ACKNOWLEDGMENTS

It gives me great pleasure to express my deepest sense of gratitude and respect to my Research Supervisor, Dr. J. S. Kadadevramath, Reader in Department of Physics/Electronics, Karnataka University, Dharwad, for his invaluable timely help, continuous inspiration, support, encouragement and positive criticisms were of immense help and asset in bringing out my investigations of research in thesis form. I am totally indebted to him.

I am at a loss of words to express my humble indebtedness to Dr. M.V. Latte, H.O.D, Department of Electronics & Communication S.D.M College of Engineering Dharwad for his inspiring enthusiasm and meticulous planning, which helped me immensely to forge ahead in my research work and Prof. D. K. Deshapande (Rtd) Dept of Physics/Electronics Karnataka University Dharwad, for his encouragement and co-operation in carrying out this work.

My sincere thanks to University Grant Commission (U.G.C.) for granting Teacher fellowship under F.I.P., programme to carry out my research work.

I thank Prof. S.S.Kubakaddi, Chairman and Prof, A.M. Karaguppikar Former Chairman, Department of Physics/Electronics Karnataka University, Dharwad for providing the departmental facility to carry out my research work.

I am thankful to Prof. B. G. Mulimani, Vice Chancellor, Gulbarga University, Gulbarga and Prof. B. Hanumaih, Vice Chancellor, Baba Ambedkar University, Lucknow, (UP) for their inspiration and encouragement in carrying out this research work.
It is with pleasure that I express my thanks to Prof. N. S. Sankeshwar, Prof. S. R. Inamdar, Dr. J. S. Bhat, Dr. J. R. Tonannavar, Dr. N. M. Badiger, Dr. U. S. Raikar, Shri. S. Y. Amaragolkar, Dr M. K. Rabinal, Dr. (Smt) J. V. Yenagi, Shri. A. H. Sidarai, Dr. L. R. Naik and other members of the staff of the department, for their co-operation.

I express my deep and sincere respects to H. H. Sri Vishweshatheetrtha Swamiji of Pejawar Mutt, and Dr. D. Veerendra Hegade, Dharmadhikari of Dharmasthal and Chairman of Janata Shikshana Samiti, Dharwad, for their abundant blessings.

I express my deep sense of gratitude to Prof. N. VajraKumar, Secretary, Janata Shikshana Samiti, Dr. Ajit Prasad, Principal and Smt U. A. Anaandarayanavar, Former principal of J. S. S. College Dharwad for deputing me to carry out research work leading to Ph.D. degree under F.I.P., programme.

I fail in my duty if I do not acknowledge with gratitude's the co-operation extended by Dr. B.R. Deshpande, and Prof. P. R. Hanchinamani for their persistent encouragement. I am thankful to, H. O. D., P. N. Yen and my teacher colleagues Department of Physics/Electronics, J.S.S. College Dharwad, for their encouragement and constant support.

I express my sincere thanks to my friend father Sri R. M. Munjuji (rtd) health inspector, without whom I would not be a post-graduate and my teacher Sri Tattimani for their valuable suggestions and encouragement.

I express my sincere thanks to the non-teaching staff, department of Physics/Electronics, Karnatak University, Dharwad for their help and cooperation in completing this work.

Finally, I pay my deepest respects to my parents and express my deepest gratitude to family members, relatives and friends, without whose encouragement, love and unfailing support this task would not
have been accomplished. I also acknowledge my debt to those who were my source of inspiration and joy.

M.N. Rashinkar