DEDICATED TO MY BELOVED

FAMILY
Today with humility, misty eyes and folded hands when I thank Almighty in these blissful moments, I am also expressing my innermost into words. Research is an arduous task that involves consistent and dedicated mind with persistent hard labour put into it. This can only be possible with His benediction and grace.

Language is the most eloquent vehicle of human expression, yet on occasions one finds it difficult to get appropriate words to express an emotion fully. Speech fails me when I fumble for words to articulate my heart felt and sincere gratitude to my worthy supervisor, Prof. (Mrs.) Sadhana J. Rajput, whose continuous encouragement, invaluable guidance, constructive criticism, precious suggestions, crucial help, benevolent attention and tireless efforts enabled me to execute this project successfully. I will never forget the spirit of sincerity, devotion, dedication, moral certitude and ethics she has inculcated within me during this period.

I express my sincere thanks to, Prof. R. Balaraman, Head, Pharmacy Department, for having provided me with the necessary laboratory facilities and congenial ambience.

With great reverence, I also express my debt of gratitude to Prof. Ambikanandan Misra, Prof. R.S.R. Murthy, Prof. M.R. Yadav, Prof. S.H. Mishra, Prof. (Mrs.) R. R. Girdhar and Prof. (Mrs.) K. Sawant Pharmacy Department, Faculty of Technology and Engineering, The Maharaja Sayajirao University of Baroda for their valuable suggestions and help whenever sought for.

I would like to express my cordial thanks to Dr. (Ms.) R. Mashru, (Redear, Pharmacy Department) for her timely help, moral support and useful guidance which helped me to achieve my target.

I am thankful my friend Vaibhav and other colleges of pharmacology
department for providing me lab facility in Department of Pharmacology to complete my animal experiment.

My sincere thanks are due to the Dean, Faculty of Technology and Engineering, The Maharaja Sayajirao University of Baroda, Vadodara for providing me with the necessary facilities required for my research work.

I take opportunity to thank Dr. B. N. Suhagia, Professor, L. M. College of Pharmacy, Ahmedabad for his keen interest and valuable support. He was always available to give me the valuable suggestions. My hearty thanks go to him.

I am immensely thankful to Torrent Pharmaceutical Pvt. Ltd, Ahmedabad for providing me gift sample of API. I am also thankful to Gatteffose, France; Colorcon Asia Pvt. Ltd., Goa, India; BASF, Mumbai, India and Abitec Corporation, Ohio, USA for providing gift samples of excipients.

I wish to express my sincere thanks to the entire teaching staff, Mrs. Vaishaliben, Mrs. Hasumatiben and other non-teaching staff of the Pharmacy Department for their kind co-operation.

I avail this rare opportunity to articulate my genuine appreciation to my most treasured friends, Samir, Viral, Pranav, Manan, Haresh Patel, Niken Desai and Anil Solanki who helped me as and when required without giving second thoughts. Thanks are also due to my friends and labmates, Pallavi, Manish, Punit, Aarti, Atul, Nitin, Ashutosh, Mayur Sakaliya, Jolly Sakaliya, Chitrang, Rishit, Yogesh Raichandani, Hansaraj, Tushar, Munish, Pramod, Pruthvi and Dhaval my juniors Shital, Deepti and Grishma for making this time memorable, with lots of cherished reminiscences to look at back. I am also grateful to my juniors for their help whenever needed.

I wish to express my sincere thanks to my close friends Akshay, Darshan, Prignesh and Amish for their kind co-operation and timely
advice.

I am thankful to all those who have helped me in whatsoever manner during this work whom I might have missed inadvertently.

I owe a deep sense of gratitude to Shk. Z. A. Haidermota for his kind co-operation and timely help.

This account would be incomplete without mention of my beloved Dadaji, Grandma, Parents, my in-laws, my sister and my uncle Pramodkaka and his family from whom I received the precious gift of astounding courage, tremendous power of endurance, dedication to the chosen task and moral support, which always inspired me for constant efforts and because of them only, I am able to walk on this weary road of life without tiredness.

I am hearty thankful to my beloved wife Ekta for giving me a moral support at each phase of difficulties and strengthen my ability to complete my research work.

Last but not the least I thank the Almighty for his unlimited favors showered upon me.

Adhvait R. Dixit