

PREFACE

The thesis entitled '**Phase Transition in Binary Liquid Crystalline Mixtures**' is the final work of my Ph.D. study at the Department of Physics, University of North Bengal. The entire research work has been described in nine different chapters. The first chapter covers a brief introduction and background to the general topics of liquid crystals. I have discussed only those parts which are related to different areas of this thesis and are very essential for a general idea about liquid crystals. Chapter 2 contains a concise description about various experimental techniques that have been used and also the related theories associated to this work. Chapter 3 to 8 includes the experimental results obtained and their discussions. Finally, the work has been concluded in chapter 9.

There is always a world of people behind the scenes with supports, unfailing encouragement, sacrifices and good anticipations in order to complete each and every piece of the work. This thesis would not complete without all of those my well wishers. Therefore, I would like to avail this opportunity to thank everyone for their contributions and supports to carry out the research work. I would like to acknowledge everybody for their involvements to the studies conducted during my time as a research scholar.

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