I think this is the easiest and hardest chapter that I have to write. It is very simple to name here of all those people that help me to complete this thesis. But it is very tough to thank them. I will try to thank many of them.

I would like to give the first and foremost place to my mentor and guide, Dr. U.B. Chansheti. He is the Head of the Department of Chemistry, Arts, Science and Commerce College, Naldrug, District osmanabad. (M.S.) I complete this thesis under his guidance, advice and supervision right from the emerging stage of this work till the completion. Above all he provides me support and unflinching encouragement in various ways. His passion towards scientific attitude, science and foresight made him a constant oasis of ideas. This enriched my growth as student, a researcher and a scientist. His strong belief learning by doing exceptionally inspire me during my failures and persuaded me strive for success. I am truly indebted to him. In the same way I want to thank co-guide Dr. Monalisa Boruah HOD & Ph.D. Coordinator, Department chemical science Shri J.J.T. University Jhunjhunu, Rajasthan.

I extremely grateful to Dr. D.B. Kale C-MET, Pune, Dr. R.A. Mane, Dr. M.S. Shingare from Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, Dr. Asbe sir Walchand college solapur, Dr. Ram Kadam, Dr. S.M. Patange S.K. Mahavidyalaya Gunjoti, Prof. Bansode, Prof. Vishwas Choudhary, Dr. R.V. Kathare K.M.J. Mahavidyalaya washi, who help me in different ways at different stages of this work.

I take an opportunity to express my sincere gratitude to Dr. S.D.Peshwe, Principal, Arts, Science and Commerce College, Naldrug. He provides the necessary facilities for the research work. In the course of research activity the atmosphere in laboratory was friendly and co-operative, for this I thank to Asst. Prof. S.D. Ghodke, Asst Prof. P.S.Bhale, Mr. B.S. Shinde, Mr. Bhaginath Bansod, and all teaching and non teaching staff of Arts, Science and Commerce College, Naldrug District Osmanabad. I also thank to all teaching and non-teaching staff of Karmveer Mamasheb Jagdale Mahavidyalaya, Washi.
I take an opportunity to express my sincere thank to Prof. Pratap Ghule, Mr. Ganesh Rewadkar, Mr. Kapil Falake, Mr. Pramod Kambale, Mr. Ravi Charate, Shri Aba Umbare, Shri. Lawand B.B., Shri Autade A.B., Shri Khatal C.E., Shri Jugdar B.R., Shri Giram S.S., Shri Muluk A.B., Shri Nagtilak S.K., Shri Khandagale D.J., Shri Galande D.S., Shri Pandhare A.P., Shri Jadhav V.V., Shri Galande S.R.,

I convey special acknowledgements to my brother Mr. Arun Fulchand Yadgire. It has been due to the divine sacrifice and continuous support of him in amidst of his busy schedules. I also thank to Mrs. Deepali Arun Yadgire, Yashraj, and lovely new born baby for their kind nature.

During the completion of my research the continuous moral support of my wife Swati. Her positive attitude is the major part of thesis completion. In my venture and aspirations daughter Shravani, & son Vyankatesh (Viraj) are also liable to thank. I also want to thank my aunt Mrs. Navalbhai Bhaskarrao Yadgire for his deep faith in me. I am extraordinarily fortunate to thank my parents. Because none of these experiences would have occurred if not for the perpetual support of my parents, my father, Mr. Fulchand Motichand Yadgire, & mother, Mrs. Pramila Fulchand Yadgire who deserve special mention for their inseparable support and prayers. The knowledge that they will always be there to pick up the pieces is what allows me to repeatedly risk getting shattered. To my parents I dedicate this thesis.

Last but not the least I also thankful to all my teachers, relatives and friends whose trust, love and admiration has made it possible for me to progress in my carrier.

Prakash Fulchand Yadgire

Research Student