

**Green Synthesis of New Tetra Schiff Bases and
Bis-Azo Bis-Schiff Bases Derived from
2,6-Diaminopyridine as Promising
Photosensitizers**

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Abstract

Nine new tetra Schiff bases (M2 - M9) were prepared in moderate yields via the condensation of different aromatic amines and bis-Schiff base (M1) in microwave synthesizer. Also five new azo-Schiff bases (M16 - M20) were prepared by the condensation of (M1) with the azo-salicylaldehyde (M11 - M15) using the same method. The green synthesis by microwave irradiation was chosen as route due to its novelty, cleanliness, efficiency, time and solvent saving properties compared with the conventional methods which lack these advantages; such as time consume and wasting environment polluting organic solvents to achieve the same efficiency in synthesis. The prepared compounds which are believed by us to be competent as photosensitizers in photochemical systems were identified by IR and NMR spectroscopy besides elemental analysis.

Keywords

Schiff Base, Azo-Schiff Base, 2,6-Diaminopyridine, Azo-Salicylaldehyde Photosensitizer