

# RSIC Newsletter

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## Oak Ridge National Laboratory

POST OFFICE BOX 2008 ! OAK RIDGE, TENNESSEE 37831-6362  
MANAGED BY MARTIN MARIETTA ENERGY SYSTEMS, INC.  
FOR THE U.S. DEPARTMENT OF ENERGY

Phone No. 615-574-6176  
FAX 615-574-6182

BitNet: PDC@ORNLSTC • Internet: PDC@ORNL.GOV

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

## **In Summary: International Conference on Nuclear Data for Science and Technology**

The most recent Conference on Nuclear Data for Science and Technology was held 9–13 May 1994 at the Park Vista Hotel in Gatlinburg, Tennessee USA. Two hundred forty-eight scientists from 29 countries were registered. They presented almost 300 papers. These included 48 invited presentations. Sessions were divided into 11 plenary sessions, 9 sessions of contributed oral reports, 2 sessions of contributed poster reports, 1 tutorial session, and a round-table discussion on Friday afternoon. The topics for the plenary sessions included: International Cooperation and Initiatives; Standards and Facilities; Experiments; Theory; Evaluation and Validation; Large Evaluated Data Files; Applications I; Fission and Fusion; Medium Energy; Applications II; and Applications III. The session on Applications II, held Friday morning, featured C. Rubbia (CERN in Switzerland), C. Bowman and A. Michaudon (Los Alamos National Laboratory) discussing the uses of spallation sources in fission and basic physics applications. This session was opened to the public, and about 310 people attended. M. Kellett of the University of Birmingham in the United Kingdom won the best student paper award. The title of Honorary Chairman was bestowed upon R. W. Peelle in recognition of his many contributions and influences to the field of Nuclear Data. Dr. Alvin Weinberg was the featured speaker at the awards banquet.

The Conference was organized and sponsored by the Oak Ridge National Laboratory. Additional sponsors were the U. S. Department of Energy, the University of Tennessee, the American Nuclear Society, the American Physical Society, the European Nuclear Society, and the International Union of Pure and Applied Physics. Cooperation was also provided by the International Atomic Energy Agency and the OECD Nuclear Energy Agency. Assistance with the social breaks was provided by EG&G Ortec, Martin Marietta Energy Systems, Inc., and the Tennessee Valley Authority.

The papers were of excellent quality, the weather was mild and pleasant during the week of the Conference, and the hotel management provided excellent facilities and prompt attention to the social activities. And the peak of a partial solar eclipse occurred during the lunch break on Tuesday—a fitting celestial display for a scientific meeting!

*J. K. Dickens, Conference Chairman*

## **Robert M. (Mike) Westfall Among Six Fellows Selected by the American Nuclear Society**

Six members were recognized during the Honors and Awards Luncheon June 21 at the 1994 American Nuclear Society Annual Meeting in New Orleans for notable original research or invention, for technical leadership, or for outstanding leadership as a teacher. Those receiving citations are as follows:

**Charles J. Divona**, technical director and lead nuclear/mechanical engineering for the Hanford Waste Vitrification Plant Project, Fluor Daniel, Inc., "For his extensive accomplishments in the design and development of remote systems for the safe handling of radioactive fuel, material and waste products; and for his contributions to the engineering research of Liquid Metal Fuel Breeder Reactor Systems and Technology."

**Michael J. Driscoll**, professor emeritus and research scientist, Massachusetts Institute of Technology, "For his innovative contributions to the reactor fuel cycle involving fuel supply, fuel management, fast reactor applied reactor physics, coolant chemistry, and passive reactor design: and for his dedication and productivity in the development of future nuclear industry."

**Nasr M. Ghoniem**, professor, University of California, Los Angeles, "For his invention of low-activation steels and continued research on environmentally acceptable structural materials for fusion energy applications, for the development of fundamental concepts and theories of radiation damage and effects on materials, and for his educational contributions to the professions of nuclear and materials engineering."

**Jerome H. Goldberg**, president Nuclear Division, Florida Power & Light Company, "For excellence in design, construction, and operation of nuclear powered naval vessels and commercial nuclear power stations in a forty-year career as engineer, manager, and leader; and for distinguished service to the American Nuclear Society in establishing and sustaining professionalism in local chapters."

