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Book reviews

¹³C NMR Data for Organometallic Compounds. By B.E. Mann and B.F. Taylor, Academic Press, London, 1981, viii + 326 pages, £15.90/U.S. \$32.50.

Organometallic chemists are making increasing use of ¹³C NMR spectroscopy in characterizing organometallic compounds, and they will find this volume helpful and timely. Apart from the first 36 pages, which are devoted to a useful introduction, the book consists of tables of data; with one exception each table presents chemical shifts and coupling constants for a particular type of organic group (e.g. an acetylene group or a phenyl group) attached to the range of metals and metalloids. The exception is the brief table concerned with data for some paramagnetic organometallic compounds.

The only elements not regarded as metals for the purposes of this volume are H, C, N, O, S, the halogens, and the noble gases. However, because of the very large body of data on silicon and phosphorus derivatives, these are treated superficially; this makes the book of limited use to organosilicon and organophosphorus chemists, but they can still turn to it first for some illustrative material and leading references.

Most organometallic chemists will want to have this monograph available to them, and they will be pleased by the price, which is remarkably low on present day standards.

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Topics in Current Chemistry, Vol. 97, (Managing editor F.L. Boschke), Springer-Verlag, Berlin-Heidelberg-New York, 1981, DM 92.00.

There is considerable current interest in the chemistry of organophosphorus compounds having novel structural and bonding features (see for example recent reviews by E. Fluck on compounds of phosphorus with coordination number 2 (*Topics in P.chem.* Vol 10) and R. Appel on Phospha-alkenes and Phospha-alkynes, *Angew. Chem. Int. Edn.*, 20, 731 (1981). The article by Regitz and Maas entitled "Short Lived Phosphorus(V) Compounds having Coordination number 3" complements these and surveys the chemistry of short lived compounds of pentavalent phosphorus of three general types: (a) RP(X)(CR₂), (X = O, S); (b) RP(O)X, (X = O, NR) and (c) ZP(X)(Y), (Z = O, OR, NR₂, X, Y = O, S, NR₂).