and the qualitative and quantitative aspects of autoxidation of saturated polyolefins are dealt with in Chapters 6 and 7, respectively. The final chapter is devoted to the investigation of polyolefin autoxidation by various techniques.

The arrangement and sequence of the subject matter is well organized and allows even the nonexpert to follow the kinetics without too much difficulty. There is an abundance of reaction rate equations which although essential for kinetic studies would appear to be overexcessive. There are also numerous chemical equations for the various autoxidation schemes. The problems given at the end of some chapters are adequate, being fairly difficult and of good variety and these should prove stimulating and challenging to the graduate student or research worker specializing in this field. However, I feel that answers to the numerical problems should have been provided and these would be most helpful to the student. The rate constants compiled in the various tables will prove to be a most useful feature to research workers in this field. The bibliography is up-to-date, covering the literature up to 1967. However, the inclusion of reference to private communication and unpublished work in a textbook is undesirable and meaningless. Several of the figures are very poorly drawn and detract from the quality of the book. The authors should have been able to reproduce the figures from the original papers. To sum up, the book can be highly recommended to the advanced graduate student and the specialist in this field who will find a wealth of material gathered together in a single book.

Reviewed by Lucy S. C. Wan School of Pharmacy University of Singapore Sepoy Lines, Singapore 3

Purification of Inorganic and Organic Materials: Techniques of Fractional Solidification. Edited by Morris Zief. Marcel Dekker, Inc., 95 Madison Ave., New York, NY 10016, 1969. xvii + 318 pp. 15×23 cm. Price \$17.75.

An earlier volume edited by Zief and Wilcox, entitled "Fractional Solidification," brought together for the first time the basic principles, apparatus, and applications of all types of solid-liquid processes associated with ultra-purification of chemical compounds. The volume here reviewed is a logical sequel inasmuch as it presents reliable methods for the preparation and analysis of such compounds. The choice of the methods presented admittedly reflects the interests of the author, however, they are described by experts in the respective areas and were chosen on the basis of originality, reproducibility, and adaptability to problems normally encountered in the laboratory. Contributing authors represent a broad distribution of research laboratories, both foreign and domestic.

Part I of the book concerns the description of analytical methods for ultra-pure compounds, including a variety of spectral techniques, thermal methods, electrochemical and gas-liquid chromatographic procedures. Part II describes in detail the most useful methods available for zone melting, progressive freezing and column crystallization. Particularly unique are the chapters describing rapid purification of organic compounds, purification in kilogram quantities, zone melting chromatography, and the concentration of flavors at low temperature.

As though in answer to the question of how one maintains the integrity of an ultrapure compound, Part III presents, in a single chapter, a discussion and tabulation of data concerning containers for pure substances. Quite interesting is the fact that polyfluorocarbons compare most favorably with quartz and borosilicate as acceptable container materials.

While they ought to be, at least for pharmacological evaluation and for reference standards, medicinal compounds are not subjected to ultrapurification. The book under review presents considerations which are applicable to some organic medicinal compounds, if and when it should be desirable to render them ultrapure.

Reviewed by Paul J. Jannke
College of Pharmacy
University of Connecticut
Storrs, CT 06268