**Herbert Inhaber**, principal scientist, Westinghouse Savannah River Co., "For innovative work in comparative risk analysis, showing that nuclear power has among the lowest risks of all energy sources, including alternative systems; for explaining the results to the public and decision-makers; for making nuclear power more acceptable as a result; and for new approaches to nuclear waste siting."

**Robert M. Westfall**, head, Nuclear Engineering Applications Section, Computing Applications Division, Oak Ridge National Laboratory, "For innovation in the development and application of advanced problem-solving methodologies in the nuclear field with major contributions to nuclear safety, and for his leadership role in our field." Mike and the staff of his section are major contributors of technology to the RSIC collection, including the SCALE series.



## **CHANGES TO THE COMPUTER CODE COLLECTION**

Four changes were made to the computer code collection during the month. One new code system was packaged and added to the collection and three existing code packages were replaced with newly frozen versions. One change resulted from a foreign contribution.

### **CCC-414/DIAMANT2**

**OP SYS:** DOS

**Language:** Fortran 77

**Computers:** PC 386

**Format:** DOS

The Nuclear Research Center in Karlsruhe, Federal Republic of Germany, through the NEA Data Bank, Issy-les-Moulineaux, France, contributed the newly frozen version 2.0 of DIAMANT2, which solves the two-dimensional static multigroup neutron transport equation in planar regular triangular geometry. Both regular and adjoint, inhomogeneous and homogeneous problems subject to vacuum, reflective or input-specified boundary flux conditions are solved. Anisotropy is operational in this new release for the scattering source. The discrete ordinates approximation for

the angular variable is used in finite difference form which is solved with a diamond difference approximation.

DIAMANT2 runs on IBM 386 personal computers under the DOS operating system. Both the Fortran 77 source and executable are included in the package which is transmitted on one DS/HD 5.25-in. (1.2 MB) diskette in self-extracting compressed DOS files. Reference: KfK 4133 (June 1987). Fortran 77; PC 386 (C00414/PC386/00).

### **CCC-613/VALE 1.1**

**OP SYS:** DOS

**Language:** Fortran 77

**Computers:**  
PC 386/486;  
workstations

**Format:** tar, DOS

Oak Ridge National Laboratory released a newly frozen version of this multigroup diffusion theory neutronics code system for solving two- and three-dimensional problems for trigonal geometries. VALE, Version 1.1, corrects a conflict in naming the interface data files on workstations and a problem related to direct access block size and record length specifications. Other minor changes were also made in this release.

VALE runs on either IBM 386 and 486 personal computers or IBM RISC/6000 workstations and is transmitted on two DS/HD 3.5-in. (1.44 MB) diskettes in tar format or one DS/HD 3.5-in. (1.44 MB) diskette in self-extracting compressed DOS files. The package includes source files, PC executables and sample cases. References: ORNL-5792 (Aug. 1981), ORNL-5711 (June 1981), and ORNL-5229/R1 (July 1979). Fortran 77; PC 386 and 486 (C00613/PC386/01) or IBM RISC/6000 (C00613/IRISC/01).

### **CCC-629/SESOIL**

**OP SYS:** DOS

**Language:** Fortran 77

**Computers:** PC

**Format:** DOS

Oak Ridge National Laboratory contributed this one-dimensional, vertical transport code system for the unsaturated soil zone. SESOIL performs long-term simulations of chemical transport and transformations in the soil. The model uses theoretically derived equations to represent water transport, sediment transport on the land surface, pollutant transformation, and migration of the pollutant to the atmosphere and groundwater. The processes modeled by SESOIL are categorized into three cycles: hydrology, sediment, and pollutant transport. The RM/Fortran Compiler, Version 2, was used to create the executable included in the package. The Fortran source, executable, and sample input and output are transmitted on one DS/HD 5.25-in. (1.2 MB) diskette in DOS format. Reference: PUBL-SW-200-93 (June 1993). Fortran 77; IBM PC (C00629/IBMPC/00).

