RSIC Newsletter

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The most thoroughly wasted of all days is that on which one has not laughed.—Chamfort

SCALE TRAINING WORKSHOP PLANNED

Your attention is directed to the back page of this newsletter. It is a preliminary announcement for a SCALE training workshop sponsored by the U.S. Department of Energy Transportation and Packaging Safety Division. The Radiation Shielding Information Center (RSIC), which distributes the SCALE code package, will organize and host the training workshop. The training workshop will be taught by staff of the Oak Ridge National Laboratory Computing Applications Division who are responsible for the development and maintenance of the SCALE code system. Attendance will be limited to 100 participants, therefore it is imperative that you register your interest as soon as possible and make your plans for the week of July 19, 1993 (a change from the previously announced date in the November 1992 *RSIC Newsletter*). Your response to the attached questionnaire will be instrumental in planning the final structure.

RSIC to Provide Diskettes for Many Package Requests

RSIC will provide new diskettes for future requests as a convenience to users and a precaution against spreading personal computer viruses. Requesters should contact RSIC to verify the media required for each package. For those packages available on disk, RSIC will provide the disks at no additional charge. The requester will continue to furnish cartridge or open-reel (round) magnetic tapes when necessary. Most packages available on DOS diskettes can be sent on either 1.2 or 1.44 MB diskettes, and users will need to state which media is preferred in their requests.

We have recently acquired some new computing equipment and are now able to offer packages on various media. In general, UNIX-based code packages are transmitted in tar format on either DS/HD 3.5-in. (2.0 MB) disks, DC 6150 (150 MB) cartridge tapes, or 8-mm tapes. Other new mainframe and personal computer versions of packages are usually transmitted on DS/HD 5.25-in. (1.2 MB) or DS/HD 3.5-in. (1.44 MB) diskettes in DOS format. The PKZIP software is often used to create self-extracting compressed files which are to be read and uncompressed under DOS. Bernoulli disks (90 MB) can be used to transmit packages available in DOS format. The number of records in a package is a determining factor in choosing transmittal media. If the package is very large, it is generally transmitted on a 9-track open reel magnetic tape written at either 1600- or 6250-bpi density. We are in the process of downloading many of our older packages to either diskettes or cartridge tape.

In newsletter announcements, we state transmittal media options for packages, but at this time we do not have a printed list of transmittal media required for each package.

Jennie Manneschmidt

RSIC Using New Package Identification Scheme

You will notice we have begun listing these in newsletter announcements. The first character refers to the type of package (CCC, PSR or DLC). This is followed by five digits corresponding to the package number. The next five characters identify the computers on which the code runs. The final two digits indicate revisions to the package. For example, C00200MFMWS00 identifies MCNP 4.2 for mainframes and workstations. C00200PC38600 identifies MCNP 4.2 for 386 personal computers. If users do not know the exact identifier for a package, please be certain to state in package requests what computer you intend to use so we can select the version best suited to your needs. The new identification scheme is designed to be more compatible with those used by the Energy Science and Technology Software Center and the Nuclear Energy Agency Data Bank.

CCC	MCNP4.2	mainframes and workstations	revision
C	00200	MFMWS	00

Jennie Manneschmidt

CHANGES TO THE COMPUTER CODE COLLECTION

Six changes were made to the computer code collection during the month. Two new code systems were packaged and added to the collection and four existing code packages were replaced with newly frozen versions. One change resulted from a contribution from South Africa.

CCC-522/VARSKIN-2

Pacific Northwest Laboratory, Richland, Washington, released a newly frozen version of this code system for assessing skin dose from skin contamination. This package, VARSKIN Mod 2, includes SADDE Mod 2 and obsoletes all previous releases. Shortcomings and errors cited in the March and August 1992 issues of the HPS newsletter are corrected in the new release. VARSKIN has been modified to calculate dose to skin from three-dimensional sources, sources separated from the skin by layers of protective clothing, and gamma dose from certain radionuclides. A correction for backscatter was also incorporated for certain geometries. The input data file was modified to reflect current physical data, to include the contribution to dose from internal conversion and Auger electrons, and to reflect a correction for low-energy electrons. SADDE Mod 2 was modified to allow the generation of scaled absorbed dose distributions for mixtures of radionuclides and internal conversion and Auger electrons. This new release runs on IBM PC compatible computers. A graphics card is required and an 8087 coprocessor is desirable. The executables included in the package were compiled using Microsoft Fortran version 5.0 and Microsoft C version 6.0 under Microsoft DOS version 5.0. Reference: NUREG/CR-5873 (Nov. 1992). Fortran 77 and C; IBM PC (C00522IBMPC01).

