"ACKNOWLEDGMENT"

I am deeply indebted and would like to express deep gratitude to my esteemed guide Prof. R. K. Goutam, Department of Chemistry, Dr. Hari Singh Gour Vishwavidyalaya, Sagar (M.P.) for his valuable and persistent supervision, vital encouragement and vigilant guidance which proved to be a milestone responsible for the successful completion of this work. I would like to acknowledge my sincere and endless gratitude towards him.

I am highly grateful to Prof. S. P. Banerjee, Head, Department of Chemistry, Dr. Hari Singh Gour Vishwavidyalaya, Sagar (M.P.) whose spontaneous help regarding laboratory facilities and available advices were always available to me.

I find no words adequately to express my gratitude and indebtedness to Dr. Mahesh Kumar Kathal whose affable attitude profound encouragement and active cooperation was available to me through out this work.

I am so very obliged to Madam Prof. (Smt.) Kamala Gautam Gout. Girls College Sagar for her constant affectionate encouragement.

I express my profound sense of gratitude to the Director C. D. R. I. Lucknow and the Director B. A. R.C. Mumbai for C, H, N analysis. The Director R.S.I.C. Nagpur. The Director C.A.T. Indore, The Director, I. S. L. Sagar for spectral analysis. The Director N.P.L. Delhi for studies of magnetic properties of complexes. The Directors N.C.S/I.I.S. Bangalore for survey of literature. The Head Department of Pharmaceutical Science and Dr. A. C. Reza, Shri M. M. Javadi, Ms. Sanmati Jain (J.R.P.), Pharmaceutica Science, Dr. H. S. Gour, V. U. Sagar. The Head Department of Botony, and Dr. (Smt.) Archana Mehta, Ku. Seema Jain (R.S.) Department of Botony Dr. H. S. Gour V.U. Sagar, for providing screening facilities of various biological activities mentioned in this thesis.

I am very much grateful to Dr. S. N. Limaye (Reader), Department of Chemistry and Prof. R. D. Maheshwari, Department of Criminology, Dr. H. S. Gour V. U. Sagar.

My sincere gratitude goes to Mr. Sandeep Jain (S.R.P.), Lokesh Jain, Subir Chopara, Vireet Jain, Umesh Patil and Kishore Baboo, Pharmaceutica Science, Dr. A. S. Gour, V. U. Sagar, for their kind cooperation.
It was not possible for me to accomplish this thesis work without the precious help from Ku. Mahima Khare, Sandhya Pimplepure, Ms. Praveen Kumar Dubey. They have also shared my pains and joys, cared for me in anguish during trouble some position and always provided me the needed morale support.

I sincerely acknowledge the blessing of Res. Dadiji, Papaji, Mummy, Uncle, Aunty, Krishna Kant (Baboo) Bhaiya, Archana, Arvind, Devendra, Phophy, Abhishek, Rajkumar, Arti and all family member who always illuminated my path in all walks of my life. At last but not the least the constant encouragement from my elder brother Prabhat (Bunty) Bhaiya who helped throughout the work needing special mention. He dispelled all my deflections and disappointments by his warm affection.

I also express my sincere thanks to Mr. Yogesh Mourya and Manish Sipokya for neat and clean typing and xerox work.

(Chitra Gupta)