### **PSR-333/CHENDF 6.9**

**OP SYS:**

**Language:** Fortran 77;  
ANSI 77 Fortran

**Computers:** Many

**Format:** DOS

The National Nuclear Data Center at Brookhaven National Laboratory, Upton, New York, contributed a newly frozen version of these utility codes written to process ENDF-6 formatted files including all formats approved up to and including the October 1993 CSEWG meeting except for the Generalized R-Matrix resonance region format and the generalized format for covariances (file 30). The programs are written in ANSI-77 Fortran and should operate on any computer with sufficient memory and a Fortran compiler conforming to this standard. The SETMDC program is included to convert the source codes from one mode to the other. The standard batch mode version is indicated by "ANS" code and the interactive version by "VAX" code. One DS/HD 5.25-in. (1.2 MB) diskette written in self-extracting compressed DOS files is used for transmitting the package. Reference: Informal report (Nov. 1993). Fortran 77; Vax family and IBM (P00333/MNYCP/01).



## 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.

### Calendar

Your attention is directed to the following events of interest.

#### September 1994

##### *International Conference on the Nuclear Power*

*Option*, Sept. 5–8, 1994, Vienna, Austria, sponsored by the International Atomic Energy Agency. Contact: IAEA (phone 43-1-2360-1310; fax 43-1-234-564).

*19th Symposium of the Uranium Institute*, Sept. 7–9, 1994, London. Contact: Uranium Institute, U.K. (phone 44-071-225-0303; fax 44-071-225-0308).

*First International Workshop on Accelerator-Based Neutron Sources for Boron Neutron Capture Therapy*, Sept. 11–14, 1994, Jackson, Wyoming, sponsored by the U.S. Department of Energy. Contact: D. W. Nigg, Idaho National Engineering Laboratory, P.O. Box 1625, Idaho Falls, ID 83415-3890 (fax 208-526-0528).

*9th International Meeting on Radiation Processing*, Sept. 11–16, 1994, Istanbul, Turkey. Contact: Prof. Dr. Olgun Güven, Chairman (IMRP-9), P.O. Box 177, Bahcelievler, Ankara, 06502 Turkey (phone 90-4-298-1894, fax 90-312-815-4307).

*Environmental Monitoring*, Sept. 12–16, 1994, in Oak Ridge, Tennessee, a short course sponsored by Oak Ridge Associated Universities. Contact: Registrar Professional Training Programs, Oak Ridge Associated Universities, P.O. Box 117, Oak Ridge, TN 37831-0117 (phone 615-576-3576 or 615-241-4888; fax 615-576-9383).

*The Nuclear Industry—Into the 21st Century?* Sept. 14–15, 1994, London, sponsored by the *Financial Times*, in association with *FT Energy Economist*. Contact: Financial Times Conference Organization, 102-108 Clerkenwell Rd., London EC1M 5SA U.K. (phone 44-71-814-9770; fax 44-71-873-3975/3969).

*Utility-NRC Interface Workshop (Region I)*, Sept. 18–21, 1994, King of Prussia, Pennsylvania, sponsored by the American Nuclear Society. Contact: General Chairs William F. Kane, U. S.

Nuclear Regulatory Commission, 475 Allendale Road, King of Prussia, PA 19406 (phone 215-337-5304; fax 215-337-5241) or Dickenson Smith, PECO Energy Co., 965 Chesterbrook Blvd, M/C 63C-3, Wayne, PA 19087-5681 (phone 215-640-6600; fax 215-640-6611).

*Radiation Safety Officer—A Technical Short Course*, Sept. 19–23, 1994, Las Vegas, Nevada, offered by Nevada Technical Associates, Inc. Contact: Nevada Technical Associates, Inc., P.O. Box 90748, Henderson, NV 89009 (phone or fax 702-564-2798).

*Applied Health Physics*, September 19–October 21, 1994, in Oak Ridge, Tennessee, a five-week course sponsored by Oak Ridge Associated Universities. Contact: Registrar Professional Training Programs, Oak Ridge Associated Universities, P.O. Box 117, Oak Ridge TN 37831-0117 (phone 615-576-3576 or 615-241-4888; fax 615-576-9383).

*6th Russian Scientific Conference on Radiation Shielding of Nuclear Installations*, Sept. 20–23, 1994, Obninsk, Russia. Contact: A. P. Suvorov, Inst. of Physics and Power Engineering, Bondarenko Sq. 1, Obninsk, Kaluga Region 249020, Russian Federation (fax 095-230-2326, telex 911509 URAN SU).

