ACKNOWLEDGEMENTS

It is pleasure for me to join the entire en-lighted scientist in our laboratory here in CSMCRI. First of all I would like to express my deep sense of profound gratitude to my respected and beloved guide Dr. S. H. R. Abdi, who gave me the opportunity to join his research group, guided me and encourage me with his valuable guidance throughout my thesis work. I am grateful to him for the trust and freedom given to me. His eagerness, inspiration and great efforts to explain things clearly and very simply has helped a lot to find out the solution of problems regarding my research work. His support and open mind for new concepts, freedom to explore new ideas, valuable suggestions at appropriate time made myself capable to complete my thesis work. His wonderful sense of humour and activities outside of the research work made the time memorable.

I wish to express my warm and sincere thanks to Dr. N. H. Khan, who introduced me to the field of asymmetric sulfoxidation. His valuable suggestions, concepts and inspiring attitude motivated myself to work. I am hearty grateful to Dr. (Mrs.) R. I. Kureshy for her valuable guidance, suggestions throughout the years and her kind support to shape up the thesis in a wholesome way.

I owe my most sincere gratitude to Dr. H. C. Bajaj, Discipline Coordinator, Discipline of Inorganic Materials and Catalysis and Dr. P. K. Ghosh, the Director, Central Salt and Marine Chemical Research Institute (CSIR-CSMCRI) Bhavnagar, and Prof. N. C. Desai, Head of the department of chemistry, Maharaja Krishnakumarsinhji Bhavnagar University, who have always been encouraging with their kind words, suggestions and deeds.

I am thankful to (Drs.) R. S. Shukla, S. D. Bhatt, R. S. Somani, S. Kannan, H. M. Modi, B. Tyagi, Jugnu Bhatt, A. B. Boricha, R. J. Tayde, A. B. Panda, S. H. Zaidi, P. Paul, A. Das, P. S. Subramaniam, D. N. Srivastava, E. Suresh and N. S. Ghosh for devoting their precious time and made many valuable suggestion which indeed helped me during this research work.

I wish to express my cordial appreciation to my senior colleagues (Drs.), Santosh Agrawal, Vishal Mayani, K. J. Prathap and Mrs. Nirali Pandya for their valuable instructions and suggestions throughout the course.

I would like to acknowledge my labmates, Arpan K. Shah, Nabin Ch. Maity, S. Sarvanan, Arghya Sadhukhan, Manish Kumar, Tamal Roy, Anjan Das, Subba Rao Ganga,
Debashis Ghosh, Pratibha Kumari, Manoj Chaudhary, Ajay Jakhar, Naveen Gupta, Dr. Maru Minaxi, Shailesh Verma, Md. Naazish, Sekhar Nandi, Rajkumar Tak and Ansari for their supports and for helping me to visualize the importance of cordial sound working environment in doing research. I hope this amazing enthusiasm never wanes and this group goes from strength to strength.

I extend my special thanks to Dr. K. Jeya Prathap, S. Sarvanan, Nabin Ch. Maity and Pratibha Kumari for their support in various forms inside the lab and outside. I cannot complete this acknowledgement without mentioning names of my friends Dr. Prasenjit Mahato, Dr. Sukdev Saha, Dr. Priyadip Das, Kamal Kumar Bisht, Dr. Amal Mandal for their every kind of support whenever I need and made all the difference in the world through their eclectic sense of humour.

I thank to my friends and colleagues for the great time I had in this institute. I enjoyed the atmosphere, their friendship, and their support, viz., Thillai Sivakumar, K. Saravananan, Dr. Apurba Singha Mahapatra, Dr. Anik Sen, Biplab Roy, Dr. Pravin Ingole, Radheshyam Pawar, Sandesh Sawant, Dr. Dinesh Patil, Dr. Sumeet Yadav, Dr. G. P. Dangi, Ravindra Nath Lo, Bharesh Parmer, Debdeep Maity, Provas Pal, Arka Saha, Sandip Pahari, Narottom Sutradhar, Provas Pal, Manoj C. Raj for spending a great time with full of enjoyment in a friendly environment.

Further, I thank to my seniors and friends for the great time I had in our institute. I enjoyed the atmosphere, their friendship and their support, (Drs.) Prasenjit Kar, Subrata Patra, Asif Dabawala, Phani, Jinesh, Manu, Manoj Gupta, R. D. Patil, Dr. Amrita Ghosh, Govind Sethia, Sumit Jadav, Manoj Kesharwani, Sudeesh, Prashant, Girdhar Joshi, Tanmay, Rakesh, (Mr.) Adarsh Bhatt, Sampath, Sanwala Ram, Jacky, Praful, Koilraj, Munusamy, N. Kalidasan, Arnab, Ajay Parmar, D. Chandramohan, Stalin, R. Reddy, Ramkrishna, Ravi, Tushar Trivedi, Debasish Sahu, Bhanu, Milan.

My special gratitude goes to Dr. Arun Das, Dr. V. P. Boricha, (Mr.) Hitesh, Batuk, V. Agrawal, Harshad Brahmbhatt, Dr. P. Paul and all the members of Analytical Science Discipline who have been kind enough to analyze my samples during this Ph. D. work, without which I could not proceed to accomplish this task.

I wish to acknowledge the spontaneous support extended to me by (Mr.) Atul M. Shah, Mehul
Bhatt, P. G. M. Pillai, A. H. Lakhani, B. B. Parmar, Jyanti Bhai, V. C. Zala, Pramod Makwana, Deepak, Tushar (glass blower).

I am also thankful to institute’s staff members whose names although not mentioned individually here, but have always been ready to understand my problem and helped me in all possible manners.

I gratefully acknowledge the funding sources, UGC for awarding JRF and SRF that made my Ph.D. work possible and comfortable.

With core of my heart, I am thankful to my dear respected parents, elder brother, beloved family members and all my well-wishers whose continuous encouragement and support have been a source of inspiration in completion of this tough task.

Last but not the least; I am thankful to the Almighty, who has provided me strength to complete this work. What I am and what I would be I owe to the Almighty for leading me the path of light and success.

March, 2014

Prasanta Kumar Bera