ACKNOWLEDGEMENT

It is matter of great pleasure and proud privilege for me to express my heartfelt sense of gratitude towards all those personalities who have always lent a hand in my pursuit for knowledge in diverse ways.

I am highly indebted intellectually to my guide Dr. (Miss) R. G. Patel, Professor of organic chemistry, Department of Chemistry, Sardar Patel University. It could have hardly been possible for me to undertake this research venture without her precious, intellectual, knowledgeable and valuable suggestions. Her truly scientist intuition has made her as a constant reservoir of ideas and passions in science, which extraordinarily inspire and enrich my growth as a student and a researcher want to be. I am indebted to her more than she knows.

I am very thankful to Dr. V. S. Patel (Ex-Vice Chancellor, Sardar Patel University) and Dr. M. P. Patel, Associate Professor of Chemistry, Sardar Patel University, for giving me benefit of their knowledge and constructive criticisms during my research progress.

My parents deserve special mention for their inseparable support and prayers. My success today had it roots in the inspiration provided by my Parents, Mr. Anilbhai J. Makawana and Mrs. Sarlaben A. Makawana. They are the ones who have born the major brunt of difficulties to make my study comfortable, enjoyable from the very beginning till the end.
I gratefully acknowledge the important and valuable role of my younger brothers' jainik, kishan, darpan and sisters puja and madhuri for their selfless love and providing encouragement in my endeavor to carry out this research from beginning to end.

I express heartily feelings to all my friends, well-wishers and colleagues Dr. Jay, Dr. Niraj, Dr. Nirav, Dr. Sandip Bhuva, Dr. Nilesh, Dr. Ankit, Dr. Divyesh, Dr. Pushpak, Chetan, Nimesh, Harshad, Hardik, Yatin, Mehu and Viren for their kind help during the course of my work. Words fail me to express my appreciation to my friends Dr. Santosh, Dr. Natvar, Dr. Chandresh, Dr. Jitu, Dr. Jashmin, Shashikant, Abhishek, Bhavesh, Tarun, Jemin, Hitesh Barad, Hitesh Dholaria, Rohit, Amit, Bhautik and Umesh, Devji, Harsh, for their co-operation throughout research work.

I am thankful to Sophisticated Instrumentation Centre for Applied Research and Testing, V. V. Nagar for providing FT-IR and elemental analysis facilities.

I acknowledge Oxygen Healthcare Research Pvt. Ltd., Ahmedabad for providing MS facilities. I am also grateful to Microcare Laboratory, Surat for providing antimicrobial screening facilities.

A special thanks to all the staff members of Department of Chemistry, Sardar Patel University for their valuable co-operation.

Finally, I would like to thank everybody who was important to the successful realization of thesis, as well as expressing my apology that I could not mention personally one by one.

Date: 24th November 2011                  Makawana Jigarkumar A.