EPR Studies of Cu²⁺ Doped Zinc Saccharin, [Zn(sac)₂·(H₂O)₄]·2H₂O Single Crystals

- İ. Kartal, B. Karabulut, F. Köksal, and H. İçbudak^a
- Department of Physics, Faculty of Sciences, Ondokuz Mayıs University, 55139 Samsun, Turkey^a Department of Chemistry, Faculty of Sciences, Ondokuz Mayıs University, 55139 Samsun, Turkey Reprint requests to Dr. İ. K.; E-mail: ikartal@omu.edu.tr
- Z. Naturforsch. **55 a,** 887–890 (2000); received October 13, 2000

The EPR spectra of Cu^{2+} in zinc saccharin crystalline powder and single crystals have been recorded at room temperature. The angular variation of the spectra indicates the substitution of the host Zn^{2+} with Cu^{2+} . Two magnetically inequivalent sites for Cu^{2+} have been observed. The spectra were fitted with a rhombic spin-Hamiltonian, and the ground state wave function of the complex has been constructed.

Key words: EPR; Zinc Saccharin; Cu²⁺; Ground State Wave Function.