

Book review

Acetylenes and Allenes; by T. F. Rutledge. Reinhold Book Corporation, New York, Amsterdam and London, 1969, 16+432 pages. £10.

The present volume is the second of a two-volume series on "Acetylenic Compounds" of which the first was published in 1968. The contents of the volume now under review are firstly (103 pages) an account of the methods available for the preparation of allenes and cumulenes as well as a treatment of their reactions. The major section of the book, however, deals with addition reactions of acetylenes, and this is subdivided into additions general to all types of acetylenic compounds, and additions to special types of acetylenes *e.g.* those containing electron-attracting substituents, etc. A third section deals with the use of acetylenic compounds for the preparation of vinyl derivatives. Many of these reactions have commercial importance and they include the interesting carbonylation reactions of acetylenes in presence of nickel, cobalt and palladium catalysts. The following section on the cyclisation and oligomerisation of acetylenes in presence of metal compounds will be of special interest to organometallic chemists and it forms a concise review of the various types of reactions which have been studied. Finally the section on acetylenic polymers, which includes those polymerisations catalysed by transition metal complexes, completes the survey.

The book is written authoritatively, the classification of reactions follows a logical pattern and the general format is clear and well set out. Together with the earlier volume the present work constitutes a balanced survey of acetylene chemistry and it can be recommended confidently.

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