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Study of Temperature effect on refractive indices for(5PCH) liquid crystals

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Abstract : Liquid crystals are state of substance possesses characteristics between traditional liquid and crystallization. For instance, perhaps liquid crystal away similar to the crystals. There are different types of crystal in the liquid phase. In this study, used nematic liquid crystals type(5PCH) and wavelength (632.8nm) for find the temperature effect on optical properties .This study shows the direct proportionality between the temperature and the ordinary refractive index (n_o), from one side and the indirect proportionality between the temperature with the extraordinary refractive indices (n_e),optical anisotropy (birefringence Δn). **Keywords :** Liquid Crystals, Optical Properties, Birefringence.

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