ACKNOWLEDGEMENT

I feel emotionally moved when it comes to acknowledge after the task is accomplished. My mind is full of images of those who directly or indirectly helped me in this endeavor. I thank to one and all.

First and foremost, I pay my tribute to the ever so giving Almighty God, without whose gracious blessings, I would never have been where I am. I remember my parents, wife, gurus and all the other elders who have contributed in making what I am today.

Any project no matter how, an individual will almost certainly require input, assistance or encouragement from others, my project is no exception. I was wondering right from the formative stages of my Thesis to the final draft, how things will turn out but, afterwards the ending seems inevitable. Many different people contributed to the current shape of my life. It is however, not possible to mention everyone by name, as I certainly would forget some of them. Those who are not mentioned, but have shared parts of my work should know that I thank all of them for everything they have done for this dream.

I feel myself very fortunate and grateful to be associated with my guide, Dr. (Mrs.) Bhavna A. Shah, Professor, Department of Chemistry, Veer Narmad South Gujarat University, Surat whose inspiring guidance, unbound affection, immense interest, watchful aid, and encouraging criticism have been an invaluable asset throughout the advancement of my research work. She has been a constant source of inspiration for me to guide me during the course of my research by means of her vast knowledge, skill, vision, ethics, and interaction with participants.

I wish to thank Dr. Ajay V. Shah, Head, Science and Humanities Department, Polytechnic, Vidyabharti Trust, Umrakh for his valuable guidance, feasible aid, and constant support during my entire research work.
I express my sincere thanks to Dr. P. Bahadur, Professor and Head, Department of Chemistry, Veer Narmad South Gujarat University, Surat for providing the necessary laboratory facilities. I would like to mention my thanks to all teaching and non-teaching staff members of the Department for their kind co-operation during the course of my research.

I am thankful to Sugar Mill Shree Khedut Sahkari Khand Udhyog Mandali Ltd., Baben village, Bardoli, Gujarat, India for providing Bagasse fly ash free of cost for my research work. I am thankful to Central Salt & Marine Chemical Research Institute, Bhavnagar for the SEM, X-ray diffraction, XRF, BET, and Thermal analysis.

Grateful acknowledgement is made to all my friends in the Department, which made my research so intellectually stimulating and enjoyable. I wish to express my heartfelt thanks to my research colleagues Dr. Nilesh Ahire, Dr. Rajesh Singh, Dr. Pathik Shah, Dr. Riddhish Bhatt, Dr. Nayan Patel, Dr. Ritesh Tailor, Dr. Harendra Patel, Mr. Chirag Mistry, Mr. Alok Navik, Mrs. Pratima Surti, Miss. Darshini Pandya and Mr. Hiren Patel for their precious notion, constant inspiration, and moral support which contributed to the current shape of my life. A special note of thanks to my friends and colleagues Dr. Jayraj Yadav and Mr. Krishna who had provided pesticides for my research work.

No words are adequate to express my greetings for the unconditional love, support, and inspiration given by my father Mr. Yashwantbhai Jadav and my mother Mrs. Pannaben Jadav. Their blessings have always shadowed me. I express my heartiest feelings of gratitude to my wife Nilam for her invaluable love, cooperation, and encouragement during the course of my research.

PIYUSH Y. JADAV