

progress has resulted largely from the combined efforts of biochemists, morphologists and pharmacologists.

R. E. COUPLAND

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### **Enzymes: Physical Principles**

H. GUTFREUND

*John Wiley and Sons, Chichester, 1972, pp. 242, £5.50*

The physical techniques used in modern enzymology have become an indispensable part of any biochemistry course. A book that sets out to describe the basis on which these techniques are applied in a manner suitable for consumption by advanced undergraduates is therefore to be welcomed.

Perhaps one of the more remarkable features of this book is that the title is particularly apposite. The text is almost entirely concerned with physical principles and the way these are applied to solve general enzymological problems. There is very little discussion of specific examples, so that the amount of information about particular enzymes is very small. It can by no means be regarded as a general enzymology textbook and is more an adjunct to a suitable lecture course. It might also be quite useful as general reading for students with an insufficient background of physical chemistry or whose knowledge requires refreshing.

The first three chapters are essentially introductory and deal with basic thermodynamics, the properties of water as a solvent, ionization, oxidation and reduction and chemical equilibrium. The relevance of these topics to protein chemistry and enzymology is well illustrated with examples, although in some cases the brevity with which the examples are considered lends a rather fragmentary air to the text. This introductory section does, however, form an excellent basis for the major portion of the book, which is concerned with ligand binding and various aspects of enzyme kinetics. The approach in this second part of the book is largely concerned with experimental techniques, both from the point of view of setting up experimental situations to examine particular aspects of a system and also with the extraction of information from the experimental results produced. The first priority is once more given to the principles concerned and examples are chosen to illustrate these.

As the author himself states in the preface, it is not possible in a book of this length to cover the whole field of physical enzymology in depth. There is no attempt made to provide any coverage of protein structure, and the chemical basis of the catalytic process is dealt with rather briefly. Within this limitation, the book provides a clear and concise account of modern enzymological techniques. The section dealing with the kinetics of transient and relaxation processes in particular fill a gap that previous undergraduate texts have left.

A. P. DAWSON

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### **Chemistry and Biology of Peptides: Proceedings of the 3rd American Peptide Symposium**

J. MEIENHOFER (Editor)

*John Wiley and Sons, Chichester, 1973, pp. 762, £11.00*

This volume contains 97 papers presented at a meeting of nearly 300 peptide chemists and biochemists in Boston in June 1972. Such meetings are of value for the opportunity they afford for the presentation of up-to-the-minute information, and the publication of their proceedings makes this available to a wider public. Such publication is only justified if it is achieved with the minimum of delay; no one wants out-of-date up-to-the-minute information, which is all too often what symposium proceedings provide!

Almac will be attending the Chemistry and Biology of Peptides Meeting this November. To learn more about this meeting [click here](#).  
Providing services for all stages of drug development for small (including highly potent) molecules and peptides. API Services & Chemical Development Home. Pharmaceutical Development. Expert development & manufacturing solutions for all phases of clinical trials. Pharmaceutical Development Home. Analytical & Solid State Services. Delivering comprehensive solutions to support drug substance (API) and drug product development programs. Start by marking "Chemistry And Biology Of Peptides; Proceedings" as Want to Read: Want to Read saving... Want to Read. Let us know what's wrong with this preview of Chemistry And Biology Of Peptides; Proceedings by Johannes Meienhofer. Problem: It's the wrong book It's the wrong edition Other. Details (if other): Cancel. Thanks for telling us about the problem. Return to Book Page. Not the book you're looking for? Preview "Chemistry And Biology Of Peptides; Proceedings" by Johannes Meienhofer. Chemistry And Biology Of Peptides; Proceedings. by Johannes Meienhofer. from book Peptides for the New Millennium: Proceedings of the 16th American Peptide Symposium June 26–July 1, 1999, Minneapolis, Minnesota, U.S.A. (pp.614-615). American Peptide Symposia. Chapter 1. January 2002 with 9 Reads. To clarify the structural implications of these findings, we conformationally restricted the center of the pheromone by inserting gamma-lactam constraints in place of either the Lys4Gly5 or the Gly5Val6 dipeptide unit. Incorporation of (R)-3-amino-2-oxo-1-pyrrolidineacetic acid in place of Lys4Gly5 led to a super-active agonist which exhibited a 32-fold higher bioactivity than that of the a-factor. In contrast, an analog with (S)-3-amino-2-oxo-1-pyrrolidineacetic acid in place of Gly5Val6 is about 30 to 60-fold less active than the a-factor.