ACKNOWLEDGEMENT

I have been accompanied, inspired and encouraged by numerous people who have helped me in immeasurable ways to not only complete this degree but also to amass many great and unforgettable memories, and I am delighted that now I have the opportunity to express my gratitude to all.

First and foremost, I would like to express my sincere gratitude to my respected guide **Dr.R.S.R.Murthy**, Professor of Pharmaceutics, Pharmacy Department, Faculty of Technology and Engineering, The M.S.University of Baroda, for his open-minded scientific thinking, encouragement and interest in my work, for scientific guidance during these years, for always finding time for my problems, for constructive criticism and for sharing his wide pharmaceutical experience. To work under the guidance of such an eminent person has been a great and inexplicable experience, which will go a long way down my memory lane in my life.

My sincere thanks are also due to **Dr. S. H. Mishra** former Head **and Dr. A. N. Misra**, present Head, Pharmacy Department, Faculty of Technology and Engineering, The M. S. University of Baroda, for providing necessary facilities and rendering their co-operation during this project.

I am very appreciative to **Mr.R.R.Shah**, Managing Director, Mercury Laboratories Limited, Baroda, for continuous encouragement and for providing me the financial support for this project.

I extend great thanks to Prof. **Dr. Pramod Khandekar**, Bioinformatics Centre, University of Pune, for providing Molecular modeling facilities and deeply indebted to **Dr. Sangeeta Sawant** for giving the training on Molecular Modeling.

I am thankful to **Dr. Ketan Merchant**, Sharddha Analytical Services, Mumbai, for providing the NMR, DSC facilities.

I am also thankful to **Mr. M.N.Patel**, Lecturer, Dept. of Metallurgical Engg, Faculty of Tech. and Engg., M.S.University, Baroda, for providing the SEM facilities.

I am thankful to my colleagues Vijay Ahire, Anil Shinde, Sunil Bothara, Hettal, Rita, Yogesh, Mahavir and all other who worked with me in the laboratory during my tenure, for their unforgettable help, support and encouragement.

I have reserved my final thanks for my families. I am deeply grateful to my mother and father who have always valued knowledge and education and for all of their love and support.

I would also like to share this moment of happiness with my brother Sandeep and Pankaj for their love and support. My parents-in-law have loved me like their own son.

My five -year-old daughter, Rhutuja, has given me a lot of joy being a parent. Finally, my deepest thanks go to my wife, Leena, for her constant support, love and understanding through the hard times. The love and happiness they have brought me is immeasurable.

Jaideep T. Patil