

**substance:**  $\text{Sm}_3\text{Se}_4$

**property:** crystal structure, physical properties

**crystal structure** cubic ( $\text{Th}_3\text{P}_4$ -type,  $T_d^6 - \bar{1}4\bar{3}d$ )

**lattice parameters**

$a$	8.785 Å	59B
	8.892 Å	79C

**heat capacity:** Fig. 1

**References:**

- 59B Benacerraf, S., Guittard, M.: C. R. Acad. Sci. Paris 248 (1959) 2012.  
79C Coey, J. M. D., Cornut, B., Holtzberg, F., von Molnar, S.: J. Appl. Phys. 50 (1979) 1923.

**Fig. 1.**

$\gamma$ - $\text{Sm}_2\text{S}_3$ ,  $\text{Sm}_3\text{S}_4$ ,  $\text{Sm}_3\text{Se}_4$ . Temperature dependence of molar heat capacity. The increase below 7 K is explained by a Schottky anomaly due to the crystal field splitting ( $\Delta_{\text{cf}} = 2.4$  K) of  $\text{Sm}^{3+}$  [79C].

