

## New Titles from Portland Press ...

*Publisher of the Biochemical Society*

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**A Cornish-Bowden**

Since the first edition was published in 1979, the development of techniques for studying and manipulating genes have transformed biochemistry. Nonetheless, enzymes remain at the heart of all living systems, and an understanding of how they operate is vital for understanding the chemistry of life. This book describes the principles of enzyme kinetics, with an emphasis on principles rather than an encyclopaedic accumulation of facts, to allow readers to fill gaps for themselves and proceed in the subject as far as they need to go. In this way it provides the basis for understanding enzyme kinetics, whether at the level of the undergraduate, the research student or the researcher.

**Contents:** Basic principles of chemical kinetics; introductory enzyme kinetics; assays and other practical aspects; derivation of rate equations; inhibition and activation; multi-substrate reactions; isotope exchange and isotope effects; pH and temperature effects; control of enzyme activity; multi-enzyme systems; fast reactions; statistical analysis; references; solutions to problems; index.

1 85578 072 0

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**Pulmonary Vascular Remodelling** describes the changes that occur in the structure and function of the pulmonary vasculature during the development of pulmonary hypertension. Topics include: • the diversity of the pulmonary circulation and its adaptation to changes in the environment • the dynamic nature of extracellular matrix metabolism • the mechanisms that regulate the remodelling process, including the roles of growth factors, vasoactive substances and mechanical forces. It will be of great value to all researchers and clinicians interested in pulmonary and vascular biology, as well as undergraduates and postgraduates studying cell biology and vascular physiology.

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Feelisch, R Busse & E A Higgs

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- The roles of molecular chaperones in vivo
- Ribozymes
- Opsin genes.

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I 85578 044 5                      Hardback                      1994  
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### Molecular Botany

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Edited by D J Bowles, P M Gilmartin, J P Knox

Molecular Botany presents an overview of the ways in which environmental stimuli lead to developmental and physiological changes within plants. Molecular Botany encompasses wide areas of plant biology including the study of signals, signalling pathways and their end effects. It addresses areas of intense research activity including the role of the cell wall and glycans in signalling through to molecular events regulating gene activation, defence responses and developmental programming. Molecular Botany should appeal to a broad range of students and researchers working in the areas of plant cell and molecular biology and plant biotechnology.

I 85578 050 X                      Hardback                      1994  
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Edited by J S Bond and A J Barrett

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I 85578 039 9                      Hard                      Jan 1994  
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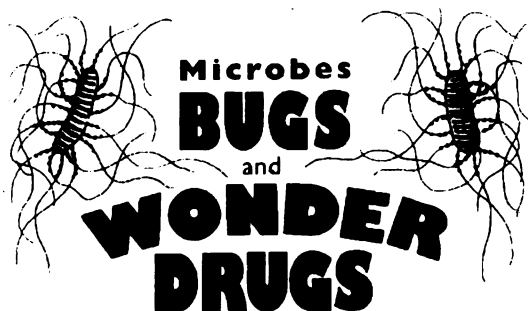


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- Oxygen toxicity, free radicals and antioxidants in human disease, C Rice-Evans and V Gopinathan
- The roles of molecular chaperones *in vivo*, P A Lund
- Ribozymes, H A James and P C Turner
- Opsin genes, B E H Maden
- Molecular chaperones: physical and mechanistic properties, S G Burston and A R Clarke.

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Biochemical Education  
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## Fundamentals of Enzyme Kinetics

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A Cornish-Bowden

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