

ACKNOWLEDGEMENT

I wish to express my deep and profound sense of gratitude towards Shri. A. B. Kadam, Lecturer in Electronics, Deptt. of Physics, Shivaji University, Kolhapur for his indispensable guidance, stimulating discussion and constant encouragement throughout the course of this investigation. It was really a great pleasure to work under him.

I am highly obliged to Dr. R. N. Patil, Professor and former Head of the Department of Physics, Shivaji University, Kolhapur for his invaluable help and encouragement during this work. My grateful thanks are due to Dr. K. L. Narayana, Professor and Head, Deptt. of Physics Shivaji University, Kolhapur for his kind co-operation and fruitful discussions which led me to represent this work.

I am indebted to Dr. S. H. Chavan, Dr. S. R. Sawant, Dr. C. S. Shalgaonkar, Dr. B. K. Chougule, Deptt. of Physics, Shivaji University, Kolhapur for their valuable suggestions and constant encouragement in one way or the other. I am thankful to all other members of teaching staff and non teaching staff of department of Physics, Shivaji University, Kolhapur.

Similarly, I have the honour to express my deep sense of gratitude towards all the members of Dharmabad Shikshan Sanstha, Dharmabad and Shri J. U. Chamargore, Principal, Lal Bahadur Shastri Mahavidyalya, Dharmabad, Shri. U. D. Suryawanshi and Shri. M. K. Gundawar, Vice-principals of L.B.S.College Dharmabad for granting me the study leave and allowing to proceed further for my present work. I shall always remain grateful to them for their constant help and inspiration at every stage of my research work.

I express my sincere thanks to Dr. R. L. Patil, Reader in Electronics, K. U. Dharwad, for valuable discussions and help in the course of my study. I am thankful to the Librarian, I. I. Sc., Nagpur, for providing Library facility.

My thanks are also due to Dr. M. T. Teli, Professor and Head of the Department of Physics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad and Dr. T. G. Naik, Retired Professor, Shivaji University, Kolhapur for their kind co-operation and help.

I also acknowledge with thanks the authorities of the University Grants Commission, New Delhi for providing the opportunity by selecting me as a Teacher Fellow and for financial assistance to carry out the present investigation. No words are enough to express my thanks towards to Shri R. G. Desai, Supdt., Stat section and Shri P. S. Marulkar, Supdt., P. G. Section, Shivaji University, Kolhapur and their colleagues for their invaluable help during the tenure of my research work.

I am thankful to my colleagues Dr. G. R. Nambiar, Mr. S. R. Dumbre, Mr. R. B. Chidrawar, Mr. B. G. Warade, Mr. O. R. Sharma, Mr. D. P. Patodekar, Mr. P. Y. Kale, Mr. K. E. Sundge, Dr. K. V. Kalyane, Mr. B. R. Inamdar, Mr. M. D. Mr. M. D. Ejalkar and Mr. N. B. Rander, Mr. R. G. Kalia, Mr. L. V. Palkritwar and all other members of Teaching and Non-teaching staff of L. B. S. College, Dharnabad for their help in some way or the other.

My thanks are also due to my research colleagues Dr. S. P. Rasal, Mr. R. N. Thokle, Mr. K. D. Ghadge for their co-operation.

I appreciate the neat and careful Typing of Dissertation by S. N. Sontakke and fine Tracing by Mr. P. V. Ravan.

I am grateful to my uncle Shri.V.M.Bagul and brothers Yuwraj ,Ramkrishna, Devidas Borse and all family members without whose active encouragement this dissertation would have never seen the light of the day.My acknowledgement seems to be incomplete if I fail to offer my heartiest thanks to my wife Pushpa for her forbearance and moral support whilst this work was being completed.

Finally, my heartiest thanks to my Parents without whose blessings it would not have been possible to undertake and complete this M.Phil Course.

Kolhapur.
Date: 6-9-94


C.A. M. MAHAJAN
Research Student