

capitates nor the accurate measurement of crystallographic properties has proved widely useful, but the fusion methods described in this book show much promise. Advantages claimed for these methods are the simplicity of the apparatus, the speed with which tests can be carried out, and the adaptability of the methods for use by operators with limited training.

The book has a brief chapter on apparatus, with abundant references to original literature. The longest section of the text is devoted to detailed description of techniques, including identification of compounds, analysis of mixtures, and determination of temperature-composition diagrams. Particularly interesting are the ingenious methods for purifying minute amounts of compounds and for rapidly measuring such properties as refractive index, birefringence, and dispersion. One of the special accomplishments of the fusion technique is the working out, quickly and easily, of temperature-composition diagrams. Several research applications of the method are discussed briefly. The book concludes with identification tables for 1200 organic compounds, arranged according to melting points, then according to eutectic melting points with ten standard compounds, and finally according to refractive indices at various temperatures.

The book has little theoretical material and makes few demands on the reader beyond an elementary knowledge of organic chemistry, crystallography, and microscope techniques. It is abundantly and beautifully illustrated, both with black-and-white photographs and with several color plates showing interference colors.

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Physiologie de l'Insecte. Les grandes fonctions, le comportement, écophysiologie. Rémy Chauvin. Institut National de la Recherche Agronomique, Paris, ed. 2, 1956. 917 pp. Illus. \$9.50.

This is the second edition, extensively revised, of a book that was first published in 1949. It reflects, in its encyclopedic bulk, the rapid development of insect physiology in the last 8 years. It now has the fleeting advantage of being the most up-to-date exposition of insect physiology, since V. B. Wigglesworth's *Principles of Insect Physiology*, second edition, is 6 years old.

Despite its youth, this book is inferior in many of those elements that are essential to a critical review: carelessness is symptomized by frequent bibliographic errors, some of which have been carried over from the first edition, and suppres-

sion of the critical faculty, perhaps from a desire to achieve impartiality, has caused juxtaposition of data of widely varying credibility.

Although these shortcomings make this a dangerous book for the beginner, its comprehensiveness makes it useful as a guide to the literature. In terms of emphasis it differs from Wigglesworth's *Principles of Insect Physiology* mainly in its more extensive consideration of insect biochemistry.

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Scientific Research in British Universities, 1955-56. H. M. Stationery Office, London, 1956 (order from British Information Services, 45 Rockefeller Plaza, New York 20, N.Y.). 372 pp. \$3.78.

Scientific Research in British Universities, 1955-56, which is published annually by the Department of Scientific and Industrial Research, is commended to American scientists who may be interested in visiting or exchanging information with workers in British universities and university colleges. Current research projects in each university department are listed, together with the names of the research workers. Name and subject indexes make the book easy to use.

New Books

L'Evolution de la Lithosphère: Oro-génèse. vol. III (pts. 1 and 2) of *Traité de Géologie*. Henri Termier and Genevieve Termier. Masson, Paris, 1956; 1957. 498 pp.; 437 pp. F. 9800 per volume.

Electricity and Magnetism. J. Newton. Philosophical Library, New York, 1956. 622 pp. \$10.

The History of Mathematics. Joseph Ehrenfried Hofmann. Translated from the German by Frank Gaynor and Henrietta O. Midonick. Philosophical Library, New York, 1957. 143 pp. \$4.75.

Canadian Cancer Conference. vol. 2. Proceedings of the second Canadian Cancer Research Conference, Honey Harbour, Ont., 17-21 June 1956. R. W. Begg, Ed. Academic Press, New York, 1957. 410 pp. \$8.50.

Archaeology in the U.S.S.R. Mikhail Miller. No. 3 of *Research Monographs of the Research Program on the U.S.S.R.* Praeger, New York, 1956. 232 pp. \$5.

The Next 50 Billion Years. An astronomer's glimpse into the future. Kenneth Heuer. Viking, New York, ed. 2, 1957. 144 pp. \$3.

1001 Questions Answered about the Seashore. N. J. Berrill and Jacquelyn Berrill. Dodd, Mead, New York, 1957. 317 pp. \$5.

An Introduction to Semiconductors. W. Crawford Dunlap, Jr. Wiley, New York; Chapman and Hall, London, 1957. 438 pp. \$11.75.

Introduction to Organic Chemistry. Louis F. Fieser and Mary Fieser. Heath, Boston, 1957. 616 pp. \$7.

Seafarers and Their Ships. The story of a century of progress in the safety of ships and the well-being of seamen. Prepared by the British Ministry of Transport and Civil Aviation and the Central Office of Information. Philosophical Library, New York, 1956. 96 pp. \$3.50.

Statistical Methods in Research and Production. With special reference to the chemical industry. Owen L. Davies, Ed. Oliver and Boyd, Edinburgh, rev. ed. 3, 1957. 406 pp. 45s.

System Engineering. An introduction to the design of large-scale systems. Harry H. Goode and Robert E. Machol. McGraw-Hill, New York, 1957. 563 pp. \$10.

Ruwenzori Expedition, 1934-35. vol. II, No. 9, *Trypetidae*. H. K. Munro. British Museum (Natural History). Jarrold, London, 1957. 198 pp. £2 5s.

Exploration Hydrobiologique du Lac Tanganika (1946-1947). vol. 3, pt. 6. Résultats scientifiques publiés par l'Institut Royal des Sciences Naturelles de Belgique. Brussels, 1957. 89 pp.

Miscellaneous Publications

Acoustical Streaming in the Vicinity of a Sphere. WADC Tech. Rept. 56-346. ASTIA Document No. AD 118044. R. W. Thrasher and P. J. Westervelt. 1957. 66 pp. *A Method for Calculating the Acoustical Characteristics of Aircraft in Flight.* WADC Tech. Note 56-488. ASTIA Document No. AD 110562. J. N. Cole, D. T. Kyrakis, Hans L. Oestreicher. 1956. 23 pp. *Bodily Dimensions of the Older Pilot.* WADC Tech. Rept. 56-459. ASTIA Document No. AD 97217. Edward I. Fry and Edmund Churchill. 1956. 39 pp. Wright Air Development Center, Wright-Patterson Air Force Base, Ohio (request from ASTIA Document Service Center, Knott Building, Dayton, Ohio).

A Laboratory Manual in Human Physiology. Albert R. Dawe and Robert T. Schopp. Holt, New York, 1957. 147 pp. \$2.25.

Medical Statistics of the United States Army. Calendar year 1954. Annual report of the Surgeon General. Office of the Surgeon General, Department of the Army, Washington, 1956. 344 pp.

Social Science Research Council Annual Report, 1955-1956. The Council, New York, 1957. 102 pp.

Departments of Geological Science in Educational Institutions of the United States and Canada in 1956-57. AGI Rept. No. 11, 1956-57 edition. Shepard W. Lowman, Ed. American Geological Institute, Washington 25, 1957. \$1.50.

Selected Scientific Papers from the Istituto Superiore Di Sanita. vol. 1. Fondazione Emanuele Paterno, Rome, 1956. (order from Interscience, New York). 233 pp. \$8.10.