Acknowledgement

I have great pleasure to record my sincere and heartfelt gratitude to my supervising teachers Dr. S. Madhavankutty Nair, Retired Professor, Department of Chemistry, University of Calicut and Dr. M.S. Krishnan, Retired Reader, Department of Chemistry, University of Calicut for the valuable guidance, sustained help, expert discussions, constant encouragement and kind blessings without which this work would not have been completed.

I express my sincere gratitude to Dr. Muhammed Shafi, Professor and Head, Department of Chemistry, University of Calicut, Dr. K.K. Aravindakshan, Professor and former Head, Department of Chemistry, University of Calicut and other faculty members and research scholars of the Department for their support.

I am extremely glad to express my sincere gratitude to Dr. Lisa Sreejith, Senior Lecturer, Department of Chemistry, NIT Calicut and Dr. Sreejith M. Nair and Dr. Sheeba P.S of the Department of Chemistry of Malabar Christian College, Calicut for the kind help and inspiration.

I also wish to express my heartfelt thanks to Smt. A. Parvathy, Retired Professor and Head of the Department of Chemistry, Govt. Arts and Science College, Calicut for the blessings and support.

Special thanks are to Dr. G. Unnikrishnan, Asst. Professor and Head, Department of Chemistry, NIT Calicut, Dr. N. Seetharaman, Retired Professor, NIT Calicut and Dr. Soney Varghese, NIT Calicut for valuable suggestions and help.

I also wish to express my sincere thanks to Dr. P.K. Indira, Dr. T. S. Sahish and Sri P. N. Sathyathan for their help.


Special thanks to Sri. Anil Kumar of NIIST, Thiruvananthapuram for the kind help in getting the XRD studies done and discussions relating to that.

I wish to acknowledge my sincere thanks to Department of Chemistry, NIT Calicut, RSIC, Nagpur and STIC, Cochin University of Science & Technology for the thermograms.

My sincere thanks to my wife and children for their prayers and support.

Finally, I acknowledge my thanks to Sri. Sugeesh and Sri. Beljith for the care they have taken in typing, setting and binding the thesis.

Devadasan K K