pyridiniumammonium hydrate also have been reported in normal human urine, it is possible that the color developed in normal urine may be due in part to compounds other than nicotinic acid or its methylated betaine, trigonellin. But all substances producing color by this reaction have been absent from the pellagrin urine thus far examined.

DEPARTMENTS OF BIOCHEMISTRY AND MEDICINE
UNIVERSITY OF CINCINNATI
S. P. VILTER
T. D. SPIES
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RECEIVED FEBRUARY 7, 1938

NEW BOOKS

Ambix. The Journal of the Society for the Study of Alchemy and Early Chemistry. Vol. I. F. SHERWOOD TAYLOR, Editor. Taylor and Francis, Ltd., Red Lion Court, Fleet Street, London, E. C. 4, England, 1937. 18 × 25 cm. Published quarterly. No. 1, May, 1937, pp. 1–92; No. 2, Dec., 1937, pp. 93–141. Price for year, £1, 4s, 0.

This new journal will delight the heart of every chemist who is interested in the early history and cultural values of his science. The contributions that have appeared in the first two issues of this quarterly are not only of high quality but in their respective fields of historical inquiry they represent the product of most painstaking original research.

It is impossible in the present notice to review each separate article that has been published in the two numbers of *Ambix* that are now before us. The period covered in the twelve contributions extends from "Jofuku or Joshi, the earliest alchemist of historical record" (Tenney L. Davis and Rokuro Nakaseko, pp. 109–115), through the later "Origins of Greek Alchemy" (F. Sherwood Taylor, pp. 30–47) and the medieval writings of "Albertus Magnus on Alchemy" (J. R. Partington, pp. 3–20), down to the time when the first members of the Royal Society under the leadership of Boyle became interested in "Hooke's Theory of Combustion" (D. J. Lysaght, pp. 93–108). Within this immense range of nearly 2000 years (from approximately 250 B.C. to 1680 A.D.) occurred the rise and fall of alchemy. While only a few high spots in this long period are discussed in the first two numbers of *Ambix*, we may expect, from the excellence of the articles already published, that future issues of this journal will most worthily continue to fill in the gaps. The chemist, who begins his membership and subscription now, will have in his possession, as the years go by, a detailed history of early chemical and alchemical origins of gradually increasing completeness. Not only every teacher of chemistry should have access to this journal but those who are active in industrial applications may derive profit and enjoyment from its pages.

Fifteen years ago the late Edgar Fahs Smith attempted to arouse interest in the publication of a history of chemistry journal in the United States and, had he lived, the plan, under his inspiring leadership, would no doubt have succeeded, for promises of sufficient support had been almost gained. But alas! not only Smith, but Moore, Slosson, Coyle, Newell, Foster and other loyal members of his following have been called from our midst and the movement perished from the loss of so many of its leaders. We, who were sadly disappointed in that outcome, can well rejoice that our British cousins have now come so gallantly to the rescue. We should join most heartily by membership and if possible by contributed articles in helping to make so worthy an undertaking a success.

In addition to the scholarly translations of the Greek alchemists by Dr. Taylor and the other interesting contributions in each issue of *Ambix*, there are several pages of timely reviews that deal with recent works on the history of alchemy and chemistry. The typography of *Ambix* leaves nothing to be desired. Its bound volumes will be valuable additions to the library of every chemist.

C. A. BROWNE

Traité Élémentaire de Chimie de Lavoisier. (Lavoisier's Elementary Treatise on Chemistry.) With an Introduction by HENRY LE CHATELIER. Gauthier-Villars, Éditeur, 55 Quai des Grands-Augustins, Paris 6, France, 1937. xxxviii + 191 pp. 13.5 × 19 cm. Price, 21 francs.

This book is one of *Les Classiques de la Découverte Scientifique* (*Mémoires de Chimie*) published on the occasion of the exposition of 1937 and of the organization of the *Palais de la Découverte*. The series will appear under the general editorship of Le Chatelier, Béhal, Urbain, Bertrand, Perrin, Delépine, Lespieau, and Damiens.

