

Gain a practical, working knowledge of the physical chemistry essential for the biological sciences

Physical Chemistry for the Biological Sciences is an excellent resource for biochemistry and biology/health science professionals and students who need a basic understanding of thermodynamics, kinetics, hydrodynamics of macromolecules, and spectroscopy in order to explore molecular structure and chemical reactions. Approachable, yet thorough, the book presents physical chemistry in conceptual terms with a minimum of mathematics. Providing the basic knowledge and tools that every biologist should have to understand the quantitative interpretation of biological phenomena, it covers:

- Fundamentals of thermodynamics and chemical kinetics
- Fundamentals of spectroscopy and structure determination
- Ligand binding to macromolecules, hydrodynamics, and mass spectrometry

All techniques and concepts are clearly illustrated with relevant applications and examples from the biological sciences. Problems at the end of each chapter reinforce the principles. This is a succinct reference for practitioners, including bioorganic chemists, medicinal chemists, biochemists, pharmaceutical chemists, biologists, and professionals in fields such as pharmaceuticals, agriculture, and biotechnology. It's also an excellent textbook for graduate and upper-level undergraduate students in biochemistry, biology, and related fields.

GORDON G. HAMMES, PhD, is University Distinguished Service Professor of Biochemistry at Duke University Medical Center in Durham, North Carolina. He is author of *Thermodynamics and Kinetics for the Biological Sciences* and *Spectroscopy for the Biological Sciences* (both from Wiley) and more than 225 research articles.

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