

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

N. Ajeetha and Venkata G. K. M. Pisipati

Centre for Liquid Crystal Research and Education (CLCRE), Faculty of Physical Sciences, Acharya Nagarjuna University, Nagarjuna Nagar-522 510, A. P., India

Reprint requests to Prof. V. G. K. M. P.; E-mail: venkata_pisipati@hotmail.com

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Synthesis of a new family of various Schiff based mesogens, viz. *N-(p-n-alkylbenzylidene)-p-n-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-alkoxybenzylidene)-p-n-alkyl anilines* (*nO.m*'s).

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