RSIC Newsletter

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March 1993

Talk is by far the most accessible of pleasures. It costs nothing in money, it is all profit, it completes our education, founds and fosters our friendships, and can be enjoyed at any age and in almost any state of health.—Robert Louis Stevenson

Alert to ANISN Users

The upscatter removal section of ANISN subroutine WATE is incorrect in all versions distributed by RSIC except for the IBM mainframe version (CCC254A). The error can be traced to the late 1960s when the first coupled neutron-gamma calculations were attempted. Since ANISN is not used extensively for cross section weighting at most sites, and is used even less to remove upscatter cross sections while retaining multiple thermal groups, most users will not be impacted. Users are urged to contact RSIC to request a copy of the memo describing the simple change to correct the problem.

CHANGES TO THE COMPUTER CODE COLLECTION

During the month four changes were made to the code collection. Three new code systems were packaged and added to the collection and an existing code package was replaced with a newly frozen version. Three changes resulted from foreign contributions.

CCC-611/LABAN-PEL

The Atomic Energy Corporation of South Africa Limited, Pretoria, contributed LABAN-PEL, which solves the two-dimensional, Cartesian geometry multigroup diffusion equation by means of the high-order response matrix method. The method is applied to coarse-mesh problems and is useful as a benchmarking tool for nodal methods. LABAN-PEL has run routinely on IBM mainframes 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 diskette is required for transmittal. References: PEL-309 (June 1991). Fortran 77; IBM mainframes and PC (C00611IMFPC00).

No. 340

CCC-614/1DB

Battelle-Northwest Laboratory, Richland, Washington, contributed this one-dimensional diffusion code for nuclear reactor analysis. The code is designed to compute keff and perform criticality searches, to compute collapsed microscopic and macroscopic cross sections averaged over the spectrum in any specified zone, to compute resonance-shielded cross sections using data in the shielding factor format, and to compute isotopic burnup using decay chains specified by the user. 1DB has run on many computers, including Cray, IBM PS/2, Vax, and PC 486. Microsoft Fortran compiler Version 5.0 was used to create the executable file included in the package. One DS/HD diskette is required for transmittal. Reference: WHC-EP-0435 (Sept. 1991). Fortran 77; many computers (C00614ALLCP00).

PSR-194/FEDGROUP-C86 Rev. 3

The J. Stefan Institute, Ljubljana, Slovenia, through the NEADB have contributed a newly frozen version of this multigroup, neutron crosssection processing system, designated FEDGROUP-C86 Revision 3. Data contained in evaluated nuclear data files are processed to produce spectrum averaged multigroup constants for applications in transport calculations. Cross sections (shielded and unshielded), scattering matrices and some other constants are prepared. Special emphasis has been placed on thermal reactor applications, particularly ing matrix. Cross section averaging with FLANGE was also corrected for a Maxwellian-1/E spectrum. Modifications were also made to the auxilliary routines. The code has run on CDC Cyber-172 computers running NOS-BE and on several Vax computers, ranging from Micro Vax-II to Vax 8650 under a different version of the VMS operating system. References: IJS-DP-6228 (Nov. 1991) and IJS-DP-5446 (June 1989). Fortran IV; CDC and Vax (P00194MNYCP01).

PSR-324/EQUIVA-2.0

The Atomic Energy Corporation of South Africa Limited, Pretoria, contributed this code system for generating environment-insensitive equivalent diffusion theory parameters for PWR reflector regions from the results of simple one-dimensional (slab) multigroup transport calculations. EQUIVA-2.0 has run routinely on IBM mainframes and on 32bit 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 diskette is required for transmittal. References: PEL-307 (March 1991), Nucl. Sci. Eng. 103 359-376 (1989), and Nucl. Sci. Eng. 109, 200-214 (1991). Fortran 77; IBM mainframes and PC (P00324IMFPC00).

CHANGE TO THE DATA LIBRARY COLLECTION

An existing data library was replaced with a newly frozen version as a result of a contribution from Slovenia.

