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DIRECTORY OF USAEC INFORMATION ANALYSIS CENTERS

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October 1974

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LOCATION OF USAEC INFORMATION ANALYSIS CENTERS



DIRECTORY OF USAEC INFORMATION ANALYSIS CENTERS

Foreword

Information analysis centers perform a useful service by making available critically evaluated and analyzed data. The AEC wholly or jointly supports a number of such centers either by direct funding or by supplying office space at AEC facilities. Most are located at AEC laboratories where a substantial literature collection and technical personnel with subject competence are readily available.

While experience has shown that these information centers provide outstanding services, their ultimate value depends on use by the scientific and technical community. This directory is issued to bring the centers to the attention of those who can benefit from them.

Important Notice

In August 1974 the AEC General Manager approved a new policy of charging non-AEC users for the products and services of AEC supported information centers. In addition to AEC users, certain others are exempt from charges including:

- 1. Users voluntarily providing AEC centers information or assistance with data evaluation on a regular basis.
- 2. Centers having a bilaterial information exchange agreement with an AEC center.
- 3. Students or individuals doing research not funded by grant or salary.

All AEC information center publications will be sold by the National Technical Information Service (NTIS), U. S. Department of Commerce, Springfield, Virginia, 22151. In addition, all non-AEC persons or activities desiring to purchase AEC information center services must have a deposit account at NTIS. The cost of services will be billed by the center concerned to the customer's NTIS deposit account. Further information on costs is available from the information center directors.

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Accelerator Information Center Oak Ridge National Laboratory P. O. Box X, Bldg. 6000 Oak Ridge, Tennessee 37830 Telephone: 615-483-8611, Ext. 3-1641 Director: F. T. Howard

SPONSOR

Oak Ridge National Laboratory, Physics Division

YEAR STARTED

Original work started in 1955; established as a center 1963.

SCOPE

Maintains a worldwide directory of cyclotron and other types of resonance accelerators and the tandem Van de Graaff machines. Emphasis is on the machines and their characteristics.

SERVICES

Tabulations of various types of machines have been published in connection with high energy particle accelerator and cyclotron conferences.

STAFF

Part-time efforts of one professional and one non-professional.

QUALIFIED USERS

Operated primarily as a service to accelerator installations, but published materials are made available generally. Advisory Center on Toxicology National Academy of Sciences 2101 Constitution Avenue Washington, D. C. 20418 Telephone: 202-389-6751 Director: Ralph C. Wands

SPONSOR

Office of Naval Research on behalf of nine federal agencies including USAEC Division of Biomedical and Environmental Research.

YEAR STARTED

Advisory Committee on Toxicology established in 1947. Advisory Center on Toxicology established in 1957.

SCOPE

Maintains extensive coverage of published and unpublished data on the toxicity of materials with emphasis on mammalian toxicology as applied to humans. Very little information on pharmaceuticals.

SERVICES

Provides information and advice on problems involving toxicology in response to requests from the sponsors. Serves as a focal point for coordination of toxicology research programs of the sponsors in order to avoid unnecessary duplication. Fosters discussion of questions of broad policy on issues involving toxicology. Promotes the exchange and dissemination of toxicity data. Acts as liaison between the sponsors and the Committee on Toxicology of the NAS/NRC. Reviews and evaluates the literature on specific topics in toxicology and assists the Committee on Toxicology in providing advice and recommendations on the topics.

STAFF

3 to 4 professional, 3 technical, 5 secretarial.

QUALIFIED USERS

USAEC and any of the other sponsoring agencies. Requests are submitted by liaison representatives; for AEC this resides in the Division of Biomedical and Environmental Research. Requests involving little man-power are honored without charge from other health scientists in other agencies or industry. Argonne Code Center Argonne National Laboratory 9700 South Cass Avenue Argonne, Illinois 60439 Telephone: 312-739-7711, Ext. 4366 Director: Margaret Butler

SPONSOR

U. S. Atomic Energy Commission

YEAR STARTED

1960

SCOPE

The Center serves as a central information agency and library for computer programs developed under AEC funding for USAEC offices and contractors, U. S. government and contracting agencies, research and educational institutions, and industrial concerns consistent with guidelines established by USAEC Headquarters program divisions.

