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### Preface

The aim of this book is to present the technologies of liquid crystalline materials. These technologies determine the material phases on surfaces, and by understanding the properties of the LCDs, essential knowledge of LCDs is also given in the text, which is as far as possible.

Originally, the book was planned to be a complete introduction. However, as writing progressed, it became apparent that it was necessary to focus on specific areas, especially based upon discussions and the reader's feedback. Although discussions were little limited, each chapter was supplemented and supported by relevant references.

The first half of the book deals with smectic liquid crystals, and in the second half, almost all commercially available materials are discussed. The first chapters provide information on the fundamentals of smectic liquid crystals with all the essential knowledge of LCDs. In the first half, almost all commercially available materials are discussed, while the second half focuses on the properties of the crystals that are essential for LCDs.

The book provides useful information for researchers working on development of novel surfaces, and for those beginning to work in the LCD field, with references and bibliographical fields.

The authors have all worked in the field of liquid crystals during these years and were able to provide a comprehensive overview of the current state of the art.