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books is in the simplicity and the clarity of the discussion without sacrifice of rigour. (The chapter on isotope effects is in my view especially effective.) If I were now involved in teaching in the field of organic mechanisms (as I was for many years) I would recommend this book as a primary text for both undergraduates and postgraduates. It could also certainly be read with advantage, or at the very least consulted, by those engaged in studies of mechanisms of organometallic reactions.

It is a pity that the authors have so thoroughly excluded consideration of reactions of organometallic species. After all, those involving cleavages of C-metal bonds, much used in organic synthesis, are no less organic reactions than those involving breaking of, say, C-H or C-Br bonds. Students of organic chemistry should at least be aware, for example, that reactions of aryl-M bonds (e.g. M = Hg, Si, Sn) with electrophiles are no less electrophilic aromatic substitutions than those of aryl-H bonds. There are other omissions; for example, carbanions are mentioned only in one short sentence. But the book must be judged on what it does contain rather than on that which a particular reader may think is wrongly omitted, and on that basis it is first class, and can be thoroughly recommended. It is a great pity that its very high price will largely rule out purchase for personal use.

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Fieser and Fieser's reagents for organic synthesis M. Fieser, Wiley Interscience, New York, 1994, 443 pages £49.50 USD 68.95 ISBN 0-471-00074-4

This volume in a highly regarded series deals with information appearing in late 1990 to early 1993. It is reviewed in this Journal because the great majority of the reagents considered are organometallic species, including organic derivatives of Li, Mg, Ba, Y, Ce, Sm, Ti, Cr, Yb, Mn, Ru, Rh, Ir, Ni, Pd, Pt, Cu, Ag, Zn, Hg, B, Al, Tl, Si (many entries), Sn, Pb, Sb and Se. (Other metals appear as inorganic derivatives, including La, W, Re, Fe, Os, and Ga). Indeed a glance through the book provides an impressive indication of the great and increasing importance of organometallic compounds in organic synthesis.

Organometallic chemists will find some of the nomenclature unusual, and indeed incorrect; for example on the first page Al(SiMe₃)₃ is named as aluminium tris(trimethylsilane).

This is a valuable and reasonably priced addition to an important series.

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