# Influence of terminal groups on liquid-crystalline polymorphism of selected azobenzene derivatives.

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This article describes the synthesis and liquid-crystalline characterisation of four kinds of azobenzene derivatives: 1-[4-(hexyloxy)phenyl]-2-(4-**X**-phenyl)diazenes (**A**), 4-[(4-**X**-phenyl)diazenyl]phenyl heptanoates (**B**), 4-[(4-**X**-phenyl)diazenyl]phenyl 4-(dodecyloxy)benzoates (**C**) and 4-[(4-**X**-phenyl)diazenyl]phenyl 4-{[(2S)-2-chloropropanoyl]oxy}benzoates (**D**), where **X** is the alkyl, alkyloxy alkylcarbonyl and alkyloxycarbonyl substituents. Among the 32 calamitic mesogens presented (13 of them are described here for the first time), the following mesophases were observed: nematic, SmA, SmC, $B_{hex}$, $B_{Cr}$ and G. About half of the investigated compounds exhibit more than one mesophase. We noted and compared the relationship between the type of the substituent and the type of liquid-crystalline phases and their temperature ranges.

Słowa kluczowe

liquid crystals, terminal groups, azobenzene, nematic, Smectics

Adres publiczny

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