Copies of the original edition of Lavoisier's famous *Traité* have become so scarce and so valuable that students will be very glad to have a reprint of it. A bookseller's catalog recently offered "a very nice copy of this extremely rare book." first edition, 2 volumes, 1789, for $110.00. Students will still be glad to learn of the future publication of a reprint of it, for the present one is incomplete and thereby fails to answer the needs of those who will want it most. The entire Second Part of the work has been suppressed "because it is devoted to the enumeration of the chemical combinations which were known in the time of Lavoisier. The number of combinations known today has become so considerable that the limited list of Lavoisier no longer presents any interest." The Third

Part has been reproduced only partially. "Certain chapters have been suppressed which have lost their interest, such as those on luting, on porphyrization, and on filtration. Other chapters have been set aside because they are scheduled for reproduction in other volumes of the same collection, for example those which relate to solution and to organic analysis." What editor can pretend to guess the motives which attract a student to the study of a classic? The dull and seemingly unimportant parts are significant and interesting because they show the character of the author, the state of knowledge in his time, the difficulties under which he worked. A reprint ought to be complete, in order that scholars may use it as if it were the original. Commentaries are helpful, but deletions are disappointments.

The Table of Contents of the reprint is a complete Table of Contents of the original edition, page numbers being omitted for the portions which are suppressed. The diagrams of apparatus, which are printed on folding plates at the end of Volume II in the original edition, are here distributed in the text, and add considerably to the ease of reading. The book is further illustrated with two full-page plates, respectively, a portrait of Lavoisier and a picture of the Lavoisier medal.

The Introduction by Le Chatelier is a just and clear evaluation of the place of Lavoisier in the history of chemistry. It is followed by a note which reads as follows; "The *Traité élémentaire de Chimie* of Lavoisier was published in 1789 by Cuchet, bookseller, *rue et hôtel Serpente*, in two volumes in 8vo. It was reprinted in 1801 by Déterville, bookseller, *rue du Battoir* No. 16, *quartier de l'Odéon*, in two volumes in 8vo. Further, the Complete Works of Lavoisier were brought together and published in 1864, at the expense of the French Government, in six volumes in 4to, printed at Paris (*Imprimerie impériale*)." The facts relative to the earliest editions are these: the first edition was published in 1789 *chez Cuchet*, two volumes with continuous pagination; a second printing of the same year, often considered the second edition, differs from the first printing only in the respect that the pages of the two volumes are numbered separately; and an edition, often considered the third but designated on the title-page as the *Seconde Édition*, was published in 1793, *chez Cuchet*, two volumes paginated separately.

TENNEY L. DAVIS

Synthetic Resins and Allied Plastics. Edited by R. S. MORRELL, M.A., Sc.D., Ph.D., F.I.C., in collaboration with T. HEDLEY BARRY, F.I.C., R. P. L. BRITTON and H. M. LANGTON, M.A., B.Sc. Oxford University Press, 114 Fifth Avenue, New York, N. Y., 1937. 417 pp. Illustrated. 14.5 × 22.5 cm. Price, $11.00.

The present volume purports to continue the discussion of synthetic resins from 1928, the publication date of "Natural and Synthetic Resins" by Barry, Drummond and Morrell.

In the introductory chapter the object has been to give a summary of the chemical and physical properties of the most important classes of resins, so that the reader interested in only one special group may obtain a general survey of the subject. There follow some nine chapters discussing various Plastics from an essentially technical point of view, the aim apparently having been to collate the methods of preparation with the properties of the various Plastics. The sixth chapter, entitled "Coumarone and Indene Resins," is particularly good both in arrangement of material and editing, possibly because the subject of coumarone resins is one which has been fairly well investigated and organized years ago and little new work has been done. There follow several chapters on "Electric Testing and Requirements," "Moulded Insulation" and "Solid Compounds for Electrical Work." Under Electric Insulators an attempt has been made to correlate properties and chemical composition. Under Causes of Resinification the authors have tried to give the important facts and views of various workers without sufficient editorial discretion, with the unhappy result that the chapter is a hodgepodge.

