NEW BOOKS

Vitamine und Hormone und ihre technische Darstellung. Dritter Teil. Darstellung von Hormonpräparaten (ausser Sexualhormonpräparaten). (Vitamins and Hormones and their Technical Production. Third Part. Production of Hormone Preparations (except Sex Hormone Preparations.) By Dr. ERICH VINCKE, Hamburg. Verlag von S. Hirzel, Königstrasse 2, Leipzig C 1, Germany, 1938. xii + 167 pp. 15 × 22.5 cm. Price, RM. 7.50.

This critical review of methods for the production of hormone preparations has been compiled with the assistance of information from manufacturers and reference to the patent literature abstracted up to the end of 1937. In that many hormone preparations are not chemically pure substances a preliminary chapter is given over to general methods of conserving, extracting and drying hormonal material. The remaining chapters deal with the chemistry, identification, assay and preparation of the pancreatic, thyroid, parathyroid and pituitary hormones and of hormones in the wider sense including those of the thymus and pineal body, together with cardiac and circulatory hormones, secritin, liver extracts and other substances of hypothetical hormone nature. A final chapter is devoted to the phytohormones. Each chapter is provided with a bibliography, a patent listing and an excellent tabulation of commercial preparations. These products are almost entirely of Continental origin.

The short treatment of other antidiabetic substances is of present interest in the light of the recent publication of the discovery on the West Coast of a plant extract with antidiabetic activity. The section dealing with the recently published work on corticosterone is excellent but the treatment of the industrial applications of phytohormones is trivial in view of recent U. S. developments in this field.

This excellent monograph, with its addenda of European patents and commercial preparations, is invaluable to the American manufacturer and worker in this field.

C. R. ADDINALL

La Chimie des Vitamines et des Hormones. (Chemistry of the Vitamins and Hormones.) By M. JOSEPH SIVADJIAN, D.-ès Sc. Gauthier-Villars, Éditeur, 55 Quai des Grands-Augustins, Paris, France, 1938. 239 pp. 16 × 24 cm. Price, 50 fr.

The rapid advances in the knowledge of vitamins and hormones in the three years since the publication of the 1st edition of this text has compelled the author to recast his previous compilation to conform with the recent discoveries in these fields. To this end a chapter on vitamin E has been added to those on vitamins A, D, C, B_2 and B_1 in Part 1, and the chapters of the 2nd part on the male sex hormones, the hormones of the corpus luteum and the follicular hormones have been supplemented by a chapter of two brief pages on corticosterone.

Unfortunately this text only discusses work up to the middle of 1937 and consequently the new chapter on vitamin E mentions the Fernholz degradation of α-tocopherol but is silent as to the really important recent work on the structure and synthesis of vitamin E and its lower homologs. Similarly, the brief treatment of corticosterone is miserably inadequate in view of the recent developments of the chemistry of the adrenal cortical hormones in the hands of Reichstein. The technical developments which have revolutionized the commercial production of vitamin A and D products are entirely neglected but the unfortunate identification of vitamin C with methylnornarcotine is once again dragged into the light of day. The intricacies of the vitamin B complex are completely ignored and there is no discussion of cocarboxylase and its biological importance. Because of the date of compilation there is no mention of nicotinic acid and its role in pellagra.

True to tradition in French texts, the table of contents is at the end and there is no index of any kind. Bibliographies with 760 (Part I) and 300 references (Part III) are given. The classic knowledge in these fields is well treated and within its brief compass the text affords a reasonably good review of the standard information up to June, 1937. It suffers from attempting too much and from being already 18 months out of date in fields where history is made overnight.

C. R. ADDINALL

Organic Chemistry. By PAUL KARRER, Professor in the University of Zürich. Translated from the latest German edition by A. J. Mee, M.A., B.Sc., Head of the Science Department, Glasgow Academy. Nordemann Publishing Company, 215 Fourth Avenue, New York, N. Y., 1938. xx + 902 pp. 17.5 × 25.5 cm. Price, $11.00.

