

Table 3.  $W_s$  values

Salt	$W_s$ (eV) (from Fig. 2)	$W_s$ (eV) (Experimental or theoretical)	$W_s$ (eV) (Pathak & Vasavada, 1970)§
KI	1.83	1.60* (Ex) 1.70–1.92†‡ (Th.)	2.04§
RbI	1.81	1.798† 1.88‡	1.88§

\* Ecklin, Nadler & Rossel (1964). † Boswarva & Lidiard (1967). ‡ Rao & Rao (1968).

§ From the equation  $W_s = 2.05 \times 10^{-3} T_m$  ( $T_m$  = melting point).

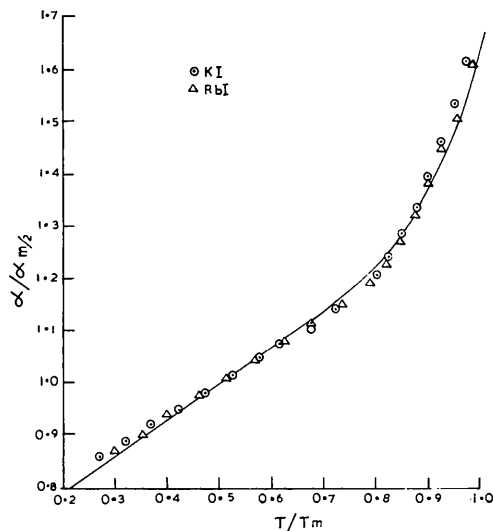


Fig. 3. Plot of reduced expansion  $\alpha/\alpha_{m/2}$  versus reduced temperature  $T/T_m$ .  $T_m$  is the melting temperature ( $^{\circ}\text{K}$ ) and  $\alpha_{m/2}$  is the value of  $\alpha$  at  $T = \frac{1}{2}T_m$ .

The coefficients of linear expansion defined by  $\alpha = (1/a_i)(da_i/dt)$  are given in Tables 1 and 2 along with those determined by other workers.

It was found as shown in Fig. 1 for KI that the thermal expansion  $\alpha$  increases considerably beyond the temperature corresponding approximately to the 'knee' of the electrical conductivity versus  $1/T$  plot. It is assumed as in Paper I that (i) equations (1) and (3) hold up to melting point, (ii) any deviations from them are due to defects (Fig. 1) and (iii) the energy of vacancy formation can be deduced from the

slopes of the plots of  $\log \Delta\alpha$  versus  $1/T$ . Such plots are shown in Fig. 2. The energy of formation,  $W_s$ , of the Schottky defects determined from them are given in Table 3. Since experimental values of  $W_s$  for RbI are not available comparison is made with some theoretical estimates.

It was shown in Paper I that the plot of reduced expansion  $\alpha/\alpha_{m/2}$  versus reduced temperature  $T/T_m$  gave a common curve for the alkali halides NaCl, KCl and CsBr. Here  $T_m$  is the melting point and  $\alpha_{m/2}$  is the thermal expansion at  $T = \frac{1}{2}T_m$ . The common curve is shown as a full line in Fig. 3 while points for KI and RbI are plotted on it. It is seen that these halides also follow the 'law of corresponding states'.

#### References

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### The root-mean-square vibrational displacements of sodium and fluorine ions in sodium fluoride: erratum.

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Corrections are given to Sharma [*Acta Cryst.* (1974) **A30**, 299–300].

The following corrections to Sharma (1974) are given:

- Page 299, lines 2 and 3 in the abstract should read: mean-square vibrational displacements of sodium and fluorine ions were determined to be  $0.184 \pm 0.002$  and  $0.186 \pm 0.005$  Å respectively. These values are compared with the values of  $0.202 \pm 0.007$  Å for the two . . . .
- Page 300, lines 14 and 15, column one, should read:
 

$B$ (sodium)	$= 0.893 \pm 0.021$ Å <sup>2</sup>
$B$ (fluorine)	$= 0.912 \pm 0.054$ Å <sup>2</sup>

- Page 300, lines 19 and 20, column one, should read: placements of  $\sqrt{\bar{U}^2}$  (sodium) =  $0.184 \pm 0.002$  Å and  $\sqrt{\bar{U}^2}$  (fluorine) =  $0.186 \pm 0.005$  Å as compared to the values

#### Reference

- SHARMA, V. C. (1974). *Acta Cryst.* **A30**, 299–300.