

Both books are written in German, but English translations of the author's preface, the table of contents and chapter and section headings are provided. Volume 12 contains a formula index which covers both volumes. Literature coverage is complete to the end of 1971 but extends well into 1972.

*Department of Chemistry  
Massachusetts Institute of Technology  
Cambridge, Massachusetts 02139 (U.S.A.)*

DIETMAR SEYFERTH

*Formation of C—C Bonds, Vol. 1, Introduction of a Functional Carbon Atom,*  
by J. Mathieu and J. Weill-Raynal, Georg Thieme-Verlag, Stuttgart, 1973,  
xxiv + 495 pp., DM 128.

It is the purpose of this three-volume series to systematize the known procedure for forming carbon—carbon bonds, with emphasis on the synthetically useful reactions. This, the first volume of the series, deals with those carbon—carbon bond-forming reactions which simultaneously introduce a new functional group at the new junction, i.e.,  $\geq\text{C}- + \geq\text{C}-\text{Z} \rightarrow \geq\text{C}-\overset{\text{I}}{\text{C}}-\text{Z}$ . The chapters cover a large number of reactions including mono-, di- and tri-halomethylation, mono- and dihalomethylenation, oxymethylation, thio-methylation and variants involving other oxidation states of sulfur, amino-methylation and its variants including diazomethylation, formylation, carboxylation, cyanation and carbamoylation.

The information on these reactions is presented by means of equations, many tables and brief textual material in footnote-style concerning scope and limitations, conditions, etc. Appropriate references to the primary and the review literature are provided. Organometallic compounds, mostly Grignard and organolithium reagents, but also some others, are used in quite a few of these reactions.

The formation of a carbon—carbon bond often is a key step in the synthesis of complex organic compounds and the synthetic chemist should find it very useful to have the reactions which accomplish this task evaluated critically and organized in a clear, systematic manner. This handsomely produced book can be recommended to all chemical libraries.

*Department of Chemistry  
Massachusetts Institute of Technology  
Cambridge, Massachusetts 02139 (U.S.A.)*

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