

Epr Of Mn²⁺ - Doped Cadmium Potassium Selenate Tutton Salt

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ABSTRACT

The EPR of Mn²⁺ has been studied in the single crystals of cadmium potassium selenate hexahydrate Tutton salt. Two types of magnetically in-equivalent sites have been obtained. The spin Hamiltonian parameters are determined by analyzing the Z- and X- axes spectra. The variation of prominent cubic field parameter b_4^0 and prominent lower symmetry parameter D has been examined in different series of Tutton salts and crucial role of hydrogen bonding is envisaged in explaining the change in sign of D.

Keywords : EPR of Mn²⁺, Tutton salt, hydrogen bonding