*7th International Symposium on Environmental Radiochemical Analysis*, Sept. 21–23, 1994, Bournemouth, United Kingdom, sponsored by the Royal Society of Chemistry. Contact: P. Warwick, U.K. phone 44-0509-222-585; fax 44-0509-233-163.

*International Uranium Seminar*, Sept. 25–28, 1994, Beaver Creek, Colorado, sponsored by the Nuclear Energy Institute. Contact: Cheryl Moss, phone 202-739-8000.

*Fundamentals of Radiation Protection*, Sept. 26–30, 1994, Cambridge, Massachusetts, a short course offered by Arthur D. Little, Radiation Technology and Policy Unit, ATTN: David J. Allard, 20 Acorn Park, Rm. 321, Cambridge, MA 02140-2390 (phone 617-498-6101; fax 617-498-7161).

*3rd International Conference on Decommissioning of Nuclear Facilities*, Sept. 26–30, 1994, Luxembourg, sponsored by Commission of European Communities. Contact: FBCL Conference Services, Rue J. P. Brasseur 29, L-158 Luxembourg, Luxembourg ( phone 352-455518; fax 352-455905).

#### October 1994

*ENC-94—International Nuclear Congress and World Exhibition*, Oct. 2–6, 1994, Lyon, France. Contact: P. Fuez, European Nuclear Society, P.O. Box 5032, Belpstrasse 23, CH-3007 Berne, Switzerland (phone 41-31-320-61-11; fax 41-31-244-66).

*Meeting of the American Society for Therapeutic Radiology and Oncology*, Oct. 3–7, 1994, Philadelphia, Pennsylvania. Contact: ASTRO, 1101 Market St., 14th Floor, Philadelphia, PA 19107-2990 (phone 215-574-3180).

*Transportation and Packaging of Radioactive Materials*, Oct. 3–7, 1994, Phoenix, Arizona, a technical short course offered by Technical Management Services, Inc., P.O. Box 226, New Hartford, CT 06057 (phone 203-738-2440; fax 203-738-9322).

*International Workshop on Advances in Radiation Measurements*, Oct. 3–5, 1994, Chalk River, Ontario, Canada. Contact: H. G. Menzel, Belgium phone 32-3-296-6256; fax 32-2-295-9298.

*International Meeting on Sodium-Cooled Fast Reactor Safety*, Oct. 3–7, 1994, Obninsk, Russia. Contact: V. M. Poplavski, Russia phone 08439-9-8792; fax 095-230-2326.

*Introduction to Health Physics*, Oct. 3–7, 1994, Knoxville, Tennessee. Contact: Consultec Scientific, Inc., 725 Pellissippi Parkway, Suite 110, Knoxville, TN 37932-3300 (phone 800-269-4333; fax 615-675-4334; email info@consultec.com).

*Statistics for Health Physicists*, Oct. 3–7, 1994, Knoxville, Tennessee. Contact: Consultec Scientific, Inc., 725 Pellissippi Parkway, Suite 110, Knoxville, TN 37932-3300 (phone 800-269-4333; fax 615-675-4334; email info@consultec.com).

*Meeting on External Radiation Dosimetry*, Oct. 4, 1994, London, sponsored by the Society of Radiological Protection. Contact: SRP, Buckingham Place Rd., London SW1W 9TR, U.K. (phone 44-71-823-4971; fax 44-71-824-8112).

*8th Annual INEL Computing Symposium*, Oct. 4–7, 1994, Idaho Falls, Idaho. Contact Teri Ehresman, phone 208-526-7785.

*Seminar on Radioactive Waste Management Practices and Issues in Developing Countries*, Oct. 10–14, 1994, Beijing, China, sponsored by IAEA. Contact: IAEA, Conference Service Section, P.O. Box 100, A-1400 Vienna, Austria (phone 43-1-2360-1310; fax 43-1-234-564).

*International Symposium on Spent Fuel Storage—Safety, Engineering and Environmental Aspects*, Oct. 10–14, 1994, Vienna, sponsored by the International Atomic Energy Agency. Contact: IAEA, Conference Service Section, P.O. Box 100, A-1400 Vienna, Austria (phone 43-1-2360-1310; fax 43-1-234-564).

*ANSWERS Shielding & Criticality Seminar*, Oct. 11–14, 1994, a workshop presented by AEA Technology at Winfrith, U.K. Contact: Mrs. J. Wilkinson-James, AEA Technology, Winfrith, Dorchester, Dorset DT2 8DH, UK (phone 0305-202352; fax 0305-202746).

