

PREFACE

The work in the thesis entitled **“INVESTIGATION OF HOST-GUEST INCLUSION COMPLEXATION OF SOME BIOLOGICALLY POTENT MOLECULES AND SOLVENT CONSEQUENCES OF SOME FOOD PRESERVATIVES WITH THE MANIFESTATION OF SYNTHESIS, CHARACTERIZATION AND INNOVATIVE APPLICATIONS”** was initiated under the supervision of Dr. Mahendra Nath Roy, Prof. of Chemistry in the Department of Chemistry, University of North Bengal. This research was become conscious within the framework of the Programme in the field of **“Host-Guest Inclusion Complexation of Some Biologically Potent Molecules & Food Preservative - Ionic Liquid interaction”** and the research group of Professor Roy.

The whole is an attempt to explore the supramolecular host – guest inclusion complexation of some biologically active molecules such as small drug molecules as well as vitamins in order to make them more bioavailable by increasing their solubility and to develop the drug delivery system for the mere water soluble newly emerging highly potential drug as inclusion complexes leads the controlled release of the drug molecules to the affected site without any chemical modification of the drug molecules. Beside this we investigated food preservative – ionic liquid interaction to minimize the doze of food preservative in foods.

During the course of my research, I was privileged to participate in several meets and seminars across the country. I was highly inspired by listening and interacting with distinguished experts and scientists. I was even fortunate enough to publish the works relating the thesis in the International Journal of repute.

In keeping with general practice of reporting scientific observation, due acknowledgement has been made whenever the work described was based on the findings of the other investigators. I must take the responsibility of any unintentional oversights and errors, which might have crept in spite of precautions.

I hope I will be given more challenges in my life so that the knowledge that I have earned during my work can be put into action in the future.