DLC-147/WIMSLIB-IJS1

The J. Stefan Institute, Ljubljana, Slovenia, through the NEADB have contributed a newly frozen version of this extended WIMS 69-group library. This is a revision of the WIMS-IJS0 library. The contents of the new library is very similar, but the cross sections have been recalculated and the data checked for consistency. Corrections for some problems, particularly for those related to burnup in cluster geometry, have been made. CTA/IEAv, São

Jose Dos Campos, Brazil, through the NEADB contributed the ICAROG retrieval program, included in this package. ICAROG converts a WIMS-D/4 nuclear data library from BCD to binary and vice versa. It also extracts a subset of nuclides specified by the user. The package is transmitted in DOS format on one DS/HD 1.44 MB (3.5-in.) diskette. References: IJS-DP-6243 (Nov. 1991) and IJS-DP-6245 (Nov. 1991). Fortran 77; Vax (D00147D881001).

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.

J. J. Schmidt retires. Schmidt served as head of the International Atomic Energy Agency Nuclear Data Section from 1969 to 1992. He has vigorously promoted international cooperation in the field of nuclear data through the International Nuclear Data Committee, data center networks, specialist's meetings to assess data needs, training courses, and research contracts.

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.

Georgia Tech Offers Nuclear Engineering Master's Degree via Videotape

In response to the need for practicing engineers to further their education while maintaining full-time employment, the nuclear engineering faculty at Georgia Tech is offering graduate-level courses via video that may applicable toward a master's degree in the fall quarter of 1993. Initially, one or two courses will be offered each quarter. The number of courses will increase as enrollment grows. For further information on Georgia Tech's video-based master's degree program, contact the Video Programs Office at 404-894-8572 (fax, 404-853-0117, email vbis@conted.gatech.edu).

Computational and Experimental Validation of Nuclear Power Safety and Fuel Cycle Investigations

The 8th Topical Meeting "MEPhI-VOLGA-93" is the next in a series of scientific meetings on reactor physics problems. It will be held September 5–9, 1993, in Moscow. The meeting is sponsored by the Department of Theoretical and Experimental Reactor Physics of MEPhI and the International Nuclear Society and co-sponsored by the Ministry of High Education of Russia. The meeting language will be Russian and English. Papers are solicited for the following topics:

- ! Advanced Methods in Neutron and Photon Transport for Reactor Safety.
- ! Neutronics Experiments for Nuclear Reactor Safety Validation.
- ! Complex Modelling of Dynamics in Different Types of Reactors.
- ! Analysis Methods and Use of In-Core Information for Improving the Safety Characteristics.
- ! New Physical Principles and Investigations Related to Core Inherent Safety and Nuclide Composition Management.

Two copies of camera-ready manuscripts of summaries must reach the Program Chairman by **April 15**, **1993**. The address is Dr. V. I. Naumov, MEPhI, Kashirskoe Shosse 31, Moscow, 115409, Russia. (phone 095-324-7026, fax 095-324-2111).

Health Physics Society Call for Papers

Managing Radioactive and Mixed Waste is the topic planned for the 27th Annual Midyear Topical Meeting of the health Physics Society. The meeting will be held February 13–17, 1994, in Albany, New York. Discussion will focus on management practices and technologies which apply to wastes containing radioactive, chemical, biological and other hazardous materials. The distinction between radioactive and non radioactive hazardous wastes is becoming nonexistent. Federal and state regulations for chemical and biological wastes are impinging on what has traditionally been radioactive waste management. Waste practices permitted in the past may no longer be acceptable. New technologies will be applied whether disposal is to be local or at some special facility. The Northeastern New York Chapter of the HPS is especially interested in receiving papers from the hazardous waste community to assist in this tutorial meeting. Papers are requested for the following topics:

- ! Siting and Regulation, to include Regulatory Requirements and Permitting, Land Disposal Restrictions, and Facility Description
- ! Innovative Treatment Technologies, to include High-Level, Transuranic and Low-Level Radioactive Waste, High-Level, Transuranic, and Low-Level Mixed Waste, and Hazardous Waste
- ! Storage (onsite and offsite)
- ! Disposal of Radioactive and Mixed Waste
- ! Transportation
- ! Remediation, Decontamination and Decommissioning
- ! Characterization and Risk Assessment
- ! Communicating with Public and Media
- ! International Perspectives

Those who wish to participate should submit a 200-word abstract by **July 1, 1993**, to John M. Matuszek, NENYHPS, P.O. Box 2249, Empire State Plaza Station, Albany, NY 12220-2249 (phone 518-474-0004, fax 518-473-2895).