*Environmental Radiation: How Clean Is Clean?* Oct. 12–14, 1994, Springfield, Illinois, sponsored by the Health Physics Society Environmental Section and Prairie State Chapter. Contact: Sheryl Soderdahl, Illinois Dept. of Nuclear Safety, 1035 Outer Park Dr., Springfield, IL 62704 (phone 217-785-9887).

*2nd Biennial Decommissioning Conference*, Oct. 16–19, 1994, Captiva Island, Florida, sponsored by TLG Services, Inc. Contact: Lori Metcalf, phone 203-355-0415.

*Radioactive Low-Level and Mixed Waste Workshop—Everything You Ever Needed to Know About Generating, Handling, Storing, and Disposing of Low-Level and Mixed Waste*, Oct. 17–19, 1994, Gainesville, Florida, sponsored by the National Low-Level Waste Program, Southeast Compact Commission, and the Dept. of Nuclear Engineering Sciences at the University of Florida. Contact: James S. Tulenko, Dept. of Nuclear Engg. Svcs., 202 Nuclear Sciences Center, P.O. Box 118300, University of Florida, Gainesville, FL 32611-8300 (phone 904-392-1401; fax 904-392-3380).

*9th Annual Conference on Contaminated Soils: Analysis, Fate, Environmental & Public Health Effects and Remediation*, Oct. 17–20, 1994, Amherst, Massachusetts, sponsored by the University of Massachusetts. Contact: Paul Kostecki, phone 413-545-2934.

*Decontamination/Decommissioning of DOE and NRC Regulated Facilities*, Oct. 17–21, 1994, Knoxville, Tennessee, a technical short course offered by Technical Management Services, Inc., P.O. Box 226, New Hartford, CT 06057 (phone 203-738-2440; fax

203-738-9322).

*International Symposium on Nuclear and Related Techniques on Soil/Plant Studies on Sustainable Agriculture and Environmental Preservation*, Oct. 17–21, 1994, Vienna, sponsored by the International Atomic Energy Agency. Contact: IAEA, Conference Service Section, P.O. Box 100, A-1400 Vienna, Austria (phone 43-1-2360-1310; fax 43-1-234-564).

*3rd International Conference on Containment Design and Operation*, Oct. 19–21, 1994, Toronto, Canada. Contact: CNS, 144 Front St. West, Suite 725, Toronto, Ont., Canada M5J 2L7 (phone 416-977-7620).

*4th Conference on Radiation Protection and Dosimetry*, Oct. 23–27, 1994, Orlando, Florida. Contact: J. S. Bogard, phone 615-574-5851.

*6th World Congress of the World Federation of Nuclear Medicine and Biology*, Oct. 23–28, 1994, Sydney, Australia. Contact: 6th World Congress Secretariat, Australia phone 61-2-241-1478; fax 61-2-251-3552.

*Fourth Conference on Radiation Protection and Dosimetry*, Oct. 24–26, 1994, Orlando, Florida, sponsored by the Oak Ridge National Laboratory. Contact: J. S. Bogard, ORNL, P.O. Box 2008, Oak Ridge, TN 37831-6379 (phone 625-574-5851, fax 615-574-9174).

*International Symposium on Global Environment and Nuclear Energy Systems*, Oct. 24–27, 1994, Shizuoka, Japan. Contact: Akinao Shimizu or Hiroshi Tomiyasu, Research Laboratory for Nuclear Reactors, Tokyo Institute of Technology, O-okayama, Meguro-ku, Tokyo 152, Japan (phone 81-3-3734-3062; fax 81-3-5734-2925).

*International Conference on Radiation and Society: Comprehending Radiation Risks*, Oct. 24–28, 1994, Paris, sponsored by the IAEA. Contact: IAEA, IAEA-CN-54, P.O. Box 100, A-1400 Vienna, Austria (fax 43-1234564).

*Fundamentals of Radiation Safety*, Oct. 24–28, 1994, Toronto, Canada, a technical short course offered by Technical Management Services, Inc., P.O. Box 226, New Hartford, CT 06057 (phone 203-738-2440; fax 203-738-9322).

