

## Al – Eu (Aluminum – Europium)

### Phase diagram

A short discussion of this system is given by Okamoto [91 Oka]. Kononenko et al. [90 Kon] have investigated the Al-rich side by observation of mechanical damping. Manyako et al. [85 Man] found the intermediate phase AlEu. The phase diagram proposed by Okamoto [91 Oka] is reproduced in Fig. 1.

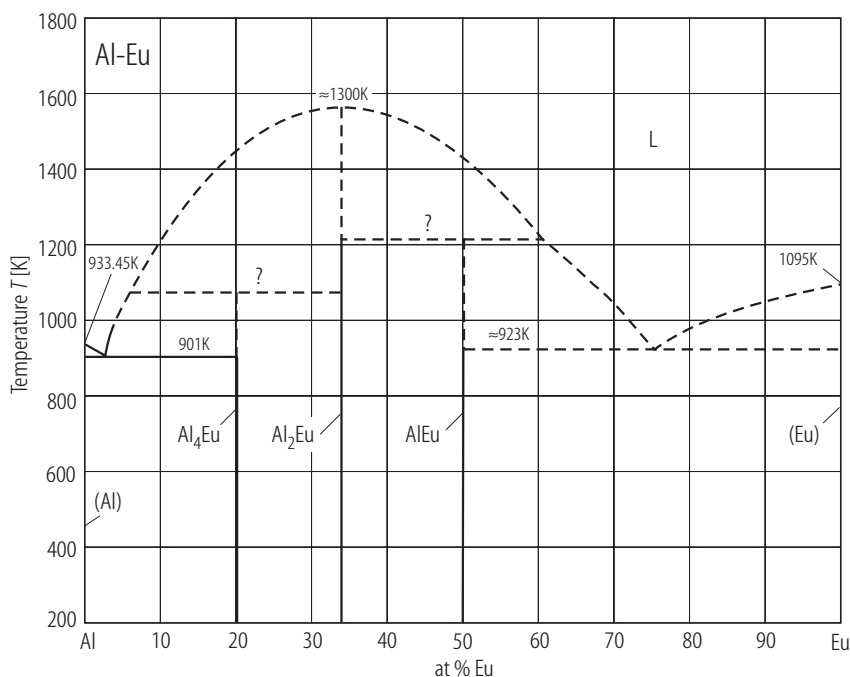
### Crystal structure

Crystallographic data of AlEu are:

Structure: orthorhombic;

Lattice constants:  $a = 0.5806$  nm  
 $b = 0.9652$  nm  
 $c = 1.0088$  nm [85 Man].

**Figure**



**Fig. 1. Al–Eu.** Phase diagram proposed by [91 Oka].

### References

- [85 Man] Manyako, N.B., Rozhdestvenskaya, I.B., Zarechnyuk, O.S., Yanson, T.I.: *Kristallografiya* **30** (1985) 484
- [90 Kon] Kononenko, V.I., Golubev, S.V.: *Russ. Metall*, (1990) 193
- [91 Oka] Okamoto, H.: *J. Phase Equilibria* **12** (1991) 499