ACKNOWLEDGEMENT

The author deems it a veritable pleasure to record her heartfelt thanks to her supervisor, Dr.G.Uma, Associate Prof., PED, DEEE, Anna University for her invaluable guidance and magnanimous help to carry out the research work. Being a source of unlimited inspiration and uncompromising commitment, she has been the driving force behind the author in realising the fruits of this work.

It is a great pleasure to express the author’s sincere thanks and deep sense of gratitude to Dr.K.Murali, Associate Professor, Department of Physics, Anna University for his excellent guidance, constant encouragement, thought provoking ideas and constructive criticism.

The author is thankful to Dr.S.Usa, H.O.D, DEEE, Anna University for providing the necessary facilities to carry out this research work. The author also expresses her gratitude to the Doctoral Committee members, Dr.R.Ramanujam, Retired Professor, Anna University and Dr.N.Lakshminarasamma, Assistant Professor, IIT Madras for their guidance.

Last but not the least, the author acknowledges her husband Mr.K.Muthukumar, her daughter M.Harini, her parents Ms.P.Santha and Mr.P.Sankar, her mentors Dr.K.Dharmalingham and Dr.G.Sambandan and her friends for their patience and moral support.

DEIVA SUNDARI