RSIC Newsletter

RADIATION SHIELDING INFORMATION CENTER

OAK RIDGE NATIONAL LABORATORY

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There is nothing more frightful than ignorance in action. . . . J. W. von Goethe

LARGE ATTENDANCE EXPECTED FOR MONTE CARLO SEMINAR-WORKSHOP IN APRIL

Plans are progressing for the RSIC Seminar-Workshop on Theory and Application of Monte Carlo Methods which will be held in Oak Ridge on April 21–23, 1980. Sixty-three persons have returned their registration forms. A copy of the registration form is included as the last page of this newsletter. Interested persons should return the completed form to RSIC as soon as possible. Information on local motels and transportation, as well as a copy of the preliminary program, will be sent on request.

A total of twenty-two papers are presently scheduled for presentation in the seminar portion of the meeting to be held at the Oak Ridge National Laboratory all day Monday and Tuesday morning. The Workshop on the TRIPOLI-II code will be held at the Holiday Inn in Oak Ridge on Tuesday afternoon and all day Wednesday.

Registration fee is $30.00.

ANS POSITION PAPER ISSUED ON OCCUPATIONAL DOSE LIMITS

The American Nuclear Society has taken a stand on the subject of occupational radiation dose limits in one of its recent position papers. The position paper, "Occupational Radiation Dose Limits for Nuclear Facilities," is published in **Nuclear News**, pp. 130-131, Feb. 1980. Copies are available from ANS, 555 N. Kensington Ave., La Grange Park, Ill. 60525.

Parts of the paper include the following.

Summary

The potential harm from exposure to ionizing radiation has been studied more extensively than that from practically any other potential health concern. Available data suggest that the nuclear power industry has successfully controlled radiation exposure in the workplace well below regulatory limits. Radiation risk is small compared to other occupational risks.

Recommendations

The ANS believes that implementation of the following recommendations will assure adequate protection of the individual radiation worker and the collective work force.

1. Those charged with the formulation of radiation exposure regulations should change existing limits only when definitive scientific data exist to support such changes. Then all the consequences of any proposed changes should be considered. For example, studies show that lowering individual dose limits would increase rather than decrease the exposure to the collective work force.
2. The federal regulatory activities should be focused to minimize problems of duplication among the present federal agencies now regulating radiation health and safety. This would ensure that the best available scientific resources are used effectively for the benefit of the radiation worker.
3. An industry-wide radiation exposure data bank should be established for the nuclear power industry. Data such as type of job, craft labor group involved, etc., should be included. Objectives of the proposed data bank are to aid plant designers and operators in the definition of problem areas, to allow concentration of future efforts to reduce worker exposure, and to provide a sound data base for future research and for evaluation of standards.

Conclusion

The risks associated with radiation exposure in nuclear power plants are not only very low, when compared with other risks, but there is a large direct benefit to society associated with these low risks—namely, the generation of clean electric power and the reduction in the reliance on foreign oil. Implementation of the recommendations made will assure that radiation exposure risk will continue to be low and acceptable.

The paper was originally prepared by an **ad hoc** committee of the ANS Radiation Protection and Shielding Division chaired by E. A. (Ed) Warman of Stone & Webster Engineering Corporation.

CHANGES IN THE COMPUTER CODE COLLECTION

The following changes were made in February.

CCC-48/QAD

The QAD kernel integration code system has been updated by including a listing of ICOMPL in the document. ICOMPL is a routine which returns the complement, bit by bit, of the integer *4 variable. The complement of 0 is 1 and the complement of 1 is 0. ICOMPL is an online library subprogram supplied by UCND Computer Sciences Division at the Oak Ridge National Laboratory. The original QAD code series were contributed by Los Alamos Scientific Laboratory, Los Alamos, NM. IBM 360.

CCC-365/IODES

IODES, a code package for calculating the estimation of dose to the world population from releases of iodine-129 to the environment, was contributed by Oak Ridge National Laboratory. The environmental compartments assumed in the model comprise the atmosphere, hydrosphere, lithosphere, and terrestrial biosphere. The global transport of iodine is described by means of time-invariant fractional transfer rates between the environmental compartments. The fractional transfer rates for ^{129}I are determined primarily from available data on compartment inventories and fluxes for naturally occurring stable iodine and from data on the global hydrologic cycle. The dose to the world population is estimated from the calculated compartment inventories of ^{129}I, the known compartment inventories of stable iodine, a pathway analysis of the intake of iodine by a reference individual, dose conversion factors for inhalation and ingestion, and an estimate of the world population. Reference: NUREG/CR-0717 (ORNL/NUREG-59). FORTRAN IV; IBM 360.

