

**Supramolecular Dye Chemistry. Topics in Current Chemistry, 258.** Edited by Frank Würthner (Universität Würzburg). Springer: Berlin, Heidelberg, New York. 2005. xii + 324 pp. \$299. ISBN 3-540-27758-7.

In the preface, the editor indicates that the goal of this book is to present selected aspects of supramolecular chemistry, focusing on explanations of concepts employed to produce target multichromophoric architectures (dye assemblies) in solution and at interfaces. Seven specific topics were chosen because of their potential for “successful development”: dye assemblies involving chlorins, organometal complexes, H-bonding, monolayers on gold surfaces, and organogels; analytical methods for studying such assemblies; and dye–DNA interactions involving intercalation. This book is true to its objective and, consequently, will probably be more useful to the practitioner and novice than to the theoretical chemist. Its chapters provide many examples of developed colorants and their properties but do not delve deeply into the fundamental principles underpinning the design and properties of dye assembly. Examples of well-established topics that were purposely omitted are photoswitches and sensor materials as well as dye assemblies based on cyanine systems.

In addition to its practical utility, this book is commended for its clarity, readability, scope of references, and flow, which will make it a useful resource for individuals new to the field. While the topics interrelate, there is extremely little repetition of concepts among the chapters. Interestingly, at various points the authors seem to anticipate questions arising in the minds of the readers, such as “How was this unusual structure synthesized?” or “Is this compound optically active?” Each chapter begins with an outline, abstract, and set of key words and ends with a “forward look” that provides suggestions for further studies in the field.

In summary, this book complements earlier ones in the field pertaining to functional dyes in general and supramolecular assemblies specifically. It reflects the way forward in the field of dye chemistry and will serve as a good teaching tool. A shortcoming of this book, however, is the modest index, which is only four pages.

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**Handbook of Affinity Chromatography, 2nd Edition.** Edited by David S. Hage (University of Nebraska). CRC Press/Taylor and Francis Group: Boca Raton, FL. 2006. xx + 944 pp. \$176.36. ISBN 0-8247-4057-2.

This book represents the collaboration of 48 scientists and students in order to present the latest information on the theory, use, and applications of affinity chromatography. There are six sections: (I) Introduction and Basic Concepts; (II) General Affinity Ligands and Methods; (III) Preparative Applications;

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(IV) Analytical and Semipreparative Applications; (V) Biophysical Applications; and (VI) Recent Developments. An extensive index completes the book.

JA059898O

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**Targets in Heterocyclic Systems: Chemistry and Properties, Volume 8 (2004). Reviews and Accounts on Heterocyclic Chemistry.** Edited by Orazio A. Attanasi (University of Urbino, Italy) and Domenico Spinelli (University of Bologna, Italy). Società Chimica Italiana: Rome. 2005. x + 456 pp. \$99.95. ISBN 88-86208-29-4.

This volume of 15 chapters covers the “synthesis, reactivity, activity (including medicinal) and mass spectrometry of different heterorings”, to quote from the preface. Topics range from applications of porphyrins, phthalocyanines, and related compounds for optical limiting to the synthesis of benzo[*c*]quinoxalizin-3-ones as inhibitors of steroids. There is no index.

JA059943S

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**Oxidation of Alcohols to Aldehydes and Ketones: A Guide to Current Common Practice.** By Gabriel Tojo and Marcos Fernández (University of Santiago de Compostela, Spain). from the series, *Reactions in Organic Synthesis*. Edited by Gabriel Tojo. Springer Science + Business Media, Inc.: 2006. xx + 376 pp. \$129.00. ISBN 0-387-23607-4.

The aim of the authors in writing this book is to help scientists perform a particular alcohol oxidation “in the most quick and reliable way”. As a result, oxidants that are used most often in labs, and have thus passed the test of reliability, are featured most prominently here. There are 10 chapters covering important oxidations of alcohols to aldehydes and ketones, complete with experimental details. This book is meant for use at the lab bench rather than in the library.

JA069703S

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**Theilheimer's Synthetic Methods of Organic Chemistry, Volume 68.** Edited by Alan F. Finch (Cambridge). S. Karger AG and the Thomson Corporation: Basel, Switzerland. 2005. xxvi + 398 pp. \$632.00. ISBN 3-8055-7989-6.

This volume, the second of *Theilheimer's* for 2005, contains abstracts of new synthetic methods and supplementary data from papers published in the literature up to March 2005. Like

previous volumes, it features the sections "Further Trends and Developments in Synthetic Organic Chemistry 2005" and "Reviews", which cover new developments in organic synthetic chemistry from January to September 2005. A detailed subject index and a list of supplementary references complete the book.

JA069704K

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**Natural Products Isolation, 2nd Edition. Methods in Biotechnology, 20.** Edited by Satyajit D. Sarker (University of Ulster at Coleraine, Northern Ireland, UK), Zahid Latif (Molecular Nature Limited, Aberystwyth, Wales, UK), and Alexander I. Gray (University of Strathclyde, Glasgow, Scotland, UK). Humana Press: Totowa, NJ. 2006. xii + 516 pp. \$135.00. ISBN 1-58829-447-1.

The latest techniques for extracting, preparing, and isolating natural products from source materials are covered in this second edition of *Natural Products Isolation*, which includes the following new chapters: Hyphenated Techniques; Purification by Solvent Extraction Using Partition Coefficient; and Isolation of Microbial Natural Products. The book follows the trademark format of the series with each chapter offering step-by-step instructions for the laboratory, including an introduction to principles of the technique under discussion, a list of the materials and reagents needed, references for further investigation, and, where necessary, a troubleshooting guide. A subject index completes the book.

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