

Foreword

The study of Soft Condensed Matter has stimulated fruitful interactions between physicists, chemists, and engineers, and is now reaching out to biologists. A broad interdisciplinary community involving all these areas of science has emerged over the last 30 years, and with it our knowledge of Soft Condensed Matter has grown considerably with the active investigations of polymers, supramolecular assemblies of designed organic molecules, liquid crystals, colloids, lyotropic systems, emulsions, biopolymers and biomembranes, among others. Taking into account that research in Soft Condensed Matter involves ideas coming from physics, chemistry, materials science as well as biology, this series may form a bridge between all these disciplines with the aim to provide a comprehensive and substantial understanding of a broad spectrum of phenomena relevant to Soft Condensed Matter.

The present Book Series, initiated by the late Pierre-Gilles de Gennes, comprises independent book volumes that touch on a wide and diverse range of topics of current interest and importance, covering a large number of diverse aspects, both theoretical and experimental, in all areas of Soft Condensed Matter. These volumes will be edited books on advanced topics with contributions by various authors and monographs in a lighter style, written by experts in the corresponding areas. The Book Series mainly addresses graduate students and junior researchers as an introduction to new fields, but it should also be useful to experienced people who want to obtain a general idea on a certain topic or may consider a change of their field of research. This Book Series aims to provide a comprehensive and instructive overview of all Soft Condensed Matter phenomena.

The present volume of this Book Series, edited by Yoav Tzori and Ullrich Steiner, impressively demonstrates that electric fields play an important role in Soft Condensed Matter phenomena. Due to their comparatively strong influence and long range, electric fields are particularly relevant when the system size becomes small like in block copolymer mesophases or at interfacial structures. Electric fields can induce phase transitions, provoke

interfacial instabilities, govern wetting properties or allow tuning ordering processes in block copolymer systems.

Within the next few years, our *Series on Soft Condensed Matter* will grow continuously and eventually cover the whole spectrum of phenomena in Soft Condensed Matter. We hope that many interested colleagues and scientists will profit from these endeavors.

David Andelman and Günter Reiter
Series Editors