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.

H. B. VICKERY

Department of Biochemistry
Connecticut Agricultural Experiment Station

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.