

In Fig. 2 we note at high pressure an apparent new peak in the spectrum near 33-34 kK. It seems reasonable to assign this to Sb(IV). The $\text{Cs}_2\text{Sb}_{0.3}\text{Sn}_{0.7}\text{Cl}_6$ and $(\text{CH}_3\text{CH}_2\text{NH}_3)_2\text{Sb}_{0.5}\text{Sn}_{0.5}\text{Cl}_6$ give qualitatively similar high pressure visible and UV spectra. All changes were reversible upon release of pressure.

Equation (1) can be applied to MV_1 to estimate the relative stability of the Sb(III)-Sb(V) ground state to that of Sb(IV)-Sb(IV). It is necessary to assume $R = (\omega/\omega')^2 = 1$, but in a variety of systems it appears that the deviation from 1 is always less than 10%. Configuration interaction would doubtless modify the quantitative nature of the results, but it is clear from Table I that the electronic transition is feasible.

The various pieces of evidence put together are rather convincing that the mixed valence Sb(III)-Sb(V) compound transforms to an Sb(IV)-Sb(IV) ground state at high pressure.