

## ACKNOWLEDGEMENT

I would like to thank **Dr. N. Devarajan**, my thesis supervisor, for accepting myself as a student to work under him when I was going through my gloomy periods of research. I consider myself privileged to have such a permissive, experienced, proficient and humble professor.

I express my thanks to doctoral committee members **Dr. Thanushkodi. K.** and **Dr. M. Rangasamy**, for their sustained support and blessings. I would like to thank the Principal of Government College of Technology, Coimbatore **Dr. Lakshmi Prabha**, for her support during my research work.

I would like to dedicate my research work to my guru **Professor A.T. Devarajan**, Amrita Vishwa Vidyapeetham, for his priceless guidance in the exciting field of power electronics. I am greatly obliged to **Dr.Sasi. K.K.**, the **PI, Indo-Swedish DST-VINNOVA Research project** on “Energy Management on Smart Grid using embedded systems” at Amrita University, Coimbatore, who has given me a true insight on renewable energy research. I would like to thank all my PG project students.

Most significantly, I would like to thank **my parents** for everything they have done for me. I wish to extend my thanks to my husband and son, who was a strong pillar of moral support. Above all I thank the Almighty for given the conviction in completing the research work successfully.

**A. VIJAYAKUMARI**