SERVICES

Collects, reviews, maintains, and distributes computer programs, systems, and associated documentation.

Tests and evaluates library programs to facilitate use by persons or installations other than the originators.

Answers technical inquiries concerning computer programs and assists others in program implementation and conversion.

Prepares and publishes the Computer Program Abstract reports describing the Center's library collection and the USAEC Computer Program Summaries Report describing AEC-funded computer program development efforts.

Performs literature searches, maintains information files and compiles bibliographies of computer program literature in AEC program areas.

Maintains for the USAEC communications and exchange agreements with other U. S. and foreign computer program information centers.

Distributes and maintains the OECD Nuclear Energy Agency Computer Program Library programs and publications in the U. S. and Canada. Coordinates proposed USAEC acquisitions of non-government software and prepares and issues Software Newsletters containing information on commercial software packages, programs and systems developed by other government agencies, and requests for information on particular applications from USAEC office and contractor personnel.

Publishes and maintains the American Nuclear Society Mathematics and Computation Division's benchmark problem book.

Develops and participates in cooperative efforts for the preparation of standards and guidelines directed to effective exchange of computer programs.

STAFF

Operated within the Laboratory's Applied Mathematics Division. Staff level is 7 persons.

QUALIFIED USERS

The Center operates primarily through installation representatives at cooperating U. S. government and contracting agencies, research and educational institutions, and industrial concerns engaged in nuclear science, reactor development, and other USAEC program areas. It serves persons and institutions with a professional interest in computer programs in these areas. Berkeley Particle Data Group Lawrence Berkeley Laboratory Berkeley, California 94720 Telephone: 415-843-2740, Ext. 6301 or 5885 Director: Arthur H. Rosenfeld

SPONSORS

U. S. Atomic Energy Commission, National Bureau of Standards and National Science Foundation.

YEAR STARTED

1958

SCOPE

Compilation and publication of data on properties of particles; compilation of reports on cross sections for particle reactions.

SERVICES

Production of annual "Review of Particle Properties".

Production of a series of reports compiling cross sections for particle reactions.

Preparation of special compilations to meet a timely need.

Data retrieval and bibliographical searches to meet requirements of individual physicists.

STAFF

4 full-time and 4 part-time physicists; 1.5 secretaries, numerous unpaid author-contributors throughout the world.

QUALIFIED USERS

Physicists engaged in high energy physics research.

Biomedical Studies Group Information Center Complex Information Division Oak Ridge National Laboratory P. O. Box Y, Building 9224 Oak Ridge, TN 37830 Telephone: 615-483-8611, Ext. 3-5476 or 3-5296 Director: James Edward Huff

SPONSORS

Toxicology Information Program, National Library of Medicine; the Solid and Hazardous Waste Research Laboratory, U. S. Environmental Protection Agency; and the U. S. Atomic Energy Commission.

YEAR STARTED

1973

SCOPE

Biomedically oriented information and consultation, particularly toxicology.

SERVICES

Toxicology literature collection and evaluation; toxicology data extraction and data base building; toxicology stateof-the-art reviews; and toxicology consultation.

STAFF

Four professionals (2 Ph.D., 1 M.S., and 1 B.S.) and one non-professional.

QUALIFIED USERS

Serves the sponsors and the interested scientific community.

Controlled Fusion Atomic Data Center^{*} Oak Ridge National Laboratory P. O. Box Y Oak Ridge, Tennessee 37830 Telephone: 615-483-8611, Ext. 3-7558 Director: C. F. Barnett

SPONSOR

U. S. Atomic Energy Commission, Division of Controlled Thermonuclear Research.

YEAR STARTED

1965

SCOPE

Collisions involving charged and neutral particles with gases and surfaces with emphasis to those processes that are of direct interest to Controlled Thermonuclear Research.

