ACKNOWLEDGEMENT

I express my deep and profound sense of gratitude to my guide, Dr. A. S. Vaingankar under whose able and inspiring invaluable guidance only it was possible for me to complete this work.

I am very much thankful to Dr.K.L.Narayana, Head of Department of Physics for providing laboratory facilities and the necessary encouragement.

I am highly indebted to Hon'ble Ganeshrao Dudhgaonkar, Chairman, Dnyanopasak Shikshan Mandal, Parbhani, for his constant encouragement.

I am very much thankful to Shri B.S.Solunke,
Principal, Dnyanopasak college, Parbhani, for deputing me to
M.Phil. course.

I have been benefited to a great extent for the valuable suggestions and discussions with Dr.H.V.Kumbhojkar, Department of Mathematics, Shivaji University, Kolhapur. I thank him sincerely.

The help and the hand of co-operation extended by Dr.S.R.Sawant, Dr.M.D.Upalane, Dr.C.S.Salgaonkar, A.B.Kadam, Dr.S.A.Patil, Dr.P.N.Kamble and others, in discussion are invaluable. I express my sincere thanks to all of them.

I am thankful to the authorities of University of Hyderabad for providing library facilities.

I am thankful to U.G.C. authorities Delhi, for providing me the teacher fellowship.

I also acknowledge the help extended by non teaching staff of Department of Physics, Shivaji University, Kolhapur.

Finally, I acknowledge the encouragement I received from the members of my family without whose help, co-operation and utmost patience, this work would not have been, what it is now. My deep sense of gratitude also goes to the homely help extended by the members of the family of my guide Dr. Vaingankar.

Place: Kolhapur

Date: 11-08-1995.

(H. B. Khanale)