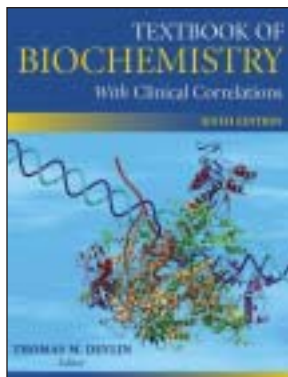


## Textbook of Biochemistry with Clinical Correlations, Sixth Edition

Thomas M. Devlin, Editor, John Wiley & Sons, Inc., Hoboken, NJ, 1,208 pp., \$115, 2005, ISBN: 0-471-67808-2

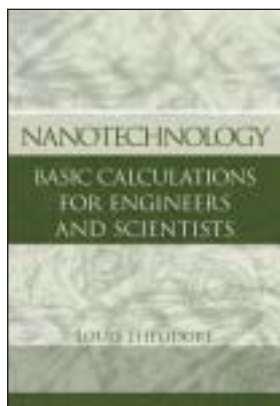


Completely updated from its previous edition published in 2001, this textbook includes the latest scientific research on the biochemistry of mammalian cells; detailed examination on the relationship between events at the cellular level to the subsequent physiological processes in the whole animal; and examples of human diseases derived from aberrant biochemical

processes. The book features: more than 1,200 high-quality, full color illustrations; over 250 clinical correlations that explain the relationship between biochemical concepts and human diseases; questions with explained answers at the end of every chapter; and a concise appendix that reviews key organic chemistry concepts. The book is divided into five parts: Structure of Macromolecules (*i.e.*, eukaryotic cell structure); Transmission of Information (*i.e.*, DNA replication, recombination and repair); Functions of Proteins (*i.e.*, enzyme classification, kinetics and control); Metabolic Pathways and Their Control (*i.e.*, bioenergetics and oxidative metabolism); and Physiological Processes (*i.e.*, biochemistry of hormones).

## Nanotechnology — Basic Calculations for Engineers and Scientists

Louis Theodore, John Wiley & Sons, Inc., Hoboken, NJ, 459 pp., \$82.50, 2005, ISBN: 0-471-73951-0

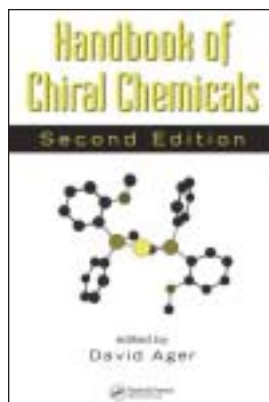


This book contains almost 200 solved problems relating to nanotechnology. These problems are divided in four sections: Chemistry Fundamentals and Principles; Particle Technology; Applications; and Environmental Concerns. In addition to the solved examples, each section contains overview coverage of the subject matter. A key feature of the book is that the solutions can be presented in a standalone manner, and the problems are laid out to develop the reader's

understanding of the subjects.

## Handbook of Chiral Chemicals, Second Edition

David Ager, Editor, CRC Press and Taylor and Francis Group, Boca Raton, FL, 824 pp., \$199.95, 2005, ISBN: 1-57444-664-9

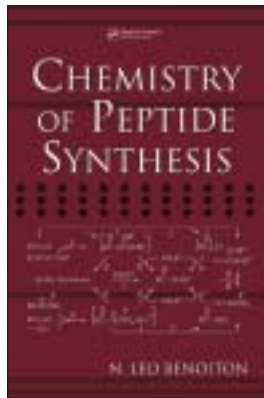


As pharmaceutical companies look to develop single enantiomers as drug candidates, chemists are increasingly faced with the problems associated with this subclass of organic synthesis. The book highlights the problems associated with the production of chiral compounds on a commercial scale. It elaborates on starting materials obtained from a "chiral pool" that can be derived from natural products. Then it explains methods and reactions

that can introduce or influence stereogenic centers, particularly asymmetric hydrogenations, oxidations, pericyclic reactions, and enzymatic methods. Several chapters concentrate on understanding how to manipulate enzymes — primarily those derived or modeled from biological systems — for catalyzing new reactions for taking new substrates. Other significant topics include chiral auxiliaries, chromatographic techniques, enantiomer-specific reactions, and resolution.

## Chemistry of Peptide Synthesis

N. Leo Benoiton, CRC Press and Taylor and Francis Group, Boca Raton, FL, 290 pp., \$139.95, 2005, ISBN: 1-57444-454-9



This book is a complete overview of how peptides are synthesized and what techniques are likely to generate the most desirable reactions. Incorporating elements from the author's role of Career Investigator of the Medical Research Council of Canada and his extensive teaching career, the book emphasizes learning rather than memorization. The text uses clear language and schematics to present concepts progressively, carefully excluding unnecessary

details and providing a historical context in which to appreciate the development of the field. The book supplies a broad, yet straightforward approach that appeals to those with limited knowledge of organic chemistry or chemists from other fields, as well as in-depth coverage that can be appreciated by experienced peptidologists.