SERVICES

Publishes data compilations and state-of-art reviews.

Maintains bibliography of collision processes.

STAFF

6 professional on a part-time basis and 2 nonprofessional.

QUALIFIED USERS

U. S. government agencies and their contractors, research and educational institutions and industry.

*Formerly Atomic and Molecular Processes Information Center.

Criticality Data Center Oak Ridge Y-12 Plant P. O. Box Y Oak Ridge, Tennessee 37830 Telephone: 615-483-8611, Ext. 3-5237 Director: E. B. Johnson

SPONSOR

U. S. Atomic Energy Commission, Division of Military Applications.

YEAR STARTED

1965

SCOPE

Criticality safety in transportation, storage, and chemical and metallurgical processing of fissile materials. Performs analyses to determine the critical dimensions of accumulations of fissile materials.

SERVICES

Publishes data compilations, together with the necessary correlations, as well as technical guides and standards. Provides guidance in the preparation of regulations and standards related to criticality safety.

STAFF

1 professional and 0.5 nonprofessional.

QUALIFIED USERS

U. S. government agencies and their contractors, research and educational institutions, and industry.

Ecological Sciences Information Center Oak Ridge National Laboratory, Building 2029 P. O. Box X Oak Ridge, Tennessee 37830 Telephone: 615-483-8611, Ext. 3-6524 or 3-6915 FTS 615-486-6524 or 483-6915 Director: Carol Oen

SPONSORS

U. S. Atomic Energy Commission, Division of Biomedical and Environmental Research, Washington, D.C., and the Nevada Applied Ecology Group (NAEG) of the AEC Nevada Operations Office, Las Vegas, Nevada.

YEAR STARTED

1968 (formerly called Biogeochemical Ecology Information Center)

SCOPE

The scope centers around radioecology relating to investigations of the USAEC or the Environmental Sciences Division of the Oak Ridge National Laboratory. Subjects include radionuclide cycling and effects in freshwater and terrestrial systems, and thermal effects. The biomedical and environmental aspects of uranium, plutonium, and the transplutonic elements are the topics of the NAEG information support.

SERVICES

Identification, collection, analysis, storage, and retrieval of bibliographic and numerical information relevant to the interests of the sponsors. The information is maintained in files of the Oak Ridge Computerized Heirarchical Information System.

STAFF

Director, five information specialists, two information technicians. Working relations with the investigators of the Environmental Sciences Division and other ORNL information activities are integral. Energy Information Center Environmental Information System Office Oak Ridge National Laboratory P. O. Box X Oak Ridge, TN 37830 Telephone: 615-483-8611, Ext. 3-1289 Director: Mariam P. Guthrie

SPONSORS

National Science Foundation, Federal Energy Administration, and the U. S. Atomic Energy Commission.

YEAR STARTED

1971

SCOPE

Information contributing to energy-related analysis and evaluation in the following areas: Policy; conservation; research and development studies; economics, supply and demand; forecasting; systems studies; and environmental effects. Specific fields of energy covered are: energy sources, including fossil fuels, nuclear fuels, hydrogen and synthetic fuels, and hydroelectric; unconventional energy sources, including solar, wind, geothermal, tidal, and waste products; electric power; energy conversion and storage; and energy consumption.

SERVICES

In cooperation with the USAEC Technical Information Center, prepares and edits "Energy Abstracts for Policy Analysis", a monthly abstract journal of recent publications that fall within the topics listed under SCOPE. (The journal is printed and distributed by the U. S. Government Printing Office.) In response to specific requests conducts computer searches of the Energy Data Base, a bibliography with abstracts of energy-related publications. Prepares specialized energy-related bibliographies, also on request.

