Preliminary Studies on the Dielectric Permittivity in the Isotropic and Mesophase of Cholesteryl Oleyl Carbonate

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The phase detection in cholesteryl oleyl carbonate was studied over a broad temperature range by dielectric spectroscopy. Tests were conducted in the static and the low frequency ionic regions. They point to the possibility of relatively simple detection of phase transition. Some manifestations of pretransitional behaviours were also found. – Pacs: 64.70Md, 77.22Ch, 64.30+t

Key words: Static Dielectric Permittivity; Dielectric Spectroscopy; Liquid Crystal Blue Phase; Ionic Impurities; Critical Fluctuations.