That Karrer's book has gone through six editions since its inception in 1928 and has now been translated into English is a significant indication of the high regard in which it has been held and of its growing popularity. The book presents in a concise manner a large body of practical information covering a broad range of subjects, and it has become recognized as one of the most authoritative and up-to-date general surveys of the field available in a work of medium size. Its freedom from insistence on any particular brand of theory and the general avoidance of speculation give to the book a quality which is at once reserved and substantial, and this doubtless has contributed to its wide appeal. Graduate students and advanced undergraduates can find here a reliable source of information, and thorough study of the book should provide a sound foundation of fact and a background sufficiently broad for the judicious consideration of special topics and special theories.

The first English translation makes the distinguished Swiss chemist's work more readily available, although many of those who have the time will want to continue the practice of learning chemistry and German at the same time. The translation is, perhaps, a little too faith-

ful to the original text, but in a work which is so predominantly descriptive, fluency of style is of less moment than accuracy, and the English version seems beyond reproach in this respect. The printing and composition are all that might be desired.

While this translation is based on the fifth German edition, the corrections and additions for the sixth edition have been incorporated as well. Although the changes introduced in recent editions are not extensive, the more significant new advances are always given a place in the book with great promptitude. In the present edition, for example, one finds reference to work completed during the past year on vitamins B_1 and E and on the cortical steroids. A noteworthy addition is a chapter on organic compounds containing heavy hydrogen.

LOUIS F. FIESER

The Electrode Potential Behaviour of Corroding Metals in Aqueous Solutions. By O. GATTY, M.A., B.Sc., Formerly Fellow of Balliol College, and E. C. R. SPOONER, M.Sc., B.E., D.Phil., Technical Superintendent, Magnesium Metal Corporation, London. Oxford University Press, 114 Fifth Avenue, New York, N. Y., 1938. xi + 504 pp. 84 figs. 14.5 × 23.3 cm. Price, $8.00.

An applied electrochemistry for the sophisticated only. Absent is the reassuring picture of electrodes in thermodynamical equilibrium with their ions, and the time honored equation for electromotive force with its definite concentrations. Rather, the emphasis is placed upon the essential irreversibility of the average electrode under practical conditions and upon the difficulties of estimating concentrations at electrode surfaces. At the same time a greatly expanded list of possible reactions presses for consideration. No less than eighteen of these may be of importance at the surface of a metal in an air-free water solution, not to mention additional complexities as soon as air is admitted. Slow reactions, as well as diffusion processes, retard the establishment of steady states, and make the time factor of paramount importance.

At the start one encounters a hundred pages of general theory, not easy to digest, often inviting controversy, but never dull. This section is aptly described as "an attempted synthesis of the thermodynamics of reversible electrodes, the local-action theories of corrosion, the overvoltage work of Bowden and Gurney, and the polarographic viewpoint of Heyrovsky and Frumkin." Here is a feat calling for mental agility of no mean order.

There follow nine more or less disconnected chapters in which the general principles are amplified and applied to corrosion rates and other data for the common metals. The authors cover pertinent literature to the end of 1936, and supply a wealth of their own results, previously unpublished. The most original of these, in their opinion, is "the probable existence on some metals in airfree solutions of areas of adsorbed hydrogen which, whilst impermeable to ions of the electrode metal, permit of electron transfer."

While the validity of the method of attack is stoutly upheld, the speculative nature of various detailed interpretations is readily admitted. Development of a completely satisfactory theory must await further information concerning "overvoltage, ionic transport through surface films and through precipitated corrosion products; the factors controlling the relative areas of exposed metal and of the oxide or other films, and a knowledge of the quick transients during the electrical polarization of electrodes."

