ACKNOWLEDGEMENT

I feel immense pleasure in expressing my deep sense of gratitude to my supervisor Dr. Ghulam Jilani Khan, Head, Department of Chemistry, for his sustained interest and valued guidance throughout the endeavour.

It is a pleasure to pay my humble respect to my Principal Dr. Iftekhar Ahmad, whose benign attitude encouraged me in completing this difficult task.

I am also thankful to Dr. Atma Ram Mishra, Head, Department of Chemistry, S.D.J.P.G. College, Chandeshwar, Azamgarh for his cooperation.

I take opportunity to thank Dr. R.A. Singh, Reader (Department of Chemistry, B.H.U.), Dr. H.N. Rai, Reader & Head, Department of Hindi, G.S.T.P.G. College, Bardah, Azamgarh, Dr. M. Singh, (Reader and Head, Department of Political Science), Mr. R.A. Sharma, Department of Physical Education), S.D.J.P.G. College, Chandeshwar, Azamgarh, Dr. S.R. Rai, Retd. G.S.P.G. College, Koilasa, Azamgarh for their help in academic discussions and experimental works.

In various ways, I am indebted to my senior and friends Dr. R.M. Mishra, Lecturer, Department of Chemistry, Harishchandra P.G. College, Varanasi, Dr. M.K. Bharati, Lecturer, Department of
Chemistry, B.H.U., Varanasi, Dr. Manish, Dr. Nootan, Dr. Alok Rai, Dr. A.K. Pandey, Dr. D.S. Tripathi, Dr. A.K. Dwivedi, Dr. Sachin, Dr. R.C. Rai, Ranjeeta, Atul, Pankaj, Rajesh, Sanjay, Manoj, Ajit, Amit, Sunil, Arvind, Vikram, Pradeep, Jitendra, Anil and Vipin Rai for their timely help and co-operation.

Finally I express my deep sense of gratitude to my most reverend elder father Late Sharada Prasad Rai, elder mother Smt. Saraswati Rai, father Shri Chandrika Prasad Rai, mother Smt. Satya Rai, sister Smt. Vibha, Vandana, Priyanka Rai, brother Rakesh Rai, Smt. Alka nephew Pushkar, Akshara Rai and my daughter Apoorva Rai for their moral, support, and unending encouragement, for creating a congenial environment to complete this thesis.

At last but not the least I am indebted to my wife Dr. (Smt.) Archana Rai for her encouragement during the course of research.

(Brajesh Kumar Rai)