CCC-366/DASH-FP

A code package for the one-dimensional analytic-numerical solution to a multicomponent time-dependent solution for fission product diffusion was contributed by Los Alamos Scientific Laboratory, Los Alamos, NM. DASH-FP is useful in solutions of radioactive decay problems which arise in the study of high-temperature gas-cooled reactors. Fission product migration is solved in one-dimensional geometries. The spatial multicomponent diffusion operator is numerically represented by a conservative finite difference approximation. An analytic time-dependent solution is achieved using a matrix operator method. The holdup of ^{90}Sr by graphite is calculated. Reference: NUREG/CR-0776-MS. FORTRAN IV; IBM 360.

PSR-124/GIFT

The documentation for this combinatorial geometry code system with model testing routines has been updated to include "The GIFT Code User Manual; Volume II, The Output Options," Technical Report ARBRL-TR-02189. USA Ballistic Research Laboratory, Aberdeen Proving Ground, Maryland, contributed the code package and this material for addition to documentation.

PSR-148/ITER-2

ITER-2 was contributed by Jozef Stefan Institut, Lubljana, Yugoslavia. Previously used for unfolding neutron activation detectors data, ITER-2 now has the added capability of doing pulse height spectra

unfolding. The raw data of a neutron spectrum measurement may consist of the output of several different detector types, such as proportional counters, activation detectors, scintillation and semiconductor spectrometers. Multispectrometer unfolding (simultaneous unfolding of all spectral data available) has been found a better approach than the method of unfolding the spectral data of each detector separately and seeking the consensus of thus obtained solutions. References: Unpublished Papers by J. Stefan Institute, Lublijana, Yugoslavia. FORTRAN IV; CDC.

VISITORS TO EPIC

The following persons came for an orientation visit and/or to use EPIC facilities during the month of February.

Hector M. Antunez, Comision Nacional de Energia Atomica, Buenos Aires, Argentina; **Jim D. Cape**, U.S. DOE Technical Information Center, Oak Ridge, TN; **Jack Courtney**, Louisiana State University, Baton Rouge; **Jacob Neufeld**, Consultant, Oak Ridge, TN; and **Walter Ohnesorge**, ORNL Health Physics Division, Oak Ridge, TN.

PERSONAL ITEMS

Margaret Maxey, Assistant Professor of Bioethics at the University of Detroit, has joined the South Carolina Energy Research Institute as assistant director.

Randall S. Caswell, chief, Nuclear Radiation Division, and **William L. McLaughlin**, physicist, Center for Radiation Research, National Measurement Laboratory, were among recipients of Gold Medal Awards presented to nine National Bureau of Standards employees by the Department of Commerce for "rare and outstanding contributions of major significance to the Department, the nation, or the world." **Harold Berger**, chief, Office of Nondestructive Evaluation, National Measurement Laboratory, and **Joseph Reader**, physicist, Center for Radiation Research, National Measurement Laboratory, were among recipients of the Department's Silver Medal Awards, for "contributions of unusual value to the Department."

The following changes of address have been noted: **David E. Cullen** *from* Lawrence Livermore Laboratory, Livermore, CA *to* Nuclear Data Section, International Atomic Energy Agency, Vienna, Austria; **R. K. Liang** *from* Columbia University, New York, *to* Stone & Webster Engineering Corporation, New York; and **Ronnie Eaton** *from* Honeywell, Los Angeles, CA *to* Rand Corporation, Santa Monica, CA.

NUMERICAL TRANSPORT THEORY INSTITUTE FORMED

Texas Tech University, Lubbock, Texas, has announced the formation of the Institute for Numerical Transport Theory within the Department of Mathematics to promote and encourage studies and other activities relating to numerical methods which can be applied to mathematical models of the type occurring in connection with transport phenomena. The scope of the Institute includes both development of new numerical methods and studies aimed at increasing the theoretical understanding and improving the practical application of existing methods. The transport phenomena of interest include those modelled on both the microscopic and the macroscopic levels.

