Acknowledgment

This thesis resulted out of four years of research that has been done since the DAVV research centre was established at MCTE Mhow. During these years, I have worked with a great number of people whose contribution in direct and indirect ways to the research and the making of the thesis deserved special mention. It is a pleasure to convey my gratitude to them all in my humble acknowledgment.

In the first place I would like to record my gratitude to Prof. (Dr). B. K Joshi for taking the initiative to start the DAVV research centre at MCTE Mhow, having agreed with me to define the topic of this thesis, for advising, supervising and correcting my work. Above all and the most needed, he provided me unflinching encouragement and support in various ways especially when the going was tough. I am indebted to him more than he knows.

It is an honor for me to thank the MCTE in inspiring me to do my research. I wish to express my gratitude to the Commandant MCTE for permitting me to undertake this topic for my research. I am grateful to the Commander FCE for providing me with all the necessary help during the course of this work. All my colleagues at FCE at MCTE made it a convivial place to work. In particular, I would like to thank Assistant Professor Rajesh M Bodade for his friendship and help in the past seven years. My colleagues holding the appointment of DSCoord of FCE have been very considerate to me, especially Lt Col Ravindranath PP and Lt Col CP Kothari, in adjusting my classes and giving me the subjects of my choice during their tenure.

I wish to thank my parents for the constant reminders and much needed motivation they provided me. I always remember that I can count on my parents and they were very supportive to me during many difficulties. The most important support I have received from my wife Preetha. She encouraged me during the difficult times and she always had belief in me. I also want to mention the immense emotional support I have got from my son Nanda Kishore during these years of hard work.

Lastly, I offer my regards to all of those who supported me in any respect during the completion of the project, and to God, who made all things possible.