MORPHOLOGIC PROPERTIES OF MULTIPLATINUM/HYDROCARBON LYOTROPIC LIQUID CRYSTALLINE SYSTEMS

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Metal-containing liquid crystals are very interesting investigation objects due to the special and original combinations of the thermotropic and lyotropic properties and the availability of the various physical properties of these materials.

In this work we have investigated the mesomorphic and morphologic properties in three new lyotropic systems on the basis of multinuclear mesogens. The investigation objects are the disc-like macroheterocyclic platinum organyls with halogene bridging groups (Cl, Br and I) [1].

The typical textures of the observed N₁ and N₂ nematic mesophases and the microphotographs of the heterophase regions are presented. The linear sizes and the temperature widths of the heterophase regions of the N₁ --- N₂ and N₂ --- I phase transitions have been determined with high accuracy.


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