Abstract

Combination of ferroelectric nano – powder and anisotropic liquid crystalline gives rise to exceptional physical properties unknown for solid state materials. The outstanding properties of
Characterization and Mesomorphic Behavior of Liquid Crystals Doped with Nano – Powder

ferroelectric doped liquid crystal being their macroscopic dipole, the preparation must assume the uniform alignment of the mesogen. By selecting suitable liquid crystals, phase structure and chemistry of macromolecular structure, these physical properties can be optimized for special applications like optical, electrical etc. In this paper, dispersed low mass nano – powder in liquid crystal is studied by various techniques viz. Polarizing Microscopy Studies (PMS), Data Thermal Analysis (DTA), Fourier Transform Infrared (FTIR) Spectroscopy, Ultraviolet Visible (UV) Spectroscopy.

References

- Rita A. Gharde, Santosh A. Mani and Madhavi S. Pradhan Spectroscopic Study of liquid crystal doped with nano-powder (Proceedings of International Conference on Green Technology in Engineering and Applied Sciences, Chennai 2013)

Index Terms

Computer Science
Green Technology
Characterization and Mesomorphic Behavior of Liquid Crystals Doped with Nano – Powder

Keywords
Cholesteric Liquid Crystal (clc)  Polarizing Microscopy Studies (pms)  Data Thermal Analysis (dta)
Fourier Transform Infrared (ftir) Spectroscopy
Ultraviolet Visible (uv) Spectroscopy