*NRRT Exam Preparation*, Oct. 24–28, 1994, Las Vegas, Nevada. Contact: Nevada Technical Associates, Inc., P.O. Box 90748, Henderson, NV 89009 (phone 702-564-2798).

*Nuclear Science Symposium: Medical Imaging Conference*, Oct. 30–Nov. 5, 1994, Norfolk, Virginia, sponsored by the U.S. Department of Energy, the Institute of Electrical and Electronics Engineers, and the Stanford Linear Accelerator Center. Contact: L. A. Kleisner, SLAC, P.O. Box 4349, MS 12, Stanford, CA 94309.

*HSRD/ORNL Conference on Applied Environmental Assessment: Site Characterization and Risk Assessment*, Oct. 31–Nov. 3, 1994, Orlando, Florida, sponsored by the Oak Ridge National Laboratory Health Sciences Research Division. Contact: Sue Huckaba, Oak Ridge National Laboratory, P.O. Box 2008, Oak Ridge, TN 37831-6480 (phone 615-576-2100; fax 615-574-9888).

#### **November 1994**

*International Conference on Physical Insult From and Biological Responses to Ionizing Radiation*, Nov. 3–4, 1994, Upton, New York. Contact: E. P. Cronkite, Medical Dept. Brookhaven National Laboratory, Upton, NY 11971 (fax 516-282-5311).

*13th International Conference on the Application of Accelerators in Research and Industry*, Nov. 7–10, 1994, Denton, Texas. Contact: Jerome L. Duggan, The University of North Texas, Dept. of Physics, P.O. Box 5368, Denton, TX 76203-5368 (phone 817-565-3252/3250; fax 817-565-2227; email fc66@untvax.bitnet).

*Calibration of Radiation Survey Instruments*, Nov. 7–11, 1994, Knoxville, Tennessee. Contact: Consultec Scientific, Inc., 725 Pellissippi Parkway, Suite 110, Knoxville, TN 37932-3300 (phone 800-269-4333; fax 615-675-4334; email info@consultec.com).

*Fundamentals of Radiochemistry*, Nov. 7–11, 1994, Las Vegas, Nevada. Contact: Nevada Technical Associates, Inc., P.O. Box 90748, Henderson, NV 89009 (phone 702-564-2798).

*International Conference on Radiation, Health and Society: Comprehending Radiation Risks*, Nov. 7–12, 1994, Paris, sponsored by the International Atomic Energy Agency. Contact: IAEA, Conference Service Section, P.O. Box 100, A-1400 Vienna, Austria (phone 43-1-2360-1310; fax 43-1-234-564).

*22nd Annual Meeting of the Argentinian Nuclear Technology Association*, Nov. 8–11, 1994, Buenos Aires, Argentina. Contact: Assoc. Argentina de Tecnologia, Av. Callao 384, 1022 Buenos Aires, Argentina (phone/fax 54-1-476-2013).