STAFF

2 professionals, 1 part-time professional, 1 non-professional.

QUALIFIED USERS

Federal, state and regional government agencies and their contractors, research and educational institutions, and industry.

Energy Research and Development Inventory Environmental Information System Office Oak Ridge National Laboratory P. O. Box X Oak Ridge, Tennessee 37830 Telephone: 615-483-8611, Ext. 3-1784 Director: G. M. Caton

SPONSORS

U. S. Atomic Energy Commission-Division of Biomedical and Environmental Research, and National Science Foundation-RANN.

YEAR STARTED

1971

SCOPE

A computerized inventory containing descriptions of current energy-related research done or sponsored in the United States is maintained and updated. The scope of interest is broad, including: (1) all energy sources - fossil fuels, nuclear, and unconventional; (2) electric power generation, transmission, distribution, and storage; (3) energy uses; and (4) environmental and biomedical aspects. In relation to the above subjects information concerning exploration, mining, processing, resources and reserve studies, any basic or applied research, engineering development, economics, conservation, regulations, and legislative studies are of interest. The descriptions of energy research projects are arranged by subject categories and consist of, when available: title, research institution and address, sponsor, principal investigator(s), project duration, funding level, description of research, and publications. Summary tables of funding in difference research areas and by types of sponsors are also included.

SERVICES

Publishes an inventory of descriptions of energy-related research in progress since 1971. Answers inquiries concerning information in this computerized data base.

STAFF

4 professionals and 1 man-equivalent of clerical.

Environmental Information System Office Oak Ridge National Laboratory P. O. Box X Oak Ridge, Tennessee 37830 Telephone: 615-483-8611, Ext. 3-6560, 3-1530, or 3-1322 Director: G. U. Ulrikson

SPONSORS

U. S. Atomic Energy Commission, National Science Foundation-RANN*, National Library of Medicine, National Institute for Environmental Health Sciences, National Cancer Institute, U. S. Department of Agriculture--Forest Service, Environmental Protection Agency.

YEAR STARTED

197Ö

SCOPE

This office coordinates information needs and services for several topical, mission-oriented environmental information centers, a variety of data base groups, special projects, and specialized retrieval and referral services. Component groups include the Toxic Materials Information Center, the Toxicology Information Response Center, the Environmental Mutagen Information Center, the Energy Data Base, the Inventory of Energy Research and Development, Biomedical Studies Group, and the Ecological Sciences Information Center. Most aspects of man's environment, especially those related to toxic materials, ecological sciences, land use, social and demographic sciences, and biological sciences are included in this coverage.

SERVICES

Conducts literature searches using computer-based systems and manual sources in response to inquiries. Publishes state-of-the-art reviews and indexed bibliographies.

STAFF

The equivalent of approximately 64 full-time people.

QUALIFIED USERS

U. S. government agencies and their contractors, research and educational institutions, and industry.

*Research Applied to National Needs

Environmental Mutagen Information Center Information Center Complex/Information Division Oak Ridge National Laboratory Post Office Box Y Oak Ridge, Tennessee 37830 Telephone: 615-483-8611, Ext. 3-7072 or 3-7998 Director: John S. Wassom

SPONSOR

National Cancer Institute, National Institute of Environmental Health Services, and the U. S. Atomic Energy Commission.

YEAR STARTED

1969

SCOPE

Maintains data base pertaining to the mutagenic activity of chemicals.

SERVICES

Answers specific inquiries on mutagenic problems. Prepares state-of-the-art reports. Publishes yearly compilations of the chemical mutagenesis literature.

STAFF

6 professionals.

QUALIFIED USERS

Serves the whole interested scientific community.

Information Center for Internal Exposure Health Physics Division Oak Ridge National Laboratory Oak Ridge, Tennessee 37830 Telephone: 615-483-8611, Ext. 3-1165 Director: S. R. Bernard

SPONSOR

U. S. Atomic Energy Commission, Division of Biomedical and Environmental Research, Washington, D. C.

YEAR STARTED

Original work started in 1948; formally established in 1965.

