

# The Cell Division Cycle

Temporal Organization and Control of Cellular Growth and Reproduction

David Lloyd, Robert K. Poole and Steven W. Edwards

January/February 1982, xii + 524pp., £38.60 (UK only) / \$79.50, 0.12.453760.X

This book highlights the sequentially-ordered processes that characterize the growth and division of a cell; advances in our understanding of these events are fundamental for the elucidation of all more complex changes occurring during development and differentiation. An appreciation of the basic control processes involved in cellular reproduction is central to investigations of factors leading to the defective states encountered in cancer.

# Carbohydrate Metabolism and its Disorders

Volume 3

edited by P.J. Randle, D.F. Steiner and W.J. Whelan

1981, xii + 530pp., £34.60 (UK only) / \$83.50, 0.12.579703.6

Topics discussed in this book range over many aspects of normal and abnormal carbohydrate metabolism in mammals and, more specifically, in man. Contributions include reviews of carbohydrate metabolism in skeletal muscle; glycogen synthase deficiency and nesidioblastosis; diabetes – its aetiology and treatment in the light of the discovery of pro- and proinsulin and advances in knowledge of the pancreatic islet biochemistry and the function of the insulin receptor; the chemistry and biosynthesis of glycoproteins; the role of carbohydrate groups in cellular recognition; intestinal oligo- and disaccharidases and their part in disease in man.

# Cytochrome Oxidase

A Synthesis

Marten Wikstrom, Klaas Krab and Matti Saraste

January 1982, xii + 198pp., £14.60 (UK only) / \$30.00, 0.12.752020.1

This volume provides an up-to-date synthesis of research material on cytochrome oxidase. Various models and hypotheses are used as frames for the experimental data, and themes covered include protein structure and topography of the enzyme in its isolated and membrane-bound states; physical properties; configuration and topography of the haem and copper centres, their interactions and oxidoreduction properties under equilibrium conditions; kinetics and catalytic mechanism of electron transfer and oxygen reduction; mechanism of energy transduction by proton translocation.

# Energy Metabolism of the Cell

A Theoretical Treatise

J.G. Reich and E.E. Sel'kov

1981, xiii + 344pp., £36.00 (UK only) / \$74.00, 0.12.585920.1

This monograph is primarily a theoretical treatment of cellular energy metabolism, which requires a good background knowledge of biochemistry on the part of the reader, but whose mathematics is fairly modest. By searching for compact kinetic blocks of metabolites and reactions, the authors aim to simplify the complex schemes of biochemical pathways and present an integrated picture so that the performance of the system as a whole can be studied.

# Fluorescent Probes

edited by G.S. Beddard and M.A. West

July 1981, x + 236pp., £15.20 (UK only) / \$36.50, 0.12.084680.2

The papers collected in this volume were first presented at a meeting, 'Fluorescence Probes in Proteins and Membranes', held at the Royal Institution of Great Britain, in November 1979. Many have been updated by their authors since the meeting. Papers covering the latest time-dependent work indicate the value of these measurements for both intrinsic and extrinsic probes. The chemical properties of various site-specific probes are also discussed together with applications to energy transfer and lectin distribution in normal and malignant cells. The book includes a comprehensive bibliography of work in the area between 1970 and 1980.

# Electron Microscopy of Proteins

Volumes 1 and 2

edited by J.R. Harris

Volume 1: September/October 1981, xiv + 352pp., £35.00 (UK only) / \$72.00, 0.12.327601.2

Volume 2: January/February 1982, c.350pp., £30.00 (UK only) / \$61.50, 0.12.327602.0

In the preface, Professor R.W. Horne, Department of Ultrastructural Studies, John Innes Institute, Norwich, England writes: "These volumes reveal the remarkable progress made in the field of morphology closely linked to biochemistry and biophysics. The contributors are distinguished experts within their own areas of research, which will provide the reader with an up-to-date account of the exciting and new developments in determining the structure of a wide range of proteins with the aid of the electron microscope."

# Microbial Degradation of Xenobiotics and Recalcitrant Compounds

edited by Thomas Leisinger, Alasdair M. Cook, Ralf Hutter and Jacob Nuesch

December 1981, xiv + 416pp., £32.00 (UK only) / \$66.00, 0.12.442920.3

With industry producing ever-increasing amounts of chemical waste the problem of counteracting or neutralising this effluent is becoming urgent. One approach to the detoxification of this waste is the use of microorganisms and microbial enzymes to break down these chemicals into safe (and possibly useful) materials. Many man-made chemical compounds, however, are resistant to microbial attack. This book looks at possible ways in which microbial activity can be directed against these recalcitrant compounds.

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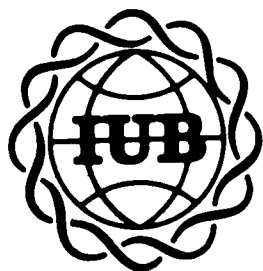


A Subsidiary of Harcourt Brace Jovanovich, Publishers  
London New York Toronto Sydney San Francisco  
24 28 Oval Road, London NW1 7DX, England  
111 Fifth Avenue, New York, NY 10003, USA

# BIOCHEMICAL NOMENCLATURE

AND

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This compendium, previously published under the title of *Collected Tentative Rules and Recommendations of the Commission on Biochemical Nomenclature* has now been updated and published in its third edition for the International Union of Biochemistry by the Biochemical Society under the title: *Biochemical Nomenclature and Related Documents*.

The compendium, prepared by the IUB Committee of Editors of Biochemical Journals, collects together all the current rules and recommendations on nomenclature that have emanated from the IUPAC-IUB and IUB nomenclature committees. As such it is an indispensable part of the library of all biochemists.

The price is £3.50/US\$7.00, postage-paid (vi plus 223 pages, paper bound). A 20% discount is allowable on orders for 10 or more copies to a single address. Payment must accompany the order.

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