

ACKNOWLEDGEMENTS

Foremost, I wish to express my deepest appreciation to my supervisor, Prof. RSR Murthy. I am extremely indebted for his professional guidance and his scientific support. I especially want to thank him for the numerous inspiring discussions around novel drug delivery systems, for his encouragement, and the creation of a home like working environment. I enjoyed every moment I got to interact with him and consider myself very fortunate in having the opportunity to work with him. There are so many things I got to learn for his experience and approach towards any problem.

I would like to thank

- ✧ Dr. AN Misra, Head, Pharmacy Department, The M.S University of Baroda for providing me the necessary facilities for the research work.
- ✧ Dr. MR Yadav, Professor in Pharmaceutical Chemistry, Dr. SH Mishra, Professor of Phytochemistry, Dr. R Balaraman, Professor of Pharmacology, Dr. (Mrs.) Rajani Giridhar, Reader of Pharmaceutical Chemistry, Dr. (Mrs.) KK Sawant, Reader of Pharmaceutics, Dr. (Mrs.) SJ Rajput, Reader of Pharmaceutical Quality Assurance and Dr. RC Mashru, Reader of Pharmaceutical Quality Assurance, Pharmacy Department, The M.S University of Baroda for their invaluable support during the research work.
- ✧ Brig. Dr. RP Tripathi, Director, Institute of Nuclear Medicine and Allied Sciences (INMAS), Delhi for providing me permission to carry out radiolabeling experiments in his laboratory.
- ✧ Dr. AK Mishra, Joint Director, Head - Radiobiology department, INMAS, Delhi, for his constant encouragement and support during my course of work at INMAS, Delhi.

- ✚ Mrs. Krishna Chuttani, Mr. AK Babbar, Dr. (Mrs.) P Mishra, Miss. Ankur Kaul, Mr. Dinesh for their help during my work at INMAS, Delhi
- ✚ Dr. S Bhowmick, Vice President - Formulations, Dr. Ajay Khopade, General Manager - Formulations, Mr. T Veerababu, General Manager - Formulations, Sun Pharma Advanced Research Center (SPARC), Baroda and Mr. Prashant Kamath, Manager - Zydus Cadila Healthcare Limited, for their constant support and necessary help during my work.
- ✚ PURAC Biochem, Netherlands, for generously providing me the gift sample of poly lactide co-polymers. SASOL Chemicals, Germany, for generously providing me with gift samples of the Dynasan and Witepsol range of lipids.
- ✚ Dr. NSS Murthy, Mr. MN Patel and Mrs. Vandana , Department of Metallurgy, The M.S University of Baroda for their help in obtaining the X-ray diffraction patterns and scanning electron micrographs.
- ✚ Mr. Sandeep, All India Institute of Medical Sciences (AIIMS), for his help in obtaining the transmission electron micrographs
- ✚ Dr. Harivardhan Reddy for his invaluable suggestions and constructive criticism. He is my ideal role model and played an imperative role in the progress of this work.
- ✚ Dr. Subramanian and Dr. (Mrs.) Arulsudar for their constant words of encouragement
- ✚ K. Vinayagam for all the pains he took for me in collecting valuable literature. The moments I spend with him will always remain fresh in my memory
- ✚ Prignesh Patel, Shailesh Jain , Satya Sahoo, Venkatesh and Praveen Yagna for their timely help they extended to me during the course of this work
- ✚ Bishram Chauhan (Captain) for his infinite patience and constructive criticism.

- ↳ Hamsaraj, Prudhviraaju for sharing my gloomy moments and help me to sail out from rough waters
- ↳ Prashanth, Dasgupta, Srikanth and Yogesh Raichandani for the lighter moments they shared with me
- ↳ Vipin Dhote for helping me in my animal experiments
- ↳ Bijay, Pramod, Yogesh Rane, Devendra, Vijay (Appa) , Tushar, , Sachin, Sham, Mahavir, Manish Lavahle , Punit, Somasekar, Atul, Sameer and Mrs. Pinki for their cooperation and support during the course of this work
- ↳ All the non teaching staff of GH Patel Pharmacy building for helping me in one point or the other throughout the course of my work here

My heartfelt appreciation and recognition must go to my dearest Mother and Father for their unconditioned love and affection. Without them I would have never reached this point of my life. A special mention should go to my dearest Sister for her moral support and inspiration. This acknowledgement part will be incomplete without the names of my beloved son - in - laws Karthik and Saravanan

Finally, GOD ALMIGHTY for HIS mercy and showering with me with HIS choicest blessings.

K.Vivek