

RSIC Newsletter

Oak Ridge National Laboratory

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*One should take good care not to grow too wise for so great a pleasure
of life as laughter.—Addison*

Reprinting of *Early Test Facilities*.... Ordered

The response to last month's offer of ORNL/RSIC-55, *Early Test Facilities and Analytic Methods for Radiation Shielding* has been great enough to require a reprinting. We will be accepting requests for the report through the month of December. We will then determine how many additional copies are needed and have them reproduced. Distribution will be made in late January and February. Those who have responded need not send in another request.

CHANGES TO THE COMPUTER CODE COLLECTION

Three changes or additions were made to the computer code collection during the month. Two new code systems were packaged and added, and an existing code package was extended with an additional hardware version. Two changes resulted from foreign contributions.

CCC-544/CEPXS-ONELD

A personal computer version of this one-dimensional, coupled electron-photon, transport code system was contributed by Experimental and Mathematical Physics Consultants, Gaithersburg, Maryland. CEPXS generates cross sections to be input to ONELD, an advanced discrete ordinates code that uses linear-discontinuous spatial differencing and diffusion-consistent weighted diamond angular differencing. The Lahey F77L-EM/32 Fortran compiler, Version 5.01, the Phar Lap Linker, Dos Extender, and Virtual Memory Manager were used to create the executables distributed with this package. An 80386 or 80486 PC is required

with at least 4 Mbytes of fast memory. Systems with less than 16 Mbytes of memory will require additional hard disk space since the virtual memory manager will require at least the space used by the largest unpacked run image (16 Mbyte). Three DS/HD 5.25-in. (1.2 MB) diskettes are required for transmittal of this package. References: SAND89-1685 (October 1989), SAND89-1661 (September 1989), LA-9184-M (Rev. December 1989), and SAND89-2211 (July 1990). Fortran 77; Vax (A), Cray (B), and PC 486 (C).

PSR-319/WIMSCORE-ENEA

The Soreq Nuclear Research Centre, Yavne,

Israel, and the ENEA Centre of Bologna, Italy, through the Nuclear Energy Agency Data Bank, Issy-les-Moulineaux, France, contributed this code system for use with CCC-576/WIMS-D4. WIMSCORE-ENEA processes the WIMS-D/4 binary output files for producing two-group microscopic cross sections and macroscopic lattice cell constants (zone and cell macroscopic cross sections, D, M, and K-infinity) in a more flexible format needed for reactor burnup codes like CITATION, for reactor dynamics codes like NADYP-W and for other reactor codes. The purpose of the WIMSCORE-ENEA code is to facilitate the automation of data transfer between the cell calculation code WIMS and the diffusion-burnup codes. This code is written in Fortran IV and runs on the IBM 3090. It is transmitted on one DS/HD 5.25-in. (1.2 MB) diskette. References: IA-1380 (January 1983) and ENEA Draft. Fortran

IV; IBM 3090.

PSR-320/SCALPLO

Delft University of Technology, The Netherlands, contributed this program for plotting flux output from SCALE modules and related programs. SCALPLO plots flux, power and spectrum information. Data exchange between SCALE modules and SCALPLO is via CCCC-interface files. Routines are included to produce CCCC-like files. This system has been used with XSDRNPM, CITATION, ANISN, DOT, and BOLD VENTURE. Version 11.0 or higher of DISSPLA is required. The codes run on Vax computers under VMS 5.04. SCALPLO is distributed on one DS/HD 5.25-in. (1.2 MB) diskette. Reference: IRI-131-92-002 (April 1992). Fortran 77; Vax.

CHANGE TO THE DATA LIBRARY COLLECTION

An existing data library was made available in another form.

DLC-105/MCNPDAT

Experimental and Mathematical Physics Consultants, Gaithersburg, Maryland, contributed this binary data library package for use on 32-bit personal computers. The ASCII data from DLC-105C were downloaded to diskette, converted to binary using MAKXSF, compressed, then copied to diskettes. Some files span more than one diskette and were written in DOS 5 backup format. The

MAKXSF program was compiled using the Lahey Fortran F77-EM/32 version 5 compiler and are compatible with CCC-200B/MCNP 4.2. The package, designated DLC-105D, is transmitted on 26 DS/HD 3.5-in. formatted diskettes (1.44 MB). References: Informal notes (June 1991 and October 1992). Fortran 77; All computers (C), PC 386 and 486 (D).

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.

