LISTS OF SHIELDING CONSULTANTS BEING COMPILED

Two efforts which will result in the preparation of lists of shielding consultants are under way. They are reported in the September 1969 issue of Nuclear News. Such lists would be of great value to those seeking service in the areas of shield design or calculation of radiation dose.

One list is being compiled by H. E. Hungerford, vice-chairman of the American Nuclear Society Shielding and Dosimetry Division. If you are a member of the Division and would like your name to be on the list of available shielding consultants, you may write Dr. Hungerford at the Department of Nuclear Engineering, Purdue University, Lafayette, Indiana 47907. For more information see page 94 of the September Nuclear News.

The other compilation is the Nuclear News Buyers' Guide. The 1969 Guide (February Nuclear News) had a number of categories of interest to shielders, and we would urge that shielding consultants make greater use of this compilation. For more information, write to Nuclear News, 244 East Ogden Avenue, Hinsdale, Illinois 60521.

DUAL TOPIC SEMINAR-WORKSHOP
HELD SEPTEMBER 30 - OCTOBER 3

Multigroup Cross Section Preparation - Theory, Techniques, and Computer Codes Seminar - XSDRN Workshop

Two-Dimensional Discrete Ordinates Calculation Seminar - DOT Workshop

One hundred twenty-four participants from 57 separate installations, including seven foreign countries, attended the dual topic seminar-workshop held at the Oak Ridge National Laboratory over the four-day period, September 30 - October 3. The meeting was co-sponsored by RSIC and the Reactor Division at ORNL.
Eight papers on two-dimensional discrete ordinates calculations and 24 papers about multigroup cross section preparation were given during the 21-day seminar. Half-day workshops on the computer codes XSDRN and DOT followed the seminar part of the meeting, and the remaining time was spent as an information question and answer session.

CORRECTION TO BINDING ENERGY GIVEN IN LAST ISSUE

In the table of thermal neutron capture gamma-ray spectra given in the last issue, there were data on the binding energy accounted for by Maerker and Muckenthaler. The footnote should have said, "Does not include small contribution below 1 MeV determined by others."

NEWLY TRANSLATED RUSSIAN BOOK ON SHIELDING ISSUED

The 353-page book PHYSICS OF REACTOR SHIELDING by Yu. A. Kazanskii et al. has recently been translated and is available from CFSTI as AEC-TR-6879. There are 279 references.

The authors have analyzed and correlated the mainly experimental data published up to the middle of 1964. This includes a detailed description of neutron and gamma-ray fields in shielding materials, the production of secondary gamma radiation (following capture, inelastic scattering, etc.) and the best methods for its suppression, and, finally, the most important properties of gamma quanta and neutrons, scattered in air and from the ground. The special set-ups, radiation detectors, and methods used in reactor-shielding research are described.

NEW PSR PACKAGE AVAILABLE

The following Peripheral Shielding Routine has been added to the list of PSR packages:


POPOP4 is a FORTRAN IV program which converts gamma-ray spectra from neutron-induced reactions to a required neutron-gamma-ray energy group structure. If the spectra are given in terms of gamma-ray intensity per reaction, POPOP4 will multiply the converted spectra by input reaction cross sections to produce secondary gamma-ray production cross...
sections. The code will also convert secondary gamma-ray cross sections from a given neutron-gamma-ray energy group structure to a required group structure. POPOP4 will make, update, or read a hexadecimal library tape of spectral data.

Using another code, secondary gamma-ray production cross sections calculated by POPOP4 can be coupled with the $P_0$ components of the neutron and gamma-ray cross sections for the nuclides of interest. The coupled multigroup cross sections can then be used with multigroup transport codes such as ANISN, DOT, and MORSE.

PERSONAL ITEMS

Y. T. Song, formerly at the University of Tennessee, is now with the Tennessee Valley Authority, Chattanooga, Tenn.

* * * * * * *

Albert W. Starbird is now with Littleton Research and Engineering Corporation, Littleton, Mass. Previously, he was with the Flow Corp.

* * * * * * *

L. D. Stephenson, formerly with Westinghouse Astronuclear Laboratory, is now with Knolls Atomic Power Laboratory.

VISITORS TO RSIC

OCTOBER ACCESSION LIST OF LITERATURE

The RSIC is now aware of the literature cited in the following list. This literature has either been obtained by RSIC or has been placed on order. When received, this material will be examined and assigned to various files if suitable for our information system. The accession list is divided into three fields (1) reactor and weapons shielding, (2) space and accelerator shielding, and (3) shielding computer codes. These titles are announced before processing and indexing so that there will be no delay and can serve as a prompt announcement of current literature.

RSIC is not a documentation center. Copies of the literature cited must generally be obtained from the author or from a documentation center such as the Clearinghouse for Federal Scientific and Technical Information, Springfield, Virginia 22151.

RSIC maintains a microfiche file of literature entered into its information system. Computer searches of this system (which produces a special bibliography) and duplicate microfiche copies of the literature in our file are available upon request. Naturally, we cannot supply copies of literature which is copyrighted (such as books or journal articles) or whose distribution is restricted. Neither service is yet available for the codes literature.

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Iowa State University, Ames, Iowa 77 pages

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