

$\text{NaBEt}_3\text{R}$  ( $\text{R} = \text{H}, \text{Et}, \text{C}\equiv\text{CMe}$ ) compounds, alkylboron hydrides and diethyl- and diphenyl-chloroborane. Germyl ( $\text{GeH}_3$ ) derivatives of diverse sorts are covered in the next chapter and the syntheses of some organophosphorus compounds are provided in Chapter 7. The final chapter is a catch-all, but organometallic chemists will find the synthesis of trimethylgallium with which it starts useful. Syntheses of  $\text{Et}_4\text{N}^+\text{SnCl}_3^-$  and  $\text{Et}_4\text{N}^+\text{GeCl}_3^-$  also are worth special mention.

The general value of this series lies in the fact that one can be reasonably sure that these preparative recipes will work since they all have been checked by independent groups of workers. The special value of the present volume lies in the fact that so many of the compounds whose syntheses are reported actually are useful ones which find application in synthesis or in catalysis. The editor-in-chief may be congratulated on a job well done.

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*Metal  $\pi$  Complexes, Volume II, Part 2, Specific Aspects;* by Max Herberhold, Elsevier Publishing Co., Amsterdam, London, New York, 1974, xvi + 508 pages, Dfl. 250.00 (US\$ 96.20)

Volume I of this monumental work was published in English in 1966, Volume II part 1 in 1972, and now part 2. The author is a member of the distinguished Department of Inorganic Chemistry at the Technische Universität, Munich, where, under E.O. Fischer, much of the chemistry described in these volumes originated. The volume under review treats certain specific aspects of mono-olefin complexes in a very complete and thorough manner. In my opinion it is an excellent book for the research worker who needs a reasonably detailed background knowledge in the field. With its 2102 references it provides a useful key to the primary and review literature before about 1971, and by an extensive Appendix of 38 pages, through 1971 into 1972. It also represents a great amount of meticulous work on the part of its author, complemented by an excellent translation by J.A. Connor of Manchester. It is easy to read and full of well digested information. Spectroscopic (IR, UV, NMR, and mass spectra) and structural studies, stability, nature of olefin  $\pi$ -complexes in industrial processes are all aspects of mono-olefin  $\pi$ -complex chemistry very adequately treated. The text occupies 320 pages followed by 63 pages of references and the Appendix. There are also good Subject and Author indices, together occupying 84 pages. The book is well produced, as complete as humanly possible for its size, and remarkably free from error. I warmly recommend it to all engaged in olefin-complex and petrochemical research, whether academic or industrial.

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