ACKNOWLEDGEMENT

I express my deep and profound sense of gratitude to Prof. R. N. Patil, Professor in Physics, Shivaji University, Kolhapur, for his valuable guidance throughout the course of this work.

I am very much thankful to Prof. S. A. Patil, Professor in Physics, Shivaji University, Kolhapur for his encouragement's and suggestions.

I am grateful to Prof. K. L. Narayana, Head, Department of Physics, Shivaji University, Kolhapur for necessary encouragement.

I am very much grateful to Mrs. K.K. Patankar, Research student of Physics Department who have kindly extended her helping hand wherever I requested.

I sincerely thank to Dr. B. K. Chougule, Dr. S. D. Lotke for valuable suggestions and discussions.

I take this opportunity to express my thanks to Dr. S. K. Paranjpe, S. S.P.D., B.A.R.C., Mumbai for his constant encouragement to carry out this work.

I respectfully remember Hon'ble Shri Ghorpade, Shibe, Kore C. G.,

Jr. College, Malkapur for their intellectual stimulations.

I express my thanks to Shri Mathe V.S., Shri Patil A. N. for their cooperation to carryout my research work.

Words fail me while trying to express my sentiments towards my family members, for their sustained encouragement, blessing and affection.

All the non-teaching staff of Physics Department, USIC, CFC, Shivaji University, Kolhapur are gratefully acknowledged.

Last but not least thanks are goes to typist Shri Pasare S. S., Kolhapur and Shri Patil, Yash Computers, Malkapur for his prompt typing and careful xeroxing.

MISS DOMBALE P. D.