ACKNOWLEDGMENTS

Here with I acknowledge my respectful regards and heartfelt sincere thanks which cannot be expressed in words to my teacher Prof. V. Hyder Khan, professor in physics, Sri Krishna Devaraya University, Anatapur for his inspiring guidance, illuminating insights and above all for his patience, versatility and constant encouragement through out this work.

I express my sincere thanks to principal, Sri Krishna Devaraya University, Anatapur and Prof. K.V. Sivakumar, Head of the department of Physics, Prof E. Raj Gopal, Chairman board of studies of Physics, Sri Krishna Devaraya University, Anatapur, who have rendered necessary facilities to complete this work.

I am highly thankful to Mr S. Abdul Khader Jilani research scholar Department of Electronics for his excellent cooperation throughout the work without which work would not have been completed so early and I am thankful Mr. G. Rajashekar and Mr. M. Jani Baig co-research workers for their excellent cooperation during my work.

I am thankful to Prof. Ramesh Narayan, Principal National college, Anantapur for extending help to stay at Anatapur and Sri S. Maruti for providing electronic components used for the work.

I express my deepest depth of gratitude to the management authorities V.V. Sangha, Bellary, Prof G.H. Kumar, principal, Sri S. Indu Shekar, Chairman governing council, Vijayanagar Engineering college, Bellary for their profound encouragement and help to complete the work.

I express my heartfelt thanks to Sri K. Basavana Goud (Former administrative officer V.E.C, Bellary) Member of parliament, Bellary and Prof P. Bhopal Reddy (Former Principal V.E.C, Bellary) Registrar academic Gulburga University for enlightening me about the importance of higher studies in academic field.

I am thankful to my colleagues Sri & Smt B. Vijaya Kumar, Sri H. Vema Reddy, Sri K.M. Prakash Department of physics V.E.C, Bellary for carrying out departmental works in my absence and their encouragement to complete work. Special thanks to Prof C. Prabhaker Reddy HOD Mechanical Department V.E.C, Bellary for his cooperation to carry out my work.
I am thankful to Dr. V.B. Haleshappa HOD Math's V.E.C Bellary and Dr. K.M. Basvaraj Industrial Chemistry department G.U.P.G.C Bellary for valuable suggestions.

I place on record my deepest regards to my parents, brothers, sisters and other family members who were abiding source of inspiration for this work.

Last but not the least I am thankful to my wife Syeda for constant encouragement and mental support during the work.

Place: Anantapur
Date: 13-03-2000

(Mohammed Saleem)