

Martin, S.A. Matchett, and J.R. Norton; Syntheses and Interconversions of Nitrosyl, Nitrido, and Isocyanato Carbonyl Clusters, by W.L. Gladfelter; The Interpretation of Carbon-13 NMR Chemical Shifts and their Correlation with the Reaction Chemistry of Organometallic Carbenes, Carbynes, and related Species, by R.F. Fenske; Electronic Structure of Nonacarbonyl ( $\mu$ -alkylidyne)-trimetal Clusters, by M.B. Hall; Electron Transfer Reactions of Tungstenocene Dialkyls, by J.C. Hayes and N.J. Cooper; Small Hydrocarbons as bridging Ligands in Transition Metal Chemistry: Synthesis, Structures, and Reactivity, by W.A. Herrmann; Formyl, Hydroxymethyl, and Carbene Complexes of Iridium, by D.L. Thorn; Oxidative Addition of soluble Iridium and Rhodium Complexes to Carbon-Hydrogen Bonds in Alkanes, by A.H. Janowicz, C.A. Kovac, R.A. Periana-Pillai, J.M. Buchanan, T.M. Gilbert, and R.G. Bergman; Iridium Compounds in Catalysis, by R.H. Crabtree.

While there is much of interest in this book, it is difficult to conclude that the series will provide material of lasting value, since the authors will find more general outlets for their publications.

The volume is dedicated to the late Professor Minoru Tsutsui.

*School of Chemistry and Molecular Sciences,  
University of Sussex, Brighton BN1 9QJ (Great Britain)*

MICHAEL F. LAPPERT

*Current Trends in Organic Synthesis*; edited by H. Nozaki, Pergamon Press, 1983, xii + 430 pages, £45.00.

This book is a collection of contributions to the Fourth International Conference on Organic Synthesis, held at Tokyo in August 1982. Unlike many such compilations it does give the reader a good general idea of its subject.

Synthesis was once undertaken as the ultimate proof of structure. Nowadays a chemist may have, or give, many reasons for indulging in this art. The goal of his synthesis may be a natural product that is needed in larger amounts than nature will readily yield, as we see here in E.J. Corey's work on the leukotrienes and C.B. Reese's refinements of nucleotide coupling; he may be interested in developing new synthetic methods; he is now very often interested in gaining stereochemical control over organic syntheses, as attested by a dozen contributions to this symposium. There is just one contribution having the original goal of structural proof: Y. Kishi's synthesis of degradation products from palytoxin, the incredibly complex poison from soft corals.

The full impact of organometallic chemistry on organic synthesis is yet to be felt, but there are contributions from H.C. Brown on new hydroborating agents, from three groups on organosilicon chemistry in synthesis, and from J.F. Normant and A. Alexakis on organocopper and organocuprate reagents. Palladium compounds as catalysts are mentioned in several connections, but apart from these there is little use of the new chemistry arising from transition metals and olefins. None the less, the book which is excellently produced can be recommended to all chemists interested in organic synthesis or in what it can do.

*School of Chemistry and Molecular Sciences,  
University of Sussex, Brighton BN1 9QJ (Great Britain)*

J.W. CORNFORTH