As a whole the book is very readable. It is neither elementary nor compendious and in its way covers the field outlined. It is believed to have particular value as a general review of plastics. However, the general impression conveyed is that the volume has been hurriedly thrown together, is full of inaccuracies more or less minor, and includes too many unimportant references of the promotional and exploiting type for a work of this nature. Apparently it tries to cover too great a field in the space available.

As to the kind of inaccuracies, the following are noted more or less at random: page 209—It is stated that a particular alkyd resin in the B form can be converted to the C form by immersion in distilled water for two minutes, whereas the actual facts are that the resin is in the C form if it will withstand boiling water for two minutes. Page 8—"E. Leighton" should be E. Leighton Holmes. Page 49, line 10—"celluloidal" is probably intended to be colloidal. Page 129—It is stated that methyl ethyl ketone has been polymerized with styrene, whereas the actual ketones used are unsaturated. Page 127—The formula (—CH_2C=) for the vinyl grouping is most unconventional. Page 142—In the formula for polyvinyl acetate, OR should be O—CO—CH_3 instead of O—CO—CH_2. Page 213, line 5—It is believed that "warp" should be wrap. Page 224—In the scheme illustrating resin-formation from chlorinated cymene, the formula not only does violence to the doctrine of ring compounds but serves no useful purpose since it is stated that the resin is an open chain instead of as pictured. Page 234—The formula for a polysulfide plastic shows an =SH group in the chain instead of =SS. Page 243—Pliolete should be Pliolite. Page 247—Cyclohexanone condensed with polyvinyl acetate is supposed to give a product insoluble for use in lacquer, but just how an insoluble resin could be used in lacquer is not stated.

Although the treatment of the various subjects is supposed to be critical, it seems that quotation from trade journals sometimes occurs without editorial limitation. For example, (page 252), a carbohydrate resin is noted after molding to be "equal to, if not better than, any product of its kind on the market." Pages 45, 46 and 49—The optimism shown in speaking of clear cast urea resin is not in keeping with facts, since such products have been commercial failures. Page 51—It is stated that to a

great extent the urea resins are employed alone with no other addition but pigments; however, the actual facts are the opposite and only recently has a decent molded urea plastic without filler been available. Page 43—The water-softening power of a synthetic resin derived from a quebracho tannin and formaldehyde is said to be approximately equal to synthetic zeolites.

CARLETON ELLIS

Qualitative Analysis by Spot Tests. Inorganic and Organic Applications. By FRITZ FEIGL, Ph.D., Professor of Analytical Chemistry, University of Vienna. Translated from the latest German Edition by JANET W. MATTHEWS, Ph.D., F.I.C., Imperial College of Science and Technology, London. Nordemann Publishing Company, Inc., 215 Fourth Avenue, New York, N. Y., 1937. ix + 400 pp. 24 figs. 16 × 24 cm. Price, $7.00.

This book is essentially a literal translation of the practical section of the Second German Edition with some additional matter and revisions. In order that it might be published as economically as possible and also to permit further developments the publishers did not include the theoretical part but plan to bring it out separately at a later date.

The translation is divided into eight parts as follows: I. General, 3 pages; II. Apparatus, 10 pages; III. Tests for metals, 140 pages; IV. Tests for acids, 68 pages; V. Systematic analysis of (inorganic) mixtures, 17 pages; VI. Organic spot tests for detection of elements, identification of characteristic organic groups, and identification of specific organic compounds, 78 pages; VII. Application of spot reactions, 53 pages; and VIII. Tabular summary of sensitivity of spot tests, 9 pages,

The translation is extensively documented with references to the original literature although the inclusion of only twenty references to American publications suggests that all sources of information have not been exhausted. The volume will be useful to all persons having occasion to identify either inorganic or organic substances, particularly if only small amounts of material can be spared for examination.

