

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.

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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

distinction between *that* and *which* in places where common usage allows either, although as long ago as 1965 the second edition of the great Fowler's *Modern English Usage* commented: "Some there are who follow this principle now; but it would be idle to pretend that it is the practice either of most or even of the best writers". However, as I noted in my earlier review, he accepts the use of *anticipate* in the sense of *expect*, of *reflux* as a verb, and of *due to* where earlier authorities insisted on *owing to* or *because of*; in the last case his argument is so convincing that I will in future allow this usage in my editing, although avoiding it in my own writing.

Can one fault Dr Schoenfeld? I suggest that he is wrong to persist in his view that *moiety*, coming from the French word *moitié*, a half, can mean only 'half or almost half'. The *Oxford English Dictionary* gives, as the second meaning, admittedly with the qualification 'loosely', "One of two (or occasionally more) not necessarily equal parts into which something is divided", with examples dating back to Shakespeare in 1596, and the Supplement gives "A group of atoms forming part of a molecule", with examples back to 1935.

At one point Dr Schoenfeld refers to the "swinish verb to *destruct*", and I wonder what he would make of the statement, which I meet increasingly in manuscripts, "The compound *self-destructs*..." (for *decomposes*). I should like him to consider in his next edition the increasing use, especially by inorganic and organometallic chemists, of *reactivity* simply in the sense of *reactions* (as in the common title "Synthesis and reactivity of..." for papers in which only reactions, and no measures of reactivity, are described). This is effectively destroying a very useful word; the IUPAC *Compendium of Chemical Terminology* says of *reactive* and *reactivity*: "As applied to a chemical species, the terms express a kinetic property. A species is said to be more reactive or have a higher reactivity in a given context than some other (reference) species if it has a larger rate constant for a specified elementary reaction with the same reaction partner." He will perhaps also keep an eye on the growth of the grossly incorrect use of the work *educt* by chemists. German chemists have firmly adopted the use of *edukt* in the sense of starting material, and in consequence have taken to using *educt* in the same sense in English. This word, looking new and impressively technical, has been taken up by some American and British chemists, in spite of the fact that it has a long established meaning exactly the opposite of that they have in mind! An *educt* is defined as 'that which is educed', where *educere* (from the Latin *ē*, out of, and *ducere*, to lead—compare educate) means to draw out. *Collins' English Dictionary* gives "a substance separated from another by chemical change" and some dictionaries make interesting fine distinctions between the meanings of *educt* and *product*, but it suffices here to say that an *educt* is definitely something that comes out of, not something that goes into! If chemists must have a new work for starting material or reactant, they would do better to adopt *educt*, which is more logical and, at least as a noun, does not already have another meaning. It will be interesting to see how long it takes for chemists generally to adopt the so obviously illiterate use of *educt*. Given the overwhelming influence of the American Chemical Society's journals, and the low priority given in them to the quality of the English, it is likely that in the case of this word, and of most of the common errors noted by Dr Schoenfeld, the bad will ultimately drive out the good.

In dealing with specific items I have probably given the impression that the book

is simply another dictionary of word usage. It is not; it is a highly readable and very enjoyable set of essays, intended, as the author states in his Preface, not to give readers a recipe for good writing but rather to stimulate their appetites for good English, which it will surely do. I appeal to all those who submit papers in English to *Journal of Organometallic Chemistry* to buy this book, and read it regularly.

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