

ABSTRACT

Triethanol amine and pyridine 2,6-dimethanol are ambidentate, polydentate ligands. Both are rich oxygen and nitrogen donor ligands which has been used to make one, two and three dimensional metal organic frame works with different transition metals and lanthanides. Both has different binding modes depending upon the metal's geometry. Triethanol amine has tripodal structure with three alcohol arms and is tertiary amine because of its unique structure it readily react with almost all metal atoms and form complex. Pyridine 2,6-dimethanol is used as sole ligand or in combination of other bridging ligands in transition metal chemistry.

Keeping in mind these properties of ligands efforts result in the formation of complex of copper with triethanol amine complex was synthesized at control temp (60°C) at neutral pH in the dimethylsulfoxide as solvent.

X-ray diffractometry, FT-IR studies and TGA studies were carried out to confirm the structure of crystal biological activity of the complex indicated its fungicidal properties.