

(Fyfe, Turner and Verhoogen, 1958, p. 32).

The effect of pressure on the transition temperature can be calculated from the Clausius-Clapeyron equation

$$\frac{dP}{dT} (\text{low Ab} \rightarrow \text{high Ab}) = \frac{\Delta S}{\Delta V} = 332 \pm 100 \text{ bar deg}^{-1}$$

An increase of 1000 bars in confining pressure should therefore raise the low albite-high albite transition by 2 to 4°C.

REFERENCE

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THE NEAR INFRARED SPECTRUM OF BERYL: A CORRECTION

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The crystal (sample 3) which produced the anomalous near-infrared "beryl" spectrum reported in this earlier note (Wickersheim and Buchanan, 1959) has recently been identified by us as tourmaline. While this invalidates the conclusion drawn from that particular spectrum (Wickersheim and Buchanan, 1959; 1965) as far as beryl is concerned, the conclusions do still apply to tourmaline. Stated very briefly, the conclusions which can be drawn from the spectrum alone are: 1) that three types of OH⁻ (i.e., OH⁻ on three structurally dissimilar sites) exist; 2) that there is no detectable water present; 3) that, as indicated by the polarization of the OH⁻ vibrations, the OH⁻ directions do not quite parallel the axis of symmetry of the crystal; 4) that the OH⁻ ions are coupled fairly strongly to the rest of the crystal structure, and 5) that it seems likely, because of the recurrence of a 950 cm⁻¹ combination with the OH⁻ stretching vibrations, that the oxygen of the OH⁻ group is directly bonded to a silicon ion—i.e., that we are observing silanol groups. Despite its originally erroneous identification, this spectrum is, to our knowledge, the only good spectrum of tourmaline in the 1 to 3 micron range available in the literature.

REFERENCES

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