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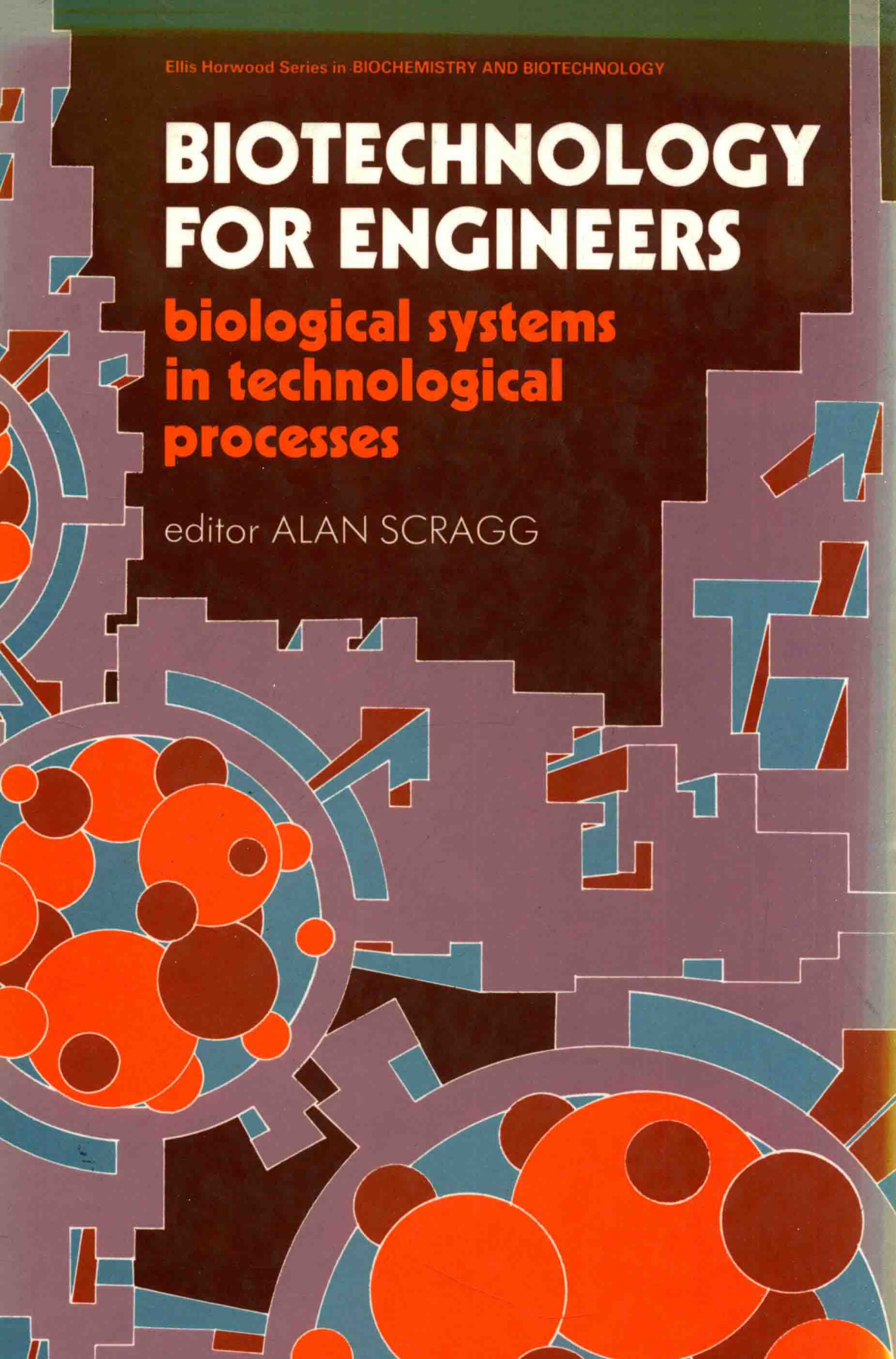
BIOTECHNOLOGY FOR ENGINEERS

biological systems in technological processes

editor ALAN SCRAGG



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Biological Systems in Technological Processes

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BIOTECHNOLOGY FOR ENGINEERS: Biological Systems in Technological Processes

Editor: ALAN SCRAGG, Senior Lecturer and Institute Deputy Director, Wolfson Institute of Biotechnology, Division of Molecular Biology and Biotechnology, University of Sheffield

There is a definite need for a book which makes the biosciences amenable to engineers who may find biological science "jargon" somewhat daunting. Containing the relevant material required to bring the chemical engineer to a high level of awareness of biological systems, this new work provides a well balanced explanation with the emphasis on the basic bioscience, illustrated with accounts of some key industrial processes. The book is adapted from a course run on "Basic Biotechnology for Engineers", run at the prestigious Wolfson Institute of Biotechnology at the University of Sheffield.

The authors input up-to-date information from such subjects as microbiology, molecular biology, genetic engineering, chemistry and chemical engineering, conferring on biotechnology a new importance in industry for the development of new technologies based on renewable sources. Based on material presented to engineers of limited biological knowledge, who are nonetheless called on to assess or work alongside biologists in the development of biotechnological processes (e.g. chemical engineers, production managers), it emphasises the need for good communication and the rapid transfer of knowledge and expertise. The book will be instrumental in teaching scientists and managers from a wide range of disciplines to speak the same language.