CCC-613/VALE

Oak Ridge National Laboratory contributed this multigroup, diffusion theory, neutronics code for solving two- and three-dimensional problems for triangular (hexagonal) geometries. VALE is a companion code module to the VENTURE neutronics code module in the CCC-459/BOLD VENTURE code package. A variety of problems may be solved: the usual neutron flux eigenvalue problem, or a direct criticality search on buckling, or on a reciprocal velocity absorber, or on nuclide concentrations. VALE runs on a 386 or 486 PC with a math coprocessor or on an IBM RISC/6000 workstation. The VALE-PC executable included in the package was compiled with the Lahey Extended Memory compiler F77L-EM/32, Version 5.01. VALE-WS

was compiled with the AIX XL Fortran Compiler/6000, version 2.2. VALE-PC is transmitted on one DS/HD 3.5-in. (1.44 MB) disk written in DOS format. VALE-WS is transmitted on either one DC 6150 tape cartridge or one DS/HD (1.2 MB) disk in tar format. References: ORNL-5792 (Aug. 1981), ORNL-5711 (June 1981), ORNL-5229/R1 (July 1979). Fortran; PC 386, PC 486, and IBM RISC/6000 (C00613PC38600 and C00613IRISC00).

PSR-199/HEATING 7.2

Oak Ridge National Laboratory contributed a newly frozen version of this code system for multidimensional, finite-difference heat conduction analysis. This package designated HEATING 7.2 solves steady-state and/or transient heat conduction problems in one-, two-, or three-dimensional Cartesian, cylindrical, or spherical coordinates. The package is available for either UNIX workstations or personal computers. The code has been run on many UNIX workstations and mainframes. A 386- or 486-based personal computer equipped with at least 4 MB of memory and a math coprocessor is the minimum configuration for the PC version. Memory management software may be required to run precompiled executables included in the package, which were created with the Microway NDP Fortran 386 compiler. The UNIX version is available on a 3.5-in. disk in tar format; the PC version is transmitted on a 3.5-in. DS/HD disk in DOS format. Reference: ORNL/TM-12262 (Nov. 1992). Fortran and C; UNIX (P00199ALLWS01); PC (P00199PC38601).

PSR-245/UPEML 3.0

Sandia National Laboratories contributed a newly frozen version of this machine-portable CDC update emulator. In addition to supporting computers such as VAX/VMS, IBM, and Cray/COS, Version 3.0 now supports UNIX workstations, the Cray/UNICOS system, and IBM compatible PCs. Several program bugs have been corrected. New features include 1) improved error checking, 2) the ability to use *ADDFILE and *READ from nested files, 3) creation of compile file on creation run, 4) allows identifiers to begin with numbers, and 5) the ability to control warning messages and program termination on error conditions. The Lahey Fortran F77L-EM/32 Version 5.0 compiler was used to create the executable included in the package. The package is transmitted on disk and is available in DOS format on a DS/HD disk (either 1.2 or 1.44 MB) or in tar format on a DS/HD 3.5-in. disk (1.2 MB). Reference: SAND92-0073 (April 1992). Fortran 77; Vax, Cray, IBM, CDC (P00245ALLCP01).

PSR-303/OFFSCALE

ORNL contributed a newly frozen version of OFFSCALE to assist SCALE users in preparing an input file for any of the criticality sequences contained in the CSAS4 criticality control module of CCC-545/SCALE-4.1. ORIGNATE is also included to assist in preparing an input file for the ORIGEN-S module of SCALE-4.1. The programs are written in Microsoft Basic 7.1 and run under the DOS operating system. One DS/HD (either 1.2 MB or 1.44 MB) disk is required for transmittal. References: Informal reports (Dec. 1991). Basic; IBM PC (P00303IBMPC01).