Reviews of the first and second German editions have already been published by THIS JOURNAL, *viz.*, **53**, 1621–2 (1931), and **58**, 863 (1936), but despite several specific criticisms no attempt to meet them could be observed in this translation. A review of the translation has appeared in *Ind. Eng. Chem., News Ed.*, **29**, 528 (1937).

E. H. HUNTRESS

Landolt-Börnstein physikalisch-chemische Tabellen. (Landolt-Börnstein Physicochemical Tables.) Edited by W. A. ROTH and K. SCHEEL. Fifth revised and enlarged edition, third supplementary volume, Parts 1–3. Verlag von Julius Springer, Linkstrasse 22–24, Berlin W 9, Germany, 1935, 1937. 734 + 1080 + 1225 pp. 19.5 × 27 cm. Price, RM. 81 + 162 + 170.

Twelve to eighteen years have now elapsed since the appearance of the several volumes of "International Critical Tables." An enormous number of new data have been published during this interval in a multitude of scientific journals and books, and the need of a complete but reasonably accessible collection of the best data extant becomes daily more acute.

At the moment, the most satisfactory relief in this situation is that furnished by the Third Supplementary Volume of the Fifth Edition of the Landolt–Börnstein "Tabellen." This volume, in three parts, contains the new data that have been published since the appearance of the Second Supplementary Volume and up to 1935–36. These new data are articulated with the old by references in the separate sections and in the Index and Table of Contents to corresponding pages of the main handbook and the earlier supplementary volumes. It is of interest that this Third Supplementary Volume contains 3039 pages as compared with the 1695 pages of the main handbook. Workers in science everywhere owe a debt of gratitude to the editors and many collaborators in the preparation and publication of these valuable Tables.

ARTHUR B. LAMB

Einführung in die Quantenchemie. (Introduction to Quantum Chemistry.) By Dr. HANS HELLMANN, Professor in the Karpow Institute of Physical Chemistry, Moscow. Verlag Franz Deuticke, Helferstorferstrasse 4, Wien I, Austria, 1937. viii + 350 pp. 43 figs. 17.5 × 26 cm. Price, M. 20; bound, M. 22.

The author has given in this volume a thorough discussion of the many recent applications of quantum mechanics to problems of molecular structure, with greater emphasis on the mathematical methods (which are described in detail) than on the chemical significance of the results.

The principal topics treated are the Thomas–Fermi statistical theory, a summary of the equations of quantum mechanics, the structure of atoms, chemical valence theory, van der Waals forces, and the quantum-mechanical theory of valence and of rates of reaction. Complete references to the literature are included.

LINUS PAULING

The Fundamental Principles of Quantum Mechanics, With Elementary Applications. By EDWIN C. KEMBLE, Professor of Physics, Harvard University. McGraw-Hill Book Company, Inc., 330 West 42d Street, New York, N. Y., 1937. 611 pp. 27 figs. 16.5 × 23.5 cm. Price, $6.00.

This excellent book should be of great value to every student who desires to obtain a thorough understanding of quantum mechanics. The author has given a detailed and rigorous mathematical discussion of all of the principal quantum-mechanical methods; and he has succeeded in keeping his presentation clear and understandable.

The book is designed for advanced readers and for those approaching quantum mechanics from the mathematical side; it does not, I believe, provide a suitable introduction to the subject for a chemist or an experimental physicist. In reading the more elementary texts, however, the student is often confronted by unproved statements and by proofs which are lacking in rigor, and he can now find satisfaction by referring to Kemble's book.

