

formation on yields or purity of product, or upon the conditions essential for success.

On the other hand, Chapter V gives a good general discussion of methods for the preparation of proteins and ends with specific and detailed descriptions of procedures whereby some 20 representative proteins may be obtained, many of them in crystalline form. In a later chapter are complete directions for the use of the Tiselius apparatus in determining diffusion constants, and, in still another chapter, a full description of the use of this device to determine mobilities.

Perhaps the least satisfactory section of the book is that on the isolation of amino acids from protein hydrolysates. The methods are given only in outline, so that reference to the original literature is necessary if use is to be made of them, and, as in the chapter on synthesis, there is little to indicate which of the various methods mentioned is to be preferred.

It is stated on page 5 that the new nomenclature for the amino acids, in particular the small capital letter prefixes for configurational relationship of these substances, is to be used throughout the book. Nevertheless, beginning on page 6 and almost consistently thereafter, *large* capital letter prefixes are used. To be sure, a small capital letter prefix is to be found here and there, and on page 70 both small and large capitals occur. This is apt to prove confusing to students, who may well wonder which is correct.

The book is thus somewhat disappointing in spite of the excellence of many chapters and the great amount of accurate and useful information about proteins and amino acids. There is much that is newly presented in textbook form. A number of tables offer information that would be difficult to find elsewhere. The student who reads it will indeed have acquired a fairly broad view of the subject, but he may frequently have to check back to the original literature to be sure of details.

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Reviewed in Brief

The Growth of Physical Science. 2nd ed. Sir James Jeans. New York: Cambridge Univ. Press, 1951. 364 pp. \$3.75.

The second edition of the posthumous work of the late Sir James Jeans, first published in 1947, has been brought up to date by correcting a number of misprints in dates and names as well as by including findings that had been overlooked by the author, who did not live to see his book in print. This edition, prepared by P. J. Grant, of the Cavendish Laboratory, can be highly recommended to teachers of physics and scientists in the neighboring fields who want to get an insight into the development of the physical sciences.

A brief outline of the physical sciences in antiquity is followed with a more detailed account of Greek mathematics, physics, philosophy, and astronomy. The sciences in Alexandria are discussed, followed by a

short description of science in Islam and in Europe during the Dark Ages. This then leads to the most important chapters: science during the Renaissance and the period from 1600 to 1700, called by Jeans "the century of genius." The two centuries after Newton are treated briefly, and the book closes with a chapter on modern physics covering the theory of relativity, the electrical structure of matter, quantum theory, and some modern astronomy, as well as experimental development in various fields of physics, including nuclear physics.

The easy style and clarity of description will make this a welcome edition for both students and teachers.

Methods in Medical Research, Vol. 2. Julius H. Comroe, Jr., Ed. Chicago: Year Book Pub., 1950. 361 pp. \$6.50.

This is the second in a series of volumes devoted to methods and techniques. The contents are grouped into three sections: "Methods of Study of Bacterial Viruses," "Pulmonary Function Tests," and "Assay of Hormone Secretions." Sixty contributors and reviewers are responsible for the material presented. The methods are clearly outlined and will be of unquestioned value to workers in the fields covered. The book is lithoprinted.

Methods in Medical Research, Vol. 3. Ralph W. Gerard, Ed. Chicago: Year Book Pub., 1950. 312 pp. \$7.00.

In the third volume, the same careful selection of material and clarity of presentation are maintained. The volume is divided into four self-contained sections with the following titles: "Genetics of Microorganisms," "Assay of Neurohumors," "Selected Psychomotor Measurement Methods," and "Methods for Study of Peptide Structure." Fifty-two contributors and reviewers prepared the material. The book can be highly recommended.

Scientific Book Register

Vorlesungen über Differential- und Integralrechnung: Differentialrechnung auf dem Gebiete mehrerer Variablen, Vol. II. A. Ostrowski. Basel: Verlag Birkhäuser, 1951. 480 pp. Sw. fr. 67, bound.

Substances Naturelles de Synthèse: Préparations et Méthodes de Laboratoire, Vol. I. Leon Velluz, Ed. Paris: Masson et Cie, 1951. 141 pp. 1,200 fr.

Annual Review of Plant Physiology, Vol. 2. Daniel I. Arnon, Ed.; Leonard Machlis, Assoc. Ed. Stanford, Calif.: Annual Reviews, 1951. 361 pp. \$6.00.

The Birds of Greenland, Part II. Finn Salomonsen; illus. by Gitz-Johansen. Copenhagen: Einar Munksgaard, 1951. Pp. 159-348, with 18 plates. \$9.00.

Physik und Chemie des Zellkernes. Protoplasma-Monographien, Band 20. Petr F. Milovidov. Berlin: Naturwissenschaftlicher Verlag, 1949. 529 pp.

Scientific and Learned Societies of Great Britain. 57th ed. London: Allen & Unwin; New York: Macmillan, 1951. 227 pp. \$5.25.

