Book Reviews

Proceedings of the First International Congress of Electron Microscopy. Paris: Editions de la Revue d'Optique, 1953. 768 pp. Illus. $23.75.

The First International Congress of Electron Microscopy was held in Paris during September 1950 and was attended by more than 600 persons, mostly Europeans, from 17 different countries who contributed 135 papers. The papers have finally appeared in these *Proceedings* together with the inaugural addresses from L. de Broglie, G. I. Finch, and R. W. G. Wyckoff.

The volume is divided into five sections which consist of 240 pages on electron optics, 93 on electron diffraction, 91 on metallurgical applications, 93 on chemical applications, and 207 pages on biological applications. There are articles here which should be of interest to everyone concerned with the development of electron microscopy and the results obtained with this instrument. Some articles are only short notes, while others like that of Finch on Mechanical Wear and Lubrication review an entire field and the role that electron microscopy and electron diffraction have played in its recent development. In spite of rather poor paper the many illustrations are of excellent quality. It is to be hoped that printers of the proceedings of future Congresses will do as well, but in less time and at lower cost.

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Organic Chemistry: An Advanced Treatise, Vols. III and IV. Henry Gilman, Ed. New York: Wiley; London: Chapman & Hall, 1953. 1245 pp., illus.+ indexes. $8.75 a volume.

The well-known Volumes I and II edited by Gilman have gone through two editions in which different chapters appeared and advisory writers prepared parts in the two editions. This change in content of the two editions has necessitated some cross reference to the earlier edition. It is with pleasure that one notes the expansion of the series to Volumes III and IV with new material rather than classification of this new material as a new edition of Volumes I and II, and it is thus expected that future presentations in this series may continue as additional volumes. This will thus preserve the earlier contributions in this progressive series.

As in the earlier volumes, this work is directed by an editorial board under the able chairmanship of Henry Gilman, and each volume consists of specialized chapters or sections written by competent and well-chosen authorities in the subject assigned.

Volume III includes the following topics: The Study of Organic Reaction Mechanisms by Paul D. Bartlett; Application of Infrared and Ultraviolet Spectra to Organic Chemistry by Foil A. Miller; Lipids by J. C. Cowan and H. E. Carter; Organic Dyes by H. W. Grimmel; Some Aspects of Chemotherapy by H. R. Ing; and Antibiotics by Lee C. Cheney.

Volume IV includes: The Terpenes by Richard H. Eastman and Carl R. Noller; Heterocyclic Chemistry by Richard H. Wiley; Starch by W. Z. Hassid; Chemistry of Explosives by George F. Wright; Reaction of Organic Gases Under Pressure by W. E. Hanford and D. E. Sargent; and Oxidation Processes by William A. Waters.

As in the previous volumes, there is a balance between specific classes of organic compounds, such as dyes, lipids, terpenes, and starch, and applications of mechanisms or measurement techniques such as antibiotics, explosives, oxidation processes, and infrared and ultraviolet absorption spectra measurements. The authoritative status of the separate authors in the fields they write on makes the series of volumes a required reference work for all students and research workers who are engaged in programs involving these fields.

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Science in Alaska, 1951. Proceedings of the Second Alaskan Science Conference, AAAS, Alaska Division, 1953. (Order from: Dr. Troy L. Péwé, Box 4004, College, Alaska.) 362 pp. $3.00.

The second Alaska Science Congress, held in McKinley Park, was the first to be held in Alaska, the preceding meeting being in Washington, D. C.

This volume which contains the papers presented at the conference, will be a valuable reference for anyone interested in any phase of science in the Territory. It consists of reports of original research, a number of historical papers reviewing what has been done in the Territory in the past, and other papers outlining immediate needs in various major scientific fields.

A number of the original papers presented at this meeting came from the activities of the Arctic Health Research Institute, the Cooperative Wildlife Research Unit at the University of Alaska, and the Fish and Wildlife Service personnel in the Territory. The University of Alaska has also greatly expanded its activities in the scientific field and a wide range of activities have been carried on by defense personnel stationed in Alaska.

In addition to general and joint sessions the meeting was broken into nine subject matter units as follows:

1. Agriculture, Botany, and Forestry
2. Medicine, Physiology, and Public Health
3. Engineering, Industrial Science, and Aviation
4. Geology and Geography
5. Sociology, Economics, and Education
6. Anthropology
7. Geophysics
8. Meteorology and Oceanography
9. Wildlife and Zoology

Original research papers were especially numerous