

## **Special Issue: Nanoparticles and Carbon Nanotubes in Liquid Crystals: Current Trends and Future Perspectives**

This Special Issue of Nanoparticles and Carbon Nanotubes in Liquid Crystals: Current Trends and Future Perspectives covers the theoretical and experimental aspects of nanoparticles and carbon nanotubes in thermotropic and lyotropic liquid crystals, formulation, properties and applications of nanoparticles in liquid crystals, liquid crystals phase transitions under nano confinement condition. In recent years, investigations of liquid crystal phase transitions in a geometrically confined environment i.e. Vycor glass, porous matrix such as Anopore, nanoparticles and carbon nanotubes have attracted much attention. It was found that nanoparticles and carbon nanotubes can greatly enhance the physical properties of liquid crystalline phases and phase transitions. This multidisciplinary field of research has led to promises new applications in the areas of displays, optical elements, meta-materials, sensors and drug delivery.

The topic includes:

Methods of nanoparticle and carbon nanotubes dispersion in liquid crystals

Synthesis of nanoparticle containing liquid crystals

Phases, chemical and physical properties of liquid crystal-nanomaterial dispersions

Carbon nanotubes in liquid crystals

Graphene and related materials in liquid crystals

Computer simulations and theory

Applications

This list is certainly not conclusive and can be expanded.