

Book Review

ALWYN G. DAVIES

Organotin chemistry

Wiley-VCH, 2004, 2nd edition, 438 pp.

price £105

ISBN 3-527-31023-1

Every graduate and advanced undergraduate chemist working with organotin compounds will sooner or later need the excellent second, revised and updated edition of this basic reference book, providing extensive and comprehensive information in that field.

Many chapters have been completely rewritten in order to reflect the developments that have characterized these specific areas. The number of papers appearing in the field of organotin chemistry is, indeed, much more than those devoted to other main group organometals.

Chapter 2, devoted to physical methods and physical data, is quite short (12 pages). It is well known that spectroscopic methods are now routinely used and are developing quite rapidly, especially mass

spectrometry and NMR spectroscopy. A more detailed chapter devoted to these methods would have been useful. More could also have been said about applications, environmental issues and analysis of organotin compounds (Chapter 23). This chapter is, in fact, one of the shortest ones. A chapter of 10–15 pages could have been devoted to each of these three topics, which are really quite different from one another and deserve to be examined separately. In fact, almost nothing is said about environmental issues, whereas many papers have appeared in that field. A chapter on the application of organotin compounds in organic synthesis would also have been useful, especially to pure organic chemists, who use more and more organometallic reactions for the synthesis of organic molecules. These reactions are often quite selective and allow the organic chemist to reach their target compound more easily than with older, purely organic reactions. Many papers devoted to organotin carboxylates have appeared in the literature, and more pages could

have been devoted to this subject than in the short Chapter 13.

The subject index is too limited and could have been extended to more keywords. Fortunately, the database on the CD-ROM that accompanies the book covers a lot of references that do not appear in the book itself and can be used to overcome this problem.

A few important facts are not discussed in the text. For instance, the high selectivity characterizing the cleavage of sp^3 carbon–tin bonds in polar solvents compared with the low selectivity observed in non-polar media, or a description of the structures of diorganotin salicylaldoximate clusters. However, they can be found in that very useful database on the accompanying CD-ROM.

Marcel Gielen

HNMR Unit, Faculty of Applied
Chemistry, Vrije Universiteit Brussel,
Belgium

DOI:10.1002/aoc.664