Acknowledgement

At the outset, I wish to pay my most humble obeisance to the almighty God for giving me the energy, inspiration and wisdom to take up this task. I have been his guiding hand that has brought this task to a successful completion.

I do not wish to exclude anyone who has contributed to this work. It is however, to mention everyone by name, as I certainly would forget some of them. Those who are not mentioned, but have shared parts of work, should not that I thank all of them for everything they have done to, or together with me. I wish to express my gratitude to those who may have contributed to this work, even though nameless.

I express my pronounced gratitude to my guide, Dr. B. T. Thaker, Professor, Department of Chemistry, Veer Narmad South Gujarat University, Surat, for his sagacious guidance seasoned with intellect, constructive criticism, unstinted and profiled encouragement that enable me to achieve the present goal. Working with him has been a rare privilege and a matter of great pleasure for me. His inspiring guidance, everlasting enthusiasm and parental care have been invaluable assets throughout the tenure of my research work without which the thesis would not have appeared in the present shape.

I avail this opportunity to express my sincere thanks to Dr. P. Bahadur, Professor and Head, Department of Chemistry, Veer Narmad South Gujarat University, Surat for encouragement and providing me all the necessary facilities to carry out the experimental work.

I am very much thankful to Dr. C. N. Murthy, Professor and Former Head, Department of Applied Chemistry, M.S. University, Vadodara, for providing optical polarizing microscope study. I am also grateful to Dr. Jayrang S. Dave, Professor, Department of Applied Chemistry, M.S. University, Vadodara, for their valuable co-operation in this work. I am also thankful to Dr. Parimal Paul, Department of Chemistry, C.M.C.R.I. (Central Salt & Marine Chemicals Research Institute), Bhavnagar, for their support in mass spectral analyses. Mr. Robin Pavlosh, METER, TOLEDO, India Pvt. Ltd., for their support in DSC (Differential Scanning Calorimetry) analyses.

I can’t forget to thank and appreciate my research colleagues and friends, Dr. Murliidhar Shah, Dr. Rekha Barvalia, Niraj Patel, Bhavesh Patel, Dipali Solanki, Yaxesh Dhimmar, Navnit Chothani, Paresh Parekh, Mimansha Mali, Sunil Patel, Dr. Anil Singh, Yogesh Patel, Divyesh Patel, Shreyash Patel, Piyush Savaliya, Sarvil Patel, Himanshu Patel for their invaluable help and encouragement.
A special note of thanks of my friends Dr. Pranay Patel and Dr. Jayraj Yadav, for their invaluable help, encouragement and time to time guidance in my research work.

I also express my thanks to teaching and non-teaching staff of Chemistry Department, Veer Narmad South Gujarat University, Surat for their co-operation and help.

My heartily thanks to my uncle Late Dr. P. M. Kanojiya for his invaluable help and encouragement in completion of my research work.

I am short in words to express to my inner sentiments towards my family members for their support and pushing throughout the hard time, which has made it possible for me to reach end of this voyage. My vocabulary fails to convey depth of my sentiments for my parents (Mr. Bhagvatiprasad & Vimlaben) and my family for their persistent encouragement.

I have the highest appreciation to them who bore the pains of my prolonged leave and still played their role befittingly. I thank all of them who contributed to this work in any form. They have a justified their right to share the credit of this work.

(Jignesh B. Kanojiya)