## **NOTICES**

- Acetylenes and Allenes: Addition, Cyclization, and Polymerization Reactions. By THOMAS F. RUTLEDGE. Van Nostrand Reinhold Company, 450 West 33rd St., New York, NY 10001, 1969. xvi + 432 pp. 23.4 × 15.6 cm. Price \$21.50.
- Adrenergic Neurotransmission. (Study Group #33), Edited by G. E. W. WOLSTENHOLME and MAEVE O'CONNOR. Little, Brown and Company, 34 Beacon St., Boston, MA 02106, 1969. x + 123 pp. 12.5 × 18.9 cm. Price \$4.50.
- Amino Acides Peptides Proteines. Cahier No. 6. Edited by MAURICE VIGNERON. AEC Societe de Chimie Organique et Biologique, 24, Avenue de l'Opera, Paris 1<sup>er</sup>, France, 1966. 457 pp. 21 × 26.7 cm.
- Antibiotike-Fibel—Antibiotika und Chemotherapie. By M. PLEMPEL and H. OTTEN. Georg Thieme Verlag, 7 Stuttgart 1, P.O. Box 732, Gerdweg 63, Germany, 1969. xl + 994 pp. 15.5 × 23 cm. Price DM 98,-.
- Behavior of Enzyme Systems. 2nd Edition. By JOHN M. REINER. Van Nostrand Reinhold Company, 450 West 33rd St., New York, NY 10001, 1969. xviii + 345 pp. 15.5 × 23.5 cm.
- British National Formulary 1968. Published jointly by the British Medical Association and the Pharmaceutical Society of Great Britain, The Pharmaceutical Press, 17 Bloomsbury Square, London, W.C.1, England, 1968. 384 pp. 10.7 × 17.2 cm. Price 13s.6d plus postage.
- British Pharmaceutical Codex 1968. Edited by S. C. Jolly. The Pharmaceutical Press, 17 Bloomsbury Square, London, W.C.1, England, 1968. U. S. Distribution: Rittenhouse Book Store, Philadelphia, Pa. xxxvii + 1513 pp. 15 × 22.3 cm. Price \$19.50.
- Degradation of Herbicides. Edited by P. C. Kearney and D. D. Kaufman. Marcel Dekker, Inc., 95 Madison Ave., New York, NY 10016, 1969. xi + 394 pp. 15.7 × 23.6 cm. Price \$18.75.
- Die Interkantonale Vereinbarung uber die Kontrolle der Heilmittel vom 16. Juni 1954. By Felix Wust. Kommissionsverlag Herbert Lang & Cie AG Bern, Switzerland, 1969. 368 pp. 15.5 × 22.5 cm. Price 3 fr./Dm 52.—.
- Index Nominum 1966, Supplementum 1968. Edited by Laboratory of the Swiss Pharmaceutical Society. Swiss Pharmaceutical Society, Marktgasse 52, 3011 Bern, Switzerland 1969. 120 pp. 17 × 24 cm. Price Sw. fr. 35.—plus postage.
- Medicaments Organiques de Synthese. Vol. I. Edited by GUILLAUME VALETTE. Masson Et Cie, Editeurs, 120, Boulevard Saint-Germain, Paris VIe, France, 1969. 226 pp. 15.4 × 22 cm. Price 88 fr.
- Methods of Biochemical Analysis. Vol. 17. Edited by DAVID GLICK. Interscience Publishers. Div. of John Wiley & Sons, Inc., 605 Third Ave., New York, NY 10016, 1969. vi + 428 pp. 15.5 × 23.4 cm. Price \$16.50.
- Pharmaceutical Chemistry Part II. Inorganic Vol. 1. By M. L. SCHROFF. National Book Centre P-76, Dr. Sundari Mohan Ave., Calcutta, 14, India, 1968. v+700+xvi pp. 14.5  $\times$  22.2 cm. Price \$10.00.
- Pharmacological Research Communications. Vol. I. No. I. The Italian Pharmacological Society. Academic Press Inc. (London) Ltd., Berkeley Square House, London WIX 6 BA, 1969. 126 pp. 16.8 × 24 cm. Price 84/-, \$10.00 per 4 issues per annum.
- Pharmacology for the Preoperative Visit. Vol. 6, No. 1. Edited by J. S. Gravenstein. Little, Brown and Company, 34 Beacon St., Boston, MA, 1969. xi + 396 pp. 15.5 × 23.5 cm. Price \$22.00/yr. subscription rate.
- Precis de Microbiologie. Vol. I. By S. Lamin and A. German. Masson & Cie, Editeurs, 120, Boulevard Saint-Germain, Paris VIe, France, 1969. viii + 669 pp. 16.5 × 21.5 cm. Price 75 fr.
- The Psychopharmacology of the Normal Human. Edited by WAYNE O. Evans and Nathan S. Kline. Charles C Thomas, 301–327 East Lawrence Ave., Springfield, IL 62703, 1969. xi + 252 pp. 15.6 × 23.3 cm. Price \$11.50.
- Psychotropic Drug Response: Advances in Prediction. Edited by Phillip R. A. May and J. R. Wittenborn. Charles C Thomas, 301–327 East Lawrence Ave., Springfield, IL 62703, 1969. xii + 292 pp. 16 × 23.4 cm. Price \$12.75.
- The Role of Learning in Psychotherapy. Edited by RUTH PORTER. Little, Brown and Company, 34 Beacon St., Boston, MA 02106, 1968. xii + 340 pp. 15.5 × 23.2 cm. Price \$12.00.
- Steroid Reaction Mechanisms. By D. N. KIRK and M. P. HARTS-HORN. American Elsevier Publishing Co., Inc., 52 Vanderbilt Ave., New York, NY 10017, 1968. xi + 476 pp. 14 × 22 cm. Price \$30.00.