

Acknowledgements

I express my thanks to **Almighty** for providing me inspiration, strength, energy and patience to start and accomplish my work with the support of all concerned a few of them I am trying to acknowledge.

I heartily and courteously thank my guide **Prof. Satish K. Shah** who has been main source of inspiration to guide this work throughout the course of the work. He is a person with tremendous force, resourceful, creativity and of friendly nature. He proved himself to be the best guide by the way of inspiring to work in right direction, presenting research papers in seminars and conferences.

I thank Prof. S G Shah, Ex-Dean, **Prof. S. M. Joshi**, Ex- Dean, and **Prof. A. I Trivedi**, Head, Electrical Engineering Department, Faculty of Technology & Engineering, M. S. University of Baroda for helping me in all ways for registering me as Ph. D. student.

I sincerely thank **Dr. M Ramamoorthy**, Ex- Director, ERDA for providing laboratory facilities. I am also thankful to **Shri U C Trivedi**, **Shri Vinod Gupta and Shri Kamalesh Keharia**, R & D Engineers. Power Electronics group, ERDA for their assistance and help.

Thanks are also due to **Shri Jayesh Patel, M. D.,** Moonlight Electrical, Makarpura, and Vadodara for providing workshop and assembly facilities for realizing proto type model of the active power Filter module.

I am thankful to A I C T E, New Delhi for sponsoring the research project and providing funds under R & D scheme.

I express my thanks to all my colleagues for their help and throughout support. Last but not least, I express my thanks to my family for all support, inspiration and love provided to me with all inconveniencies caused because of my engagement in this work.

July, 2007

Mrs. Hina B Chandwani