

A Review on Mesophase and Physical Properties of Cyclotriphosphazene Derivatives with Schiff Base Linkage

ABSTRACT

Over the last decades, liquid crystalline has been of great recent importance due to many unique and different features. The linking unit, terminal group, and core system are the most factors to influence the liquid crystal behaviour. Schiff base linkage with the formula of $-C=N-$ can maintain linearity by providing the stepped core structure with high stability. Incorporation of Schiff base linkage in cyclotriphosphazene system enhances the mesophase characteristic and high thermal stability. This review focussed on the mesophase behaviour and physical properties of cyclotriphosphazene derivatives attached to Schiff base linkages. A basic introduction to liquid crystalline materials, including description and classification, is provided in this review.