PSR-323/EQUIVA-1.1

The Atomic Energy Corporation of South Africa Ltd, Pretoria, contributed this code system for calculating few-group, equivalent diffusion theory group constants for PWR reflector regions, from the results of simple one-dimensional (slab) multigroup transport calculations. The normalized generalized equivalence theory (NGET) method is used for this purpose. EQUIVA-1.1 has run on IBM 370 mainframe and on 32-bit 80386/80486 class personal computers. The Lahey Fortran F77L-EM/32 Version 5.0 compiler was used to create the executable included in the package. One DS/HD 5.25-in. (1.2 MB) disk is required for transmittal. References: PEL 301 (1991), PEL 303 (1991), and *Nucl. Sci. Eng.* **103** 359-376 (1989). Fortran 77; IBM mainframe and PC (P00323IMFPC00).

PERSONAL ITEMS

In serving a specialized area of scientific endeavor, it seems important that we note significant changes in the activities of people concerned with radiation protection, transport, and shielding in the nuclear industry. We, therefore, continue to carry personal items as they are brought to our attention.

William (Bill) Hopkins elected Bechtel Fellow, one of twelve. Bechtel Fellows are selected on the basis of a solid record of achievement, a national or international reputation in a technical field, and important contributions to the success of the company. Hopkins is principal engineer on the staff of the Nuclear Engineering Department of the Gaithersburg Regional Office. His expertise is in the area of radiation shielding and the effects of radiation on materials. His career is a matter of record and includes special assignments to Brown's Ferry Unit 2, and TMI-2. Hopkins plans to capture in writing the essence of what Bechtel is doing and has done in his field by preparing a series of nuclear standards. "When experts retire, their expertise retires with them. I'd like to try to remedy the situation in some way." In that way Hopkins will be mentor and teacher to future generations, in much the same way that his father and Dave Trubey (retired RSIC staff member) served as mentors and teachers to him.

Proceedings dedicated to B. F. Maskewitz. The editors of *Transport Theory and Statistical Physics*, have dedicated the current issue, which contains the proceedings of the November 1991 Joint Workshop on Numerical Transport Theory, to *Betty F. Maskewitz* "in recognition of her services in keeping open the lines of communication between international scientific communities."

Clarence E. Lee, a principal scientist at EG&G Idaho and a member of the Executive Committee of the American Nuclear Society's Mathematics and Computation Division, who made many contributions in computation physics, most notably the development of advanced neutron transport codes, died September 15, 1992, at the age of 61, in Idaho Falls, Idaho.

CONFERENCES, COURSES, SYMPOSIA

RSIC attempts to keep its users/contributors advised of conferences, courses, and symposia in the field of radiation protection, transport, and shielding through this section of the newsletter. Should you be involved in the planning/organization of such events, feel free to send your announcements and calls for papers to RSIC.

Call for Papers issued for the International Workshop on Implementation of ALARA at Nuclear Power Plants. The meeting will be held May 8–11, 1994, in Long Island, New York. It is cosponsored by the U. S. Nuclear Regulatory Commission and the Brookhaven National Laboratory ALARA Center. The format will include formal presentations, summaries of recent developments, poster sessions, and demonstrations. Papers are solicited on the following topics as they relate to ALARA: work planning, prioritization, and high-dose jobs; cobalt replacement, chemistry, and decontamination; ALARA during operations; ALARA in backfits; new reactors and ALARA; robotics and remote handling; decommissioning of nuclear power plants; economics and optimization; dissemination of information; recent recommendations on dose limitation. Participants may submit either an abstract of a formal presentation (not to exceed 300 words), or a one-page summary of information on a topic intended for discussion. The deadline for submission of a paper is **December 1, 1993**. Tasneem A. Khan, ALARA Center, Bldg. 703M, Brookhaven National Laboratory, Upton, New York 11973 USA, will be accepting the abstracts. Further information may be obtained by phone 516-282-3228 or Fax 516-282-5810.

Calendar

Your attention is directed to the following events of interest.

March 1993

Workshop on Logical Data Base Design, Mar. 11–12, 1993, Cambridge Massachusetts. Contact: Marie Malangone (35/170), Arthur D. Little, Inc., 20 Acorn Park, Cambridge, Massachusetts 02140-9969 (phone 617-498-6940).

