

such as G. Bell's: "One thing that is certain is that these terms (maximum credible accident) make no sense" (p. 499).

In spite of the high quality of all the papers, and the discussions, it is unlikely that the volume will provide the guidance for public policy referred to above. The translation of scientific data into intelligible understanding and acceptance by the public is grossly lacking. The relevance of all this to the economics of nuclear power production, and what it does or can mean to the consumer, is distinguished primarily by its absence. Perhaps the next international symposium may concern itself with the problem of translation and communication with the public.

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Abel Wolman

The Johns Hopkins University  
Baltimore, Maryland

*About the Reviewer: Abel Wolman has been Professor of Sanitary Engineering at the Johns Hopkins University since 1937. His many services to science, engineering, and the government include a total of 23 editor-years for several publications, 13 years on the Reactor Safeguard Committee of the U. S. Atomic Energy Commission, several years in municipal sanitary problems in corners of the world ranging from Ceylon to Taiwan. He is a member of the National Academy of Sciences.*

**The Optical Model in Nuclear and Particle Physics.**  
By P. B. Jones, Interscience Publishers, New York, (1963). 118 pp. \$4.50.

The optical model has become an extremely useful tool in dealing with nuclear reactions and certainly deserves to be "immortalized" by a book devoted to that subject. In this reviewer's opinion such a book should be addressed to a wider audience than the professional physicist who is already familiar with this subject. Unfortunately, this slim contribution of Dr. Jones does not fill the bill. There are three chapters in this book. Exclusive of the index and references these three chapters comprise 110 pages. This includes two short appendices. By the decision to compress the material within these narrow confines, the author, advertently or otherwise, has paid a stiff price in clarity.

The first chapter, which is an introduction, necessarily tells little. The second chapter is entitled "Justification of the Model." Here all the elaborate mathematical machinery of the model is brought into play but after working through the fifty pages or so devoted to this part of the book it is doubtful that anyone who did not know how to use

the model before reading the book will be in any better position to do so. The third chapter which is, in part, devoted to phenomenology and connections with nuclear structure will be, for many, of greater interest than the rest of the book. Unfortunately it is too abbreviated to be very effective.

On the credit side it is readily conceded that the book is fairly well referenced so that it can be useful as a guide to the literature. For those who are not expert in the theoretical aspects of the problems here discussed, the exposition of the theory adds little to the already existing literature.

To get down to specifics, the nature of the giant resonance could easily have been discussed in more physical terms. This is only one example of the inadequate pedagogical style which makes this book less attractive than it might have been.

M. E. Rose

Department of Physics  
University of Virginia  
Charlottesville, Virginia

*About the Reviewer: M. E. Rose is Professor of Theoretical Physics at the University of Virginia. Following completion of his academic training at the University of Michigan he held fellowships at the Institute of Advanced Study, Cornell and Bartol and professorship at Illinois Institute of Technology and at Princeton. He was then at the Oak Ridge National Laboratory for a number of years. Dr. Rose's interests have been in the quantum theory of matter and radiation and, of course, in nuclear physics.*

**Diagnosis and Treatment of Radioactive Poisoning.** (Proceedings of the Scientific Meeting on the Diagnosis and Treatment of Radioactive poisoning jointly organized by the World Health Organization and the International Atomic Energy Agency). (Editorial Staff of International Atomic Agency, Vienna, Ed.) Printed by the International Atomic Energy Agency, (February 1963); distributed by the National Agency for International Publications, Inc., 317 East 34th Street, New York 16, N. Y. 450 pp. \$9.00.

This is one in a series of volumes produced jointly by WHO and IAEA on the health aspects of atomic energy. Like its predecessor volume "Diagnosis and Treatment of Acute Radiation Injury," it constitutes the proceedings of a scientific meeting. The meeting was held in Vienna 15-18 October, 1962 and dealt with the problem of the diagnosis and management of persons with radioelements deposited in the body.

Special problems in measurement techniques, interpretation and intreatment related to the various modes of entry, i.e., via wounds, inhalation, or ingestion are set forth. The radioelements strontium, plutonium, radium, and ruthenium were given the most intensive treatment at the conference. It is gratifying, if a bit frustrating, that twenty years after the dawn of the atomic age there is such a paucity of data on the clinical course and the pathology of radioactive poisoning in humans with the single exception of radium poisoning. "

The conference opened with a thoughtful presentation of material on "External Counting" by Vennart of Surrey, England. He pointed out that, lacking more adequate data on humans, it was impossible to define precisely what is meant by the term radioactive poisoning. This was followed by an equally thoughtful paper by Lister of Harwell, England on the value and the limitations and pitfalls of using urine and fecal radionuclide analyses for estimating body burdens. He left little doubt that the presently available methodologies for estimating present and future body burdens in humans, especially immediately after exposure and in the presence of low levels of material accumulated prior to the incident of interest, leaves much to be desired.

The other papers covered material which for the most part is available in more detailed form elsewhere—e.g. the story of radium in man, experimental work with radiostrontium and other nuclides in animals and humans, and the use and hazards of various chelating agents in the management of plutonium deposition. The principal value of the book lies in the excellent discussions, which were full, uninhibited and in general more stimulating than the papers.

*Charles L. Dunham*

Division of Biology and Medicine  
U.S.A.E.C.  
Washington, D. C. 20545

*About the Reviewer: Charles L. Dunham received his M.D. from Rush Medical College, University of Chicago, in 1933. Following wartime service in the U. S. Army, he joined the USAEC Division of Biology and Medicine as Assistant Chief in 1949, acceding through stages to Director of the Division in 1955, a position which he now holds. Among other extra activities, he serves as the AEC representative on the National Academy of Sciences - National Research Council's Division of Medical Sciences.*