GEORGE S. FORBES

Die Bierhefe als Heil-, Nähr- und Futtermittel. (Beer Yeast as a Medicinal Agent, Food and Feeding Stuff.) By Dr. JULIUS SCHÜLEIN, Munich. Second, revised and enlarged edition. Verlag von Theodor Steinkopff, Residenzstrasse 32, Dresden-Blasewitz, Germany, 1938. viii + 262 pp. 22 figs. 15.5 × 22 cm. Price, RM 11; bound, RM. 12.

In the first issue the author brought together a large number of widely scattered references dealing with the use of yeast as a food and as a medicinal agent. The author attempted to give a general view of the subject and discussed the state of research in connection with the use of yeast extracts, vitamins from yeast, and the use of yeast as a food for man and animals. The field covered by the first edition was very broad, consequently a number of references were not critically evaluated. There was also lack of discrimination in the use of the term "yeast."

The items criticized in the first edition [THIS JOURNAL, **58**, 2341 (1936)] have not been changed or corrected. The author has presented new material but has failed to revise the old material. The new material consists of a short discussion of yeast made from wood sugar, and a comparison of this yeast with beer yeast as a therapeutic agent, source of vitamins, and as a food for animals. There is also a discussion of living yeast as a therapeutic agent and as a source of vitamins. A discussion on the standardization of vitamin preparations is given.

The title of the book indicates that the author is not dealing with yeast in general, but with beer yeast. The author has attempted to use some of the data to show that beer yeast possesses therapeutic and food qualities and a vitamin content superior to that of bakers' yeast. The interpretation, however, is not always convincing. When taken as a source of vitamins, the yeasts should be evaluated on the basis of their vitamin content rather than on strain differences.

The book contains a large number of references (613) which have been systematically assembled. There is an excellent author and subject index; consequently the book may serve as a useful reference work.

C. N. FREY
G. W. KIRBY

Organisch-chemische Experimentierkunst. (Experimental Art in Organic Chemistry.) By CONRAD WEYGAND, Professor in the University of Leipzig. Johann Ambrosius Barth Verlag, Salomonstrasse 18 B, Leipzig C 1, Germany, 1938. xii + 772 pp. 265 figs. 16 × 23.5 cm. Price, RM. 43.20; bound, RM. 45.

This excellent book is, in some respects, a compact "Houben" or "Lassar-Cohn." It is divided into three sections: materials and operations (138 pp.); reactions (439 pp.); and chemical and physical characterization (172 pp.). The style and organization are splendid, and

the critical appraisal of reactions in the second section is developed to a greater extent than in most "laboratory" books and offers a useful supplement to treatises on theoretical organic chemistry. There is a liberal use of well-drawn illustrations, and numerous references are given to the original literature. The book is distinctly up-to-date, and the author has generally selected wisely from the wealth of available material.

There are relatively few typographical errors. The part on qualitative analysis is necessarily sketchy because of the severe limitations of space, but it does seem that room might have been found to mention works like those of Mulliken, Kamm, and Shriner and Fuson.

This is the sort of book that graduate students in organic chemistry would like to own. Unfortunately, the cost is out of reach for most students. However, the book will almost certainly find a place in libraries where any advanced work is done in organic chemistry.

There are numerous, excellent, less comprehensive one-volume works on organic laboratory methods. Some of these are: Cumming, Hopper and Wheeler, Fieser, Gattermann and Wieland, Hickinbottom, Morton, and the annual volumes of "Organic Syntheses." Each of these has certain special merits. It would be interesting to inquire whether some one, or a group working collaboratively, might not prepare a one-volume work which would embody the more attractive features of the books mentioned and have it published at a price accessible to most graduate students.

HENRY GILMAN

The Phase Rule and Phase Reactions. Theoretical and Practical. By SIDNEY T. BOWDEN, D.S., Ph.D., F.I.C., Lecturer in Chemistry, University College, Cardiff. The Macmillan Company, 60 Fifth Avenue, New York, N. Y., 1938. xviii + 303 pp. 164 figs. 14.5 × 22.5 cm. Price, $3.60.

