

sure that "the apparatus will have the requisite accuracy," and no mention is made of testing of such apparatus. There are chapters on practical details of acidimetry and alkalimetry, on argentometric methods, oxidation-reduction methods, and a comprehensive chapter "Titrations with EDTA and Related Compounds" by Flaschka and Barnard. In covering the practical aspects of inorganic titrimetry within a compass of only 210 pages, the authors have made a wise selection of essential material and made use of a concise style of presentation. In most instances, the level is between a modern textbook and a comprehensive treatment such as Kolthoff and Stenger or Kolthoff and Belcher.

The second part of the book on Organic Quantitative Analysis includes practical chapters on weighing and other manipulations, and on the determination of C, H, N, halogens, S, O and metallic elements. It is interesting to learn how some classical procedures, generally taken for granted by the non-specialist, still need improvement in various respects. All these chapters can be read with profit by anyone carrying out such determinations. There is a good discussion of functional group analysis (130 pages) and finally a chapter on organic applications of titrations in non-aqueous solvents. In this chapter, the discussion of methods of end-point detection is not restricted to visual methods.

Altogether, the volume is a useful and practical contribution to the literature of analytical chemistry, and in the reviewer's opinion the aim expressed in the preface has been accomplished.

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**Neuere Methoden der Präparativen Organischen Chemie**  
Band II. Edited by WILHELM FOERST. Verlag Chemie, G.m.b.H., Pappelallee 3, Weinheim/Bergstr., Germany. 1960. 272 pp. 20.5 × 18 cm. Price, kart. DM., 14.50; geb. DM. 18.—.

The development of preparative organic chemistry during the last half century has brought with it a great increase not only in the number of known reactions but also in specific modifications on which success and yield often depend. In a number of cases investigations of reaction mechanisms have led to a degree of understanding which enables the experimenter to vary conditions rationally rather than by intuition. It has, however, become more and more difficult

for the preparative organic chemist to keep up with the original literature and even to consult it exhaustively with respect to a particular problem. The survey and review literature has, therefore, become increasingly necessary. A series of articles published since 1940 in "Die Chemie" occupies an important place in this literature. The papers which had appeared by 1942 were published as Volume I of *Neuere Methoden der Präparativen Organischen Chemie*.

After the war, the publication of the highly successful reviews was resumed by "Angewandte Chemie." Fourteen articles of this second series have been brought up to date by the authors and collected in the present volume. It contains the following contributions: Syntheses with Acetoacetaldehyde (Franke, Kraft and Kosswig); Preparation of Peptides and Ureides by Way of Reactive Amides or Imides (Goldschmidt and Krauss); Preparation of Long-Chain Carboxylic Acids from Cyclohexane-(1.3)-diones (Stetter); Cyclopentanone-*o*-Carboxylic Ester and its Preparative Significance (Mayer); Ketene in Preparative Organic Chemistry (Quadbeck); Preparative and Analytical Significance of Phosphines and Related Compounds (Horner and Hoffmann); Reduction of Carbonyl Compounds by Means of Complex Hydrides (Hörmann); Alkylation of Aromatic Amines (Stroh, Ebersberger, Haberland and Hahn); Chemical Syntheses of Intermediates of the Sugar Metabolism (Fischer); Amidomethylations (Hellmann); Selective Catalytic Oxidation by Means of Noble Metal Catalysts (Heyns and Paulsen); Alkylation of Phenols and Olefins (Stroh, Seydel and Hahn); Continuous Preparation of Phenyl Sodium (Ruschig, Fugmann and Meixner); and Newer Investigations on Oxidations with Lead Tetraacetate (Criegee).

The chapters deal with the principles of the respective syntheses as well as variations, applications and yields. They are addressed to the experimental chemists and contain detailed procedures which can be followed without consultation of the original literature. While no systematic checking of the procedures is in evidence, their acceptance by the expert authors gives confidence in their reliability. Only a few of the articles discuss the reaction mechanisms involved. Although recent publications in English cover in part the same field, the present volume should be highly rewarding for anybody who is conversant with German. A low cost has been made possible by a "paper-back edition," but paper, printing and typographical arrangement are of high quality.

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