ACKNOWLEDGEMENTS

It is my great honor and unfathomable intellect of respect to my mentor **Dr.C.Sridhar**, M.Pharm, Ph.D, Director (Academics), Sri Padmavathi School of Pharmacy, Tirupati, for his evergreen expertise and inspiring guidance throughout the period of my work. He imparted me to put my aspiration and contemplations in to my research area of interest. I am indebted to him for enlightening me on the finer skills of dealing with research problems also learned ethics and professionalism. He is the one behind giving me a decisive turn and significant boost for my career and completion of this project work.

I should justify myself by expressing sincere thanks to my co-supervisor, **Dr.K.N.Jayaveera**, M.Sc, Ph.D, (Retd.), JNTUA Ananthapuramu, for his effort in successful completion of my thesis work.

I am obliged to **Prof.N.Devanna**, M.Sc, Ph.D, Director, JNTUA-OTRI and Chairman, Board of studies, Pharmaceutical sciences, JNTUA, Ananthapuramu, for his constant encouragement and necessary recommendations at times of difficulty in timely completion of my research work.

My gratified thanks to **Prof.K.B.Chandrasekhar**, Director, (R&D), JNTUA Ananthapuramu, for his endless support in proceedings my project completion.

My candid thanks to my associates, colleagues and well-wishers **Mr.S.Rubesh Kumar** and **Mr.N.Duganath**, Research Scholars, Pharmaceutical sciences, JNTUA-OTRI campus, Ananthapuramu, and **Mr.C.Sathish**, Research
Associate, Novartis, Hyderabad; who have given their continual impetus and reinforced me whenever I was down.

I would be thankful to Prof. K. Lal Kishore, Vice-chancellor, JNTUA, Ananthapuramu for his consideration and appropriate assistance in submission of my Ph.D.

Words are not enough to express my thanks to my beloved Mother Mrs. R. Sivagami, Father Mr. T. Raghunathan to whom I owe my very existence. Their blessings and prayers only facilitated me in reaching this accomplishment.

My heart wanders with happiness when I think of my dear Wife Mrs. S. Sudha to whom I owe a lot for having love, moral support and encouragement during the evolution of this project work. Assertively it was her sacrifice, special care and courtesy towards my career development made to arise till this stage.

My deep sense of love and affection goes to my handsome elder prince K. Jeevan & little prince K. Rohan who, have been source of relief while I am away from this dissertation work.

I would be thankful to my Sister Mrs. R. Priyavani, my Uncle Mr. D. M. Suresh and their son S. Kanish Ram for their constant impulse and support towards my development.

I extend my sincere gratefulness to my better half’s family; Father in law Mr. P. N. Subramanyam, Mother in law Mrs. Valsala, Brother in law
Mr. S. Ramakrishna, Sister in law Mrs. P.N. Swapna, Co-brother Mr. P. Ravi Kiran, also their dazzling daughters in delight Diya Mehar and Akshaya Mehar for their constant support during the course of tenure.

I would like to thank Professor B.R. Prasad Rao, Head, Department of Botany, S.K. University, Anantapur and Dr. G.S. Kumar, Associate Professor, Dept. of Pharmacognosy, GITAM University, Visakhapatnam for their help during the progress of my work.

It is my privilege to thank all the teaching, non-teaching staff and Heads of Oil Technological Research Institute-JNTUA; Natural Remedies Pvt. Ltd, Bengaluru; Indian Institute of Science, Bengaluru; Nalanda College of Pharmacy, Nalgonda; Vignan Institute of Pharmaceutical Sciences, Hyderabad; David Memorial College of Pharmacy, Secunderabad, for concomitant with my career.

At last but not the least, from the deepest core of my heart and soul, I thank the almighty for giving me courageousness and strength to face the most difficult times in my life. He has answered my prayers in a very special way.

R. KUMANAN