ACKNOWLEDGEMENT

It is a pleasant task to express my thanks to all those who contributed in many ways to the success of this study and made it an unforgettable experience for me.

I find words to be very inadequate while expressing my gratitude to my research supervisor Dr. D.Kalaivani, M.Sc., Ph.D., Associate Professor and Head, PG & Research Department of Chemistry, Seethalakshmi Ramaswami College, Tiruchirappalli - 620 002, without her this work would not have been possible. Her brilliance, clarity of thought and above all, an extremely positive attitude were a constant source of inspiration to me. Indeed, I am greatly indebted to her for developing in me a spirit of enquiry and scientific temperament.

I am very much indebted to the Secretary, Mr. R.Panchapakesan, B.A., B.L., and Principal Dr. Kanaka Bhashyam, M.A., M.Phil., P.G.D.J., Ph.D., Seethalakshmi Ramaswami College, Tiruchirappalli - 620 002, for having provided me all facilities to carry out the research work on part-time basis.

I wish to place on record of my deep sense of gratitude to my doctoral committee members Dr. R.Renganathan, M.Sc., M.Phil., Ph.D., Professor, School of Chemistry, Bharathidasan University, Tiruchirappalli - 620 024 and Dr. S. Prabavathi Nagarajan, M.Sc. M.Phil., Ph.D., Associate Professor and Head (retired), Department of Chemistry, Bishop Heber College, Tiruchirappalli-620 017, for their active support, motivation, timely assistance and valuable suggestions throughout my work.

My gratitude extends to Dr. S. Lalitha, M.Sc., M.Phil., Ph.D., former Head, Dr. D. VimalaDevi, M.Sc., M.Phil., Ph.D., former Head, and Dr. R. Kasthuri, M.Sc., M.Phil., Ph.D., former Head, and Dr. K. Banumathi, M.Sc., M.Phil., Ph.D., former Head, PG & Research Department of Chemistry, Seethalakshmi Ramaswami College, Tiruchirappalli - 620 002, for their encouragement and apt direction.
My heartfelt thanks are due to all the faculty members of PG & Research Department of Chemistry, Seethalakshmi Ramaswami College, Tiruchirappalli - 620 002, for their fruitful suggestions and constant encouragement during the entire period of study.

I extend my sincere thanks to Dr. Babu Vargese, Senior Scientific Officer, Grade I, Dr. A. Sudha Devi, Senior Project Officer and Dr. R. Jagan, SAIF, Indian Institute of Technology Madras, Chennai – 600 036, for collection and interpretation of crystal data.

I am indebted to Dr. S. Karpagam Kumara Sundari, M.Pharm., Ph.D., Head, Department of Pharmacology, Periyar College of Pharmaceutical Sciences for Girls, Tiruchirappalli – 620 021, for the discussion about the anticonvulsant activity.

I am grateful to thank Mr. K.A.S. Mohammed Shafeeq, M.Pharm., (Ph.D.), Lecturer, Department of Pharmacology, Periyar College of Pharmaceutical Sciences for Girls, Tiruchirappalli - 620 021, for rendering his help regarding pharmacological activities.

My heartfelt thanks are due to Mrs. G. Umadevi, Department of Pharmacology, Periyar College of Pharmaceutical Sciences for Girls, Tiruchirappalli - 620 021, for screening of the samples for antimicrobial activity.

My deepest and special thanks go to my father Mr. S. Rajamanickam and My mother Mrs. R. Manimegalai who were with me constantly whenever I needed help to look after my children during the research period.

My sincere thanks are due to my father-in-law Mr. S. Ramalingam, mother-in-law Mrs. R. Paranjothi, My husband R. Anbuselvan, M.A., M.Phil., sister R. Roobikala, B.E. and brother R. Balamurugan, B.E. for their adjustment and constant support to complete the research work smoothly.

I also like to place on record the co-operation extended by my children master A. Shivaram and A. Akshay during the entire period of my research work.
My special thanks are reserved to my friends Mrs. M. Buvaneswari, Mrs. G. Mangaiyarkarasi, Ms. K. Rajamani, Ms. J. Gomathi, Ms. S. Muthulakshmi and Ms. P. Poornima Devi for their tireless and endless support.

I am also thankful to non-teaching staff and research scholars of PG & Research Department of Chemistry, Seethalakshmi Ramaswami College, Tiruchirappalli - 620 002, for their concern.

Last but not least, I like to express my sincere thanks to Mr. P. Padmanaban, DCA, Senior Assistant, St. Joseph’s College, Tiruchirappalli-620 002, for the tireless efforts to type the thesis and draw the diagrams.

Above all, I salute God Almighty, for having made everything possible by giving me strength and courage to finish my research work successfully.

(R. Babykala)