Air Sampling, Mar. 16–19, 1993, Washington, DC. Contact: Woodson Assoc., Inc., P.O. Box 2665, Gaithersburg, MD 20886 (phone 301-990-0751, Fax 301-990-6153).

Measurement and Detection of Radiation, Mar. 29–Apr. 2, 1993, Las Vegas, Nevada. Contact: Woodson Assoc., Inc., P.O. Box 2665, Gaithersburg, MD 20886 (phone 301-990-0751, Fax 301-990-6153).

Occupational and Environmental Radiation Protection, Mar. 29–Apr. 2, 1993, Boston, Massachusetts, a short course offered by Harvard School of Public Health. Contact: Mary F. McPeak, Assoc. Dean for Continuing Education, 677 Huntington Ave., Boston, MA 02115 (phone 617-432-1171; Fax 617-432-1969).

April 1993

Meeting on Radiation Protection Measurements: Theory and Practice, Apr. 1–2, 1993, Oxford, United Kingdom. Contact: D.N.S. Dixon, Society for Radiological Protection, 67 Oatlands Park, Linlithgow, West Lothian EH 49 6AS, UK.

29th Annual Meeting of the National Council on Radiation Protection and Measurements, Apr. 7–8, 1993, Arlington, Virginia. Contact: NCRP, 7910 Woodmont Avenue, Suite 800, Bethesda, MD 20814 (phone 301-657-2652).

Auditing Process Safety Management Systems, Apr. 13–15, 1993, Cambridge, Massachusetts. Contact: Lucy Melhem, Arthur D. Little, Inc., 20 Acorn Park, Cambridge, MA 02140-2390 (phone 617-498-6117).

55th Annual American Power Conference, Apr. 13–15, 1993, Chicago, Illinois. Contact: R. W. Porter, American Power Conference, Illinois Inst. of Technology, Chicago, IL 60616.

Joint International Conference on Mathematical Methods and Supercomputing in Nuclear Applications, Apr. 19–23, 1993, Karlsruhe, Germany. Contact: H. Kuesters, KFK/INR, Postfach 3640 D-W-7500 Karlsruhe 1, Germany, or W. Werner, GRS, D-W-8046 Garching, Germany.

Introduction to Radiation Protection, Apr. 19–23, 1993, Cambridge, Massachusetts. Contact: David J. Allard, Arthur D. Little, Inc., 20 Acorn Park, Cambridge, Massachusetts 02140 (phone 617-498-6101).

International High-Level Radioactive Waste Management Conference, Apr. 25–29, 1993, Las Vegas, Nevada, sponsored by the ANS, the U.S. Dept. of Energy, and the American Society of Civil Engineers. Contact: Billy Cole, E. R. Johnson Assoc., 10461 White Granite Drive, Suite 204, Oakton, VA 22124 (phone 703-359-8355; Fax 703-359-0842).

4th Topical Symposium on Emergency Preparedness and Response, to be held April 26–29, 1993, in Long Island, New York. Contact: Brant Aidikoff, Technical Program Chairman, LIANS, Box 436, Upton, New York 11973 (phone 516-436-4256).

Seminar on Advanced Monte Carlo Computer Programs for Radiation Transport, Apr. 27–29, 1993, at Centre d'Etudes, Saclay, France. Contact: Enrico Sartori, OECD/NEA, 12 boulevard des Iles, F-92130 Issy les Moulineaux, France. (phone 33 (1) 4524 1072 or 71, Fax 33 (1) 4524 1110, or Internet sartori@nea.oecd.circe.fr.)

Radiopharmaceutical Internal Dosimetry, April 27–30, 1993, Oak Ridge, Tennessee. Contact: Registrar, REAC/TS, Oak Ridge Institute for Science and Education, P.O. Box 117, Oak Ridge, TN 37831-0117 (phone 615-576-3131, Fax 615-576-9522).

May 1993

Radiation Emergencies — What to Do, What to Say, May 3–7, 1993, Chicago, Illinois. Contact: Woodson Assoc., Inc., P.O. Box 2665, Gaithersburg, MD 20886 (phone 301-990-0751, Fax 301-990-6153).

