

be necessary to expand the present short but valuable section on radioactive materials. The situation is summarized in the introduction, where common causes of poisoning are tabulated. It is to be regretted that this section of the book is not fuller and indeed that more statistics are not available. This lack of information, which was emphasized by the Zuckerman Report on Toxic Chemicals in Agriculture, necessarily limits the effective direction of policy to reduce the incidence of poisoning.

The author has organized his voluminous material in an admirable way; inorganic substances are dealt with in alphabetical order, but this codical system has been dropped in considering drugs and pesticides. However, this allows the rational grouping of agents with similar modes of action, and hence economy in the text: it is the approach that is familiar in experimental pharmacology. The whole book is well documented with references which will be of value to practitioner and student alike, and indeed the general sections of the book could be read with advantage by students at their preclinical stage.

P. JEWELL

Jets, Wakes, and Cavities

By Garrett Birkhoff and E. H. Zarantonello. (*Applied Mathematics and Mechanics: a Series of Monographs prepared under the auspices of the Applied Physics Laboratory, Johns Hopkins University, Vol. 2.*) Pp. xii+353. (New York: Academic Press, Inc.; London: Academic Books, Ltd., 1957.) 10 dollars.

WHILE the subject of jets, wakes and cavities is of considerable interest in fluid dynamics and has attracted the attention of many engineers, physicists and mathematicians, accounts of the field as a whole are very rare. Thus, the attempt to collect the available information in one volume is most welcome, and from this aspect alone the book under review with its almost overwhelming number of references is extremely useful. But since the first author, in particular, has himself contributed much original work to this subject, the presentation bears his stamp and draws together and co-ordinates many fragmentary and seemingly unrelated pieces of information. A wide and complex field is covered and interest in the subject is still very much alive. It is in these still vigorously growing branches that the authors' preferences are most apparent and, perhaps, lead to a slightly one-sided presentation. Altogether, the book affords an excellent introduction to a fascinating subject and will profitably be studied by graduate students as well as general readers who are curious about applied mathematics, hydraulics, or aeronautics.

D. KÜCHEMANN

Nuclear Reactors for Research

Edited by Clifford K. Beck. (*The Geneva Series on the Peaceful Uses of Atomic Energy.*) Pp. xii+267. (Princeton, N.J.: D. Van Nostrand Company, Inc.; London: D. Van Nostrand Company, Ltd., 1957.) 8.50 dollars; 64s.

SO much information was presented in such a short time at the 1955 Geneva Conference on the Peaceful Uses of Atomic Energy that several publishers recognized the need for producing edited collections of papers on particular topics. The book under review is such a collection. In Part 1 the uses of research reactors are first discussed and illustrated by extensive references. Descriptions of particular types of research reactors are given in subsequent chapters which comprise Part 2.

Most of the material in the book has appeared elsewhere, but Dr. Beck has made deletions and rearranged parts of the original papers so that with his own additions assimilation is easier. Anyone currently considering whether research reactors can be of use in his particular field would do well to study this book as a guide to what can be done.

Part 1 is bound to attract most interest, and unless the reader is directly concerned with choosing a particular type of reactor or for some other reason concerned with comparing details of the different types, Part 2 may prove a rather long catalogue. However, the number of people with such interests is increasing in both industry and the universities, and to them the book should be more easily read than the alternative sources referred to.

F. W. FENNING

Medical Radiation Biology

By Friedrich Ellinger. Pp. xxxiv+945. (Springfield, Ill.: Charles C. Thomas; Oxford: Blackwell Scientific Publications, Ltd., 1957.) 150s.

THIS is a book written by a physician for physicians and as such it should prove a useful textbook for radiotherapists and a valuable reference book for medical men whose contact with radiation problems is more intermittent.

The book is written almost in lecture-note form. It is strictly systematic and exhaustive, with very adequate cross references. This, together with the 5,000 references, makes it a very valuable information source for all workers in radiobiology. It will not, however, rank as a scientific treatise on radiobiology, for the treatment is rather elementary and didactic. The early chapters on the fundamental aspects of radiation and radiation effects are rather unsatisfactory and some would consider them occasionally misleading. For example, the early statement that it is possible to consider all the effects of radiation under a single biological concept as a 'stimulus' would scarcely appeal to the physiologist.

The greater part of the book is concerned with a detailed description of the effects of radiation on the various tissues and organs of the body in health, disease and malignancy. The effect of externally administered X- and γ -radiation is, of course, the main theme, but the effects of ultra-violet and visible light are also fully dealt with. There is also a valuable section on the effects of radiations arising internally from administered isotopes. Health hazards are kept to the fore and discussed at appropriate points throughout the text.

Glossary of Indian Medicinal Plants

By R. N. Chopra, S. L. Nayar, and I. C. Chopra. Pp. xx+330. (New Delhi: Council of Scientific and Industrial Research, 1956.) Rs. 8.

THE object of this glossary is to present a concise record of the information regarding the properties and uses of the medicinal plants of India as a guide to those interested in indigenous drugs.

Much of the information is a result of an all-India survey of medicinal and poisonous plants, visits to centres of learning of indigenous medicine and consulting the literature on local herbaria and libraries.

The plants have been arranged in alphabetical order according to their scientific names, so that there will be no difficulty for readers in finding any particular drug. Many of the commonly used