

# Molecular Orientation in Uniaxial Liquid Crystal Phases as Studied by Electron Paramagnetic Resonance

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The electron paramagnetic resonance spectra of 3 $\beta$ -doxyl-5 $\alpha$ -cholestane dissolved in five liquid crystals have been recorded as a function of temperature in the isotropic and mesogenic phases. From these spectra the order parameter  $\langle P_2 \rangle$  has been determined. The results have been compared with the data obtained from the optical birefringence measurements and from the polarized absorption spectra of the dichroic dye dissolved in liquid crystal host.

*Key words:* Liquid Crystal; EPR; Order Parameter.