

## 6. REFERENCES

- Beaubois F. and Marcerou J.P. (1996) “ Biaxial nematic and smectic-A boundaries in thin planar samples of 8OCB aligned by rubbed polyimide”, *Europhys.lett.*, Vol.36, pp.111-116 .
- Chandrasekar S. and Shashidhar R. (1979), “Advances in liquid crystals”, **4**, (edn. G.H. Brown), Academic Press, New York, pp.83.
- Chandrasekhar S.(1992) “Liquid Crystals”, 2nd edn., Cambridge University Press, Cambridge, UK.
- de Gennes P.G and Prost J. (1993) “The Physics of Liquid Crystals”, 2<sup>nd</sup> Ed. Clarendon press Oxford.
- Geetha Basappa and Madhusudana N.V. (1998), “ Liquid Crystals made of highly Polar Compounds”, *Eur. Phys.Journal B.*, Vol 1, pp.179-18.
- Geetha Basappa, Govind, A.S. and Madhusudana N.V. (1997)“ Theoretical Study of the Effect of Light on Nematic to Isotropic Phase”, *J. Phys. II France*, Vol 7, pp.1693
- Govind A.S. (2002), “ Ph.D Thesis”, Raman Research Institute, Bangalore, chapter-2, pp 38.
- Govind A.S., Suresha B.L. and Radhakrishna, M.C. (2011), “ Simple Molecular Theory for the Effect of Light on Nematic to Isotropic Phase Transition”, *Acta Physica Polonica A., Journal.*, Vol 120, pp. 462-467.
- Govind A.S., Suresh B.L. and Radhakrishna M.C. (2011), “ A Simple Molecular theory for Photo Induced Smectic Phase”, *Euro Physics Journal.*,Vol 34 , pp.111-117.

- Haller, I., *Prog. Solid State Chem.*, (1975), Vol 10, pp.103 .
- Horn R.G. and Faber T.E. (1979), “ Thermodynamic Scaling and the Characteristic relaxation time at the Phase Transition of Liquid Crystals”, *Proc. R.Soc. Lond.A.*, Vol 368, pp.199 .
- Humphries R.L., James P. G. and Luckhurst G. R. (1971), “ A molecular field treatment of liquid crystalline mixtures” *Symp. Faraday Soc.*, Vol 5, pp.107.
- Katriel J. and Kventzel G.F.(1983), “Generalized mean-field theory; Formulation, thermodynamic consistency, and application to the isotropic-nematic-smectic transitions in liquid crystals”, *Phys.Rev.A.*, Vol 28, pp. 3037-3042 .
- Kobayishi K. (1971), “ Theory of Translational and Orientation Melting with Application to Liquid Crystals” *Mol.Crys. Liquid cryst.*, Vol 13, pp 137-148.
- Mada H. and Kobayashi S. (1979) , “Surface and bulk order parameters of a nematic liquid crystal” *Appl. Phys. Lett.*, Vol 35, pp .4-5.
- Madhusudana N.V. and Jyothsna Rajan (1990), “ A Simple molecular theory of double re-entrance exhibited by highly Polar Compounds”, *Liq.Cryst.*, Vol 7, pp. 31-40 .
- Maier, W., Saupe, A., *Naturforsch, Z., A* (1959), Vol 14, pp.882.
- Mc-Millan. (1972), “X-ray Scattering from Liquid Crystals .1. Cholesteryl Nanoate and Myristate” *Phys Rev.A.*, Vol 6 pp.936-947.
- Miyano K. (1979) “Wall-induced Pretransitional Birefringence : A New Tool to Study Boundary Aligning Forces in Liquid Crystals”, *PhysRev.Lett.*, Vol 43, pp.51-54.
- Nounesis G., Garland C.W. and Shashidhar R. (1991), “Cross over from three-dimensional XY to tricritical behaviour for the nematic-smectic-A1 phase transition” *Phy. Rev. A.*, Vol 43, pp.1849-1856.

- Nounesis G., Kumar S., Pfeiffer S, Shashidhar R. and Garland C.W. (1994), “ Experimental Observation of a Transition between Two Uniaxial Nematic Liquid Crystal Phases” *Phy. Rev. Lett.*, Vol 73,pp.565-568.
- Ocko B.M., Brasalu A., Pershan P.S., Schwartz D.S., etal.,(1986) , “Quantised layer growth at liquid crystal surfaces”,*Phy. Rev.Lett*, Vol 57, pp. 94-97.
- Ping Sheng. (1982), “ Boundary –layer phase transition in nematic liquid crystals” *Phys. Rev. A.*, Vol 26, pp.1610-1617.
- Ping Sheng, (1976), “ Phase Transition in Surface-Aligned Nematic films” *Phys. Rev. Let.*, Vol 37, pp.1059 -1062.
- Prost J. and Toner J. (1987), “Dislocation-loop melting theory of phase diagrams with nematic regions surrounded by smectic regions”, *Phy. Rev. A.*,Vol 36, pp.5008-5014.
- Qian T.Z., Xie Z.L., Kwok H.S. and Ping Sheng (1997), “Dynamic flow and switching bistability in twisted nematic liquid crystal cells” *Appl. Phys. Lett.*, Vol 71, pp.596-598.
- Schadt M. and HelfrichW. (1971), “Voltage Dependent Optical Activity of a twisted Nematic Liquid Crystal” *Appl.Phys.lett.*, Vol 18, pp.127-128.
- Selinger J.V. and Nelson D.R. (1988), “ Density-functional theory of nematic and smectic-A order near surfaces”, *Phys. Rev. A*, Vol 37, pp.1736-1746.
- SobhaR.W., Vijayaraghavan D. And Madhusudhana N.V. (1998), “Evidence for a nematic-nematic transition in thin cells of a highly polar compound”,*Euro phys Lett.*, Vol 44, pp.296 -301.
- Surajit Dhara. And Madhusudhana N.V. (2004), “Enhancement of the orientational order parameter of nematic liquid crystals in thin cells”, *Europhys. J. E.*, Vol 13, pp. 401-408.



## LIST OF PUBLICATIONS

### **National Level**

1. Aswini, P. & Govind, A.S., (2008), "Enhancement of Nematic Order of Liquid Crystals in Thin cells" Indian Association of Physics Teachers 23<sup>rd</sup> Annual Convention Bangalore, October-2008, Abstracts and Proceedings of the convention, pp.123

### **International Level**

1. Aswini, P. & Govind, A.S., (2011), "Theoretical Study of the Effect of the cell thickness on Nematic Order in liquid Crystals" Published in AIP Conference proc-1393, pp.293
2. Aswini, P. & Govind A.S., (2012), "Enhancement of Nematic Order of Liquid crystals in thin cells", Acta Physica Polonica A, Vol 121, pp.625-627, Impact factor-0.6
3. Aswini, P. & Govind, A.S.,(2012),"Enhancement of Nematic Order of Liquid Crystals in Thin cells with Surface Induced Smectic Phase", Liquid crystal.,Vol 39, pp.701-706, Impact factor-1.6
4. Govind, A.S. & Aswini, P. (2012),"Enhancement of Nematic Order of Polar Liquid Crystals in Thin Cells", Liquid crystal. Vol 39, issue pp.1476. Impact factor-1.6.

