

protein reaction is described as "a common test for the *phenolic group*." (5) *1,2-Diketones* (page 108).—The inclusion of the quinoxaline (or phenazine) reaction is recommended as a test for these diketones, since this condensation generally occurs instantaneously and quantitatively in alcoholic solution with *o*-phenylenediamine, the products are crystalline, easily purified and of sharp melting point. It is generally simpler and much more satisfactory than the benzilic acid rearrangement, and is, of course, equally useful in the identification of 1,2-diamines.

MARSTON TAYLOR BOGERT

Aluminiumchlorid in der organischen Chemie. (*Aluminum Chloride in Organic Chemistry.*) By GEORG KRÄNZLEIN, I. G. Farbenindustrie A.-G., Höchst am Main. Second, revised and enlarged edition. Verlag Chemie, G. m. b. H., Corneliusstrasse 3, Berlin W 10, Germany, 1932. 143 pp. 16 × 23.5 cm. Price, Mk. 12.

In this handy volume the author presents an excellent picture of the role of aluminum chloride in organic chemistry—its service in synthesis; its action in reactions which involve reduction, dehydrogenation, rearrangement, polymerization or cleavage; and its technical applications. The various modes of action are illustrated with carefully selected examples, and supported with very many references to the literature.

Monographs on special topics in organic chemistry are becoming increasingly valuable both to the student and to the investigator. This volume on an important reagent is one of the best of its kind.

E. P. KOHLER

The Terpenes. Vol. II. *The Dicyclic Terpenes, Sesquiterpenes and their Derivatives.* By J. L. SIMONSEN, D.Sc. (Manc.), F.I.C., F.R.S., Professor of Chemistry, University College of North Wales. The Macmillan Company, 60 Fifth Ave., New York, 1932. xi + 627 pp. 14 × 22.5 cm. Price, \$7.00.

With the publication of the second volume of "The Terpenes" the author has given us a work which will be indispensable to the student of terpene chemistry. As stated in the preface, few, if any, natural products have formed the subject of such intensive study as the pinenes and camphor. The section dealing with the sesquiterpenes includes the brilliant researches of Ruzicka and his collaborators.

The present work is more than a mere review of the literature, and could only have been written by one thoroughly acquainted with the subject. The development of the views regarding chemical constitution is taken up in order, and where further research is needed, the author has so indicated.

It is gratifying to have so excellent a work on the terpenes available in the English language.

E. K. NELSON

BOOKS RECEIVED

January 15, 1933–February 15, 1933

KURT ALDER. "Die Methoden der Dien-Synthese." Handbuch der biologischen Arbeitsmethoden, Emil Abderhalden, Editor. Abt. I, Chemische Methoden, Teil 2, 2 Hälften, Heft 9 (Schluss). Urban and Schwarzenberg, Friedrichstrasse 105 B, Berlin N 24, Germany. 212 pp. RM. 13.50.

HANS BODE AND HANS LUDWIG. "Experimentelle Einführung in das Wesen organisch-chemischen Reaktionen insbesondere für Lehramtskandidaten." Verlag Franz Deuticke, Helferstorferstrasse 4, Wien, Austria. 48 pp. M. 1.50.

- GUSTAV BONWITT. "Das Celluloid und seine Ersatzstoffe. Handbuch für Herstellung und Verarbeitung von Celluloid und seinen Ersatzstoffen." Union Deutsche Verlagsgesellschaft Zweigniederlassung Berlin, Kraussenstrasse 35-36, Berlin SW 19, Germany. 813 pp. RM. 85.
- C. DRUCKER and E. PROSKAUER, Editors. "Physikalisch-chemisches Taschenbuch." Vol. II. Akademische Verlagsgesellschaft m. b. H., Markgrafenstrasse 6, Leipzig C 1, Germany. 481 pp. M. 15; bound, M. 17.
- ANDRÉ GEORGE. "Mécanique Quantique et Causalité." Hermann et Cie., Éditeurs, 6 Rue de la Sorbonne, Paris Ve, France. 18 pp. Fr. 6.
- FRANZ HOLZL. "Anleitung zur Massanalyse. Eine Einführung in die Elemente der Theorie und in das praktische Arbeiten für Studierende der Chemie und Pharmazie." Verlag von Franz Deuticke, Helferstorferstrasse 4, Wien, Austria. 141 pp. M. 4.
- M. NIERENSTEIN. "Incunabula of Tannin Chemistry." A Collection of Some Early Papers on the Chemistry of the Tannins. Reproduced in Facsimile and Published with Annotations. Edward Arnold and Co., 41-43 Maddox St., London W 1, England. 167 pp. 12 s./6 d. net.
- F. F. NORD and R. WEIDENHAGEN. "Ergebnisse der Enzymforschung." Band II. Akademische Verlagsgesellschaft m. b. H., Markgrafenstrasse 6, Leipzig C1, Germany. 358 pp. M. 28; bound, M. 30.
- FENTON B. TURCK. "The Action of the Living Cell. Experimental Researches in Biology." The Macmillan Company, 60 Fifth Ave., New York. 308 pp. \$3.50.
- J. H. WHITE. "The History of the Phlogiston Theory." Edward Arnold and Co., 41-43 Maddox St., London W 1, England. 192 pp. 6 s., net.
- "Annual Tables of Constants and Numerical Data, Chemical, Physical, Biological and Technological." Published under the Patronage of the International Research Council and of the International Union of Chemistry. McGraw-Hill Book Co., Inc., 330 West 42d St., New York. Vol. VIII, 2 parts (1927-1928), 2706 pp., \$20.00. Vol. IX (1929), 1607 pp.; Index to Vol. IX, 124 pp.; \$16.00.
- "Gmelins Handbuch der anorganischen Chemie." 8 Aufl. System-Nummer 30, Barium. Herausgegeben von der Deutschen Chemischen Gesellschaft. Verlag Chemie, G. m. b. H., Corneliusstrasse 3, Berlin W 10, Germany. 390 pp. Mk. 56 to subscribers; Mk. 64 separately.
- "Micro Chemistry at New York University." New York University Centennial. Band XI, Lieferung 2, Neue Folge, Band V, *Mikrochemie*. Emil Haun and Co., Maria-Theresien-Strasse, Wien I, Austria. 368 pp.
- "An Outline of Atomic Physics." By Members of the Physics Staff of the University of Pittsburgh. John Wiley and Sons, Inc., 440 Fourth Ave., New York. 348 pp. \$3.50.