Preface

Investigations embodied in this dissertation entitled "Design And Development Of A Novel Series Of ER Ligands And Fluorescent Imaging Of Intracellular Analytes In Cancer Cells" were carried out at University College of Science & Technology, Kolkata, under the supervision of Dr. Susanta Sekhar Adhikari.

In chapter 1, the general background, we have briefly discussed about the mechanistic aspects of the role of estrogen and estrogen receptors in cancer pathology and design strategies of new class of estrogen receptors molecules with the help of molecular modeling.

In chapter 2, new class of highly potent, ER-selective, oxindole and methyl jasmonate derivatives have been synthesised and biological evaluation is underway to expand our knowledge in optimizing the pharmacophore with improved potential.

In chapter 3, some unique FRET based fluorescent probes have been developed for selective cancer cell imaging.

In chapter 4, some fluorescent probes have been designed and developed for selective detection of analytes in cancer cells.

In keeping with the general practice of reporting scientific observations, due acknowledgements have been made to the findings of other investigators. The responsibility of any unintentional oversight is solely mine.

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