(ANL), for about fifteen years. At ANL he conducted the training program (for a team of Belgian Scientists) that initiated effort at ANL that later became the International School of Nuclear Science and Engineering. He was active in scientific applications to the nuclear reactor field during the Manhattan Project. For many years his principal interests have been in nuclear reactor research, design, and operation.

A. Plasma Physics and Controlled Nuclear Fusion Research, Vol. I

B. Plasma Physics and Controlled Nuclear Fusion Research, Vol. II

C. Nuclear Fusion—Special Supplement 1970 World Survey of Major Facilities in Controlled Fusion

Author International Atomic Energy Agency

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Pages A. 993
B. 836
C. 250

Price A. $23.00
B. $19.50
C. $ 6.00

Reviewer W. M. Farr

Periodically, most disciplines have a meeting which is definitive in the sense that the state-of-the-art is defined by the papers and discussion that transpire. Meetings which fit into that class are the triennial conferences on plasma physics and controlled nuclear fusion research sponsored by the International Atomic Energy Authority. First held in 1961 at Salzburg, then again in 1965 at Culham and in 1968 at Novosibirsk, these meetings bring together at one time and in one place representatives from almost the entire controlled fusion community of the world. Here we have one of the few opportunities for a meeting of minds by physicists and engineers from all the countries involved in fusion research on both sides of the iron curtain. Considering the importance of such a meeting, a copy of the proceedings is a necessity for anyone seriously interested in controlled fusion research. The proceedings are essentially an encyclopedia covering every aspect of the subject.

Roughly speaking, there are three basic areas covered in the course of the meeting: toroidal devices, open-ended devices, and basic plasma physics. Each receives an excellent review paper in the introduction to Vol. I by L. A. Artsimovich, S. J. Buchsbaum, and M. Trocheris, respectively. These are highly recommended to the more casual reader who would like a statement of progress in fusion research set in a historical perspective.

There are, of course, hazards associated with a state-of-the-art document. The results presented at Novosibirsk reflect the thinking of researchers at some point prior to June 1968, and this fact should be kept in mind. What was considered timely and of great significance in 1968 may or may not be so thought of today. For example, in the review paper on closed devices, the Tokamaks do not receive nearly the attention which they are currently obtaining from fusion researchers.

Another word of caution. Unfortunately, of the contributions by Russian and French scientists, only the review articles appear in translation, so that anyone wishing to study the details of the Russian or French work must have a command of the respective language.

A useful addition to the proceedings is the supplementary volume that lists, worldwide, each of the major institutions involved in fusion research. This volume is somewhat more up to date, containing information current as of the spring of 1970. Cataloged information includes the personnel and major experiments taking place at each institution.

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Neutron Capture Gamma-Ray Spectroscopy

Editor IAEA

Publisher Unipub, Inc.

Pages 708

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Reviewer John L. Meason

The published proceedings of the International Symposium on *Neutron Capture Gamma-Ray Spectroscopy* is a broad collection of research on this topic. A particular point of gratification is to find that one entire section of this book consists of research papers devoted uniquely to the description of experimental techniques. In addition to several theoretical papers, the bulk of the other information consists of research reports on level schemes derived from thermal, resonance, and fast-neutron capture reaction data.

The publication of the proceedings of this symposium provides an excellent source of reference on the subjects of neutron capture spectroscopy and nuclear level structure. A large portion of the information contained in this book is invaluable to the nuclear spectroscopist studying nuclear level structure from the decay of radioactive nuclides. The nuclear level structure measurements by neutron capture provides additional data to that already accumulated by radioactive decay and particle reactions.

It is interesting to note that very little attention was directed toward data processing of the Ge(Li) gamma-ray spectra, for example, such as the techniques described by Routti, UCRL-19452 (1969). There was, however, one paper (Michaelis and Horsch) that devoted two sections of their paper to the techniques of Ge(Li) gamma-ray spectrum analysis and calibration procedures.

Within the past several years a new isomer of ^{68}Cu has been identified [*Phys. Rev.*, 188, **4** (1969)] and its population of the nuclear levels in ^{68}Zn measured. The experimental work by Ottman et al. on the neutron capture of ^{67}Zn provides additional information on this particular problem.

Neutron Capture Gamma-Ray Spectroscopy would be an excellent