EDITOR'S BOOK REVIEWS

Editor's Book Reviews are addressed to books that are primarily compilations of data and statistical information.





Advances in Nuclear Science and Technology

Editor Jeffery Lewins and Martin Becker

Publisher Plenum Publishing Corporation (1980)

Pages 338

Price \$39.50

Volume 12 of Advances in Nuclear Science and Technology again brings new insight to a series of topics of interest to practitioners of the nuclear sciences (c.f., review of Vol. 11, Advances in Nuclear Physics, in Nucl. Technol., 49, 511).

Volume 12, edited by Jeffrey Lewins of the University of London and Martin Becker of Rensselaer Polytechnic Institute, discusses theories of design of and practical operating techniques for modern nuclear power plants. Six articles are included:

Characteristics Ray Solutions of the Transport

Heterogeneous Core Designs for Liquid Metal Fast Breeder Reactors

Liner Insulation for Gas-Cooled Reactors

Outage Trends in Light Water Reactors

Synergetic Nuclear Energy Systems Concepts

Vapor Explosion Phenomena with Respect to Nuclear Reactor Safety Assessment

RGP

This book is a helpful reference for libraries, rather than for the individual. It stands alongside such classics as JANAF Tables, API Data Books, etc. A large fraction of the book is concerned with properties of water and steam, and thus might replace the classical Steam Tables of Keenan and Keys. The organization is rather hard to follow for those who cannot read German.

The tables are obviously very useful to chemical and mechanical engineers, and the compilation of transport properties of various substances, thermal conductivity, and viscosity is useful and possibly unique. *RGP*

Table of Isotopes

Author C. Michael Lederer and Virginia S. Shirley

Publisher John Wiley & Sons, Inc. (1978)

Pages 1523

Price \$40.00

Plutonium Handbook

This book is a compendium of tables of isotopic values too numerous and complex to summarize succinctly. This, the seventh edition, utilizes extensive computer assistance in the compilation to assure consistency and to minimize errors. The impressive array of authors and editors compiled the work at Lawrence Berkeley Laboratory under U.S. Department of Energy sponsorship.

This excellent reference document is a must for all who work with radioisotopes and need accurate knowledge of their properties. *RGP*

Thermodynamische Tabellen

Author Kuzman Raznjevic Editor O. J. Wick

Publisher VDI-Verlag; Distributor: ISBS, Inc. Publisher American Nuclear Society (1967)

Pages 346 Pages 966

Price \$90.00 *Price* \$48.25

This handbook presents a monumental task in its compilation. Originally published in 1967, it is nonetheless today an important reference document for the nuclear technologist. As the publisher states, "The *Plutonium Handbook* is republished by the American Nuclear Society as part of its program to provide the most authoritative information to the nuclear professional. This edition provides information on the broad range of topics of concern

in the use of plutonium and provides a reference to its technology. For this reprinting, only minor revision of the contents has been necessary, and the original two volumes have been combined into one."

The information spans nuclear properties and reactions, metallurgy, chemistry, chemical separations, and even fabrication, analysis, and inspection methods. The final section on health and safety includes criticality. RGP