

Homogeneous Catalysis: The Applications and Chemistry of Catalysis by Soluble Transition Metal Complexes

By G. W. Parshall and S. D. Ittel, Wiley, New York, 342 pp., 1992, \$50.00

This is an update and expansion of Parshall's 1980 book on *Homogeneous Catalysis* that served as a major guide to the commercial successes of homogeneous catalysis. Especially important is the introduction of new developments in

asymmetric synthesis and olefin polymerization. The number of commercial applications of soluble catalysts has doubled since the first edition; since the book has remained very concise (it has only expanded from 230 to 310 pages), the coverage is less detailed in many cases.

The authors have made excellent choices of topics and included the latest results. The application covers the range from the large-scale commercial process for the production of monomer and polymers to the enantioselective synthesis of

bioactive compounds. They provide catalytic schemes that give sufficient details for understanding the fundamental steps in a process. I am finding it a valuable source for a course in organometallic chemistry and as an excellent introduction to new fields in catalysis. This book will serve as a useful resource for chemists involved in the synthesis of organic molecules.

Robert H. Grubbs
Chemistry Dept.
California Institute of Technology
Pasadena, CA 91125