ACKNOWLEDGEMENTS

Words fail me when I want to express my gratitude to one person and that is my guide Professor B. Buti. Her zeal and persistence were the driving force behind completion of most of the work presented in this thesis. Many a time, it was her encouragement that used to turn my despair into hopes. I gained immensely from my close association with her for which I shall remain ever grateful to her.

It was Professor P.K. Kaw who introduced me to the field of Plasma Physics. The little discussions I had with him, evoked and sustained my interest in Physics in general and Plasma Physics in particular. Quite often, I was benefited by discussions with Professors R.K. Varma, A.C. Das and Drs. Abhijit Sen and G.S. Lakhina for which I am extremely grateful to them.
Drs. K.S. Rao and D.R. Kulkarni were always there to help me in my difficulties with numerical computations. I am thankful to them for their friendly help.

In those moments when life appeared gloomy, Mr. Anath Das and Mrs. Arundhaty Das were by my side to boost up my morale. With them it was a home away from home. The memory of the little time I spent with them will remain fresh in my mind for years to come.

The preparation of the thesis in the present form has been possible only due to the neat and efficient typing of Mr. P.P. Narayanan. My special thanks are due to him.

(B.N. GOSWAMI)