

## A C K N O W L E D G E M E N T

This work would not have been possible without constant encouragement and inspiring guidance provided by research guide, Dr.C.S.Shalgaonkar, Lecturer in Physics, Shivaji University, Kolhapur. To him I offer my deep gratitude and sincere thanks. I am also thankful to Prof.R.N.Patil, Head of the Physics Department, Shivaji University, Kolhapur, for providing me the Laboratory facilities.

I am also grateful to the management of the Rayat Shikshan Sanstha, Satara, for granting me permission to complete M.Phil course. I must sincerely thank, the Principal N.D. Thorat, Thakkarbappa Junior College, Gandhi-Tekadi and Principal K.K.Ghatage, R.N.Agarwal, Technical Institute and Junior College, Baramati, for their constant encouragement during this work. Thanks are due to my colleagues for their assistance during the time of this work.

I should like to express my thanks to Dr.R.D.Lawangar, Mr.L.R.Pol, Mr.Sharad Patil and Mr.A.B.Deshmukh, for their experimental help and many informal discussions.

The contribution to this work by my wife Sou.Lata cannot be exaggerated. Her patience and self sacrifice during these years have sustained me; her optimism and good cheer have encouraged me. Finally, I thank Shri Patil, for neat and accurate typing of the thesis.

Kolhapur.

  
( S.B.Kale )