## **ACKNOWLEDGEMENT**

I am deeply indebted to my Research Guide Dr.R.D.Lawangar, Lecturer in Physics, Shivaji University, Kolhapur, for his invaluable guidance and encouragement throughout this work. I should like to record my grateful thanks to him. I am also thankful to Prof.R.N.Patil, Head of the Department of Physics, for making available the laboratory facilities to pursue this work.

I must mention it here that this was mainly due to our Principal Dr.B.P.Sabale and Chairman, Mr.Jayavantrao Bhosale, Shetakari Shikshan Prasarak Mandal, Rethare (Bk), who insisted and encouraged me. I sincerely thank them for all they have done for me.

I should like to express my thanks to Dr.C.S.Shalgaonkar, Mr.M.G.Patil, Mr.R.R.Hadgal for their experimental help and many informal discussions.

I am indebted to the Vice-Chancellor, Mr.R.K.Kanbarkar of the Shivaji University, for financial assistance during much of this work.

Thanks are also due to my colleagues in Krishna Mahavi-dyalaya for their assistance during this work.

No words are adequate to express my heartiest gratitudes to my parents, without whose active encouragement this thesis would have never seen the light of the day.

Finally I thank Mr.V.B.Patil for neat and careful typing of the manuscript.

( P.R. Bote

Place: Kolhapur )
April, 20,1981.