ACKNOWLEDGEMENTS

A journey is easier when we travel together. Interdependence is certainly more valuable than independence. This thesis is the result of many years of work, whereby I have been accompanied and supported by many people. It is a pleasant aspect that I have now the opportunity to express my gratitude for all of them.

I am extremely thankful to Prof. K. S. Rangappa, Ph.D, D.Sc, FRSC, FNASc and I take this opportunity to express my immense gratitude to him. He not only introduced me to the fascinating field of Bioorganic and Medicinal Chemistry but also has helped me with his invaluable guidance and constant encouragement. He has taught me the various facts of science, the way of understanding the problem and how to maintain levelheaded approach when problems do not work. I am really glad that I have come to get to know him in my life.

I esteem it a rare opportunity to pronounce my deep sense of gratitude to Mrs. Poornimadevi Rangappa. She inspired me with her boundless enthusiasm towards life.

I am very much thankful to Prof. K. M. Lokanath Rai Chairman, DOS in Chemistry for his constant encouragement, cooperation and suggestions. The cooperation I received from other faculty members of this department is gratefully acknowledged. I also thank Prof. D. Channegowda Chairman, BOS in Chemistry, University of Mysore, Mysore and the Doctoral committee members Prof. S. Shashikanth and Prof. Y. B. Basavaraju for their constant support and suggestions.

Special thanks to Prof. H. Ila Honorary Professor, New Chemistry Unit, Jawahar Lal Nehru Centre for Advanced Scientific Research (JNCASR), Bangalore and Dr. Sathees C. Raghavan Associate Professor, Department of Biochemistry, Indian Institute of Science, Bangalore, for their constant guidance, concern and imitable support during my research work.
My parents deserve special mention for their inseparable support and prayers. My Father, Sri. Shivaramu K. T. in the first place is the person who taught me the fundamentals of my learning character, showing me the joy of intellectual pursuit ever since I was a child. My Mother, Smt. Renukamma is the one who sincerely raised me with her caring and gentle love. My sister Smt. Sowmya K. S. and brother in law Shekar N. D. have always supported my dreams and aspirations.

I thank my fellow-researchers Dr. B. Raghava, Mr. K. R. Sateesh, Dr. T. R. Swaroop, Dr. C. M. Shivaprasad, Mr. K. S. Rakesh, Ms. R. Roopashree, Mr. C. D. Mohan, Mrs. N. Ashwini, Mr. H. Ananda, Mr. S. Jagadish, Mr. K. H. Narasimhamurthy, Mr. Mahesh Hegde, Mr. K. B. Harsha, Ms. S. Chaithanya and Mrs. Maryam Gilandoust have helped me during my research work.

I would like to thank my senior fellow-researchers Dr. M. P. Sadashiva, Dr. K. Mantelingu, Dr. Basappa, Dr. M. Umashankar and Dr. B. S. Priya who have helped me during my research work.

I would like to thank my colleagues in the department and fellow research researchers Mr. Y. R. Girish, Mr. G. S. Lingaraju, Mr. A. C. Vinayaka, Mr. G. M. Raghavendra, Mr. K. N. Nandish, Mr. H. R. Puneeth, Mr. C. S. Pradeepa Kumara, Mr. Y. K. Bomme Gowda, Mr. K. S. Vinay Kumar, Mr. C. S. Pavan Kumar, Mr. K. Pramod, Mrs. Jenifer Antony, Mrs. S. D. Preethi. I thank Mr. D. R. Girish, Mr. B. M. Manjunath, Mr. C. N. Revanna and all the Non-teaching staff for their help, well wishes and encouragement throughout this work. I truly express my thanks to Padmashri Scientific and Chethana Chemicals for their invaluable technical support.

I am grateful to the University of Mysore for providing the opportunity to carry out the doctoral research and very much thankful to Department of Science and Technology (DST), New Delhi and University Grant Commission (UGC RFSMS) for providing financial support.

Last, but far from the least, I thank each and everyone who has directly or indirectly helped me in making my dream come true.

- Sharath Kumar K S