The pursuit of Ph.D has changed my life. I am a better person and a better professional now. Planned or not, such a degree prefixing my name has added a new dimension to my life. At this momentous hour it is time to look back and remember about people who held my little hands to climb up the stairs.

Best teachers teach from the heart, not from the book. My research guide Dr. Y. Madhusudan Rao, Professor and Head, Centre for Biopharmaceutics and Pharmacokinetics, University College of Pharmaceutical sciences, Kakatiya University, Warangal, is one such teacher. Words can’t express my gratitude towards him. He was like a friend, Philosopher and a guide. Help was always a call away. His diligence, constant encouragement and support, the freedom of working helped me to tide over the entire crises; I faced in completing the work. All his suggestions, intelligent planning, valuable advice were the backbone of this work. Without his assistance, this research work would never have seen the light of the day.

I express my great gratitude to my Co-supervisor Dr. K. Mukkanti, Head, Department of Pharmaceutical Sciences, Jawaharlal Nehru Technological University, Hyderabad, for his scientific guidance, continuous challenge and constant search for knowledge. Also sharing with me his storehouse of unique knowledge, which led to healthy scientific discussion of many subjects presented
in this manuscript. His contagious enthusiasm for science in this particular field gave me hope to surmount all the obstacles and constant difficulties of research and development.

I take pleasure to express my sincere thanks to Dr. Shashikant R. Pattan, Principal, Pravara Rural College of Pharmacy, Pravanagar, Maharashtra, for providing necessary facilities to take up this work.

I thank Mrs. Usha Madhusudan Rao for her affection and encouragement during the course of this work.

I remember forever the lively company and help of my friends Mr. E. Chandra Mohan, Dr. K. V. S. Naidu, Dr. B. Suresh, Dr. K. Bhaskar, Dr. M. Lingam, Mr. M. Srinivas, Mr. G. Ramesh, Mrs. Sayeda, Mr. S. Jagan Mohan, Mr. P. Chinna Reddy, Mr. Y. Vamshi, Mr. Y. Shravan, and Mr. Reddy Sunil. I am privileged to have worked with so many talented people. I expect many great accomplishments in the years ahead from this group.

I express my deep gratitude to Dr. A. P. Pawar, Professor, Dept. of pharmaceutics, Poona college of Pharmacy, Pune (M.S.), India for his technical guidance and assistance for completion and writing of research work.

I also take this opportunity to express my gratitude towards Dr. A. V. Bhosale, Principal, S.G.R.S College of pharmacy, Saswad, Pune, (M.S.) India, for his constant motivation for completion of this work.
I am also grateful to Aristo pharmaceutical Ltd., J.B. Chemicals and Pharmaceutical Ltd, Cipla Ltd, Glenmark Ltd, and Colorcon Asia Pvt. Ltd for providing the gift samples of drugs and polymers respectively.

I thank to Central Institute of Fisheries, Kochi, Kerala for providing the gift sample of chitosan.

Special thanks are required to Mr. Kiran Rasal, Mr. Abhishek Naik, Mr. Jaykrishna Bhatt and Mr. Jaideep Asane, for their valuable help at the clock of the hour.

I express my gratitude to Mr. Santosh Dengale, P.D.Ghule, D.P.Gayake, D.M.Vikhe, D.M.Mhase and Dr.S.S.Pekamwar for their lively company, motivation, help and assistance during my entire completion of the research work.

I take this occasion to express my deep sense of regards to my beloved family members, parents, for their lots of care, affection and shaping my character right from childhood. No thanks would be enough to appreciate and the moral support shown by my brother Sandip. I am thankful to my brother-in-laws Mr. Kiran and Rahul Aher, for their kind help and motivation. Here a special mention about my better half Mrs. Poonam, for her matchless cooperation and an awaited constant motivation for my work. I express my deep acknowledgement to her for her true support, the greatest care, patience and cheerful company. Without her cooperation this work could not have been completed. I cannot forget my sweet little
son, **Shubham** and cousin **Anushka**, for their adhesive affection towards me.

I am thankful to the Secretary and management of Pravara Rural Education Society and Principal, Pravara Rural college of Pharmacy, Pravaranagar, for granting permission to carry out PhD programme.

I wish to express my sincere gratitude to everyone who was involved directly or indirectly during my research work and in successful completion of thesis.

I thank **Mr. Jaykrishna Bhatt** for his patience and care for typing of this manuscript.

Last but not least, I am thankful to the almighty for giving me enough support and strength to complete this research work.

**Mr. Asane Govind Sarangdhar**
I am indebted to the volunteers who actively participated in the bioavailability studies and led to its successful completion.

I feel proud to place on record the participation of the following Volunteers in my investigation whose noble contribution shall be ever remembered.

Mr. Santosh Dengale
Mr. Rahul Poduval
Mr. Bhausaheb Wakchaure
Mr. Kiran Rasal
Mr. Jaydeep Asane
Mr. Abhishek Naik
Mr. Jaykrishna Bhatt
Mr. Daksh Patel

Mr. Sitaram Dhokane
Mr. Pratik Patel
Mr. Rahul Somwanshi
Mr. Shrikant Ametwar
Mr. Archan Shah
Mr. Kiran Aher
Mr. Rahul Aher
Mr. Govind Asane

Mr. Asane Govind Sarangdhar