translation is its belated appearance—this is most serious for the even-order P_N approximation and the resonance absorption papers.

The lack of communication between Western and Russian authors is equally apparent from a perusal of the literature citations in *Nucl. Sci. Eng.* and the present collection of papers. Since the scientific community is demonstrably capable of producing elegant communication devices for other users, the scriptural injunction, "Physician, heal thyself" seems uncomfortably appropriate.

John E. Suich

E. I. du Pont de Nemours
Savannah River Laboratory
Aiken, South Carolina

About the Reviewer: John E. Suich is a Research Physicist in the Theoretical Physics Division of E. I. du Pont's Savannah River Laboratory, where he is concerned with the development of numerical methods for the solution of reactor physics problems. Prior to joining Du Pont, he was, for two years, a Junior Research Collaborator with the Theoretical Reactor Physics Group at Brookhaven National Laboratory. He received his B.A. degree in Physics from Harvard University, and his Ph.D. in Nuclear Engineering from the Massachusetts Institute of Technology.

Nuclear Power Plants: Design, Operating Experience and Economics. By Robert L. Loftness. D. Van Nostrand Co. 548 pages. $12.50.

After a couple of chapters on basic problems in nuclear engineering and nuclear materials for the non-specialists, this book presents eight chapters on the most important types of power reactors being considered both in the U. S. and abroad. An excellent chapter on aerospace reactors is followed by a chapter on economics of nuclear power. For each major type of reactor, a description of the main existing reactors follows a few pages on design considerations and trends.

The author must be commended for the book's thorough coverage of reactors, especially foreign reactors which are seldom sufficiently described in the American literature. Design data, plant description including actual pictures and cutaways, and operating experience when applicable, are presented for most reactors. A large number of references is given for each type of reactor and a very useful ten-page "Index for Nuclear Reactor Code Names" is presented.

Having been asked to review Mr. Loftness' book at my return from the 1964 Geneva Conference—thought to be too commercial by some people—it is difficult for me to agree with the somewhat pessimistic views expressed in Nuclear Power Plants on the economics of nuclear power. A nuclear reactor may not be such an 'off the shelf' item as a recent price list might let us believe, but, at the end of 1964, the question seems to be which type of nuclear reactor is the most competitive for a power plant, rather than whether nuclear power is competitive with conventional power.

It may be unfair to judge a book in a fast-moving field on prediction rather than on the facts presented. It is obvious that late developments, such as application of large nuclear reactors to desalinization or new concepts like fast gas-cooled reactors, could not have been included in a book which was published in 1964, but probably written in 1962. But important developments such as coated particles for high temperature gas-cooled reactor fuels are not even mentioned, and not enough emphasis is placed on prestressed concrete vessels for gas cooling.

Some inconsistencies may be found in the book because of the use of different references for the same reactor. For instance, the Peach Bottom reactor is said to produce 28.5 MW (electrical) page 512, while the correct figure of 40 MW may be found two pages later in a different table. Also, on page 436, a 19-rod bundle is mentioned for EBOR, in spite of the fact that it was only an early design.

But the author has well succeeded in writing a book useful for "the engineer, the executive and the student" although he has had to compromise to satisfy their different needs. This book, which is presented in a very attractive fashion, will serve as a useful reference for executives or students, although not as a textbook. The book makes very pleasant reading, and is a useful quick source of information on nuclear power plants.

Gilbert Melese

General Atomic
P. O. Box 608
San Diego, California 92112

About the Reviewer: After a degree of Aeronautical Engineer from Paris, Gilbert Melese obtained a Ph.D. in Fluid Mechanics from Johns Hopkins University in 1954.

From 1954 to 1957 Dr. Melese was at Saclay in charge of the thermal design of the French CO_2-cooled reactors G2, EDF1, EDF2 and EL4. After three years at Columbia University teaching Nuclear Engineering, he joined General Atomic in 1960. Since then, he has been taking part in the design of several types of advanced high-temperature gas-cooled power reactors.