

Bibliography of Research Relating to the Communication of Scientific and Technical Information. J. H. KELLEY, C. L. BERNIER, AND J. C. LEONDER. xxxii + 732 pp. Rutgers University Press, New Brunswick, N. J. 08903. 1967. \$15.00.

Covering the period 1955–June 1965, this bibliography is concerned with generation, acquisition, processing storage, retrieval, and use of information. It includes about 3700 references which were selected from about 30,000 under the categories of information sciences and services, systems, generation, acquisition, processing, storage, retrieval, use, and support. The author and subject indexes are based principally on the titles of the references. Although this book lacks comprehensiveness and leans too heavily on secondary sources and government reports, it should be useful to readers of this Journal.

Macromolecular Reviews. Volume 2. A. PETERLIN, M. GOODMAN, S. OKAMURA, B. H. ZIMM, AND H. F. MARK, Editors. 295 pp. John Wiley & Sons, 605 Third Avenue, New York, N. Y. 10016. 1967. \$13.50.

Each of the following four reviews are critical, readable, concise, and complete introductions to an important new area of polymer science: "The Technique of Neutron Scattering and its Application to Polymers," G. J. Safford and A. W. Naumann; "Syndiotactic Polypropylene," E. A. Youngman and J. Boor, Jr.; "Homogeneous Anionic Polymerization of Unsaturated Monomers," M. Morton and L. J. Fetters; and "The Nature of the Active Site in the Ziegler-Type Catalyst," J. Boor, Jr.

Technology in Western Civilization. The Emergence of Modern Industrial Society, Earliest Times to 1900. Volume 1. M. KRANZBERG AND C. W. PURSELL, JR., Editors. 802 pp. Oxford University Press, 200 Madison Avenue, New York, N. Y. 10016. 1967. \$8.50

Here is proof that a committee does not have to result in a giraffe. This excellent book on the history of technology from the beginnings of man to the 20th century was formulated by a panel of historians of technology in the Spring of 1963. The panel's objective was to produce a course in the history of technology for the United States Armed Forces Institute. The members of the panel surveyed the existing works in the history of technology and concluded that none balanced adequately the cultural, economic, sociological, technological, and historical aspects (unfortunately, the members overlooked the scientific). Consequently, this book was launched to fill the need. This it does admirably, except for the one weakness noted. As this two-volume work (Volume 2 will cover the period since 1900) is planned as a text for a one-year course, presumably in the Freshman or Sophomore year and primarily for non-scientists, the scientific lacuna may be an advantage.

Organizationally, the book is well conceived. In view of the fact that over 30 historians constituted the contributors, the editors did a remarkable job integrating the many facts, interpretations, and styles. Although the writing is not equally good throughout, none of the writing is poor. The history flows smoothly from chapter to chapter, and tells an interesting and unified story of technology which should find wide use throughout the university world as a text. Engineers and scientists will find this book informative and stimulating and a well-consulted addition to all technical libraries.

Introduction to Computational Linguistics. D. G. HAYS. xvi + 231 pp. American Elsevier Publishing Co., Inc., 52 Vanderbilt Avenue, New York, N. Y. 10017. 1967. \$9.75.

Written specifically as a basic text in a university course by the author at California State College and UCLA and at Rand Corp., this book should be of interest also to linguists and computer programmers who are involved in language processing by computers. This book is very much oriented to the use of computers for machine translation of language to language and of text to abstract and index, and thus discusses sort programs, algorithms, matrix operations, tree storage, character sets, dictionary lookup, parsing strategies, grammars, concordances, etc.

Reaction Index of Organic Syntheses. S. SUGASAWA AND S. NAKAI. 251 pp. John Wiley & Sons, Inc., 605 Third Avenue, New York, N. Y. 10016. 1967. \$8.75.

The approximately 2000 reactions in the first 45 volumes of Organic Syntheses are indexed specifically under 31 classes of reactions, such as oxidation, reduction, polymerization, and condensation. Thus, under oxidation, there is first oxidation of CH_3 to COOH , CHO , and $\text{CH}(\text{OCOR})_2$, then oxidation of CH_2 to CO , CHOH , and CHOOH , and so on. The index is easy and simple to use, and obviously was a labor of love and, probably, of necessity as existing indexes are oriented to the compounds and not to the reactions.

TICA 3. Technical Information Center Administration. A. W. ELIAS, Editor. vii + 135 pp. Spartan Books, 432 Park Avenue, New York, N. Y. 10016. 1967. \$7.50.

The contents of this book is that of the third conference, August 29–September 1, 1966, sponsored by the Drexel Institute of Technology, and includes the following: Library Resources—T. C. Hines; Conventional files—P. V. Gentieu; Abstracting—I. D. Welt; Indexing—A. W. Elias; Composition, Copying, and Semimechanized Filing and Searching Devices—S. Herner; Use of Tabulating Equipment—R. Ford; Computer Roles—G. V. O'Brien; and Analysis and Design of Information Systems—H. Borko.

BOOK REVIEWS

Encyclopedia of Industrial Chemical Analysis. Volume 4. F. D. SNELL AND C. J. HILTON, Editors. xiii + 650 pp. John Wiley & Sons, 605 Third Avenue, New York, N. Y. (subscription), \$45.00.

Volume 4 begins the methods devoted to the analysis of specific products or groups of products, and covers Ablative Materials to Alkaloids. The articles are well written, easily understandable by B. S. chemists, yet at the level of the analytical chemist. This encyclopedia will find heavy use in university and industrial libraries.

Computer Applications—A Select Bibliography. C. I. BARNES. vi + 66 pp. Hertis, Hatfield College of Technology, Hertfordshire, England. 1967. 5 schillings.

This pamphlet is an annotated bibliography of the literature on the uses of computers in administration operations, process control, engineering, and metallurgy over the period January 1965 to December 1966. A total of 518 references is included. The selection was based on the interests of users and not of the computer specialist nor of the information scientist.