Acknowledgement

It is a pleasant duty to acknowledge all the help that I received during the period of my research work. I am fortunate to be a member of the Organic Chemistry group of MG University, Kottayam, under the tutelage of our beloved guide - the late Dr. C. V. Asokan, Reader, School of Chemical Sciences, Mahatma Gandhi University. His constant encouragement, unrelenting inspiration and his enviable erudition in the field of Organic Synthetic Chemistry has been the true proverbial ‘wind behind my wings’ over the course of my work. I express my deep sense of gratitude and reverence to my guru. The sudden demise of Dr. C.V. Asokan plunged me in great grief and put the project in a state of uncertainty. It has been with the able guidance of both Dr. P. Madhavan Pillai and Dr. K. S. Devaky that I was able to pull through this work. The constructive criticisms, patient reviews and thoughtful insights of Dr. P. Madhavan Pillai has been instrumental in the preparation of this thesis. I am indebted to Dr. Anabha E R for the selfless help she rendered during the correction time, where she reviewed the complete work with immaculate precision and patience. Dr. P K Radhakrishnan the Director rendered his help at every stage of my work. Dr. M. Padmanabhan, the former Director was an inspiration of my work. My teachers: Dr. M. R. Gopinathan Nair, Dr. A. S. Padmanabhan, Dr. Sabu Thomas, Dr. I. Ibnu Saud, Dr. C. T. Aravindhkumar, Dr. Pius Kuruvila, , Dr. Beena Mathew, and Dr. Suresh Mathew were always a source of constant encouragement and guidance. Although, this work lists only one author, it is but a conglomeration of the ideas and suggestions of a number of bright minds. Among my colleagues Mr. Prakash Chandran, Dr. Reichel Samuel, Dr. Ajith Dain Thomas and Dr. S. Retnamma, Mr. Paulson Mathew, Mr. K. Ramakrishna Menon, Dr. Satheesh K. Nair, Ms. Ann Maria Jose, Ms. S. Smitha, Mr. K. C. Lethesh, Mr. M. Prasanth, Mr. K. U. Krishnaraj, Ms. Sholly Clair George, Ms. Sasikala K. N, Ms. Sreedevi N. K, Mr. Sumod Mathew, Mr. Hari, Ms. Sreerenjini, Ms. Praseeda, Ms.Christi, Ms. Simi, Ms. Heni deserve special thanks for their friendship and encouragement. Thanks are also due to all the members of my FIP fraternity, who have constantly motivated each other to stay on course and complete the work, even under difficult and demanding scenarios. The two and a half years with them was the most exciting journey of my life- a journey filled with sharing, love, defeat and triumph, tears and joy. I am also grateful to all the research students of SCS, MG University.
All the literatures were collected from the University library. Mr. Raju Varghese, Mr. J. Sukhu, Mr. K. K. Murali, Mrs. Anu, Mrs. Laila, Mrs. Sabeena and other library staffs were always generous to help me to collect printed as well as electronic journals. The facilities for the spectral analyses were availed from CDRI, Lucknow and some of the analyses were done by Dr. Prakash Chandran, Dr. Mangalam Nair, RRL, TVM. I am thankful to Mr. Shibu and Mr. Unni of M/S Minitek Computers for their advices and help for the DTP work of the thesis. I extend my warm thanks to Mr. Sreekumar D who helped me to complete my office paper works in time. There are so many people like Dr. Manikandan Nair, Dr. C. Arunan, Ms. Sakeena, Dr. Claramma Varkey, Dr. Meenakumari, Mr. Iquebal, Mr. Manilal, Mr. Salin Thomas, Mr. Ajayakumar, Mr. Varrier, Mr. Muneeh, Ms. Prasanna, Ms. Sharifa, Mr. Lalachan, Mr. Sreekumar, Mr. Mohanan, Mr. Philip, Mr. James, Ms. Geetha, Ms. Dhby and without whom I wouldn’t complete the work properly. I am thankful to them also.

I acknowledge UGC for the FIP and financial assistance. I also extend my sincere thanks to the Management and Principal of Baselius College for sanctioning FIP to me. I am grateful to all the Teaching and Non Teaching staff, especially those in the Chemistry Department of Baselius College, Kottayam, Kerala for their support.

The affection, prayers and moral support of my parents, K. John Mathews and late Rebecca George, my brother, Dr. Biju J Mathews and his wife Anitha, my sister Mary Karuvelil and her husband Koshy Zachariah and my husband’s family showed towards me raised my morale to carry out the work. The deepest gratitude is to my family- my husband Er. Oommen C Vengal and my children Er. Jiju Cherian Vengal and Angela Miriam Oommen. With unhesitating faith and support they encouraged me to pursue my life long dream, amidst all the demands of family life. I am thankful to my house maid Vijayamma for the extra time she spent during my research work.

“I dedicate all the work to the Lord, for the work of the masons is in vain, if the Lord does not build the house.”

Ms. Annie Mathews