# Electron Paramagnetic Resonance Study of $Cu^{2+}$ in $CdCa(CH_3COO)_4 \cdot 6H_2O$ Single Crystal

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The Electron Paramagnetic Resonance spectra of $Cu^{2+}$ in $CdCa(CH_3COO)_4 \cdot 6H_2O$ (cadmium calcium tetraacetate hexahydrate) powder and single crystal have been recorded at 300 and 133 K. The angular variation of the spectra indicated the substitution of the host $Cd^{2+}$ with $Cu^{2+}$. The observed values of the **g** and **A** hyperfine tensors were found to be temperature dependent, and this dependence is discussed and explained on the basis of dynamic Jahn-Teller effects. The spin-Hamiltonian parameters were found to be axial symmetric at room temperature, whereas they showed deviations from axial symmetry at low temperature. The **g** and **A** tensors where found to be coaxial within the limits of experimental errors, and the ground state wave functions of the complex at 300 and 133 K have been constructed.

*Key words:* EPR; Crystal and Ligand Field; Jahn-Teller Effects.