Book Reviews

Combinatorial Chemistry. Synthesis, Analysis, Screening. Gunther Jung. Wiley-VCH: Weinheim. 602 pp. DM 268. ISBN 3-527-29869-X.

The concept of combinatorial chemistry has truly captured the imagination of many a researcher, both academic and industrial, as evidenced by the sheer number of publications emerging in the area over the past decade. However, due to the dramatic growth in the area no single book is able to cover all facets of the subject. This book has tried admirably. It is concisely compiled and divided into adequately sized chapters detailing diverse categories encapsulated under the heading *Combinatorial Chemistry*. It aptly begins with a straightforward introductory chapter highlighting the principles of combinatorial chemistry and mildly touches on themes such as library synthesis, compound characterisation, deconvolution of mixtures, and automation (core factors which are mentioned, some only in part, in subsequent chapters). The book continues with a survey of solid-phase organic reactions, and, if anything, demonstrates the utility of solid-supported chemistry. This is followed by the relatively unexplored territory of solution-phase combinatorial chemistry and yields an insight into the progress in the field. Multicomponent reaction chemistry is an exciting area and is dealt with in the following chapter.

Chapters 5 and 6 delve more deeply into the now familiar grounds of solid-phase synthesis. The concept of anchors in solid-phase organic chemistry is introduced in Chapter 5, which is a comprehensive display of anchor types written in an extremely organised manner, which will indeed facilitate any search made by a reader. The strategies employed for the introduction of molecular diversity from a polymer-bound template to generate multiple core structure libraries are considered in the following section. It supplies the reader with ample examples and involves a number of successful templates clearly showing the importance of such a system.

Extremely well-written chapters that detail other aspects of combinatorial chemistry follow, including a section on RNA and DNA aptamer technology, which supplements the book. Other chapters of note focus on screening and automation.

The flavour of the book is further enriched by the inclusion of sections dealing with the essential aspects of compound analysis. It introduces analytical topics such as FT-IR, mass spectrometry, and MAS NMR.

Overall, the book is a fusion of different branches of the science and is well organised. It will definitely serve as an excellent detailed reference text to the subject and offers a newcomer a balanced insight into this rapidly expanding and exciting field.

Mark Bradley and Stifun Mittoo

Department of Chemistry, University of Southampton, Highfield, Southampton, UK

OP000120R

10.1021/op000120r

 10.1021/op000120r CCC: $20.00
Published on Web 00/00/0000