ACKNOWLEDGEMENTS

The present investigations have been carried out under the vigilant supervision and active guidance of Prof. A. K. Barua, Director, Indian Association for the Cultivation of Science, Calcutta. The author expresses his sincerest gratitude to him for his keen interest, invaluable suggestions, constant help and encouragement throughout the progress of the work.

The author feels indebted to Dr. A. K. Batabyal and Dr. S. Ray for their valuable suggestions and constant help in overcoming the problems which cropped up during the course of the work. He is also grateful to Mr. D. Shome and Mr. R. G. Manna for their technical assistance in the preparation of the films and to Mr. S. Das for typing out the thesis.

The author also expresses his gratitude to all the scholars and staffs of the Indian Association for the Cultivation of Science who had extended their helping hands whenever needed.