SCOPE

Estimation of dose received from internally deposited radionuclides; calculation of maximum permissible concentrations of radionuclides in air, water, and food; body-burden calculations; and analysis of information relevant to metabolic questions involved in estimating internal exposure.

SERVICES

Answers inquiries on topics within the scope of the center and conducts literature searches, prepares compilations of data and information, and supplies interpretations and recommendations to the committees on Internal Dose of the International Commission on Radiological Protection and the National Council on Radiation Protection and Measurement.

STAFF

Director plus assistance from the Health Physics Division, as required.

QUALIFIED USERS

Work is performed primarily for government agencies, their contractor laboratories, and for NCRP and ICRP committees. Inquiries from other sources are honored as work load permits. LMFBR Fuel-Cladding Information Center Hanford Engineering Development Laboratory Westinghouse Hanford Company P. O. Box 1970 Richland, Washington 99352 Telephone: 509-942-3284 Manager: F. R. Shober

SPONSOR

Division of Reactor Research and Development, U. S. Atomic Energy Commission, Washington, D. C.

YEAR STARTED

1969

MISSION

To provide a broad base of engineering data on LMFBR (liquid Metal Fast Breeder Reactor) fuels and cladding materials and a central service to users for the evaluation of materials performance and prediction of their performance in nuclear materials.

SCOPE

Scope includes fuels and cladding materials data for LMFBR mixed oxide fuel pin development programs. Data for all experimental mixed oxide fuel pins irradiated in the EBR-II (Experimental Breeder Reactor) are maintained in modular computerized data files. These files are nominally; cladding fabrication, fuel pin fabrication, cladding properties, irradiation history, postirradiation examination results, and fuel pin failure files. The Center has data for these phases of fuel element technology and on production of mixed oxide fuel pins for the FFTF (Fast Flux Test Facility).

SERVICES

Answers inquiries and provides data compilation to users. The system provides traceability to original component raw materials with key parameters at each major process operation. Data are available directly from the computer in the form of tables, plotted curves, and simple statistical analysis. Summaries are prepared for experimental fuel pins irradiated in the EBR-II. Interfaces with related systems. The files contain data only for U. S. technology. Services are free to designees of USAEC-RRD.

STAFF

One manager-materials specialist, one metallurgist, one administrative secretary, and three technicians. Computer services by Computer Sciences Corporation; one computer programmer-analyst. Consulting services by Arnovick Associates.

QUALIFIED USERS

Persons so designated by the Division of Reactor Research and Development of the U. S. Atomic Energy Commission. Uses include fuel design, modeling, performance predictions, reactor design, proposals and bids, safety and hazard analyses, advisory services, regulatory agencies, specifications and standards, engineering services, program management. National Neutron Cross Section Center* Brookhaven National Laboratory Upton, Long Island, New York 11973 Telephone: 516-345-2902 Director: Dr. Sol Pearlstein

SPONSOR

U. S. Atomic Energy Commission, Division of Reactor Research and Development and Division of Physical Research.

YEAR STARTED

1967 (Continuation of cross-section activities started in 1951).

MISSION

The NNCSC collects and disseminates data on neutoninduced nuclear reaction and related quantities. These are stored in either of the Center's two automated library systems (see details below) and consist mainly of energyand angle-dependent cross sections and resonance parameters, although other types of data are also included. This information is primarily for use in reactor design, neutronics calculations, and nuclear physics studies.

An important corollary to the NNCSC's data collection activities is the development of new methods of crosssection analysis, whereby theoretical and empirical models are used to parameterize the experimental data.

SCOPE

Sets of experimental and systematized cross-section data for neutron-induced reactions.

