ACKNOWLEDGEMENTS

I owe my deep sense of reverence to His Holiness Jagadguru Sri Sri Sri Dr. Balagandharanatha Maha Swamiji and present pontiff His Holiness Jagadguru Sri Sri Sri Nirmalanandanatha Maha Swamiji, President, Adichunchanagiri Mahasamasthana Math and Shikshana Trust for giving me a golden opportunity to work at Adichunchanagiri Biotechnology and Cancer Research Institute (ABCRI).

In deep sense of gratitude, I greatly ever thankful to my mentor and Ph.D. guide, Dr. Leela Srinivas, Director, ABCRI, B.G. Nagara for her invaluable guidance, constant encouragement, instinct moral support and introducing me to the world of research. Her incomparable interest and insight in scientific research have been immense benefit to me and I will be ever grateful to her supporting hand whenever it mattered.

I am grateful to Prof. Karunakumar M, Prof. Cletus D’Souza of Department of Studies in Biochemistry, University of Mysore, Prof. Vishwanath B.S., Registrar, KSOU, Mysore and Dr. M.L. Shankaranarayan, Consultant, Kancor Flavors Pvt. Ltd for their encouragement and guidance.

I am thankful to Prof. Karunakumar M, Prof. Cletus D’Souza of Department of Studies in Biochemistry, University of Mysore, Prof. Vishwanath B.S., Registrar, KSOU, Mysore and Dr. M.L. Shankaranarayan, Consultant, Kancor Flavors Pvt. Ltd for their encouragement and guidance.

I am thankful to Dr. H. Srinivas, Rtd. Scientist, C.F.T.R.I., Sri S. Sampath Kumar, Director, Nutrablaze Pvt. Ltd., for their unstinted encouragement, moral support and scientific interaction.

I am thankful to Principal, HOD and faculties of Dept. of Biochemistry, Dept. of Microbiology and Blood bank of AIMS and AH & RC, B.G. Nagara for their constant support.

I am thankful to Principal, BGS-Institute of Technology, B.G. Nagara for his constant encouragement.

I owe my sincere thanks to my dear colleagues Sri S.S. Thammannagowda, Junior Scientific officer, ABCRI, Mr. M.S.L. Prabhu, Mr. C.S. Madhu and Ms. K.L. Shwetha, Research scholars for their moral support, scientific interaction and creating a pleasant working atmosphere.

I bow before the Almighty for having given me wonderful friends Dr. B.N. Mylarappa, Dr. Raghavendra P. Rao, Dr. K.N. Dinesha, Dr. S. Smitha, Dr. M. Chethankumar, Dr. M. Sivapiya, Mr. R. Harsha, Ms. G. Poornima, and Mr. B.R. Shivalingu who have been a tower of strength, inspiration for making this study a smooth sail.

I record my thanks to Mr. H.K. Madhukumar, FDA, Mr. C. Thimmegowda and Smt. Parvathamamma, ABCRI for their help and assistance.

Finally, I owe my deep sense of gratitude to my parents and family members.

(DINESHA R.)