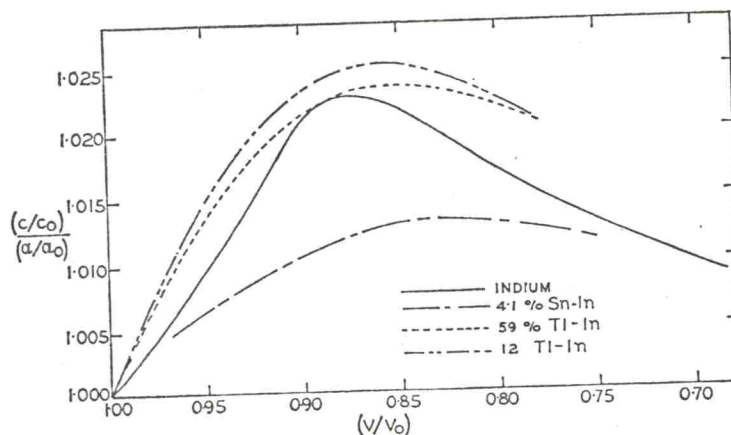
FIG. 6.  $V/V_0$  vs. Pressure—Indium-5.9% Tl Alloy.FIG. 7.  $c/c_0/a/a_0$  vs.  $V/V_0$  for Indium and three alloys.

about the same  $V/V_0$ . There are differences in compressibility among the alloys, but no significant correlation with alloying element or concentration appears.

Thallium is a considerably heavier element than indium but has the same outer electron configuration. Tin is next to indium in the periodic table and has one more valence electron. Attempts to explain the effect of pressure on the lattice parameters of h.c.p. elements such as Mg or Cd<sup>(6,7)</sup> based on almost free electron arguments have not been very successful. Until detailed information is

available about energy gaps, etc., it would seem fruitless to present any extended arguments concerning indium or its alloys.

It is apparent, however, that changing the outer electronic structure has considerably more effect than changing the row of the periodic structure.

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