ACKNOWLEDGEMENT



AUM SRI SAINATHAY NAMAHA

I heartily acknowledge my deep sense of gratitude to almighty God to give me wisdom, knowledge, intelligence and strength to carry out and complete this research work successfully. It is only because of His kindness, wish and blessings this thesis is a reality.

I express my deep sense of gratitude towards my respected parents and my in-laws, who have, with love and care, inducted the habits of honesty and hard work by setting the example through their own deeds. This thesis is a result of their blessings.

I have no words to express my heartily deep sense of gratitude to my respected guide Professor Dr.A.R.Chudasama. I have no hesitation to write that it is only because of my highly inspiring guide's patient, encouragement, active support, constructive suggestions and extensive help; I am able to carry out this research work successfully.

I take this opportunity to express my most sincere gratitude to Dr. K.K.Thakkar, director (JSL, Mogar) for sparing his valuable time for extensive discussion on this research topic, for providing facilities for Motor design and testing at JSL, Mogar. I also wish to acknowledge all his support and encouragement.

I am thankful to the Motor section staff of JSL, Mogar, for their support.

I also wish to heartily thank Mr.S.Salvi, Managing Director, VACON, Chennai, for his technical support in carrying out control circuit design and using facilities at VACON, Chennai. Mr.Venkatesh and Mr.Anil and all the staff at R&D and testing at VACON Chennai for their invaluable assistance and support.

I am thankful to Dr. Jayesh Patel Chairman and Dr.Devanshu Patel, Management trustee, Parul Arogya Seva Mandal(PASM) for kind support and encouragement. I am thankful to Mr. Jagdish Patel, Chairman, Babaria Institute of Technology for their kind support.

I also wish to thank Dr. Kelkar, Prof.MSU, and Dr. M.V. Aware, VNIT, Nagpur for providing all type of literature for my research work and for fruitful discussion and valuable suggestions during course of research work.

I am also thankful to Prof.S.P.Muley, Head, Electrical department, Priyadarshini college of Engineering, Nagpur, for her kind support and help in Matlab software simulation.

I am also heartily thankful to Mr.M.R.Tilwalli, Gururaj Engineers, GIDC, Makarpura, Vadodara for his kind help and cooperation.

I am grateful to IEEE, especially IEEE Industry Association Society and IEEE Power & Energy Society for making available all the literature and very rich quality papers in my area.

I also express my deep sense of gratitude towards Dean Faculty of Technology & Engineering for his active support and time to time encouragement.

I wish to thank Prof.Mrs.S.A.Kanitkar and Prof.S.K.Shah past and present, Head of the Electrical Engineering Department for their kind co-operation. Special thanks to Prof. Mrs. S. A. Kanitkar for her timely help and invaluable suggestions.

I am thankful to Ex-Principal of Parul Institute of Engg. & Technology, Dr. Rupesh Vasani, my friends and colleagues at Parul Institute of Engineering and Technology, Limda for their support and timely help. All the faculty of Parul Institute of Engineering & Technology-Diploma Studies working under me for their kind support and timely help.

I am thankful to Shri. Shailesh Shah, Chairman Sigma Group of Institutes and all the staff and faculty working under me at Sigma Institute of Engineering for their kind support and help.

This thesis is a result of prayers and well wishes of my husband and lovely daughter Sampada. So I heartily thank both of them for their moral support and encouragement.

I am also thankful to my younger brothers and their families for their moral support and encouragement. I sincerely thank all those who have helped me directly or indirectly in my research program.

Once again I wish to express my very sincere feeling of respect and gratitude for my guide Professor Dr. A.R.Chudasama who has guided me with perfection throughout the different stages of the research program and made it a memorable learning experience for me as always

(Archana S. Nanoty)
March 2012