SERVICES

Publishes compilations of cross section data and bibliographies, including BNL-325 and BNL-400.

Maintains on magnetic tape the CSISRS (Cross Section Information Storage and Retrieval System) library containing all experimentally measured neutron cross sections.

^{*}Merger of what was formerly the Cross Section Evaluation Center and the Sigma Center.

Maintains on magnetic tape the Evaluated Nuclear Data File (ENDF) containing complete (experimental and theoretical) values recommended for applied scientific use. ENDF also contains such information as radioactive decay data, photon interaction data, and charged particle data.

Answers specific inquiries for tabulated data with output in tape, computer card, printout, or graphic form.

STAFF

18 professional and 6 nonprofessional.

QUALIFIED USERS

Experimental data are generally available to anyone in the scientific or technical community.

Evaluated data are generally available to users in U. S. and Canada. Others should refer to Notes 1 and 2, below.

- Users from member countries of the Organization for Economic Cooperation and Development-Nuclear Energy Agency should direct requests to the OECD-NEA Neutron Data Compilation Centre, B.P. No. 9, 91190 Gif-sur-Yvette, France.
- Users from other than the U. S., Canada, or NEA member countries may obtain these data from the NNCSC if bilateral agreements for such exchange exist between the U. S. and their respective governments.

Nevada Applied Ecology Information Center U. S. Atomic Energy Commission Nevada Operations Office P. O. Box 14100 Las Vegas, Nevada 89114 Telephone: 702-734-3802 Director: Paul B. Dunaway

SPONSOR

U. S. Atomic Energy Commission, Nevada Operations Office

SCOPE

Bioenvironmental effects of nuclear testing program, with special emphasis on man's welfare and the quality of his environment.

YEAR STARTED

1971

SERVICES

Serves as a consolidated source of reliable data for the AEC with respect to bioenvironmental effects of nuclear testing.

Serves as interface with the scientific and industrial community for collection, compilation, and analyses of data relevant to the scope of the Center.

Provides information or topics within scope of the Center. Consults upon request with members of lay public, industry, and the scientific community.

STAFF

Two professionals with assistance from NV Technical Library staff and others when necessary. Data input, retrieval, and printing done at Oak Ridge National Laboratory (Person in charge: Carol J. Oen, Telephone: 615-483-8611, Ext. 3-6524).

QUALIFIED USERS

Specialized bibliographies services, including verified abstracts and data, are available to anyone with a professional interest. (These services at present mainly limited to plutonium, uranium and americium and their ecological and radiobiological significance.) Nuclear Data Project* Oak Ridge National Laboratory Post Office Box X Oak Ridge, Tennessee 37830 Telephone: 615-483-8611, Ext. 3-1612 Director: D. J. Horen

SPONSOR

U. S. Atomic Energy Commission, Division of Physical Research, Washington, D. C.

YEAR STARTED

1948

SCOPE

The primary purpose of the Nuclear Data Project is the preparation of Nuclear Data Sheets. This involves the maintenance of a complete bibliography of all published works in experimental nuclear physics, the evaluation and correlation of data contained therein, and the attempt to arrive at a best and consistent set of data for describing nuclear structure characteristics. This is done by having an experimental nuclear physicist thoroughly read and evaluate all the available literature pertaining to the specific A-chain which he is compiling. In addition, the Project stays abreast of and tries to coordinate with other national and international groups contributing to the dissemination of nuclear structure information and remains in close contact with nuclear physicists in the field.

SERVICES

Issues various compilations of nuclear data, including the journal Nuclear Data Sheets, published by Academic Press, Inc.

Provides bibliographic reference lists, answers specific questions, etc., within its scope.

STAFF

10 professional and 7 nonprofessional.

^{*}The functions of the Charged-Particle Cross-Section Data Center were consolidated into the Nuclear Data Project on July 1, 1973.

QUALIFIED USERS

Information is made available through the Project's major publication, Nuclear Data Sheets, