## The Colorimetric and Potentiometric Determination of $P \mathrm{H}$. Outline of Electrometric

 Titrations. By I. M. Kolthoff, Ph.D., Professor of Analytical Chemistry in the University of Minnesota. John Wiley and Sons, Inc., 440 Fourth Ave., New York 1931. xi +167 pp .35 figs. $15 \times 23.5 \mathrm{~cm}$. Price, $\$ 2.25$.This is primarily a textbook of hydrogen-ion concentration measurement and potentiometric titration for students who have completed an elementary course in physical chemistry. The book is divided into three sections dealing, respectively, with (1) the colorimetric determination of $P \mathrm{H}$, (2) the potentiometric measurement of $P \mathrm{H}$ and potentiometric titration and (3) conductometric titration. Problems are given in each section and a practical course consisting of a list of experiments to be performed is appended.

The book tends to be descriptive of the literature of the subject rather than informing of performance and technique. Thus it would appear that the student must obtain much of his practical information from lectures and conferences. Our present-day conception of the electrochemistry of solutions is briefly noted in the text, but, in general, the student is coached on time-honored principles. Incidentally, one is surprised to note that liquid junction potential receives such scant attention.

The book is an excellent introduction to the subject and will doubtless be useful to a much wider circle of readers than those for whom it is primarily intended.

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## BOOKS RECEIVED

August 15, 1931-September 15, 1931
E. v. Angerer. "Wissenschaftliche Photographie, eine Einführung in Theorie und Praxis." Akademische Verlagsgesellschaft m. b. H., Leipzig C 1, Germany. 185 pp . M. 11, unbound; M. 12.80, bound.

Joseph A. Babor, William L. Estabrooke and Alexander Lehrman. "Elemen of General Chemistry." Thomas Y. Crowell Company, 393 Fourth Ave., New York. 601 pp. $\$ 3.75$.

Joseph A. Babor, W. L. Estabrooke and Alexander Lehrman. "Laboratory Manual in Elements of General Chemistry." Thomas Y. Crowell Company, 393 Fourth Ave., New York. 420 pp. $\$ 2.00$.

Raph. Ed. Liesegang. "Kolloidchemie des Glases." Sonderabdruck aus der Kolloidchemischen Technologie. Verlag von Theodor Steinkopff, Residenzstrasse 32, Dresden-Blasewitz, Germany. 50 pp. RM. 4.

Hans Meyer. "Analyse und Konstitutionsermittlung organischer Verbindungen." Fifth revised edition. Verlag von Julius Springer, Linkstrasse 23-24, Berlin W 9, Germany. 709 pp. RM. 48, unbound; RM. 51, bound.
J. R. Partington. "A Textbook of Inorganic Chemistry for University Students." Third edition. The Macmillan Company, 60 Fifth Ave., New York. 1083 pp. \$4.75.

Cesare Serono. "Memorie e Communicazioni Scientifiche (1894-1930)." Istituto Nazionale Medico Farmacologico Serono, Via Casilina 125, Sede Centrale Roma 139. 701 pp .

Charles Phelps Smyth. "Dielectric Constant and Molecular Structure." American Chemical Society Monograph Series. The Chemical Catalog Co., Inc., 419 Fourth Ave., New York. 214 pp. \$4.00.

Edward R. Weidlein and William A. Hamor. "Science in Action. A Sketch of the Value of Scientific Research in American Industries." The McGraw-Hill Book Co., Inc., 370 Seventh Ave., New York, 310 pp. $\$ 3.00$.