International Workshop on Implementation of ALARA at Nuclear Power Plants, May 8–11, 1993, Long Island, New York. Contact: Dr. John W. Baum or Dr. T. A. Khan, Brookhaven National Laboratory, ALARA Center, Upton, Long Island, NY 11973 USA (phone 516-282-3228, Fax 516-282-5810).

Advanced Workshop on Occupational and Environmental Radiation Protection, May 10–14, 1993, Boston, Massachusetts, a short course offered by Harvard School of Public Health. Contact: Mary F. McPeak, Assoc. Dean for Continuing Education, 677 Huntington Ave., Boston, MA 02115 (phone 617-432-1171; Fax 617-432-1969).

Radiation Safety, May 17–21, 1993, Minneapolis, Minnesota. Contact: Woodson Assoc., Inc., P.O. Box 2665, Gaithersburg, MD 20886 (phone 301-990-0751, Fax 301-990-6153).

Occupational Internal Dosimetry, May 17–21, 1993, Oak Ridge, Tennessee. Contact: Registrar, REAC/TS, Oak Ridge Institute for Science and Education, P.O. Box 117, Oak Ridge, TN 37831-0117 (phone 615-576-3131, Fax 615-576-9522).

International Symposium on the Measurement Assurance in Dosimetry, May 24–27, 1993, Vienna, sponsored by the International Atomic Energy Agency. Contact: Conference Service Section, IAEA, P.O. Box 100, A-1400 Vienna, Austria (Fax 43 1234564).

Management and Disposal of Radioactive Waste, May 24–28, 1993, Boston, Massachusetts, a short course offered by Harvard School of Public Health. Contact: Mary F. McPeak, Assoc. Dean for Continuing Education, 677 Huntington Ave., Boston, MA 02115 (phone 617-432-1171; Fax 617-432-1969).

June 1993

Conference and International Symposium on Radionuclide Metrology and Its Applications, June 7–11, 1993, Teddington, United Kingdom. Contact: Dr. P. Christmas, National Physical Laboratory, Div. of Radiation Science and Acoustics, Teddington, Middlesex TW11 OLW, UK (Fax 4481 943 6317).

Preparation for the Health Physics Certification Exam, June 7–11, 1993, Chattanooga, Tennessee. Contact: Woodson Assoc., Inc., P.O. Box 2665, Gaithersburg, MD 20886 (phone 301-990-0751, Fax 301-990-6153).

Safewaste '93: The Final Disposal of Nuclear Waste, June 14–18, 1993, Avignon, France, sponsored by the ANS and the European Nuclear Society. Contact: Pierre Tanguy, EDF, Direction Generale 32, Rue de Monceau, 75384 Paris Cedex 08, France.

Radioactive Materials Transport and Radwaste Disposal, June 14–18, 1993, Portland, Oregon. Contact: Woodson Assoc., Inc., P.O. Box 2665, Gaithersburg, MD 20886 (phone 301-990-0751, Fax 301-990-6153).

Planning for Nuclear Emergencies, June 14–18, 1993, Boston, Massachusetts, a short course offered by Harvard School of Public Health. Contact: Mary F. McPeak, Assoc. Dean for Continuing Education, 677 Huntington Ave., Boston, MA 02115 (phone 617-432-1171; Fax 617-432-1969).

July 1993

Nuclear and Space Radiation Effects Conference, July 19–23, 1993, Snowbird, Utah. Contact: P. V. Dressendorfer, Sandia National Laboratories, Division 2535, P.O. Box 5800, Albuquerque, NM 87185.

August 1993

SMiRT 12, Structural Mechanics in Reactor Technology, Aug. 15–20, 1993, Stuttgart, Germany. Contact: Prof. Karl Kussmaul, SMiRT 12, Stätliche Materialprüfungsanstalt (MPA), University of Stuttgart, Pfaffenwaldring 32, 7000 Stuttgart 80 Germany (phone 49-711-685-3582; Fax 49-711-685-3144 or 2635).

16th Reactor Operations International Topical Meeting, Aug. 16–19, 1993, Long Island, New York. Contact: Robert McNair, Brookhaven National Laboratory, Reactor Division, Bldg. 703, Upton, NY 11973 (phone 516-282-2270, Fax 516-282-3014).

3rd European Space Power Conference, Aug. 23–27, 1993, Graz. Austria. Contact: J. Sanchez-Michielsen, ESTED, Power and Energy Conversion Division, P.O. Box 299, NL-2200 AG Noordwijk, The Netherlands (Fax 31-1719-84994).

