

## ACKNOWLEDGEMENTS

I would first like to thank my Parents, all my Teachers and the Almighty because of whose blessings only this research work was possible.

I take this golden opportunity to express a deep sense of gratitude to my esteemed guide, **Dr. (Mrs.) Rajani Giridhar**, Reader, Pharmaceutical Chemistry, Pharmacy Department, Faculty of Technology and Engineering, The M.S University of Baroda, Baroda, for her erudite guidance, support, perpetual encouragement and unlimited love. Her timely moral support has enabled me in the successful completion of my work. I lack words to express the crucial nature of interactive help I have received from her erudite personality. The presentation of this thesis has been influenced significantly by the constructive criticism and insightful corrections and suggestions provided by her.

I am extremely grateful to **Dr. M.R. Yadav**, Professor, Pharmaceutical Chemistry. Apart from his technical and scientific guidance, systematic style of working, unbiased nature and perpetual encouragement, he has kindled in me the art of synthetic work to the minute detail. I am greatly indebted to him for his moral support and constant creative motivation throughout the course of my work. It is a great pleasure to acknowledge the generosity for the kind venture he had pursued allthrough my study.

I am very much thankful to **Dr. R. Balaraman**, Professor of Pharmacology, for helping me in all the aspects of Pharmacological screening, without which, the work would be incomplete.

I wish to express my sincere thanks to **Prof. R.S.R. Murthy, Prof. S.H Mishra** and **Prof. A.N. Mishra**, Head, Pharmacy Department, Faculty of Tech. & Engg., The M.S. University of Baroda, Baroda, for providing the necessary facilities to carry out this study.

My sincere thanks are due to **The Dean**, Faculty of Tech. & Engg., M.S. University of Baroda, Baroda, for providing the facilities required for my research work.

I wish to express my sincere thanks to the entire **teaching staff of pharmacy Department**, for their co-operation and support during this work.

I express my sincere thanks to the entire **non-teaching staff of Pharmacy Department**, for their kind co-operation.

It gives me immense pleasure to appreciate, the moral support, constant encouragement, and help of **Dr. D. Sriram, R. Venkatesh Perumal, R. Revathi, C. Sreekumar, S. Satheeskumar, Hetal B. Prajapathi, Parameshwari K. Halen, Anil shinde, R. Ramajayam, G.Muruganathan, R. Rajesh** and **S. Rajasekaran** during the various stages of my work.

I am very much grateful to **Mr. Manikandan** and **Mr. Hithesh Soni** for their timely help in pharmacological screening.

My thanks are due to **RSIC, IIT, Chennai, RSIC, Panjab University, Chandigarh, RSIC, CDRI, Lucknow** and **Department of Chemistry, DST-FIST sponsored Department, The MS University of Baroda, Baroda** for

Elemental (C,H,N) Analysis data and for recording NMR and Mass spectra of the compounds.

I am very much grateful to "**Tuberculosis Antimicrobial Acquisition and Coordinating Facility (TAACF)** through a research and development contract with U.S. National Institute of Allergy and Infectious disease" for providing antimycobacterial data, National Cancer Institute, **National Institute of Health, U.S.A.**, for performing anticancer studies and **Rega Institute for Medical Research**, Katholieke University, Leuven, Belgium for performing antiHIV activity of our test compounds.

I express my special and heartiest thanks to my wife **Mrs. Sathyabhama Alagarsamy** for co-operation and encouragement throughout the course of this work.

I am highly indebted to **Mr. M. Karthikeyan, Mr. . Arumugasamy and Mr. P. Dharmar**, Secretary, S.B.College of Pharmacy, Sivakasi, for their constant inspiration and moral support.

I wish to place on record my heart-felt thanks to my parents (**Mr. P.R. Veerachamy and Mrs. Kamuthai Veerachamy**) and my family members (**Muruganantham Vijayalakshmi, Jothimani Selvarajan, Chitra Muthukumar and Chinnammal Sundararajan**) for their kind blessings, unbound affection, constant inspiration and moral support. I am highly indebted to all of them for extending a helping hand during the entire tenure of this work.

Last but, certainly not the least, I wish to thank and remember all others who helped me in one way or the other in the fulfillment of this research work.

**V.ALAGARSAMY**