The scope and character of the work are indicated by the chapter headings: I, Introduction to Dualistic Theory of Matter; Development of Schrödinger's Wave Equation; II, Wave Packets and the Relation Between Classical Mechanics and Wave Mechanics; III, One-Dimensional Energy-Level Problems; IV, The Mathematical Theory of Complete Systems of Orthogonal Functions; V, The Discrete Energy Spectrum of the Two-Particle Central-Field Problem; VI, The Continuous Spectrum and the Basic Properties of Solutions of the Many-Particle Problem; VII, Dynamical Variables and Operators; VIII, Commutation Rules and Related Matters; IX, The Measurement of Dynamical Variables; X, Matrix Theory; XI, Theory of Perturbations which do not Involve the Time; XII, Quantum Statistical Mechanics and the Einstein Transition Probabilities; XIII, Introduction to the Problem of Atomic Structure: Electron Spin; XIV, The Theory of the Structure of Many-Electron Atoms.

A very valuable part of the book is the especially clear discussion of the difficult question of the physical significance of the quantum-mechanical equations. The author makes use of the operational point of view, and places emphasis on the "subjective states" correlated with wave functions and their interpretation in terms of assemblages.

LINUS PAULING

Polymerization and its Applications in the Fields of Rubber, Synthetic Resins, and Petroleum. By ROBERT E. BURK, Western Reserve University, HOWARD E. THOMPSON, The Harshaw Chemical Company, ARCHIE J. WEITH, The Bakelite Corporation, and IRA WILLIAMS, E. I. du Pont de Nemours and Company. American Chemical Society Monograph No. 75. Reinhold Publishing Corporation, 330 West 42d Street, New York, N. Y., 1937. 312 pp. Illustrated. 15.5 × 23.5 cm. Price, $7.50.

Dr. Burk, who is responsible for the greater part of this volume, and the other authors who are associated with him in it and have contributed chapters on a number of special aspects of the matter, have, in writing this book, done a service to the further study of a subject, polymerization, which has in recent years been carved out from the general body of organic and colloid chemistry as deserving of special study because of the great and growing importance of polymeric materials. Looking back over the vast effort in the shape of empirical investigation which has been devoted to artificial resins. Dr. Weith, author of a chapter in the book, on "Polymerization and Synthetic Resins," remarks, "We are now coming to realize that more effort spent in studying the chemical nature of the different products which make up the resinous mass would have paid, perhaps, a richer reward than much of the work which has gone directly into forming a commercial article on the basis of the little fundamental information available."

The present volume does not offer an encyclopaedic account of the data relative to polymers and polymerization; rather, it is concerned to bring to the front those portions of our knowledge of the field which represent the more systematic and fundamental studies in it, and such generalizations as it is possible to formulate. It achieves considerable success in this concern, and hence will be of service in clarifying and consolidating ideas on the subject, and thus of advancing further work on it. Read in conjunction with the series of papers which formed the Faraday Society's Symposium on Polymerization (1935), it offers the best available conspectus of the subject. By comparison, the books on polymerization by Meyer and Mark and by Staudinger are of very limited scope, the former being concerned chiefly with the use of X-rays in the study of high polymers, and the latter being little or nothing more than an account of the author's own researches.

