

A MICROWAVE PROMOTED ENVIRONMENTALLY BENIGN SYNTHESIS AND SPECTROSCOPIC INVESTIGATION OF NOVEL SCHIFF BASE COMPLEXES

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ABSTRACT

A novel series of transition metal complexes of Cu, Ni, Mn, Cd, Hg and Co have synthesized from Schiff bases (SB₁ and SB₂) and derived from aryl aldehydes and 5-(3-Bromo-4-methoxyphenyl)-4-[[substitutedphenylmethylidene] amino]-4H-1,2,4-triazole-3-thiol by conventional and microwave promoted method. The molecular formulae of the synthesized compounds were assigned on the basis of elemental analysis while the structures were proposed on the basis of FT IR and ¹H NMR spectroscopy. These compounds were screened for *in vitro* antibacterial activity against three pathogenic strains. Preliminary results revealed that some of the synthesized metal complexes showed promising antibacterial activity.

KEYWORDS: Schiff Bases Ligands, Microwaves, Transition Metals, Antibacterial