Those interested may secure further information from the Department of Mathematics, Institute for Numerical Transport Theory, P. O. Box 4319, Texas Tech University, Lubbock, TX 79409; or call (806) 742-2566.

ANS PLANS EXECUTIVE CONFERENCE

The American Nuclear Society has announced plans for an executive conference on Nuclear Plant Owner Certification to be held April 20–23, 1980 in Washington, D.C. It is designed to identify and discuss the requirements for owner certification and to assist the participants in achieving consensus. The program

will consist of five sessions: Status Report: The Federal Regulators' Opinions on Nuclear Plant Owner Certification; Status Report, The State Regulators; Experience of Certified Utilities; Experience of Noncertified Utilities; and The Future. The General Chairman for the conference is Leonard J. Koch, Vice President, Illinois Power Company. The program chairmen are: Eugene C. Bailey, L. J. Chockie, John W. Landis, R. F. Reedy, James F. Schumar, and John Ward.

For further information, contact: David G. Pettengill, ANS Meetings Manager, 555 North Kensington, La Grange Park, IL 60525; or call (312) 352-6616.

ANS/ENS THERMAL REACTOR SAFETY MEETING

The 1980 ANS/ENS Topical Meeting on Thermal Reactor Safety will be held in Knoxville, Tenn., April 7–11, 1980 at the Hyatt-Regency Hotel. The technical content of this meeting encompasses all aspects of thermal reactor safety—similar to that of its predecessors (Salt Lake City – 1973, Sun Valley – 1977, and Brussels – 1978). The meeting is planned to open and close with a half-day plenary session on Tuesday and Friday, April 8 and 11, with three and four parallel technical sessions during the intervening time. Over 125 papers are expected. In view of the breadth of the subject matter, the Program Committee in its Call-for-Papers had identified the following areas of special interest: Understanding Response of Nuclear Steam Supply Systems to Design Basis Events; System Structural Response (Primarily Invited Survey Papers); Diagnostics and In-Service Inspection; Fire Protection; Safety-Related Equipment Qualification; Man-Machine Interactions; Issues With Respect to Improved Safety; New Trends in Licensing; NRC Unresolved Safety Issues; Risk and Cost Comparison of Energy Technologies for Central Electric Power Generation; and Three Mile Island Incident. The program containing abstracts of all papers will be distributed to all participants before the meeting and the full proceedings will be distributed soon thereafter.

Several special events are planned throughout the meeting for attendees and guests including a banquet featuring an address by the eminent bioethicist Dr. Margaret Maxey of the South Carolina Energy Research Institute. Five technical tours have been arranged for conference attendees and guests. The tours have been selected to provide insight into the design, construction, and operation of TVA's nuclear plants and the multifaceted energy research and development work taking place at Oak Ridge National Laboratory.

Full registration fee for ANS members is $100.00 ($130.00 for nonmembers).

For additional information, contact: Gary T. Mays, Registration Chairman, P. O. Box Y, Bldg. 9711-1, Oak Ridge National Laboratory, Oak Ridge, TN 37830.

CALL FOR PAPERS—FUSION REACTOR MATERIALS

A call for papers has been issued for the Second Topical Meeting on Fusion Reactor Materials to be held August 9–12, 1981 in Seattle, Washington. The sponsors include the American Nuclear Society, the Office of Fusion Energy of the Department of Energy, the Electric Power Research Institute, and the Nuclear Metallurgy Committee of AIME and ASM.

This conference will provide a forum for the reporting, review, and discussion of recent developments in the technology of materials for magnetically and inertially confined fusion reactors. Invited papers will summarize the state of reactor design and system studies. Papers are solicited in areas listed below or in other materials problem areas that relate to fusion power systems.

Structural and Blanket Materials—radiation effects structural properties, physical properties, compatibility with cooling or breeding materials, fabrication, etc.

Systems Studies—materials comparisons and the impact of material properties on power generation.

Plasma-Material Interface—the behavior of surfaces facing the plasma, including such special protective components as curtains, coatings, etc.

Special Purpose Materials—insulators, breeders, neutron multipliers, tritium barriers, laser and beam-transmission materials, fuel pellets, materials for hybrid systems.

