
Acknowledgement

It is indeed a great pleasure to express my gratefulness to all those who have influenced and encouraged me directly or indirectly over the course of my Ph.D. tenure. It is my duty to acknowledge each and every one. But the list is too long and if I forget to mention a few, kindly understand that you all are equally important to me.

First of all, I would like to express my deep sense of gratitude to my research supervisor Prof. Nashreen S. Islam, Department of Chemical Sciences, Tezpur University for her guidance, continuous support, limitless patience and advice throughout my doctoral studies. I am especially thankful to her for giving me the opportunities, to learn and operate various sophisticated instruments. Her immense dedication to the research, simple innovative thoughts, high degree of discipline and dynamic personality has always motivated me the most. I feel myself fortunate enough to have received the opportunity of working under one of the best mentors.

I am thankful to Prof. Vinod Kumar Jain, honorable Vice-Chancellor of Tezpur University for providing me best infrastructural facilities and research ambience in this august institution. I am highly obliged to our former vice-chancellor Prof. Mihir Kanti Chaudhuri, an eminent academician, for his significant contribution towards Tezpur University.

I would like to especially thank Prof. Ruli Borah, HoD, Department of Chemical Sciences, Tezpur University for providing me research facilities besides her selfless advice, unconditional help and kind affection towards me.

I offer my sincere acknowledgement and humble respect to my doctoral research committee members Dr. Nayanmoni Gogoi and Prof. Ashwini K. Phukan for their constructive criticism and important suggestions regarding my thesis work. Discussions with them have always been very supportive and inspiring.

It is indeed my utmost joy to thank all the faculty members of the Department of Chemistry for their co-operation from time to time, precious advice and help during the course of my research work. I express my heartiest thanks and gratitude to all the non-teaching staffs for their instantaneous response and support in need and demand.

I would like to acknowledge all my teachers from my school as well as in the University for their excellent teaching which they have provided me throughout my academics.

I take this opportunity to sincerely acknowledge Tezpur University for the institutional Fellowship and University Grants Commission (UGC), New Delhi, for providing me a Moulana Azad National Fellowship which supported me to perform my work comfortably.

I am earnestly thankful to my lab mates Gangutri Saikia, Mitu Sharma and Hiya Talukdar with whom I passed my most unforgettable Ph.D. tenure by sharing thoughts & ideas, grief & joy, getting lots of encouragement, support & love.

I am immensely indebted to my former Lab mates Dr. Sandhya Rani Gogoi and Dr. Jeena Jyoti Boruah for their support and help. I would also like to acknowledge the M.Sc project students Srewashi, Niharika and Sivangi who helped me develop my supervision skill through their project works.

My special thanks to all my well wishers Nigar, Surosikha, Pranita, Raktim, Manali, Kasturi, Chandrama, Runjun, Himadry, Pinky ba, Mamon Ba, Khairul da, Asad, Rajarshri, Dhruva da, Nipu da, Sudarshan, Nazima ba, Bagmita, Prasurya, Mukesh, biraj, Simanta, Biplop da and all the departmental colleagues as well as hostel mates for the enjoyable times I have had with them during my Ph.D period, which I am surely going to miss. I owe a lot to Prakash Da for helping and taking care of me like an elder brother in the campus. I must thank Rahman Sir and Arshiya for their warm greetings and hospitality, every time I visited ma'am's quarter.

The journey of my Ph.D. life has not been easy; it had its own ups and downs. But, with some good friends it turned out it to be a great learning experience. My acknowledgement will never be complete without the special mention of Ashraful, Karishma, Hiranya and Toufiq. My deepest thank to all for making my Ph.D. days more beautiful. I am fortunate to have Palash and admire his friendship, care, encouragement and support at various points of my life.

I would like to acknowledge my parents (Md. Mislah Uddin Ahmed and Mrs. Hafiza Begum) and my sisters (Rajia Parbin and Hasna Ara Parbin) for their support and selfless love they rendered. I will never be able to thank my parents enough for their immense sacrifices, their tireless support, encouragement and for their blessings. I am

also thankful to my brothers-in-law (Junu Vinty and Riju Vinty), nephews (Shakir, Arish, Raisa and Raina) and relatives (Bubul ka, mama, mami and Borma) for their unconditional love and affection.

Above all, I would like to thank almighty Allah, the merciful and the passionate, for everything.

Kabirun Ahmed