

## ACKNOWLEDGEMENT

*I wish to record my profound gratitude and indebtedness to Prof.K.K.Aravindakshan, Former Head of the Department and Group leader of Inorganic for his constant encouragement, timely help, patient hearing and all other sorts of support throughout this endeavor.*

*With immense pleasure, I express my deep sense of gratitude to my supervising teacher, **Dr.Abraham Joseph**, Associate professor, Department of Chemistry, University of Calicut for his valuable help and guidance, which helped me a great deal in successful completion of this work. I found in him, a real friend, philosopher and a good teacher. His advice, fruitful discussions, unbound affection, constant encouragement, timely help, care and concern has always been a source of inspiration for me.*

*I record my sincere thanks to Prof.T.Ganga Devi, Head of the Department of Chemistry, for providing me the opportunity and making available the departmental facilities. This is joyous moment for me to manifest my fathomless gratitude to Prof.Mohammed Shaffi, Prof.K.Krishnankutty, Prof.M.P Kannan, Former heads of the department and all other faculty members. I am especially thankful to Dr.K. Muraleedharan, Dr. K.V. Balakrishnan, Mr. Satheesan, and all other non-teaching staff members of the department for their help, assistance and co-operation.*

*I am highly grateful to Dr. Shibu, Director, STIC, CUSAT, Cochi; Director, IIT Mumbai, Dr.K.L Sebastian, Department of Zoology, University of Calicut, Dr.Sreejith & Dr.Abdul Jaleel U.C ,Centre for Cheminformatics, Malabar Christian college Calicut,Dr.Manju, Mr.Hari, Mr.Nandajan, Mr.Rao (NIT Calicut) for their timely help.*

*I also record my appreciation to the senior researchers, Dr.Babu Joseph, Dr.Joseph John, Dr.Sreeekumar, Dr.Susanna Seth, Dr.Sunitha, Miss Jeevana, Miss.Radhika for their help and advice during my research activities.*

*My special thanks are due to Mr. Sam John, fellow researcher of our group for his help during this investigation. I also record my sincere thanks to other fellow researchers of our group, Ms.Prajila, Ms. Remya, Miss. Revathy, Miss. Anupama and Miss. Shainy. I also wish to express my thanks to Mr.Prveen, Mr.Noushad, Mr.Shinu, Mr.Arun and all other research scholars of chemistry department for their support.*

*I am thankful to the librarian and staff of C.H.M.K Library, University of Calicut, for their valuable co-operation. I also express my sincere thanks to the staff of Infonet, C.H.M.K library for their support.*

*I am also deeply indebted to my husband, parents, brothers and all other family members for their love, tolerance and valuable support, which helped me to accomplish the goals that I have aspired throughout my life.*

*I also thank all the staff of Bina Photostat, for neat typing of the manuscript. Finally I thank all those who have helped me directly or indirectly in the successful completion of my investigation.*

*Finally I thank all those who have helped me directly or indirectly in the successful completion of my work.*

*Above all, I bow my head to the Almighty for the abundant graces and blessings showered on me at each footstep.*

**BINCY JOSEPH**