

# ABSTRACT

Inspiring from the fact that some antimicrobial preparations which are widely used contain hydrozone group, sulfonamide group etc. attempt was made in this research to synthesize a variety of hydrazides and then modify these to get hydrazide based shiff bases, amides formamides and sulfonamides.

The confirmation of proposed compositions was done by elemental analysis and structures by the I.R. spectra of synthesized compounds which showed characteristic absorption bands. The pathway of reactions and purity checking synthesized compounds done by TLC using ethyl acetate-hexane system as eluent and development was done by exposure to U.V. lamp. Enzyme inhibition activity antioxidant power assays and antimicrobial potential of all synthesized compounds were evaluated.