

Review

## Polymer Physics

Michael Rubinstein and Ralph H. Colby

Oxford University Press 2003, 2004  
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The book 'Polymer Physics' by Rubinstein and Colby represent a very good elementary textbook for both undergraduate and graduate students with interests in physical properties of macromolecules.

The book gives basic insight into the concepts of macromolecules and defines and discusses terms that are used in modern polymer science.

The book is most suitable for teaching purpose, as exemplified in the chapters on thermodynamics. This chapter discuss not only the specific properties related to polymers, but gives a rather general basis for understanding phase behaviour. Also the numerous number of problems associated with the text is highly appreciated.

The book has throughout a number of illuminating illustrations, which generally are most helpful for understanding the text. There are also a number of figures giving experimental data to support the context, even though I could wish even more experimental illustrations. References to experimental works and techniques are generally somewhat limited.

The book has a clear and consequent development in the text, starting from single chain properties and continuing on polymer blends and solutions, networks and gels, and final polymer dynamics. This makes the book highly readable. To fulfil these requirements the authors have limited themselves in number of topics, which on the other hand causes that important subjects like the glassy-state, block copolymer mesophases and micellar aggregates are only discussed very briefly, if at all.

The book is highly recommendable for advanced courses in polymer science and soft matter physics.

Kell Mortensen  
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