ACKNOWLEDGEMENTS

It is my pleasure to remember and recall all the people who extended their support and encouragement to me in completing this thesis work.

I shall remain thankful to all those scholars whose works I have referred in the present study. All of them have been instrumental in enriching my understanding of the subject and served as a source of inspiration.

First and foremost, I express my deepest sense of obligation and gratitude to my Research Supervisor, Prof. K. Nagabhushan Raju, Department of Instrumentation, S.K. University, Ananthapuram, for his invaluable guidance, encouragement, academic stimulus and generous help throughout my research work from the inception to its completion. I am really fortunate to have him as my research supervisor. I learned many technical and management skills from him, which has helped me not only in completing this thesis, but also in solving many difficulties in my personal and professional career. I always admire his discipline, sincerity, patience and dedication in all his works.

I would like to express my deep sense of gratitude to T. Rajendra Prasad, Scientist, National Atmospheric Research Laboratory (NARL), Gadanki, Tirupati, for his invaluable guidance, constant support and encouragement throughout my research career. The long lasting discussions with him helped me a lot in understanding the subject in depth. The logic that I have developed with his help will be highly useful throughout my career.

I record my deep sense of gratitude and respect to Prof. C. Nagaraja, Head, Department of Instrumentation, Sri Krishnadevaraya University, Ananthapuram for his constant encouragement and constructive discussions.

I would like to extend my sincere thanks to Prof. B. Rama Murthy, Chairman, Board of Studies, Department of Instrumentation, S.K. University, Ananthapuram, for his congenial guidance.

I convey my thanks to Prof. Jayaraman, Director, NARL, for his constant support by allowing me to work in Transmitters group of NARL.

I also thank to Mr. G. Prem Chand, Managing Director, Soroka Soft (India) Pvt.Ltd., Hyderabad, for his special interest and encouragement during my association with him.
I extend my thanks to engineers D. Chandrashekar Reddy and K. Chaithanya Pavan, M/S Megabyte Technologies, Bangalore who helped me in this research journey.

I am also extremely thankful to all the teaching, non-teaching and technical staff of the Department of Instrumentation & USIC, S.K. University, Ananthapuram for their continuous help and assistance during my research work. I can never forget the support and encouragement by my uncle Mr. G. Dhanunjaya, senior technician in the Department of Instrumentation & USIC, S.K. University, Ananthapuram.

It is my sheer pleasure to express my appreciation and thanks to my colleagues and friends C. Chandra Mouli and J. Pradeep Kumar for providing healthy working environment in the Department of Instrumentation.

I express my sincere thanks to Indian Space Research Organization (ISRO) for providing me Junior Research Fellowship under the project entitled “A Real Time Application for Remote Monitoring & Control of MST Radar Transmitters” in the Department of Instrumentation, S.K. University, Ananthapuram.

I find no words to express my gratitude to my father Late Sri R. Nallappa and mother Smt. R. Venkata Lakshumamma who stood beside me throughout my life and also encouraged me to pursue my research work. I take this opportunity to thank my brother R. Ramesh Babu for his constant encouragement throughout the period of my research work. I would also thank all my teachers and professors, past and present.

I would like to thank all those who have helped directly or indirectly in successful completion of my research work.

R. Lakshmi Narayana...