Higher Homologues of Mesomorphic Benzylidene Anilines. Manifestation of Smectic Polymorphism

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The synthesis and characterisation of higher homologues of the well-known benzylidene anilines, viz. N-(*p*-*n*-tridecyloxy, tetradecyloxy, and hexadecyloxy benzylidene)-*p*-*n*-alkylanilines, 13O.*m*, 14O.*m* and 16O.*m* liquid crystalline compounds have exhibited mono, bi and tri phase variant smectic polymorphism. The different liquid crystalline phases are characterized by an optical polarising microscope equipped with a PC based temperature controller. The phase transitions are studied by using differential scanning calorimetry. The results are discussed in the light of the data available on other *n*O.*m* compounds.

Key words: nO.m; Phase Variants; Polymesomorphism.