

## ACKNOWLEDGEMENT.

I offer my sincere thanks to my Research Guide **Dr.B.V.Khasbardar** for his invaluable guidance and keen interest in my research work throughout the course. I am very much thankful to **Prof.R.N.Patil** Department of Physics, Shivaji University, Kolhapur, for his encouragement and useful suggestion.

I thank **Dr.K.L.Narayana** Head, Department of Physics, Shivaji University, Kolhapur for allowing me to avail myself of the laboratory facilities.

I am very much grateful to **Dr.S.A.Patil** who is kind enough in extending his helping hand whole-heartedly. He assisted me at every step. **Dr.S.R.Sawant** and **Dr.B.K.Chougule**, **Dr. A.S.Vaingankar** deserve special thanks for their help and encouragement.

I take this opportunity to extend my thanks to the Teaching and Non-Teaching Staff of the Department of Physics for their co-operation. I am thankful to my M.Phil colleagues **Shri.S.C.Chaudhari**, **P.R.Patil**, **R.N.Thokale**, and Research Colleagues **Shri.B.L.patil**, **M.G.Patil**, **V.C.Mahajan**, **R.J.Gavade** and friends **N.D.Chaudhari**, **K.B.Patil** for the co-operation.

**R.S.I.C.Nagpur University**, **E.T.D.C.,Bangalore**, **U.S.I.C. Shivaji University** are the institutions to which I offer my sincere thanks.

I thank to **Principal. Shri.B.N.Patil**, Dhanaji Nana Mahavidyalaya, Faizpur and Management of **Tapi Valley Education Society** in deputing me to the M.Phil course. I also thank my colleagues in the College for their cheerful encouragement.

I am indebted to **UGC New Delhi** for providing me the financial assistance and acknowledge gratefully the facilities extended by Shivaji University Authorities to carry out this work.

I desire to record my thanks towards the members of my **Family** for creating an environment which helped me to complete this task in time.

Finally I thank to the **Typist Mrs. MEENAXI C.MORE** for neat and accurate typing and **Shri. Ravan** for tracing work.

**R.P.MAHAJAN**