

The need for editing of this material is obvious. Under the general editorship of J. G. Beckerley, the Van Nostrand Geneva series condenses into six volumes those papers which may be logically combined. *Nuclear Power Reactors* edits thirty-eight of the Geneva papers into two chapters on the economics of conventional and nuclear power and seven chapters which cover the major power reactor types (pressurized water, boiling water, homogeneous, circulating fuel, liquid and gas cooling graphite moderated, and liquid metal cooled unmoderated). As for the material presented, there is no originality in this volume; its utility lies in its editing of existing material into more convenient form. In this it has succeeded quite well and the volume should prove useful to those who deal with power reactors and who wish the more important Geneva papers on the subject in a more convenient form.

Neutron Cross Sections. Vol. 1, Div. 2 of Internat'l Series of Monographs on Nuclear Energy. By Donald J. Hughes. 182 pp. Pergamon Press, London & New York, 1957. \$5.00. Reviewed by Lyle B. Borst, New York University.

If the purpose of this small book is, as the author states, to serve as a supplement and handbook to the extensive compilation of neutron cross sections known as BNL-325, many readers will feel that it has missed the mark.

However in a rapidly expanding field characterized by extensive empirical data and no simple fundamental theory, it has a unique place. It is by far the best epitome of theory illustrated by empirical examples presently in print, and as such will find extensive use particularly among experimentalists.

The book is organized primarily around the optical model of the nucleus, and chapters are devoted to processes involving: fast neutrons; neutron resonances; and thermal neutrons. A separate chapter is reserved for the extensive studies on neutron fission. Techniques are generally illustrative and are largely selected from the author's experience. Chapter references are made primarily to the more specialized technical review articles and no attempt is made to give a research bibliography. In Appendix 3 key references are given to work from the various laboratories. Unfortunately in many cases these are unpublished documents.

The Detection and Measurement of Infrared Radiation. By R. A. Smith, F. E. Jones, R. P. Chasmar. 458 pp. Oxford U. Press, New York, 1957. \$11.20. Reviewed by S. F. Singer, University of Maryland.

In many fields progress depends on the development of techniques. The infrared field is a case in point. The region extends in wavelength from 0.75 micron to 1000 microns and thus covers an enormous range of the electromagnetic spectrum. Its different portions require different approaches both for detection and for produc-

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