- Symposium on Radioactive and Mixed Wastes—Risk as a Basis for Waste Classification*, Nov. 9, 1994, Las Vegas, Nevada. Contact: National Council on Radiation Protection and Measurements, 7910 Woodmont Ave., Suite 800, Bethesda, MD 20814-3095 (phone 301-657-2652).
- 2nd ANS Workshop on the Safety of Soviet-Designed Nuclear Power Plants*, Nov. 12–13, 1994, Washington, D.C., held in conjunction with the 1994 ANS Winter Meeting. Contact: Robert Bari, Brookhaven National Laboratory, Bldg. 197C, Upton, NY 11973 (phone 516-282-2629; fax 516-282-5266).
- 1994 ANS Winter Meeting: The State of the Industry*, Nov. 13–17, 1994, Washington, D.C. Contact: ANS Meetings Dept., 555 N. Kensington Ave., La Grange Park, IL 60525 (phone 708-579-8258).
- Embedded Topical Meeting on Decommissioning, Decontamination, and Environmental Restoration*, Nov. 13–17, 1994, Washington. Contact: Argonne National Laboratory, OQA/EWM-201, Ms. M. G. White, 9700 S. Cass Ave., Argonne, IL 60439 (fax 708-252-5965).
- Embedded Topical Meeting on the Physics, Safety, and Applications of Pulse Reactors*, Nov. 13–17, 1994, Washington, D. C. Contact: General Chair David Hetrick, University of Arizona, Dept. of Nuclear Engg., Tucson, AZ 85721 (phone 602-621-2514).
- 40th Annual Conference on Bioassay, Analytical, and Environmental Radiochemistry*, Nov. 14–18, 1994, Cincinnati, Ohio. Contact: Dr. Henry Spitz, 40th Bioassay Conference, P.O. Box 9346, Cincinnati, OH 45209 (phone 513-556-2003, Internet seg3.nioshe2.em.cdc.gov), or Sam Glover (phone 513-841-4400, Internet seg3.nioshe2.em.cdc.gov).
- 3rd Annual Meeting of the Council on Ionizing Radiation Measurements and Standards (CIRMS)*, Nov. 16–18, 1994, Gaithersburg, Maryland, sponsored by the National Institute of Standards and Technology. Contact: Bert Coursey, C229 Radiation Physics Bldg. NIST, Gaithersburg, MD 20899-0001 (phone 301-975-5584; fax 301-869-7682; email coursey@micf.nist.gov).
- 2nd Radiation Physics Conference*, Nov. 20–24, 1994, Sadaat City, Egypt, sponsored by the Atomic Energy Authority, Menoufia University. Contact: Prof. M. A. Gomaa, Atomic Energy Authority, 101. Kasr El-Aini Street, Cairo, Egypt (phone 02-355-8269/8264, fax 02-354-0982).
- Joint Meeting of the American Association of Physicists in Medicine with the Radiological Society of North America*, Nov. 27–Dec. 2, 1994, Chicago, Illinois. Contact: Executive Officer, AAPM, 335 E. 45th St., New York, NY 10017 (phone 212-661-9404).
- 18th Conference of the Nuclear Societies in Israel*, Nov. 28–29, 1994, Tel-Aviv, Israel. Contact: E. Elias, Mech. Engg., Technion, Haifa, Israel 32000 (phone 9724-293263; fax 9724-324533; email nerro02@technion.technion.ac.il).
- Workshop on Various Reduction Schemes Developed at ENEA for Use With the MCNP Transport Code*, Nov. 28–Dec. 1, 1994, Bologna, Italy. Contact: K. W. Burn (kwb@iboenea.bitnet, Internet kwb@iboenea.bitnet%icineca.cineca.it).
- December 1994**
- Safe Use of Radionuclides*, December 5–9, 1994, in Oak Ridge, Tennessee, a short course sponsored by Oak Ridge Associated Universities. Contact: Registrar Professional Training Programs, Oak Ridge Associated Universities, P.O. Box 117, Oak Ridge, TN 37831-0117 (phone 615-576-3576 or 615-241-4888; fax 615-576-9383).
- March 1995**
- Radiation Transport Calculations Using the EGS4 Monte Carlo System*, Mar. 6–9, 1995, Seattle, Washington. Contact: Ms. Suzan Walker, Computer Services Director, The Lawrence H. Lanzl Inst. of Medical Physics, 3876 Bridge Way N., Suite 300, Seattle, WA 98103-7951 (phone 206-545-1141; fax 206-545-1347; email suzan\_walker@lanzl.com).
- 1995 HEART Conference*, Mar. 13–17, 1995, Sandia National Laboratories, Albuquerque, New Mexico. Contact: Delores Walters, JAYCOR, P.O. Box 85154, San Diego, CA 92138 (619-535-9763).
- Gamma Spectroscopy*, March 20–24, 1995, in Oak Ridge, Tennessee, a short course sponsored by Oak Ridge Associated Universities. Contact: Registrar Professional Training Programs, Oak Ridge Associated Universities, P.O. Box 117, Oak Ridge, TN 37831-0117 (phone 615-576-3576 or 615-241-4888; fax 615-576-9383).
- 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.
- Health Physics for the Industrial Hygienist*, March 27–31, 1995 in Oak Ridge, Tennessee, a short course sponsored by Oak Ridge Associated Universities. Contact: Registrar Professional Training Programs, Oak Ridge Associated

Universities, P.O. Box 117, Oak Ridge, TN 37831-0117 (phone 615-576-3576 or 615-241-4888; fax 615-576-9383).

