

is divided into five sections covering the following subjects; The Growth of Whiskers, *i.e.*, filamentary single crystals (five papers); The Properties of Whiskers and Crystal Imperfections (eleven papers); The Growth of Crystals of the Solvent Phase (nine papers); The Growth of Crystals of the Solute Phase (seven papers); The Crystallization of Polymers (eight papers). In each section, the first paper is a review of the work to date; separate reviews are included on the kinetics of polymer crystallization and on the morphology of polymer crystals. The review covering crystal whiskers is particularly noteworthy and includes some two hundred fifty references in one hundred pages. The discussions which followed the presentation of the papers are included; some contributions to the discussions were written in considerable detail after the conference and add to the value of the report.

The principal distinguishing features of the conference report are the attention given to whisker phenomena which represents half of the written record, the effort to associate the problem of liquid structure with studies of crystal growth from melts and the comparison of the characteristics of polymer crystals with those of ordinary crystals.

The report was printed by the photo-offset process after typing. The use of large type resulted in a large, heavy volume but the clarity and general effect are pleasant. The nearly three hundred photographs and the more than two hundred line drawings are excellent. The papers are uniformly well written.

Thirteen of the participating scientists were from other countries; I. N. Stranski from Berlin was present and the delegation from Bristol University was headed by F. C. Frank. Six of the scientists taking part also had been present at the Faraday Society conference. The conference and its carefully prepared report represent a most useful contribution to an important and rapidly growing field of research.

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JOHN E. VANCE

**Symposium on Protein Structure.** Sponsored by the Protein Commission of the Section of Biological Chemistry of I.U.P.A.C. and held at the College de France, Paris, 25-29 July, 1957. Edited by ALBERT NEUBERGER, Professor of Chemical Pathology, St. Mary's Hospital Medical School, London. John Wiley and Sons, Inc., 440 Fourth Avenue, New York 16, N. Y. 1958. 351 pp. 16 X 24 cm. Price, \$7.75.

This symposium and the volume that reports its proceedings may well be considered a sequel to the Ciba Foundation symposium in 1952 that resulted in the volume entitled "Chemical Structure of Proteins" (reviewed in THIS JOURNAL, 76, 6212 (1954)). The speakers in both symposia are well known for their investigations of the structure of proteins. Some participated in both.

About a third of the volume is taken up with a discussion of general problems and methods in protein chemistry. The remainder is devoted to specific information about the structure of hemoglobin, myoglobin, proteolytic enzymes, ribonuclease, tobacco mosaic virus, and other proteins.

This book dramatically illustrates the progress that has been made in elucidating the structures of proteins during the five years between the symposia. Much of the earlier symposium was devoted to a discussion of methods. The now commonplace usage of these methods has led to the specific and detailed information about many proteins and peptides that was so ably presented in the second symposium and is recorded in this volume.

The subject matter of this book is too detailed to be read with profit unless the reader has a good grounding in the fundamentals of protein chemistry. On the other hand, workers in the field and teachers whose course work deals with protein chemistry will find it a valuable addition to their library.

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## BOOKS RECEIVED

May 10, 1959-June 10, 1959

REINHOLD BENESCH, RUTH E. BENESCH, PAUL D. BOYER, IRVING M. KLOTZ, W. ROBERT MIDDLEBROOK, ANDREW G. SZENT-GYORGYI, AND DAVID R. SCHWARZ, Organized and Edited by. "Sulfur in Proteins. Proceedings of a Symposium Held at Falmouth, Massachusetts, May, 1958." Academic Press, Inc., 111 Fifth Avenue, New York 3, N. Y. 1959. 469 pp. \$14.00.

THEODOR BERSIN. "Biochemie der Hormone." Akademische Verlagsgesellschaft Geest & Portig K.-G., Sternwartenstrasse 8, Leipzig C 1, Germany. 1959. 342 pp. DM. 27.—.

MILAN BIER, Edited by. "Electrophoresis: Theory, Methods and Applications." Academic Press, Inc., 111 Fifth Avenue, New York 3, N. Y. 1959. 563 pp. \$15.00.

CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE. "Premier Colloque International de Photographie Corpusculaire. Strasbourg, 1<sup>er</sup> au 6 Juillet 1957." Centre National de la Recherche Scientifique, 13, Quai Anatole France, Paris 7, France. 1958. 451 pp. 5.300 Fr.

R. C. FULLER, Chairman of the Symposium Committee. "Brookhaven Symposia in Biology." Number 11. "The Photochemical Apparatus. Its Structure and Function. Report of Symposium held June 16-18, 1958." Office of Technical Services, Department of Commerce, Washington 25, D. C. 1959. 366 pp. \$3.50.

W. D. LAWSON AND S. NIELSEN. "Semi-Conductor Monographs. Preparation of Single Crystals." Academic Press, Inc., 111 Fifth Avenue, New York 3, N. Y. 1958. 255 pp. \$8.80.

NATIONAL PHYSICAL LABORATORY. "The Physical Chemistry of Metallic Solutions and Intermetallic Compounds. Proceedings of a Symposium held at the National Physical Laboratory on 4th, 5th and 6th June, 1958." Symposium No. 9. Volumes I and II. Her Majesty's Stationery Office, York House, Kingsway, London, W.C. 2, England. 1959. 649 pp. £ 1. 17 s. 6d. (two volumes).

HOWARD K. SCHACHMAN. "Ultracentrifugation in Biochemistry." Academic Press, Inc., 111 Fifth Avenue, New York 3, N. Y. 1959. 272 pp. \$8.80.

FREDERICK SEITZ AND DAVID TURNBULL, Editors. "Solid State Physics. Advances in Research and Applications." Volume 8. Academic Press, Inc., 111 Fifth Avenue, New York 3, N. Y. 1959. 519 pp. \$13.50.

N. N. SEMENOV. "Some Problems in Chemical Kinetics and Reactivity." Volume 2. Translated by MICHEL BOUDART. Princeton University Press, Princeton, New Jersey. 1959. 330 pp. \$4.50.

A. F. TROTMAN-DICKENSON. "Free Radicals. An Introduction." John Wiley and Sons, Inc., 440 Fourth Avenue, New York 16, N. Y. 1959. 142 pp. \$2.50.

JOHN TURKEVICH AND LUDMILLA B. TURKEVICH. "Russian for the Scientist." D. Van Nostrand Company, Inc., 120 Alexander Street, Princeton, New Jersey. 1959. 255 pp. \$5.95.

ARTHUR R. VON HIPPEL. "Molecular Science and Molecular Engineering." John Wiley and Sons, Inc., 440 Fourth Avenue, New York 16, N. Y. 1959. 446 pp. \$18.50.

P. J. WHEATLEY. "The Determination of Molecular Structure." Oxford University Press, 417 Fifth Avenue, New York 16, N. Y. 1959. 263 pp. \$5.60.