ACKNOWLEDGEMENT

It gives me great pleasure to express my deep sense of gratitude to **Dr.P.S.Patil**, Lecturer in Physics, Shivaji University, Kolhapur for his expert valuable guidance and continuous encouragement given to me during the course of my work.

I am highly greatful to **Prof.K.L.Narayana** Head, Department of Physics of this university for making available the laboratory facilities and constant encouragement. My sincere thanks are due to **Prof.R.N.Patil and Dr.C.D.Lokhande**, for fruitful discussions and valuable suggestions during every phase of my work.

I have been benefitted to a great extent for valuable suggestions and thought provoking discussions with Dr.C.H.Bhhosale and Dr.M.D.Uplane. I offer my sincere thanks to them.

I sincerely appreciate the help rendered by Mr.K.M.Gadave, Mr.B.L.Patil,Mr.S.B.Jundale,Mr.S.S.Dhumure,
Mr.U.K.Mohite,Mr.J.D.Desai,Mrs.M.M.Uplane,Mr.R.P.Mahajan,Mr.S.C.
Choudhari, Mr.R.N.Thokale, and Mr.A.M.Mahajan.

I acknowledge the help received from staff of the University Science and Instrumentation Centre (USIC). I extend my sincere thanks to all my teachers as well as the administrative staff of the Physics Department and University for their cooperation.

My deep thanks and appreciations are reserved to His Highness

Lt.Col.Shivaram Raje-Bhosale, the President, and Her Highness

Sau.Satvashiladevi Bhosale, the chair person of S.R.D.S.P.Mandal,

Sawantwadi whose goodwill and inspiration for exceeds—what the words

of appreciation can express.



This work has been made possible by a teacher fellowship awarded by U.G.C.New Delhi. I express deep sense of gratitude to U.G.C. On this occasion I express my thanks to the **Principal S.P.K.Mahavidyalaya**, **Sawantwadi**, teaching and non-teaching staff of Physics Department of the College.

I desire to record my thanks towards My Parents and Wife Vidya for creating an environment which helped me to complete this task in time.

The expert and neat Typing of the Thesis by Miss. Rupali More is much appreciated.

Place: Kolhapur

Date: 1st Jan., 1994

(P.R.Patil)

Lecturer in Physics,

Shree Pancham Khemaraj

Mahavidyalaya, Sawantwadi

Dist: Sindhudurg.