

Spin – Relaxation & Quenching in Cobalt Tutton-Salts

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ABSTRACT

The temperature variation of EPR linewidth has been investigated in Mn²⁺-doped cobalt ammonium selenate hexahydrate & cobalt potassium selenate hexahydrate Tutton salt crystals. The observed variation from RT to 100 K has been attributed to spin – lattice relaxation of cobalt ions, the excessive broadening of EPR lines at 100 K being due to the increase in spin – lattice relaxation time of cobalt spins.

Key Words: EPR, Tutton Salts, linewidth broadening.