

BOOK REVIEW

Organic Syntheses with Noble Metal Catalysts. *Organic Chemistry Series, Vol. 28.* P. N. RYLANDER. Academic Press, New York, 1973. 331 pp. \$22.50.

The importance of some noble metals and their compounds in organic synthesis has been recognized for many years, but it is only recently that the versatility of these reagents has been widely exploited and the role of coordinating ligands recognized. This volume is written descriptively from the point of view of the preparative organic chemist. It contains a wealth of information in a readily accessible form in the body of the text, although the Subject Index is less helpful because almost wholly it gives compound names, and contains little mention of reaction types. The references are extensive and up to date.

The chapter headings are: Dehydrogenation; Homogeneous Hydrogenation; Oxidation; Osmium and Ruthenium Tetroxides as Oxidation Catalysts; Isomerization; Oligomerizations, Telomeri-

zations and Condensations; Carbonylation and Hydroformylation; Decarbonylation and Desulfonation; and Silicon Chemistry. Mechanistic speculation has been eschewed by the author who limits himself to occasional hints that others have not followed this self-denying ordinance, but this volume will be a splendid source of basic information for those who wish to explore this field mechanistically. Although this work is centered on the noble metals, other catalysts and reagents are discussed for comparison purposes which increases its value to the preparative chemist. It is well produced, and the few errors cause no problems, and the author is to be congratulated on giving this comprehensive survey of so much important material.

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