Acknowledgements

It is a pleasant duty to acknowledge all the helps that I received during the period of my research work. I am fortunate to be a member of Organic Chemistry group under the efficient guidance of beloved teacher Dr. C. V. Asokan, Reader, School of Chemical Sciences, Mahatma Gandhi University. He always encouraged me to enter the vast area of synthetic organic chemistry with patience. His intuitive suggestions and inspiring guidance helped me to understand more about organic chemistry. Dr. M. Padmanabhan, the Director rendered his help at every stage of my work. My teachers: Dr. M. R. Gopinathan Nair, Dr. G. Harichandran, Dr. I. Ibnu Saud, Dr. C. T. Aravindkumar, Dr. K. Padmakumar, Dr. K. S. Deavaky, Dr. Beena Mathew, Dr. Pius Kuruwila, Dr. Sabu Thomas, Dr. A. S. Padmanabhan, Dr. P. K. Radhakrishnan and Dr. Suresh Mathew always encouraged me to complete the work without much delay. Among my colleagues Mr. Prakash Chandran, Dr. Reichel Samuel, Dr. Ajith Dain Thomas and Dr. S. Retnamma deserve special thanks for their friendship and patience to forgive my mistakes. They cared me like their young sister and corrected my mistakes as good teachers. I am thankful to Mr. Paulson Mathew, Ms. Jayanthi Biju, Mr. K. Ramakrishna Menon, Dr. Sateesh K. Nair, Ms. Annie Mathew, Ms. Uma Harikrishnan, Ms. Daliya Mathew, Ms. Ann Maria Jose, Ms. S. Smitha, Mr. K. C. Lethesh, Ms. S. Deepa, Mr. M. Prasanth, and Mr. K. U. Krishnara for their friendship. Their presence always made our lab active like a home. I am indebted to Ms. Ann Maria Jose, Ms. S. Smitha, Mr. K. C. Lethesh and Prof. Madhavan Pillai for their valuable suggestions, help and proof reading for the thesis preparation. Thanks are also due to Mr. V. M. Manoj, Mr. P. Manoj, Mr. S. Gopakumar, SCS and Dr. Joshy Joseph, Dr. S. Bindhu, Dr. S. Sumalakshmi, & Dr. E. Arunkumar, RRL, Thrivanathapuram, Mr. R. Ramesh, Ms. Prema G. Vasudev, IISc, Bangalore, Mr. A. Anoop, Central University, Hyderabad. Ms. Ranimol Stephen, Seena Joseph, Ms. S.Smitha, Rajasree Jayachandran and Chitra Jayakrishnan, who were my dear colleagues as well as my hostel mates, act as a catalyst to speed up the research work during the tenure of my work. I am also thankful to Dr. K. M. Sreedhar, Mr. Gean Varghese, Mr. Franklin, Dr. Roice Michael, Dr. P. G., Sasikumar, Dr. P. K., Ajikumar, Dr. Mikki Vinod, Dr. G. Ajithkumar, Dr. T. K. Manojkumar, Dr. Reji Thomas, Dr. Jincy Joseph, Mr. P. K. Biju, Ms. Shalini James, Ms. Preethi Suraj, Ms. Sobha Prakash, Ms. Deepa, Ms. Rejitha, Ms. Bubbly Joseph, Dr. Subhash Chandran, Mr. Xeno Jose, Mr. Selvin Thomas, Mr. Sreekumar, Mr. Bejoy Francis, Ms. Renia Kuruwila, Ms. Mishi Kamal,
Ms. Maya Thomas, Ms. Rani George, Ms. Grace Thomas, Ms. Vandhana Sreekanth, Ms. Sreeja Pillai, Ms. Ashamol, Ms. Nimmi, Ms. Daliya, Ms. Reshma, C, SCS; Mr. Sunilkumar, Ms. Sheba George, Ms. Jeena Kuruvila, Ms. Josna, Ms. Preethamol, Ms. Jeethi Ram, Ms. Shyma Abdul Assis, SBS; Ms. C.M. Manju, Ms. D. Ambika, Mr. P. Gopakumar, SPAP; Ms. Christin, Ms. Deepti, Ms. Kavitha Raman, School of Letters, Ms. Sherrymol, Ms. Ashly, Ms. Anju Sebastian, Ms. Binu John SMBS and P. S. Liji, SCS.

I acknowledge Mahatma Gandhi University as well as the CSIR, New Delhi for the financial assistance. All the literatures were collected from the University library. Mr. Raju Varghese, Mr. J. Sukhu, Mr. K. K. Murali, Ms. Mini Pillai, Mr. L. Muthu 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 Mr. R. Ramesh, l. I. Sc, Bangalore, Dr. Joshy joseph, RRL, TVM and Dr. Abraham Thomas, Bombay. I am thankful to Mr. Shibu, Miniteck for his advices and help for the DTP work of the thesis. There are so many peoples like Dr. Manikandan Nair, Dr. C. Arunan, Dr. Claramma Varkey, Ms. Meenakumari, Mr. Iquebal, Mr. Manilal, Mr. Varrier, Mr. Muneesh, Ms. Prasanna, Ms. Sharija, Mr. Lalachan, Mr. Sreekumar, Mr. Mohanan, Mr. Philip, Mr. James, Ms. Jiby etc. without whom I wouldn't complete the work properly. I am thankful to them also.


"I dedicate all the work to the Lord, who is the Greatest Chemist of the Universe"

Ms. Anabha Joyson