

their derivatives, and with nitrones have also been widely used, especially in diastereo and enantioselective syntheses of amines.

The volume has been carefully and accurately produced, and the diagrams are clear and well presented. Each chapter is supplemented by many references, although I am uncertain as to the value of some of the oldest of these. The extensive use of the patent literature is especially welcome, as it is frequently difficult to track down this information. There is an adequate index.

This book is a useful addition to the reference literature of synthetic organic chemistry. Its particular value lies in its systematic approach to some rather unusual classes of compounds, which tend to be treated rather briefly elsewhere. In this respect some chapters are more useful than others; nitrones have been well and frequently reviewed elsewhere, but information on hydroxamic acids or imidates might prove more elusive. Overall this is a good, but not exceptional book, worthy of library purchase.

*School of Chemistry and Molecular Sciences  
University of Sussex, Falmer, Brighton (U.K.)*

**Penny A. Chaloner**

*Organometallics in Organic Synthesis 2*; edited by Helmut Werner and Gerhard Erker, Springer Verlag, Berlin, 1989, viii + 322 pages, soft cover, DM 94. ISBN 30540-50531-8.

This volume comprises most of the major papers presented at the second symposium on Organic Synthesis via Organometallics held at Würzburg in October 1988, and sponsored by the "Volkswagen Stiftung". It is a worthy successor to the first volume, and contains many valuable reviews, from experts in their respective fields.

The first section is an overview from Wilke, which deals with the use of nickel complexes in both stoichiometric and catalytic reactions. This is an excellent account marred only by some slightly confusing diagrams, and the fact that all the figure captions are in German, despite the English text. This is, I fear one of the consequences of rapid production from camera-ready manuscripts. This is followed by an article from Tom Dieck on diazadiene controlled carbon-carbon coupling reactions at palladium and iron, considering oligomerisations and co-oligomerisations of alkenes, alkynes, dienes and allenes. Zenneck follows this theme in discussing iron arene complexes in alkyne oligomerisation. Schlögl discusses the use of arenetricarbonyl chromium complexes as intermediates for stereoselective synthesis.

Iron carbonyl complexes of exocyclic polyenes are discussed by Vogel; the  $\{\text{Fe}(\text{CO})_3\}$  moiety acts not only as a protecting group but also has the effect of rendering the reactions of remote functions chemo- and regio-selective. Different aspects of the reactivity of diene iron tricarbonyl complexes are presented by Salzer, with the emphasis on their use in carbon-carbon bond forming reactions, and the uses of allyl and dienyl complexes.

The cyclisation reactions of cyclic dialkynes are considered from both a theoretical and practical point of view by Gleiter, and a number of interesting new superphanes were synthesised in cobalt-promoted reactions. Other notable contributions are that from Brunner on enantioselective catalysis, and the paper of Jones on

transformations involving C–H bond activation. Catalysis by cluster complexes is represented by contributions from Süss-Fink on ruthenium clusters as catalysts for a range of hydrogenation, coupling and addition reactions, and from Vahrenkamp on fundamental reactions of iron and ruthenium complexes.

Despite being produced from camera-ready manuscripts, most of the contributions are clear and well presented, with good quality diagrams and extensive bibliography. There are a few typographic errors, but no more than one would expect in this format. Without wishing to appear to be linguistically chauvinist, it is noteworthy that only one contribution is not written in English, with one more paper having German captions to its diagrams. This seems to be a pity, if only in that a good article will tend to be skipped by those who do not read German easily. This is not only the English and Americans, but also many of those for whom English is their second and German their third or fourth language.

Overall this is an excellent volume, which has been produced reasonably quickly, and at a reasonable cost. I can recommend it to all libraries, but also to individual purchase.

*School of Chemistry and Molecular Sciences  
University of Sussex, Falmer, Brighton (U.K.)*

**Penny A. Chaloner**

*The Chemist's English*, third edition; by R. Schoenfeld, VCH, Weinheim, 1990, 193 pages, DM 48.00. ISBN 3-527-28003-0.

All that really need be said about this admirable book is that everyone who writes on chemical matters in English for publication should read it, and re-read it every few months.

Why then do I say more, especially after praising the second edition at length in the strongest terms (*J. Organomet. Chem.*, 323 (1987) C54)? In part it is because publishers who supply copies of books for review expect "a full-length review". (Many authors would also be offended if their efforts were given so few lines, though Dr Schoenfeld, as a vigorous advocate of simplicity and brevity, would be an exception.) But mainly it is because I cannot resist the opportunity to express my own views on matters he raises.

Dr Schoenfeld must now be regarded as the leading authority on and guardian of Chemist's English, and I find it very helpful to be able to direct to his book the irate authors who object to changes I make in the wording of their papers, though this is ineffective with those who hold that anything they write should be allowed provided only that the meaning can be discerned. He recognises that in time usage prevails over grammarian's rules, and even over logic, but he still rightly holds out against the unattached participle that is now so common in scientific papers, especially in the case of the word *using*, and quotes as a very effective illustration the sentence from a biological journal reading "Rabbits were observed using binoculars". He is also opposed to the use of *via* in a sense other than as denoting movement through, pointing out that a compound may be formed via an intermediate but cannot correctly be said to be separated *via* chromatography. He rightly resists the use of *react* as a transitive verb, as in 'A was reacted with B', though this is probably a lost cause. He still insists that *data* must be plural. He also urges retention of the