According to the old definition of classical organic chemistry, made before polymers had attained the present-day recognition of their importance in industry and biology, a polymer is any substance the molecule of which is derived by the combination of two or more molecules of another substance, and the molecular weight of which is an exact multiple of the molecular weight of the latter. According to this formal definition, benzoin must be accepted as a polymer of benzaldehyde; aldol, a polymer of acetaldehyde. Today, in deciding what properly are to be regarded as polymers, the disposition is to place the emphasis in such a way that the scope of the term tends in some senses to be narrowed and in others to be broadened: to be narrowed by limiting it to substances, (a) in which a given structural unit, corresponding essentially to the structure of the monomer, is *repeated* several and usually a large number of times; (b) from which, in many cases, the monomer can be regenerated, by, *e. g.*, heating or hydrolysis; (c) which differ markedly in physical properties from the monomer. as, *e. g.*, the elastic solid, butadiene-rubber, differs from the gas, butadiene; the tough, moldable solid, polystyrene or polymethacrylic ester, from the corresponding liquid monomer; as cellulose, the skeletal matter of plants and the source of much of our structural material (wood), our paper and our clothing, differs from the simple sugar, glucose: to be broadened by extending it to substances which conform to the just-mentioned criteria but which are derived, not by the mere addition of monomeric molecules but by their condensation (with the elimination of molecules of water) and of which, accordingly, the molecular weight is not a simple multiple of the molecular weight of the "monomer." There is a disposition, with which the authors of the present work are in accord, to include among polymers the products of multiple condensations: products such as starch and cellulose, which are derived from glucose, not by mere addition, but by condensation, and which have as the "monomeric" unit, not glucose, but anhydroglucose. Chiefly responsible for the inclusion of multiple-condensation products within the fold of polymers have been the writings of Dr. W. H. Carothers, whose recent tragic death has deprived the subject of polymerization of one of its outstanding students.

In view of our relatively limited knowledge of polymers, any definition must at present be in some degree a working and tentative definition; a final definition must await a more conclusive knowledge of the structure of polymers in general.

The volume under review consists of three chapters on the general aspects of the subject, *viz.*, (1) the Relation between Molecular Structure and Rate of Polymerization,

(2) the Mechanism of Polymerization (this embraces a discussion of the kinetics of polymerization), (3) the Structure of Polymers. There is also a chapter (61 pages) devoted to a useful compilation of catalysts which have been found effective in bringing about the polymerization of various types of compounds, the material being indexed both under catalysts and polymerizants.

Following these chapters are chapters on (1) Polymerization in the Rubber Industry—largely concerned, naturally, with synthetic rubber, of which a succinct account is given, (2) Polymerization and Synthetic Resins—a well-arranged account, written to deal with the general and theoretical aspects of the matter rather than as a guide to its manufacturing aspects, (3) Polymerization in the Petroleum Industry—a very useful and interesting review of recently-developed processes in the petroleum field involving polymerization, such as the production of liquid fuel by the pyrolysis and catalytic treatment of natural and petroleum gases.

G. STAFFORD WHITBY

BOOKS RECEIVED

January 15, 1938–February 15, 1938

ROBERT AMMON and WILHELM DIRSCHERL. "Fermente, Hormone, Vitamine, und die Beziehungen dieser Wirkstoffe zueinander." Georg Thieme Verlag, Rossplatz 12, Leipzig C 1, Germany. 451 pp. M. 30; bound, M. 32.

PAUL ARTHUR and OTTO M. SMITH. "Semi-micro Qualitative Analysis." McGraw-Hill Book Co., Inc., 330 West 42d St., New York, N. Y. 198 pp. $2.00.

A. J. BERRY. "Qualitative Inorganic Analysis." Cambridge University Press: The Macmillan Co., 60 Fifth Ave., New York, N. Y. 147 pp. $2.00.

G. DUPONT. "Cours de Chimie Industrielle. Tome V. Industries Organiques." Gauthier-Villars, Éditeur, 55 Quai des Grands-Augustins, Paris, France. 279 pp. Fr. 70.

SAUL DUSHMAN. "The Elements of Quantum Mechanics." John Wiley and Sons, Inc., 440 Fourth Ave., New York, N. Y. 452 pp. $5.00.

JOHN THEODORE FOTOS and R. NORRIS SHREVE. "Intermediate Readings in Chemical and Technical German." John Wiley and Sons, Inc., 440 Fourth Ave., New York. 219 pp. $1.90.

HENRY GILMAN, Editor-in-Chief. "Organic Chemistry. An Advanced Treatise." John Wiley and Sons, Inc., 440 Fourth Ave., New York, N. Y. Vols. I and II. 1890 pp. $7.50 each.

