

ACKNOWLEDGEMENT

I wish to take this opportunity to express my deep sense of gratitude and respect to **Dr.G.L.Tembe (Guide)**, for his constant encouragement , inspiring guidance and support throughout the progress of my research work. I am indebted to him for inculcating in me a mind for an unending exploratory research.

Paying tributes to **Dr.R.N.Ram (Co-guide)**, I remember him for his valuable contributions, suggestions and constant encouragement throughout my research work.

I am highly indebted to **Dr. M. Ravindranthan** for his encouragement to pursue research and help me in need.

I am grateful to **Prof. A.K.Rakshit** , Head, Dept. of Chemistry, for the support and facilities provided to me during this work.

My sincere thanks to the management of **Indian Petrochemicals Corporation Limited, Baroda**, for providing me the research facilities at their Research centre.

I am thankful to Dr.S.M.Pillai , Dr. Sheo Satish, Prof. B.V.Kamat, Prof. A.C.Shah , Dr. A.B Halgeri, Dr. K.R.Krishnamurthy, for their support and guidance at various stages of this work.

I wish to acknowledge with thanks Dr.(Mrs.) Valasamma Koshy, Dr.(Mrs.) Kalpana G Dr. A.G. Basrur, Dr. D. Rajeshwar, Dr. V.K.Kaushik, Dr. K.V.Rao, Dr.VNS Pendayala, Dr. S.F. Xavier, for their help in my characterization work.

I am extremely grateful to my friends and colleagues, Mr. P.J.Patel, Mr.V.B.Solanki, Mr. Arpan Parikh, Mr. K.K.Makwana, Mr. R.U.Ravalji, Mr.M.S.Parmar, Mr. B.B.Parmar, Mr. R.S.Damor, Mr. K.N.Solanki, Mr.B.L.Makhodia, Mr.V.J.Mehta, Mr. K.L.Khatri, Dr.A.V.Patil, Mr. Rajan Bosco, Mr. Anuranjan Gupta, Mr. Upendra Acharya, Mr. Anil Rathaur, Mr. Shailesh Patel, Mr. Vaibhav Valodkar, Dr. Mahesh Dalal, Dr. Anil Wali, Dr. A.R.Bandyopadhyay, Dr. P.A.Ganeshpure, Dr.S.Talapatra, Dr. S. Shashikant, for their constant support, concern and encouragement throughout my research work.

I wish to acknowledge my parents for teaching me the lessons of hard work, my sisters, relatives and all my well-wishers who have directly or indirectly helped me during this period.

I am grateful and indebted to my wife Reeny, daughter Rhea and son Reeve, for patiently standing by me during this strenuous period by showering their love and concern.

Above all, I am thankful to The Almighty, in helping me to wade my boat through the turbulent waters of the sea to the shore.


ROBIN ANTONY

*"Chemistry without Catalysis would be like a Sword
without a Handle, a Light without Brilliance, a Bell
without Sound"*