ACKNOWLEDGEMENTS

I owe my first and foremost duty to express my deep sense of gratitude to Dr. A.P. Srivastava, Assistant Professor in Physics, Saugar University, Sagar for suggesting the problem and his valuable guidance and absorbing interest throughout the progress of this work. His guidance was so freely available to me that infact I do not find words to express my indebtedness to him.
I am also highly indebted to Dr. D.R. Bhawalkar, then Professor and Head of the Physics Department, University of Saugar, Sagar for permission and providing the necessary facilities for this work and for encouragement, advice and helpful criticism at all stages.

My heartfelt thanks are due to Dr. J.D. Ranade, present Head of the Physics Department and to Dr. R.K. Srivastava, Reader in Physics who always used to make sympathetic inquiries about the progress of the work and were a source of encouragement throughout. I am also thankful to my friends Dr. V.S. Tomar, Prof. S.K. Shukla and Dr. A.N. Dixit for helpful suggestions and discussions from time to time.

Sentimentally, I cannot look back on the past about three years without thinking of the encouragement and sacrifices of my wife and children and the supreme sacrifice of my Reverend Mother who left for Heavenly abode during this period and in whose memory I have dedicated this work.

Finally, I express my thanks to Dr. R.G. Deo, Prof. and Head of the Physics Department, M.V. Mahavidyalaya, Bhopal for extending the necessary facilities for calculation and photography work and to the Education Department, Government of Madhya Pradesh (India) for granting the study leave without which the present work would not have been possible.

(Shradha Nand Bhatnagar)