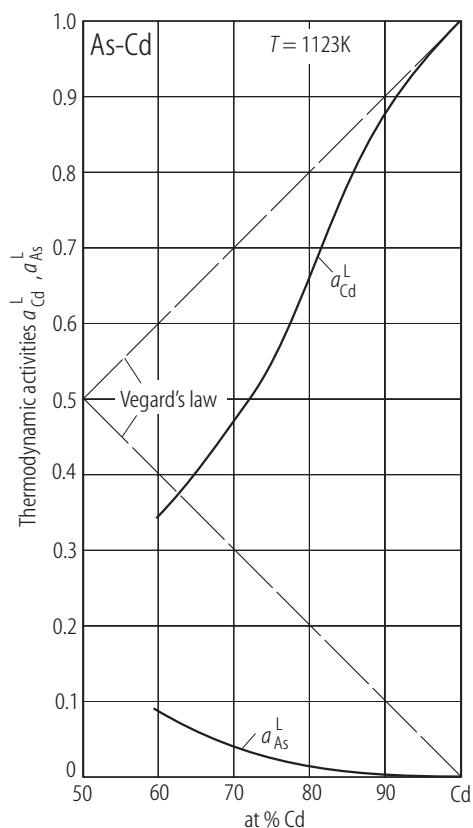
### Thermodynamics

By high-temperature drop calorimetry Yamaguchi et al. [91 Yam] have determined heat contents of liquid alloys with concentrations from 10 to 40 at% As. Evaluating the calorimetric results there have been calculated thermodynamic activities (see Fig. 2), enthalpies of mixing (see Fig. 3) and entropies of mixing (see Fig. 4).

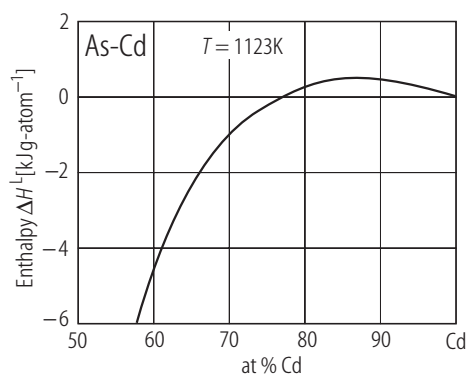
### Figures



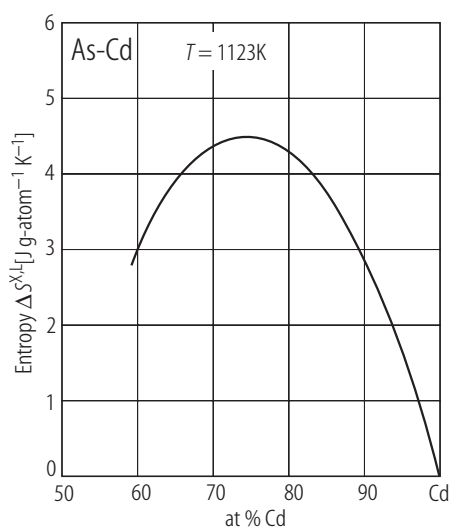
**Fig. 1. As–Cd.** Phase diagram of the As-Cd system (taken from [Massalski]).



**Fig. 2. As–Cd.** Thermodynamic activities of liquid alloys [91 Yam].



**Fig. 3. As–Cd.** Enthalpies of mixing of liquid alloys [91 Yam].



**Fig. 4. As–Cd.** Entropies of mixing of liquid alloys [91 Yam].

## References

- [13 Zem] Zemczuzny, S.F.: Int. Z. Metallogr. **4** (1913) 228
- [70 Guk] Gukov, O.Ya., Ugai, Ya.A., Pshestanchik, V.R., Gouchrov, E.G., Pakhomova, N.V.: Inorg. Mater USSR **6** (1970) 1693
- [91 Yam] Yamaguchi, K., Mikula, A., Komarek, K.L., Itagaki, K.: Z. Metallkde. **82** (1991) 591
- [Massalski] Massalski, T.B., (ed.): "Binary Alloy Phase Diagrams", Second Edition, The Materials Information Society, ASM International, Materials Park, Ohio (1992)