

Acknowledgement

I am sincerely thankful to Prof.Dhiraj Bora, my thesis supervisor, for his persistent enthusiasm, encouragement and support throughout my thesis work. His suggestions, ideas and support have given me a good direction to complete this work. It was privilege learning from him.

I thank Prof. P K Kaw for his support and cooperation during the research work. His motivation encouraged me to carry out this work. I thank Prof. Y C Saxena, Prof. A. Sen, Prof. Amita Das, Prof. R. Jha for his support and best wishes on my research work.

I thank all the members of ECRH Division and RHVPS Division for his extended support to carry out various research work in the field of ECRH in tokamak plasma.

I thank Dr. S. Pradhan and SST-1 team for his support during ECRH research work on SST-1 tokamak. I thank Dr.Joydeep and Aditya team for his support during ECRH experiments on Aditya.I thank Mr. C. N. Gupta and his team from APPS for his support.

I thank SST-1 and Aditya Diagnostics Group (Mr. P K Atrey, Mrs. Ranjana Manchanda, Dr. Manoj Gupta, Dr. Shankar Joisa, Dr. D. Raju and all the diagnostics members) for his support during ECRH experiments on Aditya and SST-1.

Finally I will thank my family for extended support during all the ECRH installations at IPR and during all the experimental campaigns on Aditya and SST-1 for allowing me to work without any disturbance and provided all the moral supports.