BIOPHYSICS
An Introduction

Rodney Cotterill
Danish Technical University, Denmark

Biophysics is an evolving, multidisciplinary subject which applies physics to biological systems and promotes an understanding of their physical properties and behaviour.

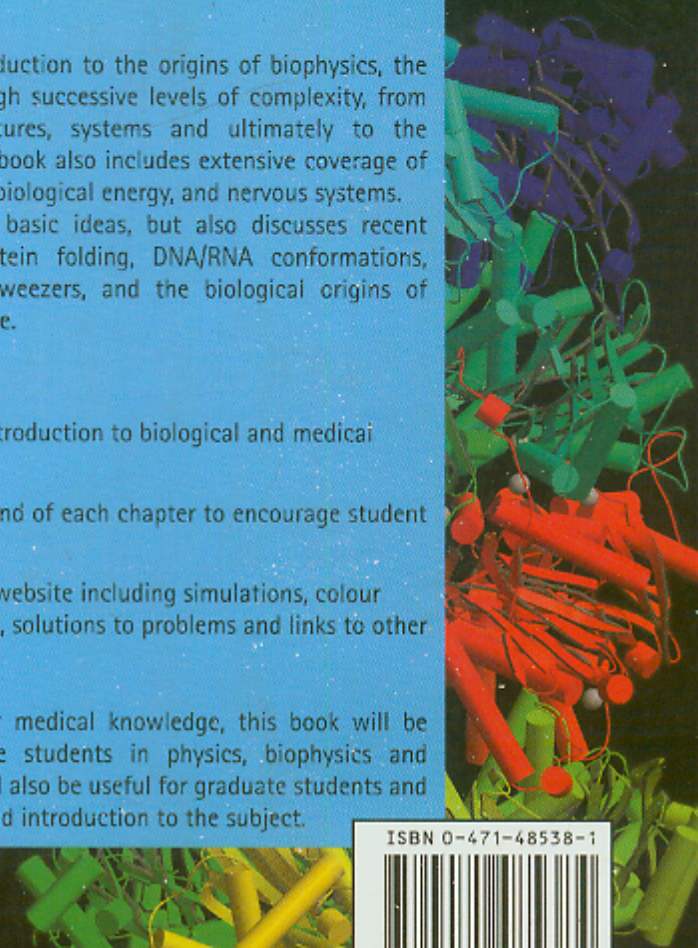
Biophysics: An Introduction, is a concise balanced introduction to this subject. Written in an accessible and readable style, the book takes a fresh, modern approach with the author successfully combining key concepts and theory with relevant applications and examples drawn from the field as a whole.

Beginning with a brief introduction to the origins of biophysics, the book takes the reader through successive levels of complexity, from atoms to molecules, structures, systems and ultimately to the behaviour of organisms. The book also includes extensive coverage of biopolymers, biomembranes, biological energy, and nervous systems. The text not only explores basic ideas, but also discusses recent developments, such as protein folding, DNA/RNA conformations, molecular motors, optical tweezers, and the biological origins of consciousness and intelligence.

Biophysics: An Introduction

- is a carefully structured introduction to biological and medical physics
- provides exercises at the end of each chapter to encourage student understanding
- includes a supplementary website including simulations, colour images, additional content, solutions to problems and links to other key sites.

Assuming little biological or medical knowledge, this book will be invaluable to undergraduate students in physics, biophysics and medical physics. The book will also be useful for graduate students and researchers looking for a broad introduction to the subject.



ISBN 0-471-48538-1