ACKNOWLEDGEMENTS

In this esoteric enterprise, many persons extended me their invaluable help in a variety of ways. At this juncture, I feel obliged to acknowledge their generosity and thank them all.

The author deems it a proud privilege to express his deep sense of gratitude to Professor P.N. Trehan, Department of Physics, Panjab University, Chandigarh, for his invaluable guidance and constant encouragement throughout the course of this work. His involvement with the project has always been a source of inspiration for me.

I feel highly indebted to Dr. P.C. Mangal, Reader in Biophysics, Panjab University, for his able co-supervision and the academic discussions.

I am grateful to former chairman, Professor I.B. Kittra and the present chairman, Professor V.B. Bhanot for providing me necessary facilities in the department.

The author wishes to express his gratitude to Dr. H.R. Verma and Dr. Nirmal Singh for their active interest and ready help throughout the work presented in this thesis. Thanks are also due to Messrs. Jasbir Singh, Ajay Krishan Ashor, Suchir Kumar, Devinder Mohta, Surinder Singh and Menchu Bel for their help in data taking and computation. Words can not explain my sincere thanks to Mrs. Renu Bedi for her consistent help in many ways throughout the course of this work.
I thank my friends who have taught me so many things outside the Physics. Together we have shared these happy days. Life would have been considerably drab without their ever pleasing company.

A timely help of the crews of Metal Workshop, went a long way in the completion of this work. I am thankful to them for their assistance.

I am indebted to my family members for putting up with me all these years, in particular, I want to mention the patience of my wife who permitted me to stay away from her immediately after our marriage.

Lastly, I am thankful to Mr. S.P. Singh for neat typing and to Mr. S.C. Kewla for the diagram work.

The financial assistance from the Department of Atomic Energy, India, is gratefully acknowledged.

Chandigarh.


Mohan Lal Garg

( MOHAN LAL GARG )