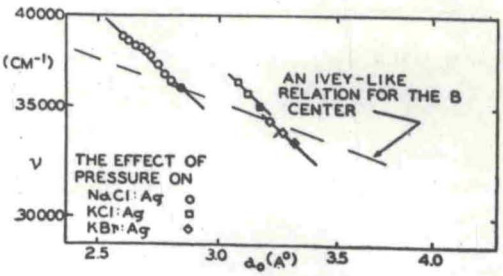

FIG. 8. An Ivey-like relation for the B center, and the compressibility near a B center.

quency of the spectra is to higher energy, although somewhat less so than the B band. This work is not inconsistent with the consensus of opinion that this band involves the interaction of two silver ions and the electron or electrons adjoining them. The model of Maenhout-van der Vorst and Dekeyser[5] involving the joining of two B centers to form the C center is perhaps favored.

d. D Center

A great deal of controversy centers around this defect. Several authors have proposed models for the band, but no consensus of opinion exists.

When pressure is applied, the band shifts to higher energy initially, but levels off around 100 000 atm. The shift is in magnitude similar to the B center.

The strong shift to higher energy seems inconsistent with a hole picture for the center, as proposed by Etzel and Schulman.[4]

On the other band, at first glance the other model proposed,[5] that of a silver ion adjoining an M center also appears to be inconsistent, because the M band in pure LiCl has a much smaller pressure shift than the F band,[10] while the D and B bands have comparable shifts. However, if one considers the Knox model of the M center[12] the smaller Ag^+ ion in the center of the cavity could offer less resistance to compression at low pressures, at least.

e. E Center

The data on this band are confined almost exclusively to potassium chloride, where the band is quite strong. Little or no pressure dependence of ν_m is detected. This is consistent with Ishiguro's model[6,7] of an electron trapped in the field of a substitutional silver ion.

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[12] R. S. Knox, Phys. Rev. Letters 2, 87 (1959).