Topical Meeting on Environmental Transport and Dosimetry, Aug. 31–Sept. 3, 1993, Charleston,

South Carolina, sponsored by the ANS. Contact: Robert Addis, Savannah River Laboratory, Environmental Transport Group, Bldg. 773-A, Box 616, Aiken, SC 29808 (phone 803-725-3325).

8th ASTM-EURATOM Symposium on Reactor Dosimetry, Aug. 29–Sept. 3, 1993, Vail, Colorado. Contact: Patrick J. Griffin, Div. 6522, Sandia National Laboratories, Albuquerque, New Mexico 87185 (phone 505-845-9121). See call for papers in September 1992 *RSIC Newsletter*.

September 1993

Computational and Experimental Validation of Nuclear Power Safety and Fuel Cycle Investigations, Sept. 5–9, 1993, Moscow, Russia. Contact: Prof. V. V. Khromov, Moscow Engineering Physics Institute, Kashirskoe Shosse 31, Moscow, 115409, Russia (phone 095-324-7026, Fax 095-324-2111).

2nd International Conference on Computational Physics, Sept. 13–17, 1993, Beijing. Contact: Prof. Tian-Yuan Zhang, IAPCM, P.O. Box 8009, Beijing, P.R. China 100088 (Fax 011-86-1-201-0108).

Radioactive Waste Volume Reduction, Sept. 27–29, 1993, Chicago, Illinois. Contact: Woodson Assoc., Inc., P.O. Box 2665, Gaithersburg, MD 20886 (phone 301-990-0751, Fax 301-990-6153).

Environmental Effects of Nuclear Power: Calculation and Control, Sept. 28–Oct. 1, 1993, Chicago, Illinois. Contact: Woodson Assoc., Inc., P.O. Box 2665, Gaithersburg, MD 20886 (phone 301-990-0751, Fax 301-990-6153).

Workshop on Data Analysis in Quality Control and in Radiation Protection of the Patient in Diagnostic Radiology and Nuclear Medicine, Sept. 29–Oct. 1, 1993, Grado, Italy. Contact: Dr. G. Contento, Ospedalae Santa Maria della Misericordia, Piazza Santa Maria della Misericordia 15, I-33100 la Loi 200, B-1049 Brussels, Belgium.

October 1993

12th International Conference on Non-Destructive Evaluation in the Nuclear and Pressure Vessel Industries, Oct. 3–7, 1993, Philadelphia, Pennsylvania. Contact: ASM International, Materials Park, OH 44073 USA (phone 216-338-5151; Fax 216-338-4634).

International Symposium on the Advanced Nuclear Power Systems: Design, Technology, and Strategies for Their Deployment, Oct. 18–22, 1993, Seoul, Korea. Contact: Conference Service Section, IAEA, P.O. Box 100, A-1400, Vienna, Austria.

Radiation Protection Engineering, Oct. 25–29, 1993, San Francisco, California. Contact: Woodson Assoc., Inc., P.O. Box 2665, Gaithersburg, MD 20886 (phone 301-990-0751, Fax 301-990-6153).

November 1993

Nuclear Energy Forum, Nov. 14–17, 1993, San Francisco, California. Contact: Conference Office, USCEA, 1776 I Street NW, Suite 400, Washington, DC 20006-3708 (phone 202-293-0770, Fax 202-785-4113).

Air Sampling, Nov. 16–19, 1993, Albuquerque, New Mexico. Contact: Woodson Assoc., Inc., P.O. Box 2665, Gaithersburg, MD 20886 (phone 301-990-0751, Fax 301-990-6153).

Radiation Contamination Risk: Communicating with the Public, Nov. 29–Dec. 3, 1993, Clearwater Beach, Florida. Contact: Woodson Assoc., Inc., P.O. Box 2665, Gaithersburg, MD 20886 (phone 301-990-0751, Fax 301-990-6153).

January 1994

11th Symposium on Space Nuclear Power Systems, Jan. 9–13, 1994, Albuquerque, New Mexico. Contact: Richard Johnson, Inst. of Space Nuclear Power Studies, University of New Mexico, Chemical and Nuclear Engineering Dept., Albuquerque, NM 87131-1341.

