BOOK REVIEW

Acetylenic Compounds, Preparation and Substitution Reactions; by T. F. Rutledge, Reinhold Publishing Corporation, New York, 1968, xvii+342 pages, £9.6.6.

R. A. Raphael's "Acetylene Compounds in Organic Synthesis" was published in 1955. No general text devoted to acetylene chemistry has appeared since despite the major developments which this class of compounds has undergone in the intervening period.

In the first of two volumes, Dr. Rutledge deals with the preparation and substitution reactions of acetylene compounds. At least two thirds of the book under review are of direct interest to the organometallic chemist and include authoritative accounts of alkali metal acetylides and acetylenic Grignard reagents. Ethynyl derivatives of other main group elements (transition metals are, suprisingly, excluded), virtually an exclusive development of the past fifteen years, receive more cursory attention, but their treatment is commensurate with a book of this size and the more important references are discussed in some detail. Other chapters describe recent developments in oxidative coupling reactions and in the chemistry of cyclic and macrocyclic acetylenes and also include an interesting account of acetylene compounds as drugs.

The author states that the book is primarily industry-oriented for the organic chemist, nonetheless, it contains a wealth of information both for the specialist and for the general reader. Some aspects of the subject, notably reaction mechanisms, receive rather elementary treatment, but this should in no way detract from an otherwise excellent book. The text is well set out with numerous formulae and diagrams, and appears to be free from obvious errors.

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