Acknowledgements

At this juncture of accomplishment of completion of Ph.D. thesis, It is my pleasure to convey my gratitude to all those who have directly or indirectly contributed to make this work successful.

First and foremost, this dissertation represents a great deal of time and effort not only on my part, but on the part of my supervisor Dr. Dipti Shah, Professor, G. H. Patel Post Graduate Department of Computer Science & Technology, Sardar Patel University. A person with great concern for her students, she will remain an exemplar in my future. I expressed my profound gratitude to Dr. Dipti Shah for her endless encouragement and continuous monitoring of my work in its improvement to a standard level.

I am grateful to Dr. P. V. Virparia, Director and Professor, G. H. Patel Post Graduate Department of Computer Science & Technology, Sardar Patel University for the constant encouragement given in completion of this work with his support and valuable suggestions.

I would like to thank Dr. D. K. Raval, Head, Department of Pharmaceutical, Sardar Patel University and Dr. H. S. Patel, former Head, Post Graduate Department of Chemistry, Sardar Patel University, for their valuable guidance in the field of chemistry and Pharmaceuticals. I am also thankful to Dr. O. S. Srivastava, former Head, BCA department, V. P. & R. P. T. P. Science College, Sardar Patel University, for their motivation and encouragement from time to time.

My sincere thanks to honourable Dr. C. L. Patel, Chairman, CVM for giving me permission to carry out Ph.D. work. It is my pleasure to sincerely acknowledge Dr. Basudeb Bakshi, Principal, N. V. Patel Pure and Applied Science College for encouraging and enthusiastic environment in college that made me accomplish this work successfully.

I admire the assistance of my friend Mr. Nikhil Shah, Assistant Professor, Department of Computer Science, Dharmsinh Desai University, Nadiad for his help and enthusiastic support during the work.

I am thankful to my family members especially my parents, my sweet daughter ‘Misri’ and my husband for their moral support and constant motivation for encouraging me towards existing research work.

Patel Meghaben Jagdishbhai