ACKNOWLEDGEMENT

It is honorific on my behalf to acknowledge my supervisor, Dr. Zeba N. Siddiqui, Department of Chemistry, Aligarh Muslim University, Aligarh for her superfluous supervision through corroborate and authenticate support in bringing up this work in present form. Her indebted oracle, unobjectionable counseling, enduring inquisitiveness and affectionate demeanour during accomplishment of this task served as reinforcement to wrap up the present thesis.

I am highly obliged to my Co-Supervisor Prof. Shamim Jahan Rizvi, Director, IBRC, J.N. Medical College, A.M.U, Aligarh, who gave the initiative and valuable suggestions, which kept my morale persistently high throughout my Ph.D programme. I also thankful for her benevolent support and providing laboratory facilities.

I also extend my gratitude to Prof. Arunima Lal, Chairperson, Department of Chemistry, A.M.U., Aligarh for providing necessary laboratory facilities.

I am thankful to my lab (IBRC) colleagues Mirza Imteyaz Beig, Huma Jamal, Shabnum Nabi and Fakhra Amin. And also thanks to my colleagues Dr. Asad, Farheen and Mustafa T.N. in Chemistry Department. My special thanks are due to my colleague Mr. Faisal Siddiqui, whose presence in the lab made it easy for me to perform my work smoothly.

I am very much indebted to Dr. Farhana Zahir for her encouraging attitude,
valuable suggestions and constant help throughout the course.

I also esteemingly acknowledge the help extended by Saba Qayyum and Ambreen Bano whenever I needed it. I also yearn to express my special thanks to my friends Shagufta Praveen, Sultana Naseem and Kaneez Fatma for always helping me round the clock.

My overwhelming thanks go to my cousin brother Mohd. Khalid Alam for helping me in literature survey at the National Medical Library, AIIMS, New Delhi.

I greatly acknowledge the moral and sympathetic support of my aunty, Sajida Nabi and uncle Aley Nabi.

I also acknowledge Department of Forensic Medicine for their support and cooperation. The laboratory help extended by Mr. Umar is also acknowledged here. I would like to express my thanks to Prof. Abida Malik, Incharge, Central Animal House, J.N. Medical College, A.M.U., Aligarh for providing the animals during research work.

Last, but not the least I thank Almighty for bestowing me a great family support, Papa, Ammi, my sisters Reena & Farzana, my brothers Azeem & Waseem and my brother in law Dr. Shakel Ahmad who have always been a source of inspiration, encouragement, patience and support during the course of my study.