

Guest Lecture on
“Nanoparticles in Liquid Crystals & Liquid Crystalline Nanoparticles”

18th November, 2019

Organized by: Department of Physics & Electronics

Resource Person: Dr. C.V. Yalamaggad
Scientist E, Centre of Nano and Soft Matter Sciences, Bengaluru

Liquid crystals represent a fascinating class of soft condensed matter where the subtle balance between order and fluidity of the molecules exist. They show a range of exceptional properties that are not only fascinating from basic science point of view, but also hold tremendous potential for various innovative applications. On the other side Liquid-crystalline nanoparticles represent an exciting class of new materials for a variety of potential applications. By combining supramolecular ordering with the fluid properties of the liquid-crystalline state, these materials offer the possibility to organise nanoparticles into addressable 2-D and 3-D arrangements exhibiting high processability and self-healing properties.

Hence, the Department of Physics & Electronics arranged a Guest lecture on “Nanoparticles in liquid crystals and liquid crystalline nanoparticles” on 18th November 2019 by Dr. C. V. Yalamaggad, to bring awareness among the students about the developments in the field of discrete thermotropic liquid-crystalline nanoparticle hybrids, with special emphasis on the relationship between the nanoparticle morphology and the nature of the organic ligand coating and their resulting phase behaviour. In his lecture he discussed about the Mechanisms proposed to explain the supramolecular organisation of the mesogens within the liquid-crystalline phases.



Dr.C.V.Yalamaggad at the Lecture & Felicitation to Dr. C.V.Yalamaggad