

the liquid phase. In support of this, the ultimate resistivity reached here is close to the value obtained by Busch⁵ for liquid indium antimonide at zero pressure. The small pressure dependence of the resistivity in the liquid phase is also consistent with the metallic behaviour demonstrated by Busch.

Fig. 2 shows the melting point, as measured by the sharp fall in resistance, plotted as a function of pressure. It shows a decrease with increasing pressure which, qualitatively, is consistent with the known contraction in volume on melting shown by this compound. The decrease varies linearly with pressure to about 30,000 atmospheres, but significantly departs from this behaviour at higher pressures. By inserting a value of the slope of our melting curve at zero pressure in the Clausius-Clapeyron equation with a known value⁶ of the volume contraction on melting ($\Delta v/v_{\text{solid}} = 0.13$) a value for the latent heat of fusion can be found. This value of 27 cal./gm. does not agree with an experimentally determined value⁷ of 47.2 cal./gm. The disagreement between these values might arise from the presence of complex phases in the liquid near the melting point⁸. In our experiments results are lacking below 10,000 atmospheres because the pyrophyllite gasket technique is not reliable.

It is interesting to compare the corresponding work on the melting of germanium by Hall⁹. In this he finds a variation of melting point with pressure which is substantially linear over the range 0-180,000 atmospheres. When his value of the slope of the melting curve is used to calculate the latent heat of fusion, using a measured value¹⁰ of the volume change, a value of 84 cal./gm. is found which is in fair agreement with the experimentally determined value of 110 cal./gm.¹¹.

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