

## CONCLUSION

In this present project we have synthesized some stable ortho mercaptoazo compounds containing divalent electrophilic sulfur atom. With these electrophilic sulfur compounds sulfenylation of nitrogen containing nucleophiles, thiols, readily enolizable compounds, electron rich aromatic systems and electron rich alkenes are carried out forming sulfenamides, disulfides and thioethers respectively. Some of the reactions could be performed in aqueous medium avoiding harmful solvents. Electrophilic sulfenylation of electronrich substrates is also carried out by an alternative method using disulfides as sulfur based electrophiles by a cooperative assistance with silver ions. Among the synthesized ortho mercaptoazo compounds some have shown significant antimicrobial activity making the chemistry of the particular class of the compounds increasingly important and interesting.