

diuretics, barbiturates, analgesics, cannabinoids, and tricyclic antidepressants. The stationary phases used include ODS, SCX, and unmodified silica gel. The separations described are certainly impressive, but it is not always easy to see that CEC has a clear advantage over HPLC.

In the final chapter Dermaux and Sandra, in a refreshingly positive contribution, show how CEC excels in applications where its unique advantage of high peak capacity comes into play. The examples are mainly concerned with the analysis of extracts from natural products, including separations of triglycerides in which the peak capacity is almost reminiscent of capillary gas chromatography.

The book makes very easy reading, and the chapters complement each other very effectively, so that there is little repetition. There are a few technical shortcomings with regard to the figures. It would have been useful to provide a comprehensive, detailed, and focused treatment of the combination of ion migration and retention for charged analytes, an aspect that is only touched on in a few places, for example, in the application of OTCEC to proteins. However, this is a useful and highly informative monograph on a method that one hopes will be used with greater success in the future.

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**Supported Catalysts and their Applications.** Edited by David C. Sherrington and A. P. Kybett. Royal Society of Chemistry, Cambridge, 2001. 270 pp., hardcover £ 69.50,— ISBN 0-85404-880-4

The development of new selective heterogeneous catalysts is a rapidly evolving field with a large impact on the chemical industry for the production

of agrochemicals, fine chemicals, and pharmaceuticals. Especially for large- and medium-scale production processes, the task of optimizing profitability and improving the environmental acceptability of processes still remains. The recently published proceedings of the RSC conference on *Supported Catalysts and their Applications*, at the 4th International Symposium on Supported Reagents and Catalysts in Chemistry held on 2–6 July 2000 at the University of St. Andrews, UK, provides solutions to some of these challenges.

With few exceptions, most of the symposium participants and contributors to the book originate from European universities and are well-known scientists in the field. The book is divided into 31 individual chapters, which cover recent aspects of the design, synthesis, and applications of solid-supported reagents and catalysts, including supported reagents for multistep organic syntheses, selectivity in oxidation catalysis, mesoporous molecular sieve catalysts, and the use of zeolite  $\beta$  in organic reactions. Traditionally, heterogeneous catalysts have usually been immobilized on inorganic oxide materials where molecular precision at the metal complex center was of minor importance. However, more recently polymer-based systems with immobilized well-defined catalytic metal complexes have become a subject of intensive research. This book covers both areas of heterogeneous catalysis, inorganic oxide materials and polymer-based catalysts, and shows interesting overlaps.

While most of the contributions deal with immobilized catalysts and their applications, an excellent chapter by Steven V. Ley and Ian R. Baxendale covers supported reagents and their application to multistep organic syntheses. Examples of syntheses range from clean alcohol oxidations with a supported TPAP reagent to the convergent(!) synthesis of sildenafil (Viagra). Unfortunately, the title of the book does not even indicate that supported reagents are also included.

Although the book was published in 2001, it does not cover any parallel approaches to the search for new supported catalysts. Especially for industry, the techniques and the screening methods for the rapid identification of new catalyst candidates remain an important challenge. In this context automation and parallel approaches should definitely be mentioned. (For a recent review see: S. Dahmen, S. Bräse, *Synthesis* **2001**, 1431.)

Apart from the above-mentioned shortcomings, the two-page subject index is far too short and consists mainly of a repetition of the table of contents. For the reader who is interested in, for example, different applications of a certain catalyst, it is completely useless.

The book is clearly a recent survey, but, like the catalysts described, it is very heterogeneous in its nature: the style and quality vary from chapter to chapter. This would be acceptable for a conference proceedings but not for a scholarly monograph. Scientists who are interested in fundamentals of immobilized catalysts are better off with the book *Chiral Catalyst Immobilization and Recycling*, edited by D. E. De Vos, I. F. J. Vankelecom, and P. A. Jacobs (review: *Angew. Chem. Int. Ed.* **2001**, 40, 3480).

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