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### Book review

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*Carbyne Complexes*; by H. Fischer, P. Hofmann, F.R. Kreissl, R.R. Schrock, U. Schubert and K. Weiss, VCH, Weinheim, 1988, xviii + 235 pages, DM 145.00. ISBN 3-527-26948-7.

This book is a companion to one entitled *Transition Metal Carbene Complexes*, by K.H. Dötz et al. (Verlag Chemie, Weinheim, 1983). Both were written as a tribute to Professor E.O. Fischer, the present volume to mark his 70th birthday.

There are 6 chapters with the following titles and authors (in parentheses are shown the number of pages and references, respectively): "The Synthesis of Fischer-type Carbyne Complexes", by H. Fischer (30 pages, 172 refs.); "Solid State Structures of Carbyne Complexes", by U. Schubert (16 pages, 72 refs.); "Electronic Structures of Transition Metal Carbyne Complexes", by P. Hofmann (36 pages, 58 refs.); "Selected Reactions of Carbyne Complexes", by F.R. Kreissl (38 pages, 231 refs.); "High Oxidation State Alkylidyne Complexes", by J.S. Murdzek and R.R. Schrock (51 pages, 121 refs.); and "Catalytic Reactions of Carbyne Complexes", by K. Weiss (20 pages, 43 refs.).

Except for Drs. Murdzek and Schrock, the authors are former coworkers of Professor Fischer. All are distinguished practitioners with extensive experience in the field, except for Dr. Murdzek (Ph.D., 1988).

The area of carbyne-metal complexes is, of course, one that was initially recognised by Professor E.O. Fischer, the first such complex having been synthesized by him, in collaboration with G. Kreis, in 1973. This represented a major extension of another discovery made in his laboratories, namely that of carbene-metal complexes, the first such compound having been prepared, with A. Maasböl, in 1964. Both types of complexes are now extremely widespread; they have an important role to play in several metal-promoted organic syntheses and catalytic reactions. High oxidation state carbyne-metal complexes were discovered (by Schrock) in 1975, and have an extensive chemistry.

This book is attractively produced and will be an invaluable source book on a significant area of organometallic chemistry for several years to come.

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