Acknowledgements

Foremost, I would like to express my sincere and whole hearted thanks to my beloved Research Supervisor Dr. N. Venkatasubba Naidu, Professor, S.V.University, Tirupati for his inspiring guidance, patience, continuous care and high scholarly diligence during my research work.

I express my profound respect, indebtedness and deep felt devotion to Retd. Prof. K. Saraswathi, Ex-Principal, Padmavathi Mahila University and also Ex-Head, Department of Chemistry, S.V.University, Tirupati for her planning and benevolent guidance unending constant encouragement and kind co-operation in the present investigation.

I am grateful to Retd. Prof. P.R. Naidu (Ex-Vice Chancellor, S.K.University), Department of Chemistry, S.V.University, Tirupati.

I wholeheartedly and profusely thank Prof. A.Varada Reddy, Chairman, BOS and Prof. A. Krishnaiah, Retired Professor. It gives me an immense pleasure to express my heartfelt thanks to Prof. P.Venkateswarlu, Head and all faculty members, Department of Chemistry, S.V.University, Tirupati for providing necessary facilities and valuable suggestions to carry out the research work.

I owe a special debt of gratitude to my beloved mother Smt. Y. Saraswathamma for the support and encouragement extended to me at various stages of my life and academic career and everlasting encouragement throughout my research work.

My thanks are due to my sister Smt.B.Sujatha and brother-in-law, Sri B. Poli Reddy and for their amiable and amicable nature and encouragement and cooperation throughout my research work. I profusely
thank my sisters daughter's, Kavya, Sowkya for their kind help and cooperation.

I would also like to express my heartfelt gratitude my husband S. Madhu for his co-operation and encouragement during the completion of this work and in preparing the thesis. I wish a sense of appreciation to my son Chi. Jagan Mohan Reddy, and my daughter Siva Sameekha who sacrificed much time of time generally expected from the mother during the period of this investigation.

I derive delight in expressing my sincere thanks to my fellow scholars and bosom friends, I am immensely happy to place on record my gratitude to Smt. N. Sundaramma, N. Padmajakumari, Jaahnavi and Poojith and family members for their encouragement and co-operation.

I would like to express my sincere thanks to my colleagues Dr. T. Narasimha Reddy, V.M. Subramanyam and K.Dakshayani(HOD), S.V. Govt. Polytechnic College, Tirupati for their cooperation to my research work.

I would like to thank firstly my colleagues Dr. N. Krishnaiah, Dr.A.Varaprasad, Dr.K. Purushotham Naidu, Dr.K. Suvardhan, Dr.N. Saritha, C. Swarana, P. Suguna, Ch. Giridhar, K. Babu Naidu, T. Niranjan M. sulochana and B. Ramachandra for their help and encouragement throughout these years.

It is my pleasant duty to thank my friend's A. Venkateswarlu, P.Ramachandra P.Naveen and P.Muni Sekhar for their help at various stages of this work.
I greatly acknowledge the authorities of Sri Venkateswara University, Tirupati for providing me all the necessary facilities.

Last but not least, I am thankful to One and All that helped me directly or indirectly.

Y. Sunceetha