A book for simple instruction in phase rule principles, along the lines planned by Dr. Bowden, would be welcome and useful, but the task of combining simplicity and correctness, without omitting too much meat, is evidently a difficult one.

Intended evidently for very elementary instruction in the principles and applications of the phase rule, this book carries out its aims in its brevity, in the clarity of most of its expositions, and in its well-balanced choice of material, both in theoretical principles and in practical examples. It recommends itself furthermore for undergraduate use through its very satisfactory format, helpful outlines and summaries for the student, description of many simple experiments, selection of questions from the examinations of a number of English schools, and in general what we may call an avoidance of complication.

Unfortunately the avoidance of complication is here accompanied by loss of thoroughness and accuracy.

One forms the impression of either too great haste in its preparation—almost of its having been "dictated but not read"—or of insufficient mastery of and familiarity with phase rule theory on the part of the author. Not to mention literally dozens of outright blunders, omissions and errors which should have been seen at once by a careful editor familiar with the subject, there are misstatements and misconceptions of fundamental ideas ranging from impossibilities such as the description of a solution of benzene, water and acetic acid at room temperature as being "saturated" with respect to the three components, and a definition of a space lattice as "an arrangement of rows of points in space such that the environment of any point is the same as that of every other point"—to serious errors such as the following: a diagram (SO_3–H_2O system) with the coëxistence of five phases, an impossible diagram for the CO_2–ether system, the mention of certain thermodynamically impossible systems of binary solid solutions as a "possible type" which "has never been met with in practice," a description of optical isomers as "the same phase," incorrect explanations of fuming liquids and of desiccation, incorrect definition of fractional distillation, confusion of monotropy and enantiotropy, of arrests and breaks in cooling curves, incorrect designation of equilibria on many diagrams, misconception of drying-up points—to mention only a few.

For the advanced student the book has almost nothing to offer. There is no mention of the words "potential" or "thermodynamic," or of anything concerning the principles of thermodynamic requirements for intra- and inter-phase equilibrium, anywhere in the book. To state the algebraic expression of the phase rule is not to state a principle. Although many workers are cited by name, only relatively few actual literature references are given. For the elementary student the book might be worth trying, for the plan is commendable, with its brief reviews of such interesting fields as intermetallic compounds, liquid crystals, solid solutions, theory of solubility, and especially the simple description of many experimental procedures. As a text for class use, however, it is unfortunately too full of errors to be useful or dependable.

JOHN E. RICCI

Die analytische Verwendung von *o*-Oxychinolin ("Oxin") und seiner Derivate. (The Use of *o*-Hydroxyquinoline (Oxin) and its Derivatives in Chemical Analysis.) By Prof. Dr. RICHARD BERG, Königsberg i. Pr. Second edition. Ferdinand Enke Verlag, Hasenbergsteige 3, Stuttgart W, Germany, 1938. xi + 114 pp. 2 figs. 16 × 24 cm. Price, RM. 11; bound, RM. 12.40.

This book is Volume 34 in "Die chemische Analyse" series edited by Wilhelm Böttger. The first edition appeared in 1935. Since that time the application of 8-hydroxyquinoline to certain analytical separations and determinations has been greatly extended, and the reagent is now one of the most useful of organic precipitating agents for the detection, determination, and separation of certain elements. Besides giving specific and sufficiently detailed directions for the estimation and separation of 31 elements (as compared to 25 in the first edition), the author also covers the determination of the constituents in various natural and artificial products. Micro estimations are also included, and references are given to about 250 papers and articles in the literature.

Altogether, the book serves as a useful compilation of data which might otherwise be overlooked, and the material is well arranged and correlated. The analytical chemist will find it a valuable addition to his library.

