ACKNOWLEDGEMENT

It is indeed very gratifying for me to place on record my deep sense of gratitude to all those who have helped me to bring out this thesis.

Dr. Beena Mathew, Lecturer, School of Chemical Sciences, is not just my research advisor. To me she is a friend, philosopher and guide. Right from the conception of my research topic to the completion of the final draft of this thesis, she stood by me with patience and perseverance. Words fail to express my indebtedness to Dr. Beena Mathew.

I have been fortunate to enjoy the goodwill and guidance of Dr. V.N. Rajasekharan Pillai, former Director, School of Chemical Sciences and former Vice-chancellor, Mahatma Gandhi University. His constructive criticism and unflinching support have always been a source of inspiration. My indebtedness to Dr. V.N. Rajasekharan Pillai is inestimable.

Dr. M. Padmanabhan, Director-in-charge, School of Chemical Sciences has always been a source of encouragement and support. The faculty of the department, particularly Dr. Devaki K.S, were all very supportive and helpful. My sincere appreciation to all of them. The technical and non-teaching staff of the School of Chemical Sciences have always been a sure support for me to rely upon. My candid thanks to every one of them, especially Dr. Claramma Varkey and Mr. K. A. James.

I thank profusely Dr. James Joseph, Registrar and Dr. K. G. Narayana Pillai, D.C.D.C., of Mahatma Gandhi University for all their support and goodwill. They were very helpful, understanding and, above all, approachable.

I place on record my sincere appreciation to the Management of my AlmaMater, B.C.M. College, Kottayam for deputing me for Ph. D. I remember with fondness the enthusiastic encouragement provided by Prof. (Mrs.) Remany Tharayil, my beloved teacher and former Principal to acquire higher academic qualifications. The loving admonitions and paternal instigations of my great teacher and spiritual father, late Msgr. Peter Uralil was instrumental in my aspiring for research degrees. I offer my prayerful homage to his memory.

All my friends and fellow research scholars have been a source of constant inspiration and unflinching support throughout my research work. Jincy, Bini, Sr. Therese, Asha, Shiny, Rajasree, Vinod, Ajikumar, Sunil and many more. My colleagues in the Department of Chemistry, B.C.M. College have been extremely supportive bearing with me every discomfiture my prolonged absence from the department might have caused. My heartfelt thanks to each and everyone of them.
The close-knit family of mine, my husband Dr. K. J. Joseph and my sons Jose and John, has been a fountain of constant inspiration and support. They happily took the brunt of familial duties and responsibilities during my prolonged preoccupations in the laboratory. My indebtedness to my dear ones is beyond words.

I have the privilege to enjoy the blessings and prayerful support of my parents-in-law, Mr. K. T. Joseph and Mrs. Ammu Joseph. My loving mother Mrs. Mariamma John, my role model in life, has always been a source of unfailing help. She along with my great father, late A.M. John, had 'borne the burden of the work and heat of the day' to bring me up to what I am. I have been singularly fortunate to enjoy the encouragement and support of my brothers and sisters, particularly Mr. K. J. Mathew who is one my mentors, and my brother-in-law, Bro. Philip Kochuparambil. I express my heartfelt thanks to each one of them. My special thanks to my cousins Mrs. & Mr. John C. Kusumalayam for sending me some rare chemicals for research purpose.

I am fortunate to receive help from some of the International Research Institutes in the country to carry out chemical analysis of my work, SIF, MRC and SSCU Divisions of IISc, Bangalore; CDRI, Lucknow; RRL, Thiruvananthapuram, and RSIC, Mumbai. My sincere thanks to the scientists and technicians of these institutes.

The financial support provided by the U.G.C. in the form of a teacher fellowship is gratefully acknowledged.

My special thanks to staff of M/s Copy Write, Ettumanoor, especially to Mr. Jojo for the neat word processing and photocopying of this work.

Last, but not the least, with a heart overflowing with gratitude, I bow before my Savior and Benefactor, Lord Jesus Christ from whom all good things come.

Magi John