#### **April 1995**

*Applied Health Physics*, April 10–May 12, 1995, in Oak Ridge, Tennessee, a five-week course sponsored by Oak Ridge Associated Universities. Contact: Registrar Professional Training Programs, Oak Ridge Associated Universities, P.O. Box 117, Oak Ridge, TN 37831-0117 (phone 615-576-3576 or 615-241-4888; fax 615-576-9383).

*5th Topical Meeting on Emergency Preparedness and Response*, Apr. 18–21, 1995, Savannah, Georgia, sponsored by the American Nuclear Society Savannah River Section. Contact: Charles H. Hunter, Jr., Technical Program Chairman, Westinghouse Savannah River Co., Bldg. 773-A, Aiken, SC 29808 (phone 803-725-2953; fax 803-725-4233).

*ICONE-3, The Third International Conference on Nuclear Engineering—Nuclear Power and the Energy Future*, Apr. 23–27, 1995, Kyoto, Japan. Contact: Mr. M. Takahashi, Japan Society of Mechanical Engineers, Shinjuku-Sanshin Bldg. 5F, 2-4-9 Yoyogi, Shibuya-ku, Tokyo 151 Japan (phone 81-3-3379-6781; fax 81-3-3379-0934).

#### **May 1995**

*1995 International High-Level Radioactive Waste Management Conference*, May 1–5, 1995, Las Vegas, Nevada. Contact: Allen G. Croff, American Nuclear Society, 555 N. Kensington Ave., La Grange Park, IL 60525.

#### **June 1995**

*Air Sampling for Radioactive Materials*, June 12–16, 1995, in Oak Ridge, Tennessee, a short course sponsored by Oak Ridge Associated Universities. Contact: Registrar Professional Training Programs, Oak Ridge Associated Universities, P.O. Box 117, Oak Ridge, TN 37831-0117 (phone 615-576-3576 or 615-241-4888; fax 615-576-9383).

*Environmental Monitoring*, June 26–30, 1995 in Oak Ridge, Tennessee, a short course sponsored by

Oak Ridge Associated Universities. Contact: Registrar Professional Training Programs Oak Ridge Associated Universities, P.O. Box 117, Oak Ridge, TN 37831-0117 (phone 615-576-3576 or 615-241-4888; fax 615-576-9383).

#### **August 1995**

*10th Brazilian Meeting on Reactor Physics and Thermal Hydraulics (X ENFIR)* and the *3rd Brazilian Meeting on Nuclear Applications (III ENAN)*, Aug. 7–11, 1995, Rio de Janeiro, Brazil. Contact: Wilma S. Bastos, IEN, C.P. 68550, CEP-21945.970, RJ, Brazil (fax 55-21-5902692; email IENRCB@BRLNCC.BITNET).

*Safe Use of Radionuclides*, August 21–25, 1995, in Oak Ridge, Tennessee, a short course sponsored by Oak Ridge Associated Universities. Contact: Registrar Professional Training Programs, Oak Ridge Associated Universities, P.O. Box 117, Oak Ridge, TN 37831-0117 (phone 615-576-3576 or 615-241-4888; fax 615-576-9383).

#### **September 1995**

*Environmental Monitoring*, September 11–15, 1995, in Oak Ridge, Tennessee, a short course sponsored by Oak Ridge Associated Universities. Contact: Registrar Professional Training Programs Oak Ridge Associated Universities, P.O. Box 117, Oak Ridge, TN 37831-0117 (phone 615-576-3576 or 615-241-4888; fax 615-576-9383).

*Applied Health Physics*, September 18–October 20, 1995, in Oak Ridge, Tennessee, a five-week course sponsored by Oak Ridge Associated Universities. Contact: Registrar Professional Training Programs, Oak Ridge Associated Universities, P.O. Box 117, Oak Ridge TN 37831-0117 (phone 615-576-3576 or 615-241-4888; fax 615-576-9383).

*16th Symposium on Fusion Engineering*, Sept. 30–Oct. 4, 1995, Urbana, Illinois. Contact: Cella Elliott, Conference Secretary, Fusion Studies Lab., University of Illinois, Urbana, IL 61801 (phone 217-333-2772; fax 217-333-2906; email miley@uiucvmd.bitnet).

## **JULY 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. For literature listed as available from INIS contact INIS Clearinghouse, International Atomic Energy Agency, P.O. Box 100, A-1400 Vienna.



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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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