International Workshop on Implementation of ALARA at Nuclear Power Plants

Brookhaven National Laboratory (BNL) will hold the *International Workshop on Implementation of ALARA at Nuclear Power Plants* on May 8–11, 1994, on Long Island, New York. The workshop is being jointly sponsored by the U. S. Nuclear Regulatory Commission and the BNL ALARA Center. Invited and contributed papers and workshop discussions will be held 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, and
- ! Recent recommendations on dose limitation.

For more information, contact Maria Beckman of the BNL ALARA Center, Bldg. 703M, BNL, Upton, NY 11973 USA (phone 516-282-3228, Fax 516-282-5810).

Calendar

Your attention is directed to the following events of interest.

January 1993

Managing Nuclear Emergencies, Jan. 11–15, 1993, Phoenix, Arizona. Contact: Woodson Assoc., Inc., P.O. Box 2665, Gaithersburg, MD 20886 (phone 301-990-0751, Fax 301-990-6153).

Radioactive Waste Volume Reduction, Jan. 11–15, 1993, Baltimore, Maryland. Contact: Woodson Assoc., Inc., P.O. Box 2665, Gaithersburg, MD 20886 (phone 301-990-0751, Fax 301-990-6153).

Groundwater Contaminant Transport Modelling Course, 9th Annual, Jan. 13–15, 1993, sponsored by the University of Vermont. Contact: College of Engineering & Mathematics, 109 Votey Bldg., Burlington, VT 05405 (phone: 802-656-1941; Fax 802-656-8802).

February 1993

HEART, Feb. 1–5, 1993, Naval Training Center, Orlando, Florida, sponsored by the Department of Defense and the Department of Energy. Contact: Arne Kalma, S-Cubed, 3020 Callen Road, San Diego, CA 92121 (phone 619-450-2439).

Practical Radiation Shielding, Feb. 1–5, 1993, Atlanta, Georgia, a course sponsored by Shonka Research Associates, Inc. Contact: Shonka Research Assoc., 4939 Lower Roswell Road, Suite 106, Marietta, GA 30068 (phone 404-509-7606).

Internal Dosimetry, Feb. 8–12, 1993, Las Vegas, Nevada. Contact: Woodson Assoc., Inc., P.O. Box 2665, Gaithersburg, MD 20886 (phone 301-990-0751, Fax 301-990-6153).

Maintenance/Repair of Oil Filled Lead Glass Shielding Windows, Feb. 9–11, 1993, Kent, Washington, sponsored by Hot Cell Services. Contact: Ronald A. Campbell, Hot Cell Services Corp., 22626 85th Place South, Kent, WA 98031 (phone 206-854-4945; fax 206-854-4947).

Internal Dosimetry, Feb. 9–12, 1993, Las Vegas, Nevada. Contact: Linda S. Woodson, Woodson Associates, Inc., P.O. Box 2665, Gaithersburg, MD 20886 (phone 301-990-0751; fax 301-990-6153).

Air Sampling, Feb. 23–26, 1993, Orlando, Florida. Contact: Woodson Assoc., Inc., P.O. Box 2665, Gaithersburg, MD 20886 (phone 301-990-0751, Fax 301-990-6153).

March 1993

Counting Statistics, Mar. 16–19, 1993, Augusta, Georgia. Contact: Woodson Assoc., Inc., P.O. Box 2665, Gaithersburg, MD 20886 (phone

301-990-0751, Fax 301-990-6153).

Radioactivity: Detection & Measurement, Mar. 29–Apr. 2, 1993, Scottsdale, Arizona. 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

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.

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.

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).

May 1993

Contamination Risk: Communicating With the Public, May 3–7, 1993, New Haven, Connecticut. Contact: Woodson Assoc., Inc.,

P.O. Box 2665, Gaithersburg, MD 20886 (phone 301-990-0751, Fax 301-990-6153).

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, Denver, Colorado. Contact: Woodson Assoc., Inc., P.O. Box 2665, Gaithersburg, MD 20886 (phone 301-990-0751, Fax 301-990-6153).

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).

Health Physics Certification Review, 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.

Transport, Storage, and Disposal of Radioactive Waste, June 14–18, 1993, Seattle, Washington. 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).

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*.

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.

NOVEMBER 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.

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It is a sincere pleasure to serve you.

*We value your friendship, confidence and
loyalty and can think of no more appropriate
time than now to tell you so.*

*May the coming year be a most Happy and Healthful
one for you and your family.*

RSIC Staff

