Synthesis and Characterization of Homologues of
\( N-(p-n\text{-Alkylbenzylidene})-p-n\text{-alkyl Anilines (n.m's).} \)
A Comparative Study

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Synthesis of a new family of various Schiff based mesogens, viz. \( N-(p-n\text{-alkylbenzylidene})-p-n\text{-alkyl anilines (n.m's).} \) is carried out and for characterization thermal microscopy (TM) and differential scanning calorimetry (DSC) are used. The results of these systematic studies are presented in compounds with \( n = 1, 2, 4, 5 \) and \( m = 10, 12, 14, 16 \). These \( n.m \) compounds are found to exhibit nematic or/and smectic phases. The results are compared with the available data on the well studied Schiff based compounds \( N-(p-n\text{-alkoxybenzylidene})-p-n\text{-alkyl anilines (nO.m's).} \)

Key words: Nematic; Smectic; nO.m; n.m.