ACKNOWLEDGEMENTS

No words of gratitude can measure up the credit that goes to my research-supervisor, Dr. Anand Prakash Mishra, M.Sc., D.Phil, Reader in Inorganic Chemistry, Dr.H.S.G. University, Sagar (M.P.), whose goodself as my teacher cum research-supervisor enabled me to bring out the present thesis replete with high academic value.

The paternal and kind role of Prof. S.P. Banerjee, the Head of the Department of Chemistry at the “Dr. H.S. Gour V.V.” Sagar, in providing me with more than common and routined facilities for carrying out my research work successfully, makes me deeply grateful to him.

I am very much thankful to Prof. S.K. Srivastava and Dr. (Mrs.) S.D. Srivastava for their encouragement and kind cooperation throughout this work. I am grateful to Dr. S.N. Limaye, Reader Analytical Chemistry for his sincere cooperation. I am also thankful to Prof. V.K. Saxena, Prof. K.S. Pitre and Prof. R.K. Gautam of this department for encouraging me during this work.

I humbly extend my thankfulness to the Director/Head RSIC Nagpur, CDRI, Lucknow, I.I.T. Bombay and TAACF, Birmingham (U.K.) for thermal, spectral, elemental analysis and antituberculosis activities respectively and also the Chairman and Librarian I.I.Sc. Bangalore for providing me with the Library facilities; to the H.O.D. Botany, Dr. H.S.G. V.V. Sagar for some technical facilities.

Can I ever pay up my indebtedness to my parents and close kins who not only built up the congenial environment, but did what not for me to carry on smoothly and successfully through my research work? My silent feelings of love and reverence go to each and all of them.

I appreciate the cooperation of my laboratory seniors and colleagues Mr. Prashant, Mr. Ramswaroop, Mr. Tikaram, Sunil Gautam, Leena, Niharika and Veerendra; and friends Chitra Gupta and Richa, who have helped me throughout this work. Thanks are also being extended to Shri S.K. Pandey and Shri R.R. Rawat (Chemistry Department) for their technical assistance.

(Ms. Mahima Khare)