Acknowledgements

At first I express my thankfulness to God, Almighty, the source of all wisdom and power for leading me kindly in this research endeavour.

With immense pleasure I record my gratitude and indebtedness to my supervising teacher Dr. A. S. Padmanabhan, Reader, School of Chemical Sciences, Mahatma Gandhi University. He has been kind and considerate and extended all help and assistance in my attempt. His deep and unwavering interest in the theoretical work gave me encouragement in the course of the research work.

I make use of this opportunity to express my gratitude to Prof. V. N. Rajasekharan Pillai, Vice Chancellor (former Director, School of Chemical Sciences), Mahatma Gandhi University for providing me all the facilities for carrying out this work.

I also owe my thanks to Dr. M. Padmanabhan, Reader in Charge, School of Chemical Sciences, Mahatma Gandhi University for giving me all help in times of need during the research period.

I extend my sincere thanks to the other members of the Faculty and also the administrative and Library Staff Members of the School of Chemical Sciences for the advice and cooperation given by them in the course of my research. Periodic help rendered by the University main office and library is also gratefully remembered.

I am also grateful to all my colleagues and friends in the School of Chemical Sciences for their timely help and cooperation which has enabled me to complete the work successfully.

With deep sense of gratitude I remember Sri. P. C. Joseph, Systems Analyst, University Computer Centre, Mahatma Gandhi University for the guidance given by him during the computer programming work. It is my pleasant duty to express my sincere thanks
to Sri Madhu P. N., Smt. Soja S. and Sri Geevarghese Kurian J., Staff members, University Computer Centre, for the help they extended to me.

I am much thankful to the management, Principal and all my colleagues in the Baselius College who gave me encouragement for finishing the work in time.

I express my thanks to Prof. V. Purushothama Prasad, Retired Professor, C. M. S. College for the immense help he offered in explaining measure theory by Halmos.

I profusely thank my husband Sri. K. P. Joseph who helped me a lot in the research work. Without his help and support my endeavour would not have been completed. I can never forget the great encouragement he gave during the research period. With heartfelt emotions I extend my special thanks to my husband for his sincere and constant support which helped me to pursue my studies properly.

I am grateful to my parents for giving me inspiration and thereby illumining my educational life.

It is injustice if I do not say thanks to my children Paul and GeoPaul who have been partially denied the delights of motherly care during my research period. Still they cooperated with me bearing all inconveniences which were forced upon them during this time.

My special thanks to M/s. Copy Write, Ettumanoor for the prompt and neat execution of the word processing and photocopying work of this manuscript.

Daisy Joseph