Readership: Chemical engineers and industrialists seeking a clear definition of biological and biotechnological matters. Biological chemists, biotechnologists, microbiologists seeking a valuable refresher course. Genetic engineers, molecular biologists, fermentation and brewing engineers.

Prior to the position of Deputy Director at the Wolfson Institute of Biotechnology, **Alan Scragg** was formerly a Senior Scientist with Cadbury–Schweppes plc (1975–83). He was on the staff of the Biochemistry Division of N.I.M.R. in London (1970–75); and was a Post-doctoral Fellow of the University of Wisconsin, USA (1968–70). He was awarded a B.Sc. in Microbiology (1965) from Queen Elizabeth College, University of London, and a Ph.D. in Microbiology (1968) from University College, London. Dr Scragg has contributed chapters to three other books.

Table of Contents

BIOTECHNOLOGY FOR ENGINEERS
Biological Systems in Technological Processes

Ellis Horwood books in the
BIOLOGICAL SCIENCES
General Editor: Dr ALAN WISEMAN, University of Surrey, Guildford

Series in
BIOCHEMISTRY AND BIOTECHNOLOGY
Series Editor: Dr ALAN WISEMAN, Senior Lecturer in the Division of Biochemistry, University of Surrey, Guildford

Aitken, J. — **Handbook of Enzyme Active Site Identification***
Ambrose, E.J. — **The Nature and Origin of the Biological World**
Austin, B. & Brown, C.M. — **Microbial Biotechnology: Freshwater and Marine Environments***
Berkeley, R.C.W., *et al.* — **Microbial Adhesion to Surfaces**
Bertoncello, I. — **Human Cell Cultures for Screening Anti-Cancer Rays***
Blackburn, F. & Knapp, J.S. — **Agricultural Microbiology***
Bowen, W.R. — **Membrane Separation Processes***
Bubel, A. & Fitzsimons, C. — **Microstructure and Function of Cells**
Clarke, C.R. & Moos, W. H. — **Drug Discovery Technologies***
Cooke, N. — **Potassium Channels***
Corkill, J.A. — **Clinical Biochemistry: The Analysis of Biologically-Important Compounds and Drugs***
Crabbe, M.J.C. — **Enzyme Biotechnology and Protein Engineering**
Crabbe, M.J.C. — **Kinetics of Enzymes***
Denyer, S. & Baird, R. — **Handbook of Microbiological Control***
Dolly, J.O. — **Neurotoxins in Neurochemistry**
Espinal, J. — **Understanding Insulin Action***
Eyzaguirre, J. — **Chemical Modification of Enzymes**
Eyzaguirre, J. — **Human Biochemistry and Molecular Biology***
Ferencik, M. — **Immunochemistry***
Fish, N.M. — **Computer Applications in Fermentation Technology***
Francis, J.L. — **Haemostasis and Cancer***
Gemeiner, P. *et al.* — **Enzyme Engineering***
Harding, J. — **Biochemistry and Pharmacology of Cataract Research: Drug Therapy Approaches***
Horobin, R.W. — **Understanding Histochemistry: Selection, Evaluation and Design of Biological Stains**
Hudson, M.J. & Pyle, P.L. — **Separations for Biotechnology, Vol 2***
Hughes, J. — **The Neuropeptide CCK***
Inoki, R., Kudo T. & Olgart, L.M. — **Dynamic Aspects of Dental Pulp***
Jordan, T.W. — **Fungal Toxins and Chemistry***
Junter, G.A. — **Electrochemical Detection Techniques in the Applied Biosciences: Vol. 1: Analysis and Clinical Applications**
Vol. 2: Fermentation and Bioprocess Control, Hygiene and Environmental Sciences
Kennedy, J.F. & White, C.A. — **Bioactive Carbohydrates**
Krcmery, V. — **Antibiotic and Chemotherapeutic Compounds***
Palmer, T. — **Understanding Enzymes, 2nd Edition**
Paterson, R. — **Biological Applications of Membranes**
Reizer, J. & Peterkofsky, A. — **Sugar Transport and Metabolism in Gram-positive Bacteria**
Russell, N. J. — **Microbes and Temperature***
Russell, N.J. & Gacesa, P. — **Pseudomonas Infection and Alginates: Structures, Properties and Functions in Pathogenesis***
Scragg, A.H. — **Biotechnology for Engineers: Biological Systems in Technological Processes**
Sikyta, B. — **Methods in Industrial Microbiology**
Sluyser, M. — **Molecular Biology of Cancer Genes**
Sluyser, M. & Voûte, P.A. — **Molecular Biology and Genetics of Childhood Cancers: Approaches to Neuroblastoma**
Verrall, M.S. — **Discovery and Isolation of Microbial Prodoucts**
Verrall, M.S. & Hudson, M.J. — **Separations for Biotechnology**
Webb, C. & Mavituna, F. — **Plant and Animal Cells: Process Possibilities**
Winkler, M. — **Biochemical Process Engineering***
Wiseman, A. — **Handbook of Enzyme Biotechnology, 2nd Edition**
Wiseman, A. — **Topics in Enzyme and Fermentation Biotechnology Vols. 1, 2, 4, 6, 8**
Wiseman, A. — **Enzyme Induction, Mutagen Activation and Carcinogen Testing in Yeast**
Wiseman, A. — **Genetically Engineered Proteins and Enzymes from Yeasts***

* *In preparation*