J. L. HAUGHTON and W. E. PRYTHERCH. "Magnesium and Its Alloys." His Majesty's Stationery Office: British Library of Information, 270 Madison Ave., New York, N. Y. 100 pp. $0.80.

ERNEST HAMLIN HUNTRESS. "A Brief Introduction to the Use of Beilstein's 'Handbuch der organischen Chemie'." Second edition revised. John Wiley and Sons, Inc., 440 Fourth Ave., New York, N. Y. 44 pp. $1.00.

G. E. F. LUNDELL and JAMES IRVIN HOFFMAN. "Outlines of Methods of Chemical Analysis." John Wiley and Sons, Inc., 440 Fourth Ave., New York, N. Y. 250 pp. $3.00.

ALWIN MITTASCH. "Katalyse und Determinismus. Ein Beitrag zur Philosophie der Chemie." Verlag von Julius Springer, Linkstrasse 22–24, Berlin W 9, Germany. 203 pp. RM. 9.60.

ERICH PIETSCH. "Sinn und Aufgaben der Geschichte der Chemie." Verlag Chemie, G. m. b. H., Corneliusstrasse 3, Berlin W 35, Germany. 33 pp. RM. 0.90.

CARL L. A. SCHMIDT and FRANK WORTHINGTON ALLEN. "Fundamentals of Biochemistry with Laboratory Experiments." McGraw-Hill Book Co., Inc., 330 West 42d St., New York, N. Y. 388 pp. $3.00.

F. SHERWOOD TAYLOR, Editor. "Ambix. Being the Journal of the Society for the Study of Alchemy and Early Chemistry." Vol. I, Nos. 1–2. Taylor and Francis, Ltd., Red Lion Court, Fleet St., London E. C. 4, England. Quarterly, £1, 4s.

OTTO VOGEL and COLLABORATORS. "Handbuch der Metallbeizerei. Nichteisenmetalle." Verlag Chemie, G. m. b. H., Corneliusstrasse 3, Berlin W 35, Germany. 262 pp. RM. 16.50.

H. B. WATSON. "Modern Theories of Organic Chemistry." Oxford University Press, 114 Fifth Ave., New York. N. Y. 218 pp. $4.50.

JOHN H. YOE and ALFRED BURGER. "German for Chemists." Prentice-Hall, Inc., 70 Fifth Ave., New York, N. Y. 537 pp. $4.50.

"Abridged Scientific Publications from the Kodak Research Laboratories." Vol. XVIII, 1936. Published by the Eastman Kodak Company, Rochester, N. Y. 226 pp.

"Gmelins Handbuch der anorganischen Chemie. System-Nummer 22, Kalium, Lieferung 4." Verlag Chemie, G. m. b. H., Corneliusstrasse 3, Berlin W 35, Germany. 128 pp. RM. 15.

"Gmelins Handbuch der anorganischen Chemie. System-Nummer 24, Rubidium." Verlag Chemie, G. m. b. H., Corneliusstrasse 3, Berlin W 35, Germany. 250 pp. RM. 31.50.

"Gmelins Handbuch der anorganischen Chemie. System-Nummer 27, Magnesium. Teil B, Lieferung 1." Verlag Chemie, G. m. b. H., Corneliusstrasse 3, Berlin W 35, Germany. 200 pp. RM. 23.25.

"Gmelins Handbuch der anorganischen Chemie. System-Nummer 59, Eisen. Teil C, Lieferung 1, Härteprüfverfahren." Verlag Chemie, G. m. b. H., Corneliusstrasse 3, Berlin W 35, Germany. 162 pp. RM. 18.75.

"Gmelins Handbuch der anorganischen Chemie. System-Num. 63–68. Legierungen der Platinmetalle. Patentsammlung." By A. GRÜTZNER and C. GÖTZE. Verlag Chemie, G. m. b. H., Corneliusstrasse 3, Berlin W 35, Germany. 536 pp. RM. 40.50.