

**Anion Sensing. Topics in Current Chemistry, 255.** Edited by Ivan Stibor (Praha Institute of Chemical Technology, Prague, Czech Republic). Springer: Berlin, Heidelberg, New York. 2005. x + 238 pp. \$219.00. ISBN 3-540-23247-8.

This treatise on anion sensing and recognition represents a new addition to a very small number of books in this area. The seven chapters address specific aspects of anion recognition and are especially welcome because they treat several areas that are not often covered in reviews. For example, the first chapter, "Artificial Host Molecules for the Sensing of Anions" by Schmidtchen, provides an excellent assessment of models of anion binding, including the rather audacious questioning of the concept of the lock and key, followed by a cogent discussion of other factors impacting on selectivity. The chapters on chiral recognition by Stibor and Zlatušková and chromogenic receptors by Suksai and Tuntulani are two other examples of areas not usually treated in reviews on supramolecular recognition of anions. Practical applications are treated in the chapter "The Construction and Operation of Anion Sensors: Current Status and Future Perspectives" by Davis, Collyer, and Higson. This chapter is especially relevant in that it provides an assessment of the different types of approaches for detecting recognition, including electrochemical, optical, and colorimetric sensors. The remaining chapters address three specific receptor frameworks: those containing metals, by Beer and Bayly, calixarenes, by Lhoták, and guanidinium receptors, by Houk, Tobey, and Anslyn. These three chapters provide nice reviews for these common classes of anion hosts.

Although this *Topics* volume does not cover all the different classes of receptors, it does provide new and timely perspectives

to anion chemistry by highlighting several areas that have been generally overlooked in other reviews. The individual chapters are well-written and include references from earlier works up to the present. As such, this volume will be of interest to the community of researchers interested in anions as well as to those who wish to learn about the host-guest chemistry of anion recognition and its applications.

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**Food Flavor and Chemistry: Explorations into the 21st Century.** Edited by A. M. Spanier (U.S. Department of Agriculture, Rockville, MD), F. Shahidi (Memorial University of Newfoundland, St. John's, NF, Canada), T. H. Parliment (Parliment Consulting, New City, NY), C. Mussinan (IFF R&D, Union Beach, NJ), C.-T. Ho (Rutgers University, New Brunswick, NJ), and E. Tratras Contis (Eastern Michigan University, Ypsilanti, MI). Royal Society of Chemistry: Cambridge, UK. 2005. xii + 510 pp. \$210.00. ISBN 0-85404-653-4.

This book was developed from the presentations given at the 11th International Flavor Conference held in July 2004 on Samos Island, Greece. Aside from the opening overview, the chapters are organized under the following topics: Dairy and Wine Flavors; Composition; Formation of Flavors; Analysis; Antioxidants and Health; and Quality. A subject index completes the book.

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