Magnet Materials—conductors, stabilizers, structures and insulators for magnet systems.
Analytical Studies and Modeling—materials response in fusion systems.

Papers will be stimulated and selected to ensure full coverage of these important materials topics, with emphasis on the reporting of new results. The conference language is English. The conference proceedings will be published for timely distribution of the presented papers.

The technical meeting will be held in the Hilton Hotel in Seattle, Washington. The Technical Program Committee is broadly representative of research in the topic. The program organizers include: from Battelle Northwest Laboratories—R. D. Nelson (General Chairman), H. W. Arrowsmith (Arrangements), S. M. Bruemmer (Publicity), M. D. Conger (Finance), B. L. Neth (Registration), and Eleanor Nelson and Jane Arrowsmith (Guest Programs); from Hanford Engineering Development Laboratory—J. J. Holmes (Technical Program) and R. E. Nygren (Publications).

The call for papers cites schedules as follows: Title Submission, October 1980; Camera-Ready Abstracts Due, January 1981; Author Notification of Action on Submission, March 1981; and Final Manuscript Due, July 1981. Title submission should be sent to: J. J. Holmes, Hanford Engineering Development Laboratory, P. O. Box 1970, Richland, WA 99352.

USA WORKSHOP ON NEA DATA BANK SOFTWARE

The OECD Nuclear Energy Agency (NEA) of Paris, France will conduct a workshop on NEA Data Bank software at the Argonne National Laboratory, Argonne, Illinois, on May 5–6, 1980 with the National Energy Software Center (NESC) as host. The objective of the workshop is to make the contents of the NEA Data Bank software library more well-known to prospective users in the United States and Canada. The Data Bank, which was set up a year ago in January 1978, took over the tasks of two previously separate OECD NEA centers, the Computer Program Library in Ispra, Italy and the Neutron Data Compilation Center in Saclay, France.

The preliminary program includes the following sessions.

WIMS—J. R. Askew of the Energy Systems Analysis Division of the UKAEA Atomic Energy Establishment at Winfrith, England – *Versions of the Winfrith multigroup lattice-cell code and the types of problems for which they were designed will be presented. Topics for discussion include: compromises in the choice of models, the selection of the data library, pin-cell solutions, treatment of streaming, burnup, special Pu-240 techniques, and validation studies.*

JAERI Software Development—T. Asaoka of the Reactor Engineering Division, Japan Atomic Energy Research Institute (JAERI), Tokai-mura, Japan – *Present status and future plans for software development in JAERI will be described.*

LAMP-B—K. Tsuchihashi of the JAERI Reactor Engineering Division – *The JAERI LAMP-B lattice-cell analysis program will be presented. Topics that will be considered are: the numerical method for collision probabilities, interactive solution of linear equations, the cross section library, optional smearing and collapsing schemes, and measures of performance and validity.*

Lattice Code Summary and Discussion—J. R. Askew and K. Tsuchihashi – *An opportunity for questions, open discussion, and summary presentations.*

SYNTH–Part 1—F. Di Pasquantonio, Centro di Richerca Termica e Nucleare (CRTN), ENEL, Milan, Italy – *The foundation for the space-time synthesis methods with axially discontinuous trial functions used in the SYNTH programs will be presented, covering items such as use of the weighted residual (Galerkin) method, choice of basis functions, and solution methods for both steady-state and time-dependent problems.*

SYNTH–Part 2—E. Salina, ARS S.p.A., Milan, Italy – *The general organization of a space-time synthesis*

calculation will be treated and distinctive features of the various programs (SQUID-SYN, LIBGEN and GRAMMA, SYNTH-C-STEADY, SYNTH-C-TRANS) by which a three-dimensional core analysis can be performed, will be described.

