

NEW BOOKS

COMPUTER INDUSTRY ANNUAL 1967-68 (Computer Design Publishing Corp., 18 E. 41st St., New York, 390 p., 1967, \$18.50).

This volume is designed to be a product selection guide, directory and industry reference for the entire electronic data processing community of equipment users, designers and general management. To meet these aims, the book contains a concise summary of the operation and organization of modern data processing systems including a glossary of the most frequently used terms, a computer manufacturers' profile which gives the sales, earnings, market position, and growth of 16 computer companies, a summary of the market size and growth for computers and related products, an exhaustive review of equipment characteristics, a definitive review of the applications, techniques, and economics of commercial time-sharing facilities, a list of professional societies, associations, conferences and exhibitions related to computers and data processing, an alphabetical list of all computer-related products which includes 450 products organized into 15 categories, with simple cross reference, a service directory listing in alphabetical order the names and addresses of suppliers and finally an extensive manufacturers' index listing nearly 2000 companies. This is the first book of its kind. For those who are contemplating the use of EDP, it provides a ready primer; for those who regularly use EDP, it provides a ready reference.

Of special interest to the scientific community is the excellent section on time-sharing facilities and the equipment characteristics review. This volume is recommended for inclusion in the libraries of those working with EDP systems.

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DICTIONARY OF INVENTIONS AND DISCOVERIES, by E. F. Carter (Philosophical Library, New York, 193 p., 1967, \$6).

This slim volume clearly is the distillation of many years of patient investigation and annotation. It is an alphabetically-arranged compilation of what, in the author's view, are man's most significant scientific and technical achievements. Included in the listing are individual inventions and discoveries themselves (insulin, logarithms, sextant, relativity theory), important subject areas under which are noted significant applications and improvements (light, bridge, music, mass production) and the names of a host of individual scientists and inventors.

In spite of the painstaking care evident in this compilation, it is difficult to decide what real purpose the volume serves. To the professional in any scientific or technical area, the minimal information provided under each heading is obvious and elementary. The astronomer does not need this book to discover that Johannes Kepler propounded the laws of planetary motion in his "Astronomia nova." On the other hand, the interested amateur of science will not find enough information here to satisfy him. Indeed, under many headings, no explanation or interpretation is offered at all. Leucin, for example, is identified as being related to the field of inorganic chemistry and as having been discovered in urine by Friedrich von Frerichs, but is not further explained. Finally, the uninformed reader would probably not know enough to identify the headings under which he should look for information, and if he did, would find little illumination: "Le Monnier, Louis-Guillaume (Fr) (1717-99) c.1750. Made important researches into

atmospheric electricity." This reader would do a lot better if he consulted a narrative history of science.

There may be an occasional user who finds this book convenient in identifying the people and the products of science and technology as a preliminary step before consulting more comprehensive reference works. The science writer, interpreter of science to the general public, may be one who finds this a handy tool, but even he might better invest in one of the several excellent encyclopedias of science and technology which not only list the discoveries and discoverers, but explain and interpret them in considerable detail as well.

The book is organized with care, but for some entries there is skimping even on the little information provided. Most individuals listed are identified as to nationality, but a large number, including Waage, Lorenz, Crawford, Macadam, Libavius, Crookes and Cannizarro are denied even this courtesy.

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OPTICAL ROTARY DISPERSION AND CIRCULAR DICHOISM IN ORGANIC CHEMISTRY, edited by G. Snatzke (Heyden and Son Limited, distributed in United States by Sadtler Research Laboratories, Inc. 416 pp. 1967, \$13.50).

In September of 1965, a short course on Optical Rotary Dispersion and Circular Dichroism in Organic Chemistry was held in Bonn, Germany. The stated intention of this course was to give an introduction into these methods and to discuss several applications from the fields of organic and inorganic chemistry and biochemistry. Twenty-three principal lectures were delivered by 17 selected speakers. This book is a compilation of the lectures presented at the Bonn Short Course.

The book is divided into 23 chapters, each of which represents a lecture from the short course. The chapters are excellent authoritative discussions of theory, instrumentation and applications of ORD and CD. Each chapter is extensively referenced and contains an abundance of diagrams, structures and equations.

The first four chapters are discussions of the theory and the role of ORD and CD in Organic Chemistry. This is followed by an analysis of commercially available ORD and CD instruments. The next two chapters are devoted to ORD and CD characteristics of metallic and organometallic complexes. Among those applications discussed are saturated carbonyls, carboxylic acids, lactones, proteins, polymers and steroids. The remaining chapters include a comparison between ORD and CD techniques and a discussion of various factors affecting ORD and CD measurements.

This book would be of most interest to the chemist involved in organic structure analysis. Optical Rotary Dispersion and Circular Dichroism measurements can be used as supporting data in structural proofs. These measurements are also valuable in determining organic conformation and configuration. In some instances, ORD and CD can give structural evidence where other methods have failed.

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