5th Nuclear Criticality Topical to be Held in Nashville

Physics and Methods in Criticality Safety is the theme for the 5th Topical Meeting of the Nuclear Criticality Division of the American Nuclear Society. It will be held September 19–23, 1993, at the Sheraton Music City Hotel in Nashville, Tennessee. The ANS Oak Ridge/Knoxville Section is hosting the meeting with co-sponsorship provided by the Oak Ridge Field Office of the U.S. Department of Energy, Martin Marietta Energy Systems, and the University of Tennessee. Approximately 45 presentations will be given during the 3½-day meeting on the topics of Criticality Theory and Experimental Measurements, Code and Data Methodology, Validation Practices, and Analytical and/or Experimental Applications. An information forum on "Things That Happen That You Don't Expect" is scheduled for Tuesday afternoon. Additional information about the technical and guest programs may be obtained from R. Michael Westfall, Oak Ridge National Laboratory, P.O. Box 2008, Oak Ridge, TN 37831-6370 (phone 615-576-3513), or Dennis Tollefson, Y-12 Plant, P.O. Box 2009, Oak Ridge, TN 37831-8221 (fax 615-574-2000).

Calendar

Your attention is directed to the following events of interest.

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).
- Towards Next Generation Light Water Reactors, Apr. 25–28, 1993, The Hague, The Netherlands, a topical meeting sponsored by the European Nuclear Society. Contact: ENS Secretariat, P.O. Box 5032, CH-3001, Berne, Switzerland (fax 41-31 22 92 03).
- International High-Level Radioactive Waste Management Conference, Apr. 25–29, 1993, Las Vegas, Nevada, sponsored by the ANS, the U.S.

- *4th Topical Symposium on Emergency Preparedness and Response*, to be held Apr. 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).
- International Workshop on Physics and Instrumentation at Future Linear Colliders, Apr. 26–30, 1993, Kona, Hawaii. Contact: F. Harris, University of Hawaii, Physics Department, Honolulu, HI 96822.
- 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, Apr. 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).
- 6th International Symposium on Transport Phenomena, May 9–13, 1993, Seoul, Korea, sponsored by the Pacific Center of Thermal-Fluids Engineering. Contact: Jong H. Kim, Electric Power Research Institute, P.O. Box 10412, Palo Alto, CA 94303 (phone 415-855-2671, fax 415-855-1026).

- 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).
- German Nuclear Society/German Atomic Forum Annual Meeting on Nuclear Technology, May 25–27, 1993, Cologne, Germany. Contact: INFORUM GmbH, Heussallee 10, W-5300 Bonn 1, Germany (phone 49 0228 507 223).
- 9th International Conference on High Power Particle Beams, May 25–29, 1993, Washington, DC. Contact: D. Mosher, University of Maryland, Naval Research Lab., P.O. Box 1077, Oxon Hill, MD 20750.

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).

Occupational & Environmental Radiation Protection,

Aug. 16–20, 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).

- 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).
- 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.
- 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).
- 3rd European Conference on Accelerators in Applied Research and Technology, Aug. 31–Sept. 4, 1993, Orleans, France. Contact: J. L. Debrun, CNRS, Centre d'Etudes et de Recherches par Irradiation, 3A rue de la Ferollerie, F-45071 Orleans Cedex 2, France (fax 38-63-0271).

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 European Conference on Radiations and Their Effects on Devices and Systems, Sept. 13–16, 1993, Saint-Malo, France. Contact: CEA-DAM, Service Electronique, BP 12, F-91680 Bruyeres, Le Chatel, France.
- 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).

- Physics and Methods in Criticality Safety, a topical meeting of the Nuclear Criticality Safety Division of the American Nuclear Society, Sept. 19–23, 1993, Nashville, Tennessee. Contact: R. Michael Westfall, Oak Ridge National Laboratory, P.O. Box 2008, Oak Ridge, TN 37831-6370 (phone 615-576-3513), or Dennis Tollefson, Y-12 Plant, P.O. Box 2009, Oak Ridge, TN 37831-8221 (fax 615-574-2000).
- 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.

February 1994

Managing Radioactive and Mixed Waste, Feb. 13–17, 1994, Albany, New York, sponsored by the Health Physics Society. Contact: John M. Matusek, NENYHPS, P.O. Box 2249, Empire State Plaza Station, Albany, NY 12220-2249.

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

- ARS '94, International Meeting on Advanced Reactor Safety, Apr. 17–20, 1994, Pittsburgh, Pennsylvania. Contact: D. Squarer, Westinghouse Electric Corp., Science and Technology Center, 1310 Beulah Road, Pittsburgh, PA 15235-5098 USA (phone 412-256-2063; fax 412-256-1348).
- RECOD '94, 4th International Conference on Nuclear Fuel Reprocessing and Waste Management, Apr. 24–28, 1994, London. Contact: W. L. Wilkinson, RECOD '94 Steering Committee, British Nuclear Forum, 22 Buckingham Gate, London SW1E 6LB, United Kingdom. (phone 071-828-0116; fax 071-828-0110).

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.

FEBRUARY 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

Nucl. Sci. Eng., 113, 109-121 . . Study of Compact Fast Reactor Core Designs . . Hamid, T.; Ott, K.O. . . February 1993

Nucl. Sci. Eng., 113, 136-144. . . Path Length Differencing and Energy Conservation of the Sn Boltzmann/Spencer-Lewis Equation . . Filippone, W.L.; Monahan, S.P. . . February 1993

Nucl. Sci. Eng., 113, 173-183 . . Analysis of Tritium Production in a Sphere of 6LiD with Oralloy Core Irradiated by 14-MeV Neutrons . . Fawcett, L.R., Jr. . . February 1993

Nucl. Technol., 101, 1-17 . . Accelerator-Driven Subcritical Target Concept for Transmutation of Nuclear Wastes . . Van Tuyle, G.J.; Todosow, M.; Geiger, M.J.; Aronson, A.L.; Takahashi, H. . . January 1993

Nucl. Technol., 101, 123-139 . . . Radis - A Regional Nuclear Accident Consequence Analysis Model for Hong Kong . . Yeung, M.R.; Ching, E.M.K. . . February 1993

Nucl. Technol., 101, 140-148 . . A Comparative Study of Nuclear Accident Consequences for Hong Kong . . Ching, E.M.K.; Yeung, M.R. . . February 1993

Nucl. Technol., 101, 168-180 . . The Use of Nonlinear Regression Analysis for Integrating Pollutant Concentration Measurements with Atmospheric Dispersion Modeling for Source Term Estimation . . Edwards, L.L.; Freis, R.P.; Peters, L.G.; Gudiksen, P.H. . . February 1993

Nucl. Technol., 101, 18-39. *Risk, Uncertainty in Risk, and the EPA Release Limits for Radioactive Waste Disposal*. *Helton, J.C. January 1993*.

Nucl. Technol., 101, 237-243 . . . Transport Analysis of Several Cross-Section Libraries Used for Reactor Pressure Vessel Fluence Calculations . . Haghighat, A.; Veerasingam, R. . . February 1993

Nucl. Technol., 101, 54-66 . . A Numerical Study of Transient Mass Transport Through a Circular Hole Connecting Two Simi-Infinite Media . . DePaoli, D.W.; Scott, T.C. . . January 1993

Nucl. Technol., 101, 67-78. . . An Analytical Model for Radionuclide Transport in a Single Fracture: Considering Nonequilibrium Matrix Sorption . . Lee, C.H.; Teng, S.P. . . January 1993

Nucl. Technol., 101, 79-91. . Diffusion of the 241Am - 237Np Decay Chain Limited by Their Elemental Solubilities in the Artificial Barriers of High-Level Radioactive Waste Repositories . . Ahn, J.; Suzuki, A. . . January 1993 **Nucl. Technol., 101, 92-100**. *Migration of Radionuclides in Fractured Porous Rock: Analytical Solution for a Flux-Type Boundary Condition*. Chiou, S.L.; Li, S.H. . January 1993

Inter. Topical Mtg. on Safety Margins in Criticality Safety . . Uncertainties Associated with the Use of the KENO MONTE CARLO Criticality Codes . . Landers, N.F.; Petrie, L.M. . . 1992

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