Synthesis and Liquid Crystal Properties of 2,7-Dialkoxy-9-fluorenones

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Abstract - 2,7-Dihydroxy-9-fluorenone was alkylated with alkyl halides in acetone in the presence of potassium carbonate to prepare 2,7-dialkoxy-9-fluorenones prone to mesomorphism. Mesomorphic properties are characteristic of the compounds containing in the alkoxyl chain from 5 to 14 carbon atoms. When slowly cooled, such compounds tend to vitrify in the liquid crystal phase.