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Book reviews

Catalysis of Organic Reactions, edited by Paul N. Rylander, Harold Greenfield and Robert L. Augustine (Chemical Industries Series, No. 133), Marcel Dekker, Inc., 1988, xi + 441 pages, ISBN 0-8247-7927-4, US \$99.75.

This volume of *Catalysis of Organic Reactions* is a collection of the papers presented at the Eleventh Conference on Catalysis of Organic Reactions in Savannah, Georgia in April 1986. The conference was sponsored by the Organic Reactions Catalysis Society, an affiliate of the Catalysis Society of North America. The range of topics covered is impressive, with excellent papers dealing with both homogeneous and heterogeneous systems, and input from both academic and industrial laboratories.

The first section will probably be that which engenders the most interest in the organometallic chemist, dealing with homogeneous catalysis. The topics covered include hydroformylation of terpenes, carbonylation of allylic substrates, syntheses of diesters, palladium catalysed oxidations, and catalytic asymmetric alkylations using phase transfer catalysis. The style is quite varied, with some sections presenting recent research results, whilst other authors have given overviews of their topics. That all the papers in this section come from authors in industrial laboratories is perhaps surprising in view of the large number of academic groups working in this area. The next section is somewhat more specialised in focus, detailing the preparation of amines and anilines. The catalyst involved are predominantly heterogeneous, and three of the four articles deal with the reductions of nitroarenes.

Section 3 deals with heterogeneous catalysts, and considers widely diverse topics, ranging from characterisation of catalysts to dehydrogenations of diarylamines. The three articles on selective reactions are similarly varied. The uses of $[\text{Ir}(\text{py})(\text{PCy}_3)_2(\text{cod})][\text{PF}_6]$ as a selective catalyst for hydrogenolysis of benzylic alcohols in the synthesis of surfactants, and some novel reactions of organozinc reagents, were particularly interesting. The final section is titled as selected topics; Negishi's article on aspects of cross-coupling reactions should prove of particular interest to organometallic chemists.

This volume has been well-produced, and unusually for a volume of conference proceedings these days, was typeset. Thus the appearance is better than for many comparable volumes, but the production delay has been correspondingly longer. I must admit to a preference for speed, particularly for the publication of relatively ephemeral material. The index seems fairly complete. The articles are of good quality and serve a wide range of interests, though one wonders whether some of the material has also been published in the primary literature. Nonetheless this will be an interesting book for organometallic chemists, and for anyone interested in catalysis, and this was clearly an exciting and stimulating meeting.