ACKNOWLEDGEMENTS

I express my deep sense of gratitude and indebtedness to my advisor, guide and supervisor, Dr. M.K. Soni without whom this thesis would not have been possible. Dr. Soni has been a very good mentor and philosopher since the very beginning of my research work. As a mentor, he provided me the freedom to explore on my own, and at the same time provided unconditional guidance to recover when my steps faltered. It wouldn’t have been possible for me to take this thesis to this level without his innovative ideas, relentless support and encouragement. I would like to express my sincere gratitude to my joint supervisor, Dr. P.K. Singhal for giving me the support and guidance to work in the area of antennas. With immense pleasure, I acknowledge the help, guidance and support received from various quarters during the course of my research work.

I would like to express my sincere thanks to all those who directly or indirectly helped me in various stages of this work. I would specifically like to thank Dr. Naresh Grover, Director, Faculty of Engineering and Technology (FET), Manav Rachna International University (MRIU) and Dr. Dipali Bansal, Professor and Head of Electronics and Communication Engineering Department, FET, MRIU for their valuable inputs, support and guidance. I would also like to thank Dr. Sarita Sachdeva, Professor and Head of Biotechnology Department, FET, MRIU for her valuable suggestions and advice throughout the research period. I would also take this opportunity to thank Dr. S.K. Chakarvarti and Dr. P.B. Mital, Professors, Department of Electronics and Communication Engineering, FET, MRIU for their unconditional help and support. They all have been a source of motivation throughout this research work.

I also express my sincere and deepest gratitude to my life partner, Rajan, for constant love, support, patience and encouragement at all the times during these years. I am also thankful to my son, Mrigank for being so patient and providing unconditional love and support.

I sincerely acknowledge my parents for their blessings affection, understanding and patience.

SHRUTI VASHIST
Registration No. 09019990041