STEPHEN G. SIMPSON

Biochemistry for Medical, Dental and College Students. By BENJAMIN HARROW, Ph.D., Associate Professor of Chemistry, The City College, College of the City of New York. W. B. Saunders Co., West Washington Square, Philadelphia, Pa., 1938. 383 pp. 52 figs. 16 × 24 cm. Price, $3.75.

The preface carries the statement, "The book includes the latest developments in the field. It covers—and I believe more than covers—the usual requirements of courses in biochemistry offered to medical, dental, agricultural and general college students." The text is divided into twenty-four chapters. The first eight present the chemistry of the different groups of substances of recognized importance in biochemistry while the remaining sections discuss the metabolism of these substances and the chemistry of the various organs and tissues. A novel feature is the chapter on "Synthesis in the Plant Kingdom." Within the individual chapters the topics treated are numerous and comprehensive in range. The discussions of individual topics present essential facts in a manner that often is very condensed yet clear. There are 55 tables and a number of excellent photographs. Structural formulas and equations are employed extensively. In an appendix of 6 pages quantitative data on a number of constituents of foods are available. Altogether an immense mass of information is concentrated within the space of this new volume.

A distinctive feature is the treatment of references. These are placed in sections at the end of each chapter and emphasize reviews rather than original articles, though some of the latter have been mentioned at various places. In presenting the references, the author has not listed them in the customary manner but has written one or more paragraphs of comment on literature bearing upon the topic of the chapter. In these discussions the reviews available (preference being given to those appearing in English) are mentioned and particular virtues of individual references are stated. To the users of this volume the extent of the references to the recent reviews and the comments upon them will be especially helpful.

Professional biochemists and advanced students of the subject will find the new book an interesting and useful addition to their libraries. Beginning students using it as a text will have ample opportunity to confirm the statement quoted from the preface.

HARRY C. TRIMBLE

Introductory Quantum Mechanics. By VLADIMIR ROJANSKY, Professor of Physics, Union College. Prentice-Hall, Inc., 70 Fifth Avenue, New York, N. Y., 1938. x + 544 pp. 112 figs. 16 × 24 cm. Price, $5.50.

Of books on quantum mechanics there now appears to be almost no end, but this volume is one with a distinct flavor of its own. It is not as advanced, or as comprehensive, as the standard treatises of Dirac, Kemble, Kramers, or Pauli. On the other hand, it delves into questions of principle more thoroughly than the well-known texts by Condon and Morse, Dushman, and Pauling and Wilson. A commendable characteristic is the great pains which the author takes to trace every detail very fully, in an elementary way. For instance, he does not take it for granted that the reader already knows the equation of continuity, spherical harmonics, the Laplacian in spherical coördinates, or even a Hamiltonian function, and he proceeds to explain and develop these concepts. In fact, three dimensional problems are not reached explicitly until almost the end of the volume. In the preface, Professor Rojansky states "The prerequisites are the elements of calculus and ordinary differential equations, and a recognition of the failure of classical mechanics in the domain of atomic physics. The reader's acquaintance with partial differential equations and with matrices is assumed to be slight at best." In my opinion, this pledge has been well kept.

A noteworthy feature, not found in most texts on quantum mechanics, is the large number of exercises, many of them rather easy, which, as the author says, "provide drill in the material already covered, tie up some of the loose ends in the discussion of the text, and clear the ground for the topics to come." Instructors in courses in quantum mechanics should find the volume useful as a source of problems for the class, while a lone person on a long sea voyage would really learn considerable technique if he were to work conscientiously through all the exercises.

