

new tools for biochemistry and protein chemistry. Finally, Chapter 3 (Folding Proteins) is a little out of place yet deals nicely with the technical aspects of monitoring protein folding as well as indirectly addressing the problems that arise in protein overexpression systems (Chapter 2).

In summary, *Protein Structure: A Practical Approach* and *Protein Function: A Practical Approach* are complementary texts which should be considered almost companion volumes. The authors are experts in their fields, and many have substantial international reputations as experimentalists. *Protein Structure: A Practical Approach* and *Protein Function: A Practical Approach* could be improved by a better organization within and between the two texts. Nonetheless, they are reference texts which should end up as well-thumbed volumes on any laboratory bookshelf.

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JM970822F

S0022-2623(97)00822-4

**Guanidino Compounds in Biology and Medicine:**

**2.** Edited by P. De Deyn, B. Mareseau, I. A. Quneshi, and A. Mori. John Libbey & Company Limited, London. 1997. 405 pp. 19.5 × 24.5 cm. ISBN 0-81696-543-4. £66.00.

This book contains selected papers from the Fourth International Symposium on Guanidino Compounds in Biology and Medicine held in Montreal, Canada, in September 1994. Like the previous volume in this series (reviewed in *Journal of Medicinal Chemistry* **1993**, 36, 2241), this work focuses on the biochemical rather than the pharmacological role of guanidine-containing compounds. Thus the book comprises eight sections each relating to specific aspects of metabolic processes involving guanidino compounds, especially arginine. The first section, which is likely to be of greatest interest to the readers of *Journal of Medicinal Chemistry*, contains several short papers on the arginine–nitric oxide pathway and its possible role in various clinical disorders. The work presented, and particularly the SAR data on neuronal nitric oxide synthase inhibitors, is a useful addition to the medicinal chemical literature. Other sections deal with hyperarginemia/arginase and the creatine–creatinine biosynthesis pathway and its physiological and clinical importance. There are also sections devoted to the metabolism of guanidino compounds and their involvement in renal failure, liver failure, and diabetes. An additional section includes discussion of electrophysiological and neurochemical studies, and the final section relates to guanidino compounds in microorganisms, plants, and invertebrates.

This book adds to the wealth of data supporting the importance of guanidino compounds in biological processes. In addition to its obvious interest to specialists in the areas covered, this book is well-worth perusal by medicinal chemists and others with an interest in the

chemistry and biology of guanidines. It is a useful addition to library shelves in academia or industry.

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JM970826K

S0022-2623(97)00826-1

**Antiviral Chemotherapy.** By Richard Challand and Robert J. Young. In **Biochemical and Medicinal Chemistry Series**. Series Editor John Mann. Spektrum Academic Publishers, Oxford, and University Science Books, Sausalito. 1997. viii + 128 pp. 19 × 24.5 cm. ISBN 1-901217-03-5. \$28.50 (pbk).

*Antiviral Chemotherapy* is the fourth offering in a series of text books tailored to provide advanced undergraduate students in the biological sciences with concise accounts of subjects where both chemistry and biology converge but which are inadequately covered in standard texts. After a general introduction to the structure of viruses and a brief description of viruses that infect humans, Chapters 3 and 4 provide the reader with a basic understanding of assay design and a summary of the major biochemical targets that have proven to be clinically useful sites for intervention in the replication cycle of many pathogenic viruses. Reflective of their preeminent role in the development of effective antiviral chemotherapeutics, Chapter 5 is devoted to a discussion of nucleoside analogues, providing a mechanistic understanding of the design and mode of action of this important class of drug. With this background, the reader is well-prepared for the remaining chapters which focus attention on drugs that are used to treat specific viral infections, beginning with the herpes virus family and following with individual discussions of HIV, hepatitis, and respiratory infections. The appendices include a useful list of the viruses known to be responsible for disease in humans and a compilation of the structures of all the marketed and late-stage antiviral therapeutics. The book concludes with a glossary of terms used in the text and a list of references to general textbooks as well as reviews and articles in both the primary and secondary literature that will be of interest to those who seek a more detailed and deeper discussion of the major topics covered.

Written by two medicinal chemists from the former Wellcome Research Laboratories at Beckenham in the United Kingdom, *Antiviral Chemotherapy* succeeds in its mission. The book provides an excellent and succinct introduction to the history of the discovery and development of antiviral chemotherapeutics and describes all of the current clinically useful agents. The information is organized in a logical fashion and presented in a readable and engaging manner, with the liberal use of figures and structures that illustrate and enhance the discussion. All of the major discoveries are dealt with, and the text briefly covers several emerging opportunities for drug discovery that remain of contemporary interest.

There are several errors, fundamental in nature, that will be readily apparent to those more familiar with the