

**Chemistry in Alternative Reaction Media**; edited by D. J. Adams, P. J. Dyson, and S. J. Tavener; Wiley-VCH: Weinheim, 2003; € 62.90, 268 pp, ISBN 0-471-49849-1

This book presents a complete and useful description of the *non usual* solvents and reaction media, as well as applications of selected catalytic reactions in such non usual reaction media. It deals with environmentally friendly processes, a deep concern in chemistry at the present time.

The different chapters cover the most important reaction media, namely supercritical fluids, ionic liquids, perfluorinated solvents and water, with an accurate description of their properties, both in one phase and as part of a biphasic or a multiphasic solvent system. It includes many practical data, the adequate catalyst types for each medium and abundant bibliographic references.

The structure of the book is excellent. After a concise and clear description of the most important solvent parameters (chapter 1), the different non usual media are described in chapters 2-6. Each of them includes numer-

ous and valuable data and presents the advantages and disadvantages of each solvent system. The second part of the book (chapters 7-10) is devoted to examples of important catalytic reactions (*i. e.* hydrogenation, hydroformylation, oxidation, C-C bond formation, metathesis and polymerization), for which non usual reaction media have been successfully used. Each of these chapters provides a brief introduction of the general aspects of the corresponding reactions, allowing a better understanding of the contribution of the alternative reaction media to the improvement of the processes. A final chapter is devoted to the use and potential of the unusual media in industrial processes (*i. e.* the biphasic hydroformylation of propene).

The book is rigorous, clear and easy to read. It covers all the essential aspects of the area and should be a text of choice for most chemists who are not familiar with these subjects and who wish to enter the field, as well as a valuable reference for specialists.

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