Metallurgical Thermochemistry. O. Kubaschewski and E. L. Evans. New York: Academic Press; London: Butterworth-Springer, 1951. 368 pp. \$6.00.

Collected Papers in Psychology. Edward Chace Tolman. Berkeley, Calif.: Univ. California Press, 1951. 269 pp. \$4.50.

Advances in Biological and Medical Physics, Vol. II. John H. Lawrence and Joseph G. Hamilton, Eds. New York: Academic Press, 1951. 348 pp. \$7.80.

Fundamentals of Horticulture: A Textbook Designed for Courses in General Horticulture. J. B. Edmond, A. M. Musser, and F. S. Andrews. Philadelphia: Blakiston, 1951. 502 pp. \$5.50.

On the Origin of Species by Means of Natural Selection. Reprint of first edition. Charles Darwin. New York: Philosophical Library, 1951. 426 pp. \$3.75.

Nature and Human Nature: Man's New Image of Himself. Lawrence K. Frank. New Brunswick, N. J.: Rutgers Univ. Press, 1951. 175 pp. \$3.00.

Artificial Fibres. R. W. Moncrieff. New York: Wiley, 1950. 313 pp. \$4.50.

Paracelsus: Magic into Science. Henry M. Pachter. New York: Schuman, 1951. 360 pp. \$4.00.

An Index of Mediaeval Studies Published in Festschriften, 1865-1946: With Special Reference to Romanic Material. Compiled by Harry F. Williams. Berkeley, Calif.: Univ. California Press, 1951. 165 pp. \$4.00.

The Elements of Mathematical Logic. Paul C. Rosenbloom. New York: Dover, 1950. 214 pp. \$2.95.

Social Aspects of Illness. Carol H. Cooley, Philadelphia-London: Saunders, 1951. 305 pp. \$3.25.

Association Affairs

The Seventh Philadelphia Meeting December 26-31, 1951

Raymond L. Taylor

Assistant Administrative Secretary

PLANS for the 118th meeting of the American Association for the Advancement of Science in the city where it was founded, in 1848, are proceeding on schedule. As forecast in the Preliminary Announcement (*Science*, 113, 635 [1951]), there will be outstanding programs in every principal field of science. A new section, Section P—Industrial Science, overwhelmingly approved by a vote of the Council, will be inaugurated at this meeting.

Sectional Programs. All 18 of the Association's sections and subsections have developed plans for programs, largely of the symposium type. Sections also scheduling sessions for contributed papers include:

- Section C—Chemistry, Ed. F. Degering, Buckman Laboratories, Inc., 1256 North McLean Street, Memphis 8, Tennessee
- Section E—Geology and Geography, Leland Horberg, University of Chicago
- Section G—Botanical Sciences, Stanley A. Cain, University of Michigan
- Section H—Anthropology, Marian Smith, Columbia University
- Section I—Psychology, Delos Wickens, Ohio State University
- Subsection Nd—Dentistry, Russell A. Bunting, University of Michigan
- Subsection Np—Pharmacy, Glenn L. Jenkins, Purdue University
- Section Q—Education, Dean A. Worcester, University of Nebraska

Those who wish to read papers in one of the above sections should submit titles and abstracts to the respective secretaries before *September 30*. Most of the sectional programs will be held in Philadelphia's Municipal Auditorium, or "Convention Hall."

Programs of the Participating Societies. The details of the sessions of the societies meeting with the AAAS will appear at a later date. Most of these sessions will be in the downtown hotels, but exceptions include the symposium "Radioisotopes in Medicine," sponsored by the Oak Ridge Institute of Nuclear Studies; the demonstration sessions of the American Society of Zoologists; and the evening lectures of the National Geographic Society, Phi Beta Kappa, and Phi Kappa Phi—all of which are scheduled for Convention Hall or university auditoriums near by. The Convention Hall will also house the Main Registration and Information Center, the 150-booth Annual Exposition of Science and Industry, the AAAS Science Theatre, the Visible Directory of Registrants, a Holland-operated Restaurant, and the Biologists' Smoker.

LOCAL INSTITUTIONS PARTICIPATING IN THE PROGRAMS

Amateur Telescope Makers of The Franklin Institute
Bryn Mawr College, Department of Geology
City Planning Commission, City of Philadelphia
Drexel Institute of Technology, College of Engineering
Engineers' Club of Philadelphia
Fels Planetarium, The Franklin Institute
Pennsylvania Academy of Science
Philadelphia Botanical Club
Rittenhouse Astronomical Society
Swarthmore College, Division of Engineering
Towne Scientific School, University of Pennsylvania
University Museum, University of Pennsylvania
Villanova College, Department of Engineering

HOUSING AND REGISTRATION

The hotels of Philadelphia have pledged themselves to provide ample housing, at moderate rates, for those attending the 118th meeting. Housing will be handled by the Philadelphia Convention and Visitors Bureau. Special forms in triplicate that prevent errors and provide for "desired rate" and "maximum rate" will be used; confirmations will be made promptly. The large number of hotels cooperating ensures a wide latitude of choice.