



## **Metal complexes of 3-(4-Bromophenyl)-3-morpholino-1-phenylpropan-1-one: Their synthesis and characterization**

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**Abstract :** This research paper deals with the synthesis, characterization and antimicrobial studies of a N-Mannich base, 3-(4-bromophenyl)-3-morpholino-1-phenylpropan-1-one and its complexes with variety of transition metals such as Mn(II), Co(II), Ni(II), Cu(II) and Zn(II). The new Mannich base ligand was prepared by the condensation reaction of 4-bromobenzaldehyde, morpholine and acetophenone. The ligand and its metal complexes were characterized using various analytical (Elemental analysis, TLC and Cyclic voltammetry) and spectral studies (FT-IR, UV-Visible, <sup>1</sup>H NMR, and <sup>13</sup>C NMR). Synthesized ligand and its metal complexes were screened for their potential in antimicrobial activities.

**Keywords :** Nucleophilic addition reaction, N-Mannich base, transition metal complexes, potential parameters, antimicrobial studies.

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