ACKNOWLEDGEMENTS

I take this opportunity to express my heartfelt gratitude to my esteemed teacher and guide Dr. N. Udupa, Professor, Department of Pharmaceutics, College of Pharmaceutical Sciences, Manipal, for the unstinted guidance and valuable suggestions and untiresome perseverance during each phase of this study, which greatly eased the task of completing this thesis.

I express my heartfelt thanks and gratitude to Dr. P. Umadevi, Head, Department of Radiobiology, Kasturba Medical College, Manipal, for providing the necessary experimental facilities for carrying out the present work. I gratefully express my warmest thanks to Dr. Satish Rao, Dr. Kheem Singh Bisht, Mr. Ravindra Kamath, Mr. Hussain, Department of Radiobiology, K.M.C., Manipal for helping me in my work.

I express my keen sense of appreciation and warmest thanks to Dr. P. Gundu Rao, ex Principal, College of Pharmaceutical Sciences, Manipal, for giving me an opportunity to work in the college and without whom I would have not been able to do my Ph.D. thesis. Sir thank you very much.

I gratefully acknowledge my warmest thanks to Dr. M.N.A. Rao, Principal College of Pharmaceutical Sciences, Manipal, for extending me the facilities for research and valuable suggestions during my work.

My teachers, colleagues and friends, Dr. K.K. Srinivasan, Dr. A.R. Bhat, Dr. S.N. Rao, Dr. Arun Shirwaikar, Dr. (Mrs) Annie Shirwaikar, Dr. Gopalan Kutty, Mrs & Mr Venkat Rao, Prof. B. Subba Rao, Mr. K.L. Bhat, Mr. Gautham, Mr Sreejayan, Mrs Geetha, Mrs & Mr Prasad, Mrs Rekha, Mrs Premlatha, Mrs Jessy and Ms Mahalakshmi Bhat, who helped me whenever I approached them without any hesitation. I have no words to thank them - Thank you all very much.

I owe a great deal to Dr. K.S. Aithal Reader, Department of Basic Sciences and Dr. C.V.S. Subrahmanym, Professor, Department of Pharmaceutics, College of Pharmaceutical Sciences, Manipal, for their constant help during my work. My efforts will be a waste if I don't thank them. Sir thank you very much from the deep core of my heart.
Mr Raja Naresh, Mr Chandrashekar, Mr Parthasarthi,
Mr Chandraprakash and Mr Madhav Rao, SRF's, College of Pharmaceutical
Sciences, Manipal, who were always available for all my doubts. I thank you all.

I am overwhelmed by the generous help of
Dr. K.M. Thomas, Add. Director, Vimta Labs Ltd., Hyderabad and his colleagues.
Dr. L.M. Vidyasagar, Asst. Manager, MSL (R&D), Hindustan Cables Ltd.,
Hyderabad.
Mr S. Satyanarayana, SRF, Central Leather Research Institute, Madras.
Mr K.M. Krishna, MSC, Indian Institute of Sciences, Bangalore.
Mr P. Bhat, Department of Audio Visual Unit, K.M.C. Manipal.
Mr Nagaraj, Artist, Department of Audio Visual Unit, K.M.C. Manipal.
Dr. Senthil Kumar, Department of Biochemistry, K.M.C. Manipal.
Dr. Anitha, Department of Pathology, K.M.C. Manipal.
Dr. Shiv Kumar, Head, Bio-Medical Technology Wing, Sree Chitra Tirunal Institute
of Medical Science and Technology, Trivandrum.
Mr Prafulla Chandra, Tamil Nadu Nadha Pharmaceuticals, Madras.
Ms J. Upeslacis, American Cyanamide Co. USA.
Mr C. Suresh Babu, Raichur.
Mr Kiran Divi, Hyderabad.
M/S INSDOC, Bangalore.
M/S NML, New Delhi.

I am thankful to the Chief Librarian, Asst. Librarian, K.M.C. Manipal for
providing the necessary facilities for carrying out reference work.

Mr Ananth, K.M.C. Library, Mr Ramachandra Rao, Computer section,
Kasturba Hospital, Mr Ashok, MAHE, Ms Vidya, Suparna, Rekha, Shobha,
Mr Ramesh and Mr Nithyanand, Computer Section, K.M.C. Library for helping me
in the preparation of the manuscript and without them the thesis would have not been
able to take its final shape.

My heartfelt thanks to Mr Nagaraju, Asst. Professor, V.V.Pura. Institute of
Pharmaceutical Sciences, Mrs Gayathri, Mrs Salama, Mrs Sarasija, Asst.
Professor, Al-Ameen College of Pharmacy, Bangalore for all their help they have
extended.
This thesis bears the imprints of Mrs & Mr Pradeep Naik, Hyderabad, Mrs & Mr Suresh Chawla and family, Shankerpura, Mrs. & Mr Ashok Goyal and family, Hyderabad, Mr Sunil and family, Hyderabad, Mr Niranjan and family, Hyderabad, Dr Udupa and family, Manipal, Dr Gundu Rao and family, Hyderabad, Mr Sudhakar and family, Manipal, Mr Rohit and family, Mangalore, Mr Rajeev Kotian and family, Parkala, Mrs and Mr Mohan Kotian, Parkala, Special thanks to Mr Santosh and family, Muscat, Mr Sharfu and family, Riyadh. Thank you all very much for the support received from you all in every aspect. I am highly indebted to you all.

The "famous five" my friends Sreenivas Reddy, Dinesh, Deepak, Shaila & Priya for all their help at every stage of the thesis.

Reshma, Sudheer, Sheena, Rajkamal, Prabhakar, Harman, Durgesh, Ramandeep, Raheja, Vinay, Naveen, Ramanan, Sandeep, Shreya, Raju, Pratibha, Usha, Sulochna, Roopa, Smitha, Sherin, Shreya, Sandeep, Adavi, Rajaram, Suresh, Roopa, Sudheer for all their help.

Mr Umanath Shetty, Divakar, Krishna Prabhu, Ms Vasanthi, Hayavadana Tenkilla, Sultan Saheb, Padmanabha Prabhu, Krishna Amin, Ganapathi Kamath, Krishnamurthi, Devidas Acharya, Saralaya, Jayaram Nayak, Raghu Nath Kamath, Panduranga Shettigar, Sripathi Kamath, Sanjeeva and all others for their help.

I wish to thank my parents, sister, brother-in-law and my relatives who all have been my source of inspiration.

I wish to thank a person, who has also been my source of inspiration, who has shared my success or failure equally with a tear of joy or sorrow, teaching me many things in life, my philosopher, a person who had given me emotional and moral support for a decade of my stay in Manipal and he is no other than DR. SURESHWAR PANDEY, Thank you is not the word for you Sir, and no words can be found in the dictionary for all that you have done for me. Sir I will miss you a lot. I also thank Mrs Savitri Pandey, Lalla and Rolu for all what they have done for me.

A thesis of this magnitude, although can be claimed to be the work of an individual but without the help of others. A number of people have helped me in this and at the end I would like to once again thank all of you.