Additions and Corrections

Mark A. Andrews, Tony C.-T. Chang, Chi-Wen F. Cheng, Lisa V. Kapustay, Kevin P. Kelley, and Mark J. Zweifel: Nitration of Alkenes by Palladium Nitro Complexes. **1984**, *3*, 1479–1484.

We inadvertently overlooked some significant prior work in the area of oxypalladation of dienes (Hughes, R. P.; Powell, J. *J. Organomet. Chem.* **1973**, *60*, 427–441 and reference therein). In particular, Hughes and Powell thoroughly analyzed the ^{1}H and ^{13}C NMR spectra of hexafluoroacetylacetonate complexes derived from the methoxy- and acetoxypalladation of norbornadiene. Our reported results are fully consistent with their more detailed studies. We regret the oversight.

Book Reviews

Fundamental Research in Homogeneous Catalysis. Vol. 4. Edited by M. Graziani and M. Giongo. Plenum Press, New York/London. 1984. x + 208 pages. $00.00.

This book constitutes the written record of the 10 plenary lectures given at the 3rd International Symposium on Homogeneous Catalysis held in Milan, Italy, in the fall of 1982. This series of symposia was initiated by the late Minoru Tsutsui to whom this volume is dedicated. What Tsutsui sought was a forum that would demonstrate the growth in scope, understanding, and diversity of homogeneous catalysis; he would have been delighted with what his efforts wrought. The contributors discuss (in order): the mechanisms of hydroformylation (the actual title of this article is "Do We Know the Mechanism of the Hydroformylation Reaction?" and the author's (Marko) answer is an equivocal no); supported clusters and the mechanism of CO reduction; metal nitro complexes as oxygen-transfer agents; catalysis of transition-metal complexes under phase-transfer conditions; hydrido(phosphine)ruthenates; organopalladium and organomolybdenum intermediates; the impact of transition-metal-based homogeneous catalysis in industrial processes; asymmetric isomerization of allylamines; organometallic compounds in the preparation of supported catalysts for polymerization and other reactions; and the role of transition-metal salts in single-electron-transfer organic reactions.

The 10 articles range in length from as little as 5 to as many as 36 pages, and some represent the work of a single author while the longest article has 13 coauthors. Chemists from 7 different countries are contributors. Most of the articles have already been published in referred research journals and such is the pace of developments that already some of the suggestions have been proven wrong. There is nevertheless considerable merit in having this collection available in one thin volume because more speculation occurs here than is usually permissible in journal articles and the great variety of papers, juxtaposed, will stimulate nimble minds to new and very likely unexpected applications of the many reactions discussed.

Milton Orchin, *University of Cincinnati*

Organic Synthesis. Volume 62. Martin F. Semmelhack, Editor-in-chief. Wiley, New York. 1984. xvi + 269 pages. $26.50.

Over the past several years *Organic Syntheses* has developed into one of the most valuable reference works serving the synthetic chemist. The original goal of the series was to present reliable, "checked" procedures for the preparation of specific organic compounds. However, recently the focus of these volumes has been to describe representative examples of new synthetic methods of established general utility. Each entry thus constitutes a minireview article, presenting not only a checked experimental procedure for the reaction but also including a table summarizing the scope and limitations of the method as well as a section discussing the mechanism of the reaction and critically comparing it to related methodology for effecting the same transformation.

The growing importance of organometallic chemistry to organic synthesis is recognized by the inclusion of a number of metal-promoted reactions among the 28 procedures contained in the present volume. Highlights include the stereoselective preparation of alkenes via cuprate additions to acetylene, the palladium-catalyzed oxidation of terminal olefins, the coupling of organocuprates to enol phosphate derivatives, the coupling of aryllead compounds with β-dicarbonyl anions, the palladium-catalyzed coupling of vinylic and allylic halides with aryl- and vinylmetal derivatives, the synthesis of dihydropyrroles via the Pd(II)-catalyzed internal amination of olefins, and the conjugate allylation of enones using allylsilanes.

Rick L. Danheiser, *Massachusetts Institute of Technology*