

PUBLICATIONS

**SYNTHESIS, CHARACTERIZATION AND ANTIMICROBIAL ACTIVITY OF
COORDINATION POLYMERS DERIVED FROM BISTETRAHYDRO
PHTHALAMIC ACID OF TRIMETHOPREM DRUG**

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Abstract

The trimethoprem drug was condensed with tetrahydrothalic anhydride. The resultant Bis tetrahydrophalamic acid of trimetroprem namely; 2, 4-Bis (5-carboxycyclone hex -1-en-6carbomyl)-(3, 4, 5-trimethoxyphenyl) methyl pyrimidine, characterised duly. The coordination polymers of this bis ligand were BTPT prepared by using metal ions viz; Cu⁺², CO⁺², Ni⁺², Mn⁺², and Zn⁺². The coordination polymers and parent ligand BTPT were analysed by metal: ligand ratio, spectral features, magnetic moment, large molecular weight and thermogravimetry. The antimicrobial activity of all the Mn- ligands and polymers were evaluated by Agar-cup-method

Keywords: *Coordination polymers, Spectral study, metalsalts ligand, magnetic moment, Spectral study, thermogravimetry, Number average molecular weight Mn-*

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**Synthesis, Metal Complexing Properties and Antifungal Activity Of Sulpha Drug
Containing Ligand**

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Abstract

Sulphathiazole (ST), a drug on condensation with tetrahydrophthalic anhydride (THPA) yield a ligand, 6-((4-(N-(thiazol-2-yl) sulfamoyl) phenyl) carbamoyl) cyclohex-3-enecarboxylic acid (THPAST). Metal complexes of THPAST were synthesised with transition metal ions i.e. Cu^{2+} , Co^{2+} , Ni^{2+} , Mn^{2+} , and Zn^{2+} . The synthesised ligands (THPAST) and its metal complexes were analysed by various parameters like elemental analysis, Spectral analysis and magnetic moments. All the samples were monitored against common fungi for their antifungal activity.

Keywords: *Tetrahydrophthalic anhydride, Metal complexes, elemental analysis, Spectral analysis, magnetic moment and antifungal activity.*

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