**Synthesis and characterization of Tin(lV) complex with**

**Methyl 3-(4-methylpiperazine-1-yl)propanoate**

Monika Gupta\*1, Varsha Goyal1

Department of Chemistry, IIS (deemed to be) University, Jaipur

Email: monikagupta19397@gmail.com

The organotin complexes show excellent biocidal activities such as antibacterial and antifungal. These complexes also display a large array of applications in industries as catalysts, antifouling agents, wood preservatives, crop protection agents etc.

In the present work, we have synthesized new Michael adduct, methyl 3-(4-methylpiperazine-1-yl)propanoate by using 1-methyl piperazine and methyl acrylate and the synthesized ligand was characterized by IR, 1HNMR, 13CNMR. It was then further stirred with tin tetrachloride in dichloromethane at room temperature. The product so obtained was white powder which was then characterized by IR, 1HNMR, 13CNMR and 119SnNMR.



**Scheme 1**

**Scheme 2**

Keywords: Organotin complex, Michael adduct, antibacterial activity, antifungal activity.