

NEW BOOKS

Die elektrometrische (potentiometrische) Massanalyse. (Electrometric (Potentiometric) Volumetric Analysis.) By Dr. ERICH MÜLLER, Professor and Director of the Laboratory for Electrochemistry and Physical Chemistry at the Technical High School, Dresden. Fourth revised and enlarged edition. Theodor Steinkopff, Dresden-Blasewitz, Residenzstrasse 32, Germany, 1926. viii + 246 pp. 56 figs. 15 × 24 cm. Price, unbound, R M 12; bound, R M 14.

The rapid development of new methods of electrometric analysis has resulted in a decided increase in size of this edition. So many of these new methods involve the use of titanous chloride that the author has devoted a special chapter to them, and has coined a new name for them which, by analogy, may be translated as "titanimetry." The author has also thought it worth while to insert the term "potentiometric" in the title of the book in order to exclude conductimetric methods of electrometric analysis. No considerable change has been made in the theoretical treatment.

This handbook remains the best which we have seen, in this field.

ARTHUR B. LAMB

Introductory College Chemistry. By NEIL E. GORDON, Professor of Chemistry, University of Maryland. New-World Science Series, edited by JOHN W. RITCHIE. World Book Company, 2126 Prairie Avenue, Chicago, Illinois, 1926. xiv + 688 pp. 137 figs. 21 × 14 cm. Price \$3.80.

This book differs from the usual text in chemistry by being essentially a teaching book written from a teacher's standpoint. It can hardly be called a text in the ordinary sense of the word. The course in chemistry outlined in it is placed on the basis of experiment wherever possible and the experiments are usually to be performed by the student. The exercises also are incorporated in the body of the text in connection with the topics which they are intended to illustrate. This arrangement will have a tendency to restrict the use of the book to the author's own laboratory, or to those laboratories where the instructor in charge is willing to follow quite closely the method of the author.

The book is modern in its attitude, the electron theory of valence being carried much further than is usual. To the casual reader it seems as if this might make the book somewhat mechanical in its outlook. The author has introduced some new terms. It is very doubtful whether the terms "deelectronization" and "electronization" can take the place of the older oxidation and reduction. These words are not more significant than the old ones excepting from the newer theoretical viewpoint.

The book is profusely illustrated both with diagrams and photographs. There are numerous pictures of plant interiors. Pictures of noted chemists also add to the interest of its pages. The book is altogether worth while, and would pay any teacher who would examine it closely.

P. A. BOND

Principles of General Chemistry. By STUART R. BRINKLEY, Assistant Professor of Chemistry, Yale University. The Macmillan Company, 60 Fifth Avenue, New York, 1926. x + 477 pp. 116 figs. 22.5 × 14.5 cm. Price \$3.50.

This textbook is written primarily for the use of students who have had High-School Chemistry and, consequently, has a different mode of approach from the usual text. Descriptive matter is reduced in amount, though not eliminated, and topics are arranged in some cases with the idea of giving the student a new viewpoint of the subject.

The book is very well arranged typographically and contains many interesting pictures, as well as a number of diagrammatic representations which are unusually clear. Exercises at the end of each chapter and a list of supplementary readings on each topic are valuable features.

Exception might be taken to some statements made by the author. There is an apparent confusion between the use of the terms "molar" and "molar" in connection with the statement of Raoult's law, good usage requiring the former. The conception of equilibrium is used before equilibrium is defined, and the same might be said about the terms basic and acid anhydrides. As a whole, however, the book is well written and should be of great value in the field for which it is designed.

P. A. BOND

Chemical Calculations: A Systematic Presentation of the Solution of Type Problems, with 1000 Chemical Problems Arranged Progressively According to Lesson Assignments. By BERNARD JAFFE, Instructor in Chemistry, Jamaica High School, New York City. New-World Science Series, edited by JOHN W. RITCHIE. World Book Company, 2126 Prairie Avenue, Chicago, Illinois, 1926. xv + 159 pp. 9 figs. 19.5 × 13.5 cm. Price \$1.28.

This valuable little book contains many well selected problems. In Part one, these are classified into ten types, each type being illustrated by a clearly explained example. This arrangement makes the problems more easily accessible to the student in his own work later. In Part two, problems are given illustrating the determination of molecular and atomic weights, specific-gravity calculations and the use of the simple factors involved in gravimetric and volumetric analysis. The last part of the book is given over to miscellaneous problems based on lesson assignments. Equations are given covering the facts involved in the problems under each topic, but the student is required to make the connection between the problem and the appropriate equation for himself. Included in the four or five hundred problems are a considerable number selected from the College Entrance Examination Board papers. The appendix gives the numerical data required for the problems. The book should be very useful as an accessory text in courses in General Chemistry.

P. A. BOND