

## BOOK REVIEW

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*Advances in Organometallic Chemistry, Vol. 6*, edited by F. G. A. STONE AND R. WEST, Academic Press, New York and London, 1968, xiii + 363 pages, 152s.

The volume maintains the high standard of this series. An innovation, meant to set a precedent for future volumes, is the inclusion of an essay "of a personal and historical nature" by a scientist who has contributed greatly to organometallic chemistry. In this case the essay entitled "A Forty Years' Stroll through the Realms of Organometallic Chemistry", is by Karl Ziegler, and its style is unusual and refreshing for an advanced specialist book of this kind.

There is an excellent review by M. Kumada and K. Tamao on Aliphatic Organopolysilanes, to the chemistry of which Kumada and his colleagues have made such important contributions; it includes a list of all the known organopolysilanes containing at least one aliphatic radical attached to silicon.

A balanced and well-informed account of Catalysis by Cobalt Carbonyls, by A. J. Chalk and J. F. Harrod, deals with hydroformylation, hydrogenation, hydrogenolysis, hydrosilation, isomerization, carboxylation, carbonylation, and polymerization.

An account of Redistribution Equilibria of Organometallic Compounds by K. Moedritzer summarizes older as well as recent work on redistributions involving carbon-metal bonds, but there is rightly an emphasis on the impressive use by the author and Dr. Van Wazer of nuclear magnetic resonance in analysis of complex mixtures obtained from redistribution.

Finally, there is a very useful account by M. I. Bruce of the Mass Spectra of Organometallic Compounds. This concentrates almost entirely on complexes of transition metals, and in this area will be a valuable reference work as well as a sound introduction. The account of main group compounds, which occupies only three pages, is little more than a list of references, and it is to be hoped that a full review of this aspect of the subject will be presented in a later volume of the series.

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