

will be invaluable to him, and should be available in all serious chemistry libraries. It did not give me an instant solution to our own current separation problem, but then neither has anyone else!

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Organometallics: A concise introduction; by Ch. Elschenbroich and A. Salzer, VCH Publishers, 1989, £47.45, DM138 (hard cover), £20, DM58 (soft cover), xi + 479 pages, ISBN 3-527-27817-6.

This volume grew out of a thirty lecture, one semester course in organometallic chemistry, for students with no previous experience in the field. Any student who absorbs the material here, in a single semester, will have worked hard indeed, but will have mastered all the fundamentals and a good deal more. This is a really excellent introduction to the subject, and I shall be recommending it to all my own students.

The organisation of the book is fairly conventional, with an introduction followed by chapters on main-group organometallics, organised by group. The second half of the book, dealing with transition metal organometallics, is divided into chapters by ligand type, with additional sections on metal-metal bonds, transition metal atom clusters and organometallic catalysis. Such a layout might have been dull, but in fact the style is very stimulating, and gives a real feeling for the exciting modern developments in the subject. The material is presented very clearly, but without a slowing of the pace. I particularly enjoyed the "excursions" in which a few pages are taken out of the main text to discuss an interesting, but perhaps not essential, topic. For example, the chapter on σ -donor/ π -acceptor ligands contains an excursion into the photochemical reactivity of transition metal complexes. There is also quite a lengthy excursion into the ^1H and ^{13}C NMR spectra of organometallics, and spectroscopic techniques are emphasised throughout the book.

The book is provided with a good clear index; I found everything I tried to look up. Numerous additional references are provided for each chapter, mainly to review articles. The one feature which I found irritating was that there were also numerous references in the text, which gave only the senior author's name and the year of publication, the authors' names also being collected in an author index. Locating these references is not difficult if you are familiar with the area under discussion, but few students will have the patience to work their way through Chemical Abstracts to find the relevant paper. How many papers did Wilkinson publish in 1968?

The standard of production of this work is high, with clear layout and excellent quality diagrams. Although it is a translation of the 1988 German edition, the translation has been accomplished with commendable speed, and is largely free from any signs of awkwardness.

Overall this is an excellent book, and the authors are to be congratulated for producing such a clear and comprehensive view of the field. It will be useful both to advanced undergraduates and to graduate students, and most research workers in the area will want a copy on their own shelves. Libraries should buy several copies. I

am sure that this will become the recommended text for many courses in organometallic chemistry, and at this modest price it is also really excellent value for money.

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