

of the peak with increasing pressure could be due to many possible effects, including the changes in the background absorption, pressure effects on lattice vibrations, production of lattice defects, or effect from the NaCl matrix in which the CuCl particles are dispersed. A  $d^{10}$  to  $d^9s$  transition requires a mixing of symmetrical and antisymmetrical states, which is already present in the zincblende structure, but is somewhat increased by lattice vibrations.

For complete understanding of the band structure, a wide variety of measurements would be necessary on

each compound. It is hoped that these optical measurements will promote some general understanding of the band arrangement of compounds of the same crystal structure, and of the effects in going from a purely valence crystal to a largely ionic compound.

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