March 1994

11th International Conference on the Use of Computers in Radiotherapy, Mar. 20–24, 1994, Manchester, United Kingdom. Contact: J. M. Wilkinson, Christie Hospital, Withington, Manchester M20 9BX, GB.

April 1994

Topical Meeting on Advances in Reactor Physics, Apr. 11–14, 1994, Knoxville, Tennessee, sponsored by the American Nuclear Society. Contact: B. A. Worley, Oak Ridge National Laboratory, P.O. Box 2008, Oak Ridge, TN 37831-6363 USA (phone 615-574-6106).

May 1994

9th Pacific Basin Nuclear Conference, May 1–5, 1994, Sydney, Australia. Contact: Australian Nuclear Association, P.O. Box 445, Sutherland, NSW 2232, Australia.

International Conference on Nuclear Data for Science and Technology, May 9–13, 1994, Gatlinburg, Tennessee, USA. Contact: J. K. Dickens, Oak Ridge National Laboratory, P.O. Box 2008, Oak Ridge, TN 37831-6356 USA (phone 615-574-6115).

March 1995

5th Topical Meeting on Tritium Technology in Fission, Fusion, and Isotopic Applications, Mar. 26–31, 1995, Augusta, Georgia, sponsored by the ANS. Contact: C. E. Murphy, Westinghouse SRC, Savannah River Lab., Aiken, SC 29808.

JANUARY ACCESSION OF LITERATURE

The following literature cited has been ordered for review, and that selected as suitable will be placed in the RSIC Information Storage and Retrieval Information System (SARIS). This early announcement is made as a service to the shielding community. Copies of the literature are not distributed by RSIC. They may generally be obtained from the author or from a documentation center such as the National Technical Information Service (NTIS), Department of Commerce, Springfield, Virginia 22161.

RSIC maintains a microfiche file of the literature entered into SARIS, and duplicate copies of out-of-print reports may be available on request. Naturally, we cannot fill requests for literature which is copyrighted (such as books or journal articles) or whose distribution is restricted.

This literature is on order. It is not in our system. Please order from NTIS or other available source as indicated.

RADIATION SHIELDING LITERATURE

Book. . *The Health Physics and Radiological Health Handbook (Revised Edition)*. . Shleien, B., Ed. . 1992

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IWGGCR/24, 92-98. . *Impact of Different Libraries on the Performance Calculation of a Modul-Type Pebble Bed HTR*. . Ohlig, U.; Brockmann, H.; Hass, K.A.; Teuchert, E. . April 1991

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JAERI 1325. . *JENDL Dosimetry File*. . Nakazawa, M.; Kobayashi, K.; Iwasaki, S.; Iguchi, T.; Sakurai, K.; Ikeda, Y.; Nakagawa, T. . March 1992

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JAERI-M 92-077. . *Curves and Tables of Neutron Cross Sections of Fission Product Nuclei in JENDL-3*. . Nakagawa, T., Ed. . June 1992

LA-UR-92-3348. . *Description of Covariances of Emission Spectra Using ENDF File 30*. . Muir, D.W. . October 1992

LA-UR-92-3942. . *Description of Covariance Data in ENDF-6 Format*. . Muir, D.W. . October 1992

LA-UR-92-4170 (preprint). . *Theoretical Models of Neutron Emission in Fission*. . Madland, D.G. . December 1992

NEACRP-L-331. . *NEACRP Comparison of Codes for the Radiation Protection Assessment of Transportation Packages. Solutions to Problems 1-4*. . Avery, A.F.; Locke, H.F. . March 1992

NEACRP-L-338. . *NEACRP Comparison of Codes for the Radiation Protection Assessment of Transportation Packages. Solutions to Problems 5 and 6*. . Locke, H.F. . March 1992

NEACRP-L-339. . *Summary of the Results of the Comparison of Calculations and Measurements for the TN12 Flask Carried Out Under the NEACRP Intercomparison of Shielding Codes.* . Locke, H.F. . March 1992

Nucl. Instrum. Methods, A321, 265-270. . *Design Calculations for the ANS Cold Neutron Source Part II. Heating Rates*. . Alsmiller, R.G., Jr.; Lillie, R.A. . 1992

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