Book review

Organoboranes in Organic Synthesis; by G.M. Cragg, Dekker, New York, 1973, xiii + 422 pages, \$24.50.

The present volume is the first of a new series, Studies in Organic Chemistry, produced under the executive editorship of P.G. Gassmann, and it is appropriate to initiate the venture with a review of the preparation and applications of organoboranes. The value of these versatile reagents for organic synthesis was, of course, first recognised by H.C. Brown, who has continued active research in the area up to the present. There is now a very extensive literature and good reviews will be welcomed by most chemists. Dr. Cragg has summarised the various types of organic compounds which are prepared from the organoboranes in his first chapter, which thus provides an overall view of the scope of these reagents at the present time. It is followed by more detailed treatment, often with the addition of practical details, of the preparation of the organoboranes themselves from various types of unsaturated compounds, the oxidation of the boranes and the process of hydroboration. Finally there are included summaries of the syntheses of carbon chains and rings, the synthesis of a variety of functional groups and the reduction of various groupings achieved by use of organoborane derivatives.

All the chapters contain quite extensive sets of literature references and work published up to mid-1972 is included. The book, therefore, provides an extensive up-todate survey of all aspects of these reagents; it is well written, is copiously illustrated by formulae, and is very largely free from trivial errors. The volume is thus an excellent start to the new series, and will be a valuable addition to all libraries.

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