

# Fullerene-Containing Liquid-Crystalline Polymers

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Fullerene-containing thermotropic liquid crystals represent a novel family of mesomorphic materials. The presence of fullerene makes such compounds interesting from a fundamental point of view: owing to the unique properties of the fullerene unit, fascinating studies can be carried out within the liquid-crystalline state. Such investigations will better our understanding of the supramolecular organization of fullerene in organized molecular assemblies.

The incorporation of fullerene into liquid-crystalline polymeric architectures is interesting as such materials will display the properties of fullerene, the characteristics of liquid crystals (organization) and the features of polymers (processability, film forming capability).

The design, synthesis, characterization and mesomorphic behavior of fullerene-containing thermotropic side-chain liquid-crystalline polymers will be presented. The influence of fullerene on the different properties will be emphasized.

-3/4"-  
19 mm)