ACKNOWLEDGEMENTS

It gives me great pleasure to express my sincere gratitude and deep sense of indebtedness to my guide Dr. V.V. Navarkhele, Reader, Dept. of Physics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad for his dynamic guidance and suggestions at every stage has helped me to complete this research work in spite all the inevitable ups and downs.

I express my deep sense of gratitude to Prof. S.C. Mehrotra, Head, Department of Computer Science and Information Technology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad and Shri G.S. Raju, Dr. P. B. Patil for their valuable suggestions and cooperation in my work.

I am thankful to Prof. K. M. Jadhav, Head, Dept. of Physics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad for providing necessary laboratory facilities and equipment as well as I offer my sincere thanks to Dr. P. W. Kharade, Dr. M. D. Sirsat, Dr. S. S. Patil.

Also I offer my sincere thanks to teaching and non-teaching staff, Dept. of Physics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad for their generous helps and well-wishers during the tenure of this work.

I am very much thankful to Dr. D. R. Mane, Dean, Faculty of Science, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad for his Continuous inspiration for this work.
I am very much thankful to Shri Vinayakrao Patil (President), Shri Basavrajji M. Patil (General Secretary), Shri Ramkrishnaji Kharoshekhar (Secretary) and entire director body members of Shramajivi Shikshan Prasarak Mandal, Omerga, Dist.Osmanabad for encouraging me for higher study.

I am grateful to Dr. D.P. Garud (Principal), Dr. S.G. Kulkarni, (Vice Principal), Adarsh College, Omerga, Dist.- Osmanabad. And Colleagues Shri U. B. Dindore, Shri S. G. Algude, Miss R. M. Mahendrakar, Shri U. T. Kesre, Shri S. G. Reddy, Shri S.M. Salunke, Shri S.K. Patel, Shri B.S. More, Dr. S.P. Jadhav, Shri B. V. Pidge, Shri A. S. Sonkate, Shri S.V. Mahajan, Shri G.R. Rasal, Shri Datta Pathak and Shri S.S. Kulkarni entire teaching and non-teaching staff Adarsh College Omerga, Dist.- Osmanabad, for their well wishes and encouraging attitude during this work.

I am very much thankful to my research colleagues in microwave group Dr. M.K. Bhanarkar, Dr. Shaikh Amjad, Miss Ratna Suradkar for their cooperation and valuable suggestions during this work as well as I am thankful my friends Shri Sanjay Kamble, Shri Somshankar Rajmane, Dr. Ankush Kadam and Dr. G.H. Jadhav.

I would like to express my feelings of love and affection to my grandmother late Nagabai B. Ramshetti blessing of her soul, my uncles Shri Shrimant, Sidramappa for their bless and inspired me to complete my research
work, my brother Shivshekhar, sisters Mrs. Shilabai, Mrs. Lalita and Shri Chandrashekhar Karpe & Vijaykumar Gutte for their eagerness.

Also I would like to express my feelings of affection to father in law Shri Gundappa Mamdapure and my mother in law Mrs. Sushilabai Gundappa Mamdapure for their encouragement in my life for this work.

At last, but not least I wish to offer my hearty thanks to my wife Mrs. Sangeeta Rajshekhar Ramshetti and beloved daughter’s Rutika & Rasika for their cooperation and patience during this research work.

Rajshekhar Sharnappa Ramshetti