ACKNOWLEDGEMENTS

First and foremost, I sincerely offer my endless thanks to Allah, the Almighty; the most merciful and most beneficient, because of whose help only, embryonic ideas about the subject of study have come to fruition.

I express my gratefulness cordially and relishing to my supervisor Dr. Tahir Ali Khan for his invaluable assiduous guidance. His persistent diligence and perseverance with prompt response was courteous and sympathetic towards me throughout the course of this study. It was a great opportunity to work under his supervision.

I am very much indebted to Prof. M. Shakir, Professor, Department of Chemistry, AMU, Aligarh for his encouraging attitude, valuable suggestions and constant help throughout the course of this work.

It gives me immense pleasure to express my sincere thanks to Prof. Kabiruddin, Chairman, Department of Chemistry, AMU, Aligarh for providing the necessary laboratory facilities.

I mention herewith great pleasure the names of the personalities and institution that have helped me in this work: Dr. M. Y. Siddiqui, Research Scientist, College of Sciences, King Saud University, KSA, Dr. R. J. Singh, Professor Emeritus, Department of Physics, AMU, Aligarh and Director, CDRI, Lucknow for their assistance in recording IR, NMR, EPR and elemental analyses.

Words seems to be inadequate for the immense appreciations and gratitude to my friends Mr. Shah Alam and Mahamood Akhtar, who
have been ‘Northern star’ in moments of darkness and pillar of strength in trouble times during all phase of the study.

I appreciate the help and willing cooperation from my hostel mates specially Mr. Raghib Yahya, Dr. Seraj Ahmad and Mr. Helal Anwar for their continuous encouragement and full cooperation in completing this project.

I owe deep sense of gratitude for the guiding hand of my father Mr. Syed Rizwan Ghani, who passed away during the course of this study and the humble and loving care of my mother Mrs. Arzoo, who allowed me to study in Aligarh cheerfully.

I greatly acknowledge the moral and sympathetic support of my elder brother Mr. Sufiyan Ghani and younger brother Raiyan Ghani and all my sisters, relatives and well wishers.

I am also thankful to my lab colleagues and roommates for their kind cooperation and encouragement throughout the course of this programme.

The financial assistance received in the form of JRF during the course of this study from Aligarh Muslim University is gratefully acknowledged.

I would like to thank Mr. Zaheer who took all the pain of typing throughout this dissertation with all skills and hard work.

Syed Sauban Ghani