

book up to date. There are only a few references later than 1980, yet inorganic syntheses have developed considerably since then.

Whether those engaged in research in inorganic or organometallic chemistry will come to turn first to this book for information on the synthesis of a particular compound is something that time will tell. They will possibly however find it an interesting and stimulating book to read. Professor Zuckerman leaves an editorial achievement on a grand scale.

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*Organolithium Methods*; by B.J. Wakefield. Academic Press, London etc., 1988. xvii + 189 pages. £29.50. ISBN-0-12-730940-3.

This volume is the latest addition to the series on *Best Synthetic Methods*, the aim of which, as stated by the editors, is to provide books "each dealing concisely with a particular topic from a practical point of view... full of preparations, practical hints, and detailed examples, all critically assessed, and giving just the information needed to smooth our way painlessly into the unfamiliar territory." This one meets the objectives admirably.

The scope can be seen from the chapter headings: General considerations in the application of organolithium compounds in organic and organometallic synthesis; Preparation of organolithium compounds. Addition of organolithium compounds to carbon-carbon multiple bonds; Addition of organolithium compounds to carbon-nitrogen multiple bonds; Addition of organolithium compounds to thio-carbonyl groups; Substitution at carbon by organolithium compounds; Reactions of organolithium compounds with proton donors; Formation of carbon-nitrogen bonds via organolithium compounds; Formation of carbon-oxygen bonds via organolithium compounds; Formation of carbon sulphur bonds via organolithium compounds; Formation of carbon-halogen bonds via organolithium compounds; Synthesis of organoboron, organosilicon, and organophosphorus compounds from organolithium compounds; Organolithium compounds in the synthesis of other organometallic compounds; Application of elimination reactions of organolithium compounds: arynes, carbenes, ylides, ring opening of heterocycles.

The accounts are clear, concise and authoritative, and will give immediate and effective help to anyone seeking to use organolithium reagents, or employ them in a particular way, for the first time. Organometallic chemists may be a little disappointed that only 6 pages are devoted to the preparation of organometallic compounds of elements other than boron, silicon, and phosphorus, but they do contain a reasonable number of illustrative examples. There is an unusually good subject index.

This book should serve as a model for authors of later volumes in this series. It should be available in all organizations concerned with organic and/or organometallic synthesis, and preferably in the laboratories not only in the library.

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