ACKNOWLEDGEMENTS

I wish to express my sincere regards and deep sense of gratitude to Late Dr. Gopal Narain, Reader, Department of Chemistry, Dr. Harisingh Gour Vishwavidyalaya, Sagar (M.P.) for his valuable supervision and encouragement throughout the course of the work.

I thank Prof. S.P. Banerjee, Professor and Head, Department of Chemistry, Dr. H.S. Gour Vishwavidyalaya, Sagar for his guidance, support and providing facilities for research work.

The author is considerably indebted to Prof.(Mrs.) P.R. Shukla, W/o Late Dr. Gopal Narain, Professor, Department of Chemistry, University of Lucknow, Lucknow for many profitable discussions on experimental and theoretical aspects and for her kind attitude, encouragement and active support in writing of the thesis.

I wish to express my gratitude to my parents, whose perennial inspiration, love, care and blissful blessings, all cooperated to give my ideas concrete shape. It is a pleasure to acknowledge the assistance time to time from my sister, Neeti Agrawal.

I am very grateful to Dr. J.L. Thakkar, Reader, Department of Physics and Dr. D.K. Mukharya, Head, Department of Criminology and forensic science, Dr. H.S. Gour university, Sagar, for permission to carry out magnetic Susceptibility and Electronic spectral measurements respectively.

Thanks are also due to my colleagues, Dr. Jai Kumar Jain, Dr. Indresh Pandey, Dr. Sanjay Telang, Mrs. Rashmi Joshi and Mrs. Rachna Kesharwani for their cooperation. In addition I am also thankful to Dr. Nihal Ahmed, Dr. Ashish Pathak, Mrs. Anjana Rastogi, Mr. Anuj Mittal and Miss Archana Shukla for their timely help.
Lastly the service of R.S.I.C., C.D.R.I Lucknow for analysing the samples and M.P. State Govt. for granting the research scholarship are also gratefully acknowledged.

Preeti Agrawal
(Preeti Agrawal)