

## ABSTRACT

Metal complexes have significant importance and are widely used in the magnetic material, luminescence, nanoparticles, homogeneous catalysis, metallurgy, analytical chemistry, medicines, industrial and biological functions. Metal complexes are photo reactive and have antimicrobial, anticancer and antioxidant properties. Metal and ligand coordination plays a vital role in pharmaceutical industry. Recent studies confirmed the complexation of captopril drug with copper and zinc. By interpreting FTIR spectrum, CHNS analysis, photocatalytic activity and antimicrobial activity of metal complexes with gram negative bacteria *E.coli* proved the significance of coordination complexes.