Acknowledgement

My Guru Resp. Shri Prashant N. Bhatt, my guide Prof. (Dr.) P. N. Bhatt has been a mentor who has guided me in the current research work and brought a passion and dedication for the involvement in this work. If it was not for his encouragement and moral support, the work would perhaps have not been completed. I will always cherish the moments with him and deeply indebted for having taken the initiative to investigate the research topic while providing so many learning opportunities. Additionally, I can never forget his cordial, lovingly and inspirational approach with me during my period of work. Let me take the opportunity to acknowledge the institutional support provided by the BIDI Tobacco Research Station- Chemistry Department, AAU, Anand for analyzing the samples for pesticide analysis for this research study. I thank Dr. Jignansu Mehta for providing valuable suggestions, experimental support and useful guidance during the course of the study. The laboratory facilities and institutional support by the University and help from various faculty members and administrative staff is acknowledged. I also thank Heads of Chemistry, Department of Bhavnagar University. I am thankful to the Irrigation Department, District Panchayat Bhavnagar who extended their cooperation and provided valuable inputs.

I thank my colleagues from the Dept. of Chemistry for their support during the course of the work. My gratitude to Dr. Hitendra Jani for his support & Mr. Vishnu Sutariya for his encouragement, advices and co-operation during my research work. I am thankful to Dr. Piyush Lashkari and Kishor Chauva for their help. I would like to thank, acknowledge and congratulate the team members of the Dept. of Analytical Chemistry, Bhavnagar University for the help and constant encouragement towards the completion of the study. This includes Mr. Galanibhai, Mr. Dabhibhai, Mr. Bhagwanbhai, Mr. Chintan, Mr. Chirag, Mr. Himanshu, Ms. Monika, Mr. Bhavesh, and Mr. Vipul. The moral support provided by my colligues Shri Virabhai Chauhan and Jaywantsinh Gohil was of immense help. I believe that my research work is an outcome of a team effort. Due acknowledgement to Mr. Pramod Makwana and shri Prashant Mehta for help in typesetting.

My sincere appreciation to the Lokbharti Gram Vidyapeeth, LokBharati Lokseva Mahavidyalaya and Management for encouragement and support for the work. I am specially thakfull to Resp. Shri Pravinbhai Thakkar for his support for the research work.

I thank and pray to God to bless us all and guide us in our work. My heartfelt love to my family members, my wife, Khushbu and Bruhad (my children) for their prayers and encouragement.

(Hasmukh Suthar)