tion (4 papers), Utilization of Separated Isotopes (5 papers), Isotope Abundance Analysis (5 papers), Design of Electromagnetic Separators (6 papers), and Separation of (Radio) Active Material (2 papers). In character the papers cover the entire spectrum from the almost popular discussion by Keim and Baker (paper no. 13) on "The Distribution and Utilization of Electromagnetically Enriched Isotopes from 1946 to 1955," to the very technical and mathematical papers by Bruck (nos. 26 and 27) on "A Very General Expression for the Dispersion of a Magnetic or Electrostatic Deflecting Field Sector" and "Use of Alternating Gradient Magnet Sector for High Dispersion."

A major portion of the papers are directed at practicing experts in the field of electromagnetic isotope separation, and thus lose interest to the general reader as they gain interest to the specialist. However, the wide range of the problems encountered in constructing and operating electromagnetic isotope separators that are described and discussed results in papers that contain much of interest to physical and inorganic chemists as well as metallurgists. The volume can be recommended to all chemists for casual reading. Chemists who are practicing mass spectroscopists or involved in the use of enriched or separated isotopes will probably want this volume on their bookshelves next to "Mass Spectroscopy in Physics Research" (Proceedings of the NBS Symposium 1951) to which the new volume forms an excellent supplement.

SHELL DEVELOPMENT COMPANY
EMERYVILLE, CALIFORNIA D. P. STEVENSON

Medicinal Chemistry. A Series of Reviews Prepared under the Auspices of the Division of Medicinal Chemistry of the American Chemical Society. Volume II. Edited by F. F. BLICKE, University of Michigan, and C. M. SUTER, Sterling-Winthrop Research Institute. John Wiley & Sons, Inc., 440 Fourth Avenue, New York 16, N. Y. 1956. vi + 311 pp. 15.5 × 23.5 cm. Price, $10.00.

This volume appears as the second member of a series of reviews in the field of medicinal chemistry. Like its predecessor, it consists of individual chapters, each a summary of some portion of the field which has ripened enough to warrant a review. The contents comprise sections on the cardiac glycosides by A. Stoll and T. L. Johnson, synthetic estrogens by J. A. Hogg and J. Korman, arylpiperidines as analgesics by C. M. Suter, and β-haloethylamines as adrenergic blocking agents by G. E. Ullyot and J. F. Kerwin. Each chapter is definitive in containing a complete bibliography and references to all pertinent compounds. The space is by no means equally divided among the four chapters. The section on the synthetic estrogens is exhaustive and comprises more than half the book. Into this space has gone a bibliography of references to more than 1200 compounds, and also to a few miscellaneous natural sources of estrogenic activity.

A main objective of the work is the reporting of structures and pharmacologic activity in such a way as to emphasize and clarify whatever regularities may exist between them. Although the chapters differ a little in presentation, each provides three essential features of the structure–activity picture: (1) tables of structures of individual compounds aligned with a quantitative expression of their biological activities, (2) a brief summary of the methods used in evaluating the relevant activity, (3) as many generalizations about structure–activity relationships as the author feels the data support. These areas are the real heart of the work and its principal justification. The separate aspects of chemistry and biology which can be found in detail in other sources are included only in condensed survey form.

A publication of this sort will no doubt have one primary audience. It will be composed of the chemists and pharmacologists of industry whose responsibility it is to prepare better therapeutic agents. The volume is well designed for this group. The authors are an exceptionally well qualified group and the wealth of their experience is reflected in the volume of previously unpublished data presented throughout. The chapter on adrenergic blocking agents, for example, has well over a hundred references to unpublished laboratory data.

A shortcoming of the book for some purposes is that it is already a little out of date. Most of the references are only through 1952 with a sprinkling from early 1953. The gap in time is particularly noticeable in the analgesic field, where new and significant arylpiperidine analogs have been reported from many laboratories in the last three years.

Proofreading has been carefully done, formulas are abundant and the text is clear and simple. Scientists working in and around the field of medicinal chemistry will undoubtedly want the book and will look forward to Vol. III.

MERCK SHARP & DOHME RESEARCH LABORATORIES
DIVISION OF MERCK & CO., INC. LEWIS H. SARETT
RAHWAY, NEW JERSEY

BOOKS RECEIVED

October 10, 1956–November 10, 1956

R. G. BRECKENRIDGE, Chairman, B. R. RUSSELL, AND THE LATE E. E. HAHN, Editorial Committee. "Photoconductivity Conference." Held at Atlantic City, November 4–6, 1954. John Wiley and Sons, Inc., 440 Fourth Avenue, New York 16, N. Y. 1956. 653 pp. $13.50.

G. E. COATES. "Organo-Metallic Compounds." John Wiley and Sons, Inc., 440 Fourth Avenue, New York 16, N. Y. 1956. 197 pp. $2.50.

ROBERT S. HARRIS, G. F. MARRIAN, AND KENNETH V. THIMANN (edited by). "Vitamins and Hormones. Advances in Research and Applications." Volume XIV. Academic Press, Inc., Publishers, 111 Fifth Avenue, New York 3, N. Y. 1956. 486 pp. $10.00.

K. HAUFFE. "Oxydation von Metallen und Metallegierungen." Springer-Verlag, Reichpietschufer 20, Berlin W 35 (West-Berlin), Germany. 1956. 389 pp. Ganzleinen DM 48.—.

CHARLES KITTEL. "Introduction to Solid State Physics." Second Edition. John Wiley and Sons, Inc., 440 Fourth Avenue, New York 16, N. Y. 1956. 617 pp. $12.00.

PAUL PASCAL, Editor. "Nouveau Traité de Chimie Minérale." Volume X. "Azote—Phosphore." By R. DUBRISAY AND P. PASCAL. Masson et Cie, Éditeurs, 120 Boulevard Saint-Germain, Paris 6, France. 1956. 963 pp. Broché 6.600 fr., Cartonné toile 7.500 fr.

H. N. V. TEMPERLEY. "Changes of State. A Mathematical-Physical Assessment." Interscience Publishers, Inc., 250 Fifth Avenue, New York 1, N. Y. 1956. 324 pp. $7.50.

H. TOMPA. "Polymer Solutions." Academic Press, Inc., Publishers 111 Fifth Avenue New York 3, N. Y. 1956. 325 pp. $8.50.