Chemistry of Various p and d Block Metal Complexes of Schiff Bases Having Different N, O Donor Sites: Catalytic and Sensor Applications

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Preface

The work embodied in this thesis entitled "Chemistry of Various p and d Block Metal Complexes of Schiff bases Having Different N, O Donor Sites: Catalytic and Sensor Applications" originated from our belief that there is a synergism between the knowledge acquired from model studies and that acquired from direct investigation on metallobiosites which enables both a better understanding of the metallobiosites and the generation of new coordination chemistry.

The thesis contains seven chapters of which **Chapter 1** deals with an overview on the coordination chemistry of Schiff-base ligand complexes of transition and post-transition metals with special emphasis on the growing importance of small coordination compounds of Schiff-base ligands as models of some metallobiosites and in summary and future scope interesting observations are highlighted. The research works are presented in the **Chapter 2-6** of the thesis.

The present work was initiated on February, 2015 jointly at the Department of Chemistry, National Institute of Technology, Durgapur, Department of Surface Engineering and Tribology Central Mechanical Engineering Research Institute, Durgapur and Department of Chemistry, Panchakot Mahavidyalaya, Sarbari under the joint supervision of Prof. Dipankar Sukul, Dr. Priyabrata Banerjee and Dr. Tanmay Chattopadhyay. Dr. Tanmay Chattopadhyay is now working at Diamond Harbour Women's University.

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

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