Plutonium Handbook must be emphasized. It is, indeed, a unique reference book for plutonium workers. Authors and editors must be congratulated for the quality and the amount of work performed.

François Sebilleau is Head of the Plutonium Fuel Department at France's Commissariat à l'Énergie Atomique. For the past ten years he has been involved in plutonium metallurgy, ceramics, and fuel development, especially for fast breeder reactors. Prior to joining CEA in 1957, he was a metallurgist with the Office National d'Études et Recherches Aérospatiales. His degrees are from École Centrale des Arts et Manufactures in 1947 and from the Université de Paris (Ingénieur Docteur 1956).

TUTTI FRUTTI

Title Nuclear Research with Low Energy Accelerators

Editors Jerry B. Marion and Douglas M. Van Patter

Publisher Academic Press, 1967

Pages xii + 515

Price $13.00

Reviewer Edward der Mateosian

If ever the proceedings of a meeting have appeared in print under favorable conditions, this fortunate book is an example of such. The outstanding characteristic of both the Symposium on Nuclear Physics Research with Low Energy Accelerators and this book, which contains the proceedings of the symposium, is timeliness. One learns in the preface that the idea for a conference dealing in depth with current experimental research using low-energy accelerators (below 5 MeV) originated in the subcommittee on Nuclear Structure of the National Academy of Science–National Research Council with the hope of stimulating those who might be considering nuclear structure studies at their own institutes. This function is served admirably by this publication, not the least because of the promptness with which it has appeared in print, hardly six months after the symposium itself took place.

The book is typical of most reports of meetings in that it contains a series of papers, 22 in fact, by individual authors each with his own style and effectiveness. The first paper, which deals with "The technique of the application of lithium-drifted germanium gamma-ray detectors," is unfortunately disappointing evidence that not all papers are of satisfactory calibre. It is too wordy, and too full of trivia through which one must sort before one finds significant information. The second paper is an example of the material that makes this a useful book. It is a paper on gamma-ray angular correlation studies and isobaric analog states presented by someone working in the field who is familiar with the motivation for this kind of work, the theoretical implication, and the status of the field in general. Much data are presented for illustrative purposes, much of which comes from original work of the author. Similar papers discuss electromagnetic lifetimes, lifetime measurements with bremsstrahlung, Mössbauer studies with Van de Graaff Accelerators, lithium-induced reactions, and other fields of research which are actively being studied around these machines.

Several papers review areas perhaps a little more theoretical in nature, such as shell model calculations of interest to the participants of the conference, theoretical problems related to the study of the intrinsic shapes of light nuclei, and (for those whose tastes might be way out), astrophysical problems

All this material is presented in a highly concentrated and terse style and is not of the best kind for the novice to study. It is suited for the expert who is interested in learning what people in associated fields are doing and for the individuals entrusted with the responsibility of suggesting programs of research at their institutions.

The book ends with an interesting summary of the conference in which a review of the subject matter is followed by an evaluation of the field of nuclear structure physics. The attractions of work in this field are described in somewhat glowing terms. The last sentence is "Our chosen field remains a cornucopia, the fruits of which are not only sweet to our own taste, but also to others." If one does not fear the occasional taste of lemon, then one can happily taste of these fruits in this book.

Edward der Mateosian, a Physicist at Brookhaven National Laboratory since 1949, has been engaged in nuclear structure research since 1947. At present he is involved in an experiment designed to investigate double beta decay. He holds BA and MA degrees from Columbia and was an assistant in physics at Indiana University.

BOOK ANNOUNCEMENTS

Although the following will not be reviewed, they may be of interest to some of our readers:

Pressure Vessel Design and Analysis, M. B. Bickell and Carlos Ruiz, St. Martin's Press, Inc., 1968, xii + 578 pp, $21.00

American Men of Science, Vol. VI (St-Z), 11th ed., R. R. Bowker, 1967, x + 988, $25.00

Preparation of Nuclear Fuels, part XVIII, A. D. Tevebaugh and D. L. Keller, Eds., American Institute of Chemical Engineers, 1967, v + 169 pp, $15.00 ($4.00 AICE members)

Annual Review of Nuclear Science, Emilio Segre, Ed., Annual Reviews, Inc., 1967, v + 546, $8.50

American Men of Science, suppl. IV, R. R. Bowker, 1968, x+ 523, $20.00

All of the remaining books were published by the International Atomic Agency:

Nuclear Activation Techniques in the Life Sciences, 1967, 709 pp, $14.50

Containment and Siting of Nuclear Power Plants, 1967, 818 pp, $16.50

Assessment of Airborne Radioactivity, 1967, 766 pp, $15.50

Plutonium as a Reactor Fuel, 1967, 858 pp, $17.50

Isotope and Radiation Techniques in Soil Physics and Irrigation Studies, 1967, 446 pp, $9.00

Neutron Thermalization and Reactor Spectra, 1968, Vol. I, 656 pp, $13.50; Vol. II, 530 pp, $11.00

Fuel Burn-up Predictions in Thermal Reactors, 1968, 243 pp, $5.00

Directory of Nuclear Reactors, Vol. VII: Power Reactors, 1968, 326 pp, $9.00