

## **ACKNOWLEDGEMENT**

First and above all, I praise **God**, the almighty for providing me this opportunity and granting me the capability to proceed throughout my career. This thesis has been kept on track and been seen through to completion with the support and encouragement of numerous people including my well wishers, my friends, colleagues and various institutions. At the end of my thesis I would like to thank all those people who made this thesis possible and an unforgettable experience for me.

I would like to express my special appreciation and thanks to my advisor/Co-guide **Professor Dr. Anamik Shah**, for being a wonderful mentor for me. I am also thankful to him for allowing me to carry out my entire Ph.D. research under his Principal Investigation at National facility for Drug Discovery Centre at Saurashtra University for research facility. Without his continuous support, I could not have completed my Ph.D. research. Words are not enough to mention his contribution in my research career.

I want to express my deep thanks to my Ph.D. Guide **Dr. Denish C. Karia** for providing me the first opportunity to carry out my Ph.D. research under his valuable guidance and also for the trust, the insightful discussion, offering valuable advice and especially for his patience and guidance during the writing process. I am also thankful to **Kadi Sarva Vishwavidyalaya** for my Ph.D. registration and for being Home University.

I would like to sincerely thank **Prof. P. H. Parsania**, Head of the Department of Chemistry, for allowing me to carry out some of my Ph.D. research using the laboratory facility of Department of Chemistry, Saurashtra University.

Above and beyond my esteemed academic instructors, I bow my head with sheer respect and convey my pleasant regards to my most adorable Mummy-Pappa, **Mrs. Ranjan D. Dabhi** and **Mr. Damjibhai H. Dabhi** without whom I would have been absolutely nothing. Whatever I am today and anything I am capable of is only because of their unfailing blessings and endless love. **Alpa**, my younger sisters has always been a pillar of support whenever I needed her the most and I am very grateful to her. I also thanks to my dearest sister **Daksha L. Parmar** and Brother in law **Dr. Lalji Parmar** for encourage me during my journey of Ph.D.,.

I warmly thank and appreciate my mother-in-law, **Mrs. Veliben C. Parmar** for being like my mother, for teaching me so many aspects of my life other than my research. I am also thankful to my father-in-law, **Mr. Chhagan R. Parmar** for make me feel like my father. No word in the dictionary would be able to express my gratitude towards my

very beloved wife **Mrs. Sarita B. Dabhi**. I also thankful **Krishiv**, my son for adding more colors of happiness in my life. I thank him immensely from the bottom of my heart for his unconditional love and never ending support in my career.

I am also very thankful to **my friends & colleagues Ashish, Abhay, Vipul, Gaurang, Yashwantsinh, Vishwa, Hetal, Madhavi, Vicky, Himanshu, Pratik, Bharat, Krunal, Sabera, Dipti, Denish, Rupali, Dilip, Faraz, and others** who made my journey of Ph.D. research memorable in my life. Words are inadequate to thank my most beloved friends **Jignesh, Pruthvisinh, Namrata, Hardik, Hitendrasinh, Darshan and Renish**. I wish special thanks to my friend **Arpita**, who inspire me to start the journey of research and kind moral support till to complete it. I also thankful to my brother in law **Mahesh; Hasmukh kaka, Pradipkaka, Vasantkaka, Bharatkaka, Jagdishkaka, Hansafai; Vijyakaki, Minakaki**. and other family members. Lastly, I apologize to them; I miss out to mention my thanks, who lent a hand in my career directly or indirectly.

***Batuk D. Dabhi***