

ACKNOWLEDGEMENTS

It is with a deep sense of gratitude that I wish to place on record my sincere thanks to my guide **Dr. Ramesh Kumar**, Senior Director, Integrated Product Development Organization, Dr. Reddy's Laboratories Limited, Hyderabad for his vigilant guidance, wise counsel, desire to strive for perfection and constant encouragement at all stages which enabled me to complete this endeavour.

I am extremely grateful to **Prof. Y. Anjaneyulu**, Retired Professor, JNT University, Kukatpally, Hyderabad for his co-supervision and constant encouragement throughout the work.

I am highly indebted to **Mr. Raghu Cidambi** Advisor, Dr. Reddy's Laboratories Limited for giving me opportunity to do my research work. I cordially express my gratitude to **Mr. K. B. Sankar Rao**, Executive Vice-President, **Dr. KVS Ram Rao**, Head, Project Management of Dr. Reddy's Laboratories Limited for providing the research facilities to pursue the Ph.D degree to upgrade my academic qualifications.

I am very happy to express my wholehearted thanks to **Dr. B. Satyanarayana** for his unfailing attention and invaluable help during the entire course of the work, without which this manuscript would not have come to light.

My heartfelt thanks are due to **Prof. B. Srinivasulu**, Retired Professor, Kakatiya University, Warangal for his kind collaboration, excellent support and important suggestions during the course of the research work.

My special thanks to **Dr. Gade Srinivas Reddy, Dr. Arun Kumar Gupta, Mr. A. Mallikarjuna Prasada Rao, Dr. Ch.Praveen, Dr. Akshaya K. Chaturvedi, Dr. Ch. Ramesh Dr. G. Srinivasulu** and **Dr. S. Sudhakar** for their untired support, fruitful discussions and cheerful cooperation during the entire work.

I would like to express sincere thanks to my colleagues and friends Mr. R. Ravi Shankar, Mr. BVVN Chandrasekhar, Dr. A. Kalyan Chakravarthy, Mr. Vadlamudi Ramakrishna, Mr. Madduri Srinivas Reddy, Mr. Awanish Singh, Mrs. T. Madhavi, Mrs. G. Kavitha and Dr. Pramod Sagar, Mr. M. Sarawanan, Mr. Ch. Sridhar, Mr. T. Ranga Reddy, Ch. Krishnaiah and all other colleagues for their cheerful cooperation and encouragement during the entire work.

Blessings of my parents **Sri. T. Shankar lingam, Late Smt. T. Suvarnam, my Father and Mother-in-laws** and loving support extended from my wife **Smt. T. Vyjayanthi**, Sons Master **T. Sai Aashrith**, Master **T. Karthik** and other family members are warmly acknowledged.

-Thatipalli Poorna chander