

## **ACKNOWLEDGEMENT**

I would like to extend my gratitude to a number of people whose help was very valuable in this research.

First and foremost, I owe my wholehearted appreciation to my respected supervisor and mentor *Prof. Swapan K. Dolui* for giving me an opportunity to carry out this research work. I fall short of words in expressing immense gratitude for my idol for his meticulous supervision, constant support, patience and visualization in a magniloquent style. His enthusiasm, simplicity, fatherly care and joyful nature will influence me for the rest of my life. I feel privileged and lucky to get him as a guide and will be indebted to you forever in my life.

My gratitude goes to the Vice-Chancellor, Tezpur University and authorities of Tezpur University for allowing me and providing necessary laboratory facilities to carry out this work.

I would like to thank to my D.C. members, Dr. R. K. Dutta and Dr. Utpal Bora Sir for their suggestions and discussions.

I take this opportunity to express my sincere thanks to the HoD and all faculty members of Chemical Sciences, Tezpur University for their help and suggestions.

I would like to acknowledge the sophisticated instrument facilities received from Department of Chemical Sciences and other Departments of Tezpur University.

I am particularly thankful to technical staff, for arranging instrumental and laboratory facilities throughout the study. Special thanks also go to office staff, Chemical Sciences Department.

The financial support received from Council of Scientific and Industrial Research (CSIR), India and Tezpur University is gratefully acknowledged.

I am truly thankful to my entire past and present lab colleagues Chandramika ba, Bhaskar da, Bikash da, Amar da, Momina ba, Shyamalima ba, Monalisha ba, Dhaneswar da, Pranob da, Jayashree, Junali, Simanta, Priyankamoni, Sumon, Shahnaz, Asfi, Deepsikha, Shilpa, Sangeeta, Jyotismita for their help and for transforming the lab to a lively place of work.

My special thanks go to my friends and seniors Himadri, Basanta, Nazreena, Jashodhara, Pranita, Kabirun, Runjun, Varsha, Smriti, Subhomoy, Hari da, Hemi, Sudarshan, Rajkamal, Shyamali, Sweety ba, Rekha ba, Nibedita ba, Pankita ba, Sudipta ba and many more for their love, help and moral support in many situations.

I am thankful to Mrs. Sutapa Dolui and Swapnil Dolui for their care affection and hospitality.

I feel deepest sense of gratitude to my family members Mr. Hari Mohan Sarkar (baba), Mrs. Usha Rani Sarkar (maa), Di, Tukku, Bhai, Jiju, Dadabhai, Sunupapa and Kutipapa for their continuous encouragement, countless sacrifices, endless support, constant prayers and encouragements for my career. I am also thankful to Sudeep and his family for their blessing, love and care.

Last but certainly not the least, I would like to thank the Almighty God for giving me strength, health and opportunity to complete this study.

*Chandrama Sarkar*