

Book Review

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**Highlights in bioorganic chemistry:
methods and applications**

Wiley-VCH; 2004,
600 pp; price £75.00/€112.50
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With the advent of Chemical Biology and Biological Chemistry it is difficult to determine what kind of research can be defined as Bioorganic Chemistry. In this book, the editors have an inclusive view of Bioorganic Chemistry, which ranges from the use of organic chemistry and its techniques to investigating biological systems (Chemical Biology), through medicinal chemistry to Biomimetic Chemistry, in which organic chemistry is used in an attempt to mimic a biological process or assembly. The book is divided into six sections: Biomolecules and Conformations; Non-covalent Intermolecular Interactions; Studies in Drug Development; Studies in Diagnostic Developments; Catalysis and Methodology; and Bioengineering and Bioinspired Assemblies. Each of these sections is sub-divided into chapters on specific areas that are written by active researchers in that area. All contributors to this book attended the 'Bioorganic Chemistry Symposium'

during the years 1999–2002. *Highlights in Bioorganic Chemistry* is the second in a series, which started with *Bioorganic Chemistry*, also published by Wiley-VCH and edited by U. Diederichsen, T. K. Lindhorst, B. Westermann and L. A. Wessjohann.

Each chapter is a focussed summary of the field that it represents and, in general, ample references are provided for those who wish to delve deeper. The book is well presented with a large number of figures and schemes; however there is no colour used and a number of the figures would certainly have benefited from the inclusion of colour. These chapters are an excellent starting point for those starting to undertake research in the area described. However, it is doubtful that the summaries will be of significant use to specialists, who will undoubtedly be aware of the work in greater detail than is presented here. Despite accepting that the field of Bioorganic Chemistry is a broad church, it is difficult to understand why chapters on 'combinatorial methods for the discovery of catalysts' and 'linkers for solid phase synthesis' are included. These chapters are well written and informative, but their inclusion feels a little contrived. The book does not intend to be, and nor is it, a comprehensive overview of Bioorganic Chemistry.

The editors describe it as a compilation of research interests by a new generation of scientists from Germany and neighbouring countries. The fact that all the authors are from continental Europe, and more specifically from Austria, Germany and Switzerland, highlights the growing European interest in Bioorganic Chemistry; however, it does not make for a balanced overview of the subject. As such, it is difficult to see this book being of use to a wider audience than that discussed above.

Overall, this book is a useful summary text for the many academic and industrial researchers who fall into the category of Bioorganic Chemistry, in its broadest interpretation, but it is not detailed enough to satisfy an expert researcher. *Highlights in Bioorganic Chemistry* will be of special interest to those who are newly working in a specific field that is covered within the book. However, this is not a book that should be recommended to undergraduate students as a general textbook for Bioorganic Chemistry.

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