Fluorescent Mesogenic Tris(borondifluoride) Complexes Derived from Hexaketonates

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Abstract

In this work, a new series of columnar. borondifluoride complexes, containing a central trimethyl 1,3,5-benzenetricarboxylate core substituted with three β-diketonate with three, six and nine terminal alkoxy groups and is described. All compounds were characterized by ^{1}H and ^{13}C NMR spectroscopy, polarized optical microscope (POM) and differential scanning calorimeter (DSC), and their structures were confirmed by X-ray diffraction (XRD) methods. Both compounds 1-2b and 1c formed hexagonal columnar phases.

Keywords –Liquid crystal, Hexaketonates, Fluorescent

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