The chapter on analytic chemistry of proteins and amino acids sets forth the various methods used for the estimation of amino acids in hydrolyzates, as well as the newer methods for sequence determination, and discusses the results of these, always with the thought expressed or implied that knowledge of the "covalent" sequences is basic to an understanding of the biological nature of proteins. The book properly emphasizes that, upon this covalent structure, a noncovalent specific structure characterizes proteins, especially the globular group.

No consideration is given to ion binding by proteins, except insofar as hydrogen-ion binding is a tool in analytic determination, and the description of denaturation phenomena is skimpy.

The book should be valuable as a guide to chemistry majors who have had standard organic and physical chemistry courses, to chemists who are not familiar with its field, and to biologists who would like to know what the chemists are talking about.

MILTON LEVY
Department of Biochemistry, New York University College of Medicine

A Short Textbook of Colloid Chemistry. B. Jirgensons and M. E. Straumanis. Wiley, New York; Pergamon, London, 1954. (Rev. version of *Kurzes Lehrbuch der Kolloidchemie,* 1949.) xvi + 420 pp. Illus. $8.

This little book is a completely revised version of the authors' *Kurzes Lehrbuch der Kolloidchemie,* which was published in 1949. The short first part concerns itself with defining the colloid field of physical chemistry and with the definitions and classifications needed for its understanding. The reader of the first part will acquire only a superficial knowledge of the subject.

The larger second section of the book is filled with a vast amount of experimental facts on colloids, together with statements of the applicable theories. The authors leave one with the impression that they have not left out a single bit of information that they considered at all useful. There is a good deal of very recent matter presented in a rather convincing manner. However, the whole subject fails in logical development. For example, chapters 9–11 concern themselves with the size, shape, and structure of colloids, and these are followed by one on the preparation of such systems. Again thixotropy, a colloidal process, is briefly discussed in a section following that on mechanical properties of polymers when it ought to appear under coagulation. A student would grasp the subject far better if it were presented without so many facts but in a logical manner—that is, all work on colloidal processes following a full knowledge of the properties of colloids and their extended surfaces.

The book is well illustrated and will be useful as a source of much factual information. Some authors' names are spelled incorrectly, and the initials of several are incorrect. However, the format makes for easy reading.

LLOYD H. REYERSON
School of Chemistry, University of Minnesota

New Books

Time's Arrow and Evolution. Harold F. Blum. Princeton Univ. Press, Princeton, N.J., ed. 2, 1955. 219 pp. $4.50.

Seashores. A guide to shells, sea plants, shore birds, and other natural features of American coasts. Herbert S. Zim and Lester Ingle. Simon & Schuster, New York, 1955. 160 pp. Paper, $1; cloth, $1.95.

Grassland Farming. George H. Serviss and Gilbert H. Ahlgren. Wiley, New York; Chapman & Hall, London, 1955. 146 pp. $2.96.

Lehrbuch und Atlas der Anatomie des Menschen. Band II, *Eingeweide Nervensystem-Sinnesorgane.* Fr. Kopsch. Thieme, Stuttgart, Germany, 1955 (U.S. distrib.: Intercontinental Medical Book Corp., New York 16). 768 pp. $15.35.

Introduction to Social Welfare. Walter A. Friedlander. Prentice-Hall, New York, 1955. 683 pp. $9.

The Genus Nicotiana. Origins, relationships and evolution of its species in the light of their distribution, morphology and cytogenetics. Thomas Harper Goodspeed. Chronica Botanica, Waltham, Mass.; Stechert-Hafner, New York, 1954. 536 pp. $12.50.

Origins of Resistance to Toxic Agents. A symposium. M. G. Sevag, Roger D. Reid, and Orr E. Reynolds, Eds. Academic Press, New York, 1955. 471 pp. $12.

The Human Adrenal Cortex. Ciba Foundation Colloquia on Endocrinology, vol. VII. G. E. W. Wolstenholme and Margaret P. Cameron, Eds. Little, Brown, Boston, 1955. 665 pp. $10.