The Schroedinger (wave) mechanics, its transform in momentum space, the Heisenberg (matrix) method, and the Dirac (symbolic) scheme of procedure are developed in order, with most of the emphasis on the first of these, *viz.*, five chapters as against one for each of the others. It is hypothesized at the outset that in quantum theory the operator $[\alpha\beta - \beta\alpha]2\pi i/h$ replaces the classical Poisson bracket, and in this fashion momentum is introduced as the operator $(h\partial/2\pi i\partial x)$. This is in contrast to the plan of most elementary texts, where the wave-momentum relations are introduced via the Hamiltonian analogy. The author is inclined to introduce postulates rather than to try to make the situation physically plausible at the outset when the latter cannot be done rigorously. Thus, in particular, the *ad hoc* assumption of the quantum mechanical expression for the transition probability without, for instance, giving a discussion of the basis of the correspondence principle, or even an elementary reference thereto, will impress many readers as rather arbitrary. However, it is to be said that with a postulational formulation, there is no uncertainty in the rules of the game. There is a good simple discussion of barrier problems, potential lattices and energy bands, useful as an elementary groundwork for the theory of radioactive decay and of conductors. The explicitness with which Heisenberg matrices, their multiplication, etc., are discussed is commendable. Too often students drift through courses or books on quantum mechanics without acquiring any knack of manipulation for matrix algebra, which for many problems is fully as powerful and intuitive as the undulatory method.

An interesting chapter is that on approximate methods for treating the one-dimensional Schroedinger equation. Here useful numerical schemes are presented for problems which cannot be handled exactly, in particular two procedures not usually given in the texts, *viz.*, two-way integration and Milne's powerful method, as well as the more conventional W. K. B. and variational attacks. They are all illuminatingly illustrated and compared by application to a system with a potential proportional to x^4.

The volume closes with two chapters devoted respectively to the Pauli theory of electron spin and the Dirac electron. The reviewer is glad to see the Pauli matrices presented in considerable detail, as writers are so apt to be intrigued by the magic of the Dirac electron that they forget that the Pauli scheme is adequate and simpler for many problems, *e. g.*, magnetism. The statement on p. 524 that the Dirac electron has discrete negative energy states besides, of course, the continuous ones, is incorrect, but in general the volume is both accurate and authentic.

Professor Rojansky's book is primarily one on principle rather than application. Such subjects as the Stark and Zeeman effects of hydrogen, chemical bonding, the helium atom, and the classification of non-hydrogenic atoms are hence not included. Because of the detail and explicitness with which the volume is written, its 500 odd pages do not permit inclusion even of many moderately advanced questions of principle, such as perturbed degenerate systems, the Pauli exclusion principle, or the theory of radiation. Readers who gain insight into quantum mechanics mainly in a phenomenological fashion through application to physical problems, rather than through somewhat abstract mathematical development, and who are refreshed by the periodic insertions of detailed comparison with experiments, may not find the volume entirely to their taste. The first seventy pages, for instance, are devoted solely to classical and mathematical preliminaries. It is an excellent companion and complement to some more chemical or physical treatment, such as Pauling and Wilson on the chemical aspects, or Pauling and Goudsmit on the spectroscopic side. It will serve especially usefully to any one who feels that most of the elementary books jump too many mathematical steps.

Professor Rojansky writes with a very fluent and agreeable style, and has given us a valuable addition to the literature of quantum mechanics by writing a lucid and unusually explicit account of elementary quantum mathematical physics.

J. H. VAN VLECK

BOOKS RECEIVED

January 15, 1939–February 15, 1939

H. BENNETT, Editor-in-Chief. "The Chemical Formulary." Vol. IV. Chemical Publishing Company of New York, Inc., 148 Lafayette St., New York, N. Y. 638 pp. $6.00.

A. BERTHOUD. "Précis de Chimie Physique." Gauthier-Villars, Imprimeur-Éditeur, 55 Quai des Grands-Augustins, Paris, France. 498 pp. 155 fr.

HARAGOPAL BISWAS. "The German Primer for Science Students." Published by the University of Calcutta, Calcutta, India. 258 pp.

