

Synthesis of new cholesteryl and stigmasterol derivatives

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Abstract The present paper shown results in the synthesis of some new cholesteryl and stigmasterol derivatives compounds with potential liquid crystals properties. Cholesteryl carbamates were prepared by reaction of cholesteryl chloroformiate with amine derivatives of heterocycle compounds in the presence of pyridine as an acid acceptor, also a new crown compound with two cholesteryl side arms was synthesized and its transport properties were studied. Stigmasteryl carbonates were prepared by the reaction of stigmasterol and acid derivatives of heterocycle compounds by imidasolydes transacilation. The compound where characterized by IR and NMR measurements. The texture of mesophase has been determined with a polarising microscope equipped with a hot stage. It was studied β -cyclodextrine capacities to form inclusion complexes with three of these compounds by solubility method.

Keywords: cholesteryl, stigmasterol derivatives, carbamate, chloroformiate, IR spectra, NMR
