## **ACKNOWLEDGEMENT**

Apart from personal efforts and steadfastness to work, constant inspiration and encouragement given by a number of individuals served as the driving force that enabled me to submit this thesis in the present form. Inspiration, guidance, direction, co-operation, all came in abundance and it seems almost an impossible task for me to acknowledge the same in adequate terms.

First of all, I take this opportunity to express my deep sense of gratitude & sincere thanks to my guide (Supervisor), Dr. Asim K, Bothra, Reader, Department of Chemistry, Raiganj College (University College) for his mature, able & invaluable guidance & persistent encouragement. No words can express my sincere and deep sense of reverence for him.

I owe heartfelt thanks to Dr. Arnab Sen, Reader, Department of Botany, North Bengal University for the constant support and guidance throughout the work. I am extremely thankful to him for his invaluable suggestions and advices.

I am also thankful to Dr. P. K. Mondal Ex Principal, and Dr. Dilip De Sarker Teacher-in-Charge, Raiganj College (University College) for providing me facilities as required from time to time L active interest in the progress of this work. My thanks are due to all other faculty members of the Chemistry Department L all the members of library of Raiganj College (University College) for their help and moral support during my work.

I am thankful to all the member of Chemistry and Botany Department of University of North Bengal for their inspiration.

Words are insufficient to express my gratefulness and indebtedness to Prof T.C. Ghosh, Bose institute, Kolkata for his suggestion & encouragement during my work and Dr. S.K. Gupta, Dr. Surajit Basak, Sujata Roy for providing research paper.

I feel lacuna of words to express my gratefulness and indebtedness to all my colleagues who have directly or indirectly helped me to present this work in present form.

My sincere thanks to my friends and lab mates Saubashya Sur, Shyamal Sharma, Biswajit Das, Bhaskar Bagchi, Dipanjan Sarkar, Abhick Chatterjee, Dr. Apurba Kanti Deb, Subarna Thakur, Dr. Biplop Sarkar, Dr. Arjun Ghosh, Dr. Shaonli Das, Tanmay Chowdhury, Arindam Dutta and my student Debjani Chakraborty for offering me assistance.

My special thanks to Ayan Pal for providing biological backup in the smooth completion of this work. Thanks are not enough for Sujajta Bothra who allow me in her home every time as and when required for computational work and sometimes directly help me in computational work.

I remember to my intimate friend Dipak K, Mahato for his inspiration and Asishda & Nayan for molar support.

All my family members contributed significantly to bring this day in my life. My parents remained a constant source of strength throughout my educational career and later in sustaining my academic interest for higher learning. I thank my father and mother for providing me the moral support and resources to finish my work.

I am also thankful to many other persons whose name may not figure out here for their help & support. In the end, I am thankful to the Almighty for blessing me to complete this work successfully.

Dated: 27.12.10

Place: Raiganj.

Uttam Kr. Mondal (Uttam Kumar Mondal)