B. BLEYER and W. DIEMAIR, Editors. "Handbuch der Lebensmittelchemie." Vol. VIII. Fr. Sierp, A. Splittgerber and H. Holthöfer. "Wasser und Luft. I. Technologie des Wassers." Verlag von Julius Springer, Linkstrasse 22–24, Berlin W 9, Germany. 745 pp. RM. 108; bound, RM. 111.60.

RICHARD BLUNCK. "Justus von Liebig. Die Liebensgeschichte eines Chemikers." Wilhelm Limpricht Verlag, Berlin S. W. 68, Germany. 320 pp.

G. GLOCKLER and S. C. LIND. "The Electrochemistry of Gases and Other Dielectrics." John Wiley and Sons, Inc., 440 Fourth Ave., New York, N. Y. 469 pp. $6.00.

ERNST A. HAUSER. "Colloidal Phenomena. An Introduction to the Science of Colloids." McGraw-Hill Book Co., Inc., 330 West 42d St., New York, N. Y. 294 pp. $3.00.

FREDERICK C. IRWIN and G. RAY SHERWOOD. "General and Inorganic Chemistry." P. Blakiston's Son and Co., Inc., 1012 Walnut St., Philadelphia, Pa. 582 pp. $3.50.

ROBERT LIVINGSTON. "Physico-Chemical Experiments." The Macmillan Co., 60 Fifth Avenue, New York, N. Y. 257 pp. $2.25.

R. H. A. PLIMMER. "Organic and Biochemistry." Sixth edition. Longmans, Green and Co., 114 Fifth Ave., New York, N. Y. 623 pp. $7.50.

CLARK SHOVE ROBINSON and EDWIN RICHARD GILLILAND. "The Elements of Fractional Distillation." Third edition. McGraw-Hill Book Co., Inc., 330 West 42d St., New York, N. Y. 267 pp. $3.00.

GERHARD STADE and HERBERT STAUDE. "Mikrophotographie." Akademische Verlagsgesellschaft m. b. H., Sternwartenstrasse 8, Leipsig C 1, Germany. 202 pp. RM. 11.80; bound, RM. 13.20.

T. W. J. TAYLOR and A. F. MILLIDGE. "The Chemistry of the Carbon Compounds (Richter-Anschütz). Vol. II. The Alicyclic Compounds and Natural Products." Nordemann Publishing Company, Inc., 215 Fourth Ave., New York, N. Y. 656 pp. $15.00.

CH. WEIZMANN and E. BERGMANN. "Polycyclic Aromatic Hydrocarbons." Scripta Academica Hierosolymitana, Dr. Immanuel Velikovsky, Editor, P. O. B. 194, Tel Aviv, Palestine. 32 pp.

ANDREW L. WINTON and KATE BARBER WINTON. "The Structure and Composition of Foods. Vol. IV. Sugar, Sirup, Honey, Tea, Coffee, Cocoa, Spices, Extracts, Yeast, Baking Powder." John Wiley and Sons, Inc., 440 Fourth Ave., New York, N. Y. 580 pp. $9.00.

"Gmelins Handbuch der anorganischen Chemie. System-Nummer 22, Kalium." Lieferungen 6–7. Erich Pietsch, Editor-in-Chief. Verlag Chemie G. m. b. H., Corneliusstrasse 3, Berlin W 35, Germany. 364 pp. RM. 21.75 + 16.50.

"Gmelins Handbuch der anorganischen Chemie. System-Nummer 66, Osmium mit einem Anhang über Ekaosmium." Erich Pietsch, Editor-in-Chief. Verlag Chemie G. m. b. H., Corneliusstrasse 3, Berlin W 35, Germany. 100 pp. RM. 14.25.

"Gmelins Handbuch der anorganischen Chemie. System-Nummer 68, Platin." Teil A, Lieferung 1. Erich Pietsch, Editor-in-Chief. Verlag Chemie G. m. b. H., Corneliusstrasse 3, Berlin W 35, Germany. 145 pp. RM. 16.50.