Bergsonian Philosophy and Thomism. Jacques Maritain. Trans. by Mabelle L. Andison and J. Gordon Andison. Philosophical Library, New York, 1955. 383 pp. $6.

Machine Translation of Languages. Fourteen essays. William N. Locke and A. Donald Booth, Eds. Massachusetts Inst. of Technology, Cambridge; Wiley, New York; Chapman & Hall, London, 1955. 243 pp. $6.

Analysis of Insecticides and Acaricides. A treatise on sampling, isolation, and determination, including residue methods. Francis A. Gunther and Roger C. Blinn. Interscience, New York–London, 1955. 696 pp. $14.

Information Processing Equipment. M. P. Doss, Ed. Reinhold, New York, 1955. 270 pp. $8.75.

Astronomical Cuneiform Texts. vol. I, *Introduction the Moon,* 278 pp.; vol. II, *The Planets Indices,* 233 pp.; vol. III, *Plates.* O. Neugebauer, Ed. Lund Humphries, London, 1955. £5 5s. per set.

The Roger Adams Symposium. Papers presented at a symposium in honor of Roger Adams at the Unversity of Illinois, Sept. 3–4, 1954. Wiley, New York; Chapman & Hall, London, 1955. 140 pp. $3.75.

Der Briefwechsel von Johann Bernoulli. Band I. Herausgegeben von der naturforschenden gesellschaft in Basel. Birkhauser, Basel, 1955. 531 pp.

The Gifted Student as Future Scientist. Paul F. Brandwein. Harcourt, Brace, New York, 1955. 107 pp. $2.

The Collected Works of George Abram Miller. vol. IV. Univ. of Illinois, Urbana, 1955. 458 pp. $7.50.

Handbook of Food and Agriculture. Fred C. Blanck, Ed. Reinhold, New York; Chapman & Hall, London, 1955. 1039 pp. $12.50.

Theory of Functions of a Real Variable. I. P. Natanson. Trans. by Leo F. Boron and Edwin Hewitt. Ungar, New York, 1955. 277 pp. $6.50.

Chemistry of Carbon Compounds. vol. III, pt. A, *Aromatic Compounds.* E. H. Rodd, Ed. Elsevier, New York–London, 1954. 685 pp. $17.50.

Approximations for Digital Computers. Cecil Hastings, Jr., Jeanne T. Hayward, and James P. Wong. Princeton Univ. Press, Princeton, 1955. 201 pp. $4.

Personal Adjustment and Mental Health. Alexander A. Schneiders. Rinehart, New York, 1955. 587 pp. $5.

Annual Review of Plant Physiology. vol. 6. Daniel I. Arnon, Ed. Annual Reviews, Stanford, Calif., 1955. 505 pp. $7.

Ancient Education. William A. Smith. Philosophical Library, New York, 1955. 309 pp. $3.75.

The Biology of a Marine Copepod *Calanus finmarchicus* (Gunnerus). S. M. Marshall and A. P. Orr. Oliver & Boyd, London, 1955. 188 pp. 21s.

Miscellaneous Publications

(Inquiries concerning these publications should be addressed, not to Science, *but to the publisher or agency sponsoring the publication.)*

Transactions of the American College of Cardiology. vol. IV, 1954. Simon Dack and Bruno Kisch, Eds. The College, New York, 1955. 319 pp.

Astronomy. Vocatonal and professional monograph. No. 72. Freeman D. Miller. Bellman, Cambridge, Mass., 1955. 32 pp. $1.

An Engineering Interpretation of the Economic and Financial Aspects of American Industry. vol. XI, *The Automotive Industry.* George S. Armstrong & Co., Inc., New York, 1955. 87 pp.

Some Polyclad Flatworms from the West Indies and Florida. vol. 104, No. 3341. Libbie H. Hyman. Smithsonian Institution, Washington, 1955. 35 pp.

Footing the Hospital Bill. Pamphlet No. 222. Elizabeth Ogg. Public Affairs Pamphlets, New York, 1955. 28 pp. $0.25.

The Ford Foundation Report 1954. The Foundation, New York, 1955. 114 pp.