



Solvent-Free Green Synthesis of Pyridazine Derivatives by Hydrothermal Method and Characterization of their Mesogenic Properties

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ABSTRACT

Hydrothermal synthesis of a homologous series of symmetrical pyridazine derivatives from 4-alkoxy benzaldehyde azines and maleic anhydride is described. The liquid crystalline properties of the synthesized compounds were investigated by Polarizing Optical Microscope (POM) and Differential Scanning Calorimetry (DSC). It is observed that most members of the series exhibited only Nematic phase (N); while others are non-mesogenic.

Keywords: Phase Transfer Catalysis, Azine, Maleic anhydride, [4+2] cycloaddition reaction, Hydrothermal / Solvothermal method, Nematic phase (N).
