First and for most I would like to express my gratitude towards the omnipotent, the omnipresent the almighty “ALLAH” for blessing me with a healthy body and a same mind, without which I could never even attempted what I am at the verge of completion.

I wish to express my deepest respect and gratitude late Dr. P. V. Khadikar, for being more than a co-guide to me. He was a source of encouragement and constant support, enlightenment to me. Without him and his vast knowledge this thesis would not have been possible.

I also received endless encouragement from Mrs. Kusum Khadikar and Mrs .S. Agrawal and I am very much thankful to both of you for their lovable and motherly support.

I also owe gratitude to My Supervisor Dr.S.M. Ali, Retd. Professor, Department of Chemistry, Islamia Karimia college, Indore (M.P.), he always shared ideas on improving my work. I would like to thank him for his support, encouragement and help.

I want to say thanks Mohd.Haleem Khan, Secretary I.K.Society, Indore and Prof.M.K.Jhanwar, Principal ,I.K.college,Indore for their co-operation during my work.

I am also thankful to Prof. Ashok Kumar Sharma Head, Chemical Sciences, Devi Ahilya University, Indore and his wife Dr. (Mrs.) Pratibha Sharma for their guidance during the my Ph.D Coursework. My special thanks are due to Prof. A.V. Bajaj, School of Chemical Sciences, Devi Ahilya University, Indore for his constant encouragement.

Dr. Jyoti Sharma, Dr. Bashirullah Shaik, Dr. Parimita Chanchani, Dr.Sufia Aziz, Dr. Vinay Dubey and Dr. Anita K. also deserve to be remembered for their selfless help and co-operation in the form of software updates and problem solving. They always participated actively in shaping the research work.

Co-heartily thank to Dr. Meenal Shrivastava who help me for the research work and also for her advice, assistance, constant encouragement, and love. I am grateful to her for thin and thick support which continuous to make my journey smooth and easy.
My heartily thanks to Mr. Jitendra Bhawsar who continue to support my efforts in research. He is generous with his time and rich source of ideas.

I sincerely convey my thanks to my friends Mrs. Rajeshri Chouhan and Dr. Aruna Bajpai for their kind co-operation in during my research work.

I also thanks to Ms. Shakira Khatoon for her typing support in the research work.

I am also thankful to Mr. M. Kumar for his efforts in making the manuscript near and accurate.

I wish to express my special thanks to all those who have directly or indirectly helped me in completion of my Research Work.

I also thankful to my father-in-law Late Abdul Khalique Sahab who sees me from above and blesses my every endeavour with the love and support.

Lastly, I thank to each member of my-in-laws family, My Parents and specially thank to my lovable husband Mr. Abdul Hannan Sahab (Faisal Khan) who always encouraged me to accomplish this research work.

(Ms. Shanno Pathan)