## **BIOSYNTHESIS OF COPPER NANOARTICLE USING NERIUM OLEANDER**

## R.Devika and Shalini Chauhan

Department of Biotechnology, A.V.I.T

Nerium oleander leaves were collected from Sipcot IT Park. Nerium oleander leaf extract was prepared in deionized water and used for the synthesis of copper Nanoparticles. The color of the solution changes from yellowish green to dark brown, which confirmed the formation of copper Nanoparticles. CuNPs were characterized by UV-Vis spectroscopy from which absorbance peak was found at 320-620 nm. CuNPs confirmed natural bio compounds found

in the leaf extract by FTIR peaks that are responsible for reducing and stabilizing agent. SEM micrographs of the synthesized by the reduction of copper sulphate revealed spherical and crystalline NPs average size of 20 nm. Biological method found to be eco-friendly, cost effective method, which provided natural capping agent.

Keywords: CuNPs, UV, SEM, FTIR