SYNTH–Part 3—E. Brega, ENEL/CRTN – *A number of benchmark and production steady-state and transient applications of the SYNTH programs will be presented and the results compared with results obtained from other kinetics codes.*

FEM-BABEL—T. Ise, JAERI, Tokai Research Establishment, Tokai-mura, Japan – *Application of the finite element method to the three-dimensional neutron diffusion equation will be described. Other topics to be treated include: the numerical solution procedure, use of the program, and validation studies.*

Registration and lodging reservations for the workshop are being handled by Argonne National Laboratory. Guest rooms have been reserved at the Willowbrook Holiday Inn at Routes 83 and I-55, and bus transportation will be provided to and from the Laboratory. Limousine service is available between the Holiday Inn and Chicago's O'Hare and Midway Airports. A social hour and banquet are planned for Monday evening. For more information, or to register, contact: Miriam Holden, Director of Conference Planning and Management, Argonne National Laboratory, 9700 South Cass Avenue, Argonne, IL 60439; phone 312-972-5585.

ATOMIC INDUSTRIAL FORUM PLANS TWO JUNE CONFERENCES

The AIF, in cooperation with the Swedish Atomic Forum, is organizing an international public-affairs workshop, June 15–18, 1980 at the Sheraton-Stockholm Hotel, Stockholm, Sweden. The Stockholm workshop is being planned as a management tool for chief executive officers, their public-affairs executives and all professionals who will be shaping and articulating their national nuclear programs in the coming decade. It will touch many important bases: the implication of the Swedish referendum in March for the forthcoming elections in the United States and West Germany; the profound changes that have been brought about by and since the Three Mile Island accident; the impact of INFCE, the CONAES report and post-TMI safety studies; the volatile state of public opinion and the uncertain prospects for world nuclear commerce. There will be country-by-country reports, and an opportunity to update participants on crucial political and technical debates.

The Second National Conference on Energy Advocacy, entitled "Energy For The Eighties," will be held on June 26–29, 1980 at the Palmer House in Chicago, Illinois. It is expected to be a greatly expanded version of the first meeting—with a target attendance of over 2,000. The conference is being sponsored by a variety of pro-energy grassroots groups, along with a large contingency of labor organizations and professional engineering and technical societies. The Energy For The Eighties Foundation has been established to act as the national sponsor of the conference, and has been incorporated with legal procedure underway for registration as a 501 C-4 organization.

Further information about the conference plans may be secured from the Conference Registrar, Atomic Industrial Forum, Inc., 7101 Wisconsin Avenue, Washington, D.C. 20014; telephone (301) 654-9260.

UPCOMING MEETINGS

We call attention to the following additional meetings.

March

7th Energy Technology Conference & Exposition on Expanding Energy Supplies, March 23–26, 1980, Sheraton Washington Hotel, Washington, D.C. Contact: Energy Technology Conference, c/o Government Institutes, P. O. Box 5918, Washington, D.C. 20014.

April

National Topical Meeting on Nuclear Criticality Safety, April 8–10, 1980, El Paso, TX. Contact: Ronald A. Knief, General Chairman, Chemical and Nuclear Engineering Department, University of New Mexico, Albuquerque, NM 87131; phone 505-277-5431.

Topical Meeting on Tritium Technology in Fission, Fusion, and Isotopic Applications, April 28–May 2, 1980, Dayton, Ohio. Contact: Harold F. Anderson, General Chairman, or Technical Program Chairman, Layton J. Wittenberg, Monsanto Mound Facility, Miamisburg, Ohio 45342; phone 513-865-3062 (Anderson) or 513-865-3571 (Wittenberg).

June

ANS Annual Meeting, June 8–13, 1980, Las Vegas, Nevada (held concurrently with the 28th Conference on Remote Systems Technology). Contact: Technical Program Chairman, Mary Gerry White, Environmental and Safety Division, U.S. Department of Energy, P. O. Box 550, Richland, WA 99352; phone 509-942-7285.

RSIC GRAB BAG

We offer the following documents on a first-come, first-served basis. Please order by document number.

ORNL-RSIC-13, Vol. I, II, III, and IV—*Abstracts of Digital Computer Codes Assembled by the Radiation Shielding Information Center*—Betty F. Maskewitz, Betty L. McGill, Hemma E. Comolander, Marie Anthony, and Henrietta R. Hendrickson. **(Vol. I and II, Microfiche only).**

ORNL-RSIC-30—*Abstracts of the Data Library Packages Assembled by the Radiation Shielding Information Center*—R. W. Roussin (March 1972).

ORNL-RSIC-31—*Abstracts of Peripheral Shielding Code Packages Assembled by the Radiation Shielding Information Center*—Betty F. Maskewitz.

