

Sechzig Jahre medizinische Radiologie. Probleme und Empirie. Hans R. Schinz. Thieme, Stuttgart, 1959 (order from Intercontinental Medical Book Corp., New York). 275 pp. Illus. \$4.65.

This little booklet was received at Munich with great enthusiasm by the several thousand participants in the 9th International Congress on Radiology (1959). Written by invitation, the booklet presents the story of the first 60 years of clinical radiology in very fine essays, giving a short survey of the problems as well as some stimulating sketches of the early personalities working in the field. This parade of the great "pioneers of radiology" is impressive; it creates curiosity and anxiety about progress during the next 50 years, although the start made by the younger generation has been so favorable.

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Handbook of Industrial Research Management. Carl Heyel, Ed. Reinhold, New York; Chapman and Hall, London, 1959. xvii + 513 pp. \$12.

The *Handbook of Industrial Research Management* is a most timely publication; industrial research has grown in an explosive manner to the point that "it is now big business." Carl Heyel, editor of the volume and author of its first chapter, points out that the management of industrial research has proved to be the most difficult of the responsibilities entrusted to company executives. Because industrial research has grown on a concurrent basis in many industrial areas, there has not yet been adequate time for establishing accepted principles of management. In fact, misunderstanding of the entire field is caused not only by a lack of recognition of its problem but by a lack of commonly understood terminology.

The 35 contributors to the *Handbook* are some of our most experienced managers of industrial research and consultants on management. In spite of the large number of contributors and the difficulty of the field, Heyel has managed to organize a very worthwhile book. Under the circumstances, one

would expect that various portions of the book would treat the subjects in a manner that is not entirely consistent. There is, however, recognition throughout the treatment that trying to force research into fixed patterns or attempting to schedule or to price research for the sake of establishing appearances of good management can be dangerous or impractical. In the first chapter, Heyel gives a comprehensive treatment of the entire group of problems facing industrial research. The remaining chapters are written by specialists from each area and cover comprehensively the entire field from basic research to product development, from keeping top management informed to meeting day-by-day schedules, and from budgeting to accounting. The book will serve company management and industrial research management in two ways: it provides ready reference material, and it is stimulating for purposes of self-examination.

The editor has carefully avoided semantic discussions, a trap that besets most writers on research management. Nevertheless, he has not escaped the problem. In the chapter on basic research, Mervin Kelly clearly creates the atmosphere appropriate to the chapter title; elsewhere the words research and development are understood to loosely indicate all technical work short of assisting in the day-to-day problems of manufacturing. In one section of the book, about the process industry, the term research covers the establishment of pilot plants and, in one instance, the design of a processing plant and its operation during debugging phases. The editor and contributors seem to avoid defining engineering; apparently the glamour of the words research and R&D is too important to neglect. To the extent that the reader is mature and can keep himself straight, these shortcomings do not detract from the book. On the other hand, references to tables and other statistical data, or justification of any degree of budgeting on the basis of information obtained from the book, are dangerous without a careful review of what the specific table, paragraph, or chapter means. The editor and the authors cannot be blamed for this; they have done a herculean job. It is unfortunate that industrial research directors themselves have not arrived at meaningful terminology so that words like industrial research, development, product engineering, process engineering,

general engineering, and manufacturing engineering might be characterized by the exactness that professional scientific people normally give to words.

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*Raytheon Company,
Waltham, Massachusetts*

Russian-English Geographical Encyclopedia. I. Telberg. Telberg Book Co., New York, 1960. x + 142 pp. \$9.80.

This work, despite its title, is a gazetteer; it lists about 1300 Soviet place names, with brief descriptions. It is basically a translation of the entries pertaining to the Soviet Union given in the second edition of M. S. Bodnarskii's *Slovar' geograficheskikh nazvanii* [*Dictionary of Geographic Names* (Moscow, 1958)]. However, the text for a number of entries has been condensed. No attempt has been made to evaluate the data in the Soviet source or to present additional information.

The publication is mimeographed on legal-size paper. The place names are given in Russian characters and are arranged according to the Russian alphabet. Each name is followed by a brief description in English, including a transliteration of the place name. An English index to place names and a map of the Soviet Union are included.

The population figures are taken from the 1956 official Soviet estimates rather than from the results of the 1959 census. Heights of mountains and lengths of rivers are given in metric units.

In translating and condensing, some shifts in meaning have been made. Thus, in the Russian original under *Kiev* we find: "During the German occupation, was heavily damaged. Now restored and expanded." The translation reads: "Was destroyed in World War II. Rebuilt."

This book does not provide as full coverage of Soviet place names as the *Columbia-Lippincott Gazetteer of the World*, but it does give more recent population figures. The encyclopedia has some entries (particularly for rivers) that do not appear in *Webster's Geographical Dictionary*. It may have some value as a quick reference aid if the other dictionaries are not available.

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