ORNL-5563—*Cross Sections for the Ti(n,xn) and Ti(n,xγ) Reactions Between 1 and 20 MeV*—G. L. Morgan.

ORNL/TM-628—*The Na(n,xγ) Reaction Cross Section for Incident Neutron Energies Between 0.2 and 20.0 MeV*—D. C. Larson and G. L. Morgan.

"Specification of a Generally Useful Multigroup Structure for Neutron Transport," C. R. Weisbin and R. J. LaBauve, LA-5277-MS, Los Alamos Scientific Laboratory (May 1973).

"A New Procedure for the Determination of Neutron Multigroup Transfer Matrices," C. R. Weisbin, P. D. Soran, and J. S. Hendricks, *Nucl. Sci. and Eng.*, 55, 329-341 (1974).

"An Evaluated Data Set for Tantalum," R. J. Howerton, M. H. MacGregor, and S. T. Perkins, UCRL-51306, Lawrence Livermore Laboratory (Dec. 1972).

"Evaluated Neutron-Interaction and Gamma-Ray Production Cross Sections of ^{9}Be for the Defense Nuclear Agency Working Cross-Section Library," R. J. Howerton and S. T. Perkins, UCRL-51337, Lawrence Livermore Laboratory (Dec. 1972).

"Evaluated Neutron Reaction Data for Uranium 235," R. J. Howerton and M. H. MacGregor, UCRL-51370, Lawrence Livermore Laboratory (March 1973).

"Cross Section Library DOSCROS77 (in the SAND-II format)," Nico J.C.M. van der Borg, Henk J. Nolthenius, and Willem L. Zijp, ECN-77-103, Netherlands Energy Research Foundation (Aug. 1977).

"Comparison of Neutron Spectrum Unfolding Codes," Willem L. Zijp, Jan H. Baard, and Henk J. Nolthenius, ECN-77-111, Netherlands Energy Research Foundation (Sept. 1977).

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 22151.

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.

REACTOR AND WEAPONS RADIATION SHIELDING LITERATURE

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Measurements of the Free Field Radiation Environment at the APRD Reactor., Kazi, A.H.; Heimbach, C.R.; Harrison, R.C.; Schanzler, L.; Buchholz, F.W., July 1979, Commander, USAHDL, ATTN: DELHD-NT, Material Testing Directorate, Aberdeen Proving Ground, Maryland 21005

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Open Problems in Nuclear Data Evaluations., Pearlstein, S., 1979, Dep., NTIS, PC A02/MF A01

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Compilation of Radiation Damage Test Data. Part II: Thermosetting and Thermoplastic Resins., Schonbacher, H.; Stolarz-Izycka, A., August 1979, European Organization for Nuclear Research (CERN), Geneva

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Fusion Reactor Materials. Proceedings of the First Topical Meeting on Fusion Reactor Materials, Miami Beach, Florida, January 29-31, 1979., Wiffen, F.W.; DeVan, J.H.; Stiegler, J.O., 1979, North-Holland Publishing Company - Amsterdam

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The Role of Materials in the Future of Fusion., Kintner, E.E., 1979, North-Holland Publishing Company - Amsterdam

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Materials Implications of Fusion-Fission Reactor Designs., Schultz, K.R., 1979, North-Holland Publishing Company - Amsterdam

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CONF-790125, Pt.A, pp.447-451; J. Nuclear Mater., 85 and 86, pp.447-451,
Irradiation Sources for Fusion Materials Development., Holmes, J.J.; Straalsund, J.L., 1979, North-Holland Publishing Company - Amsterdam

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The Fusion Materials Irradiation Test Facility at Hanford., Pottmeyer, E.W.,Jr., 1979, North-Holland Publishing Company - Amsterdam

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Measurements and Calculations of Neutron Spectra from 35 MeV Deuterons on Thick Lithium for the FMIT Facility., Johnson, D.L.; Mann, F.M.; Watson, J.W.; Ullmann, J.; Wyckoff, W.G., 1979, North-Holland Publishing Company - Amsterdam

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Measurements of ^{239}Pu and ^{235}U Fission Product Decay Power from 1 to 10^5 Seconds., Friesenhahn, S.J.; Lurie, N.A., September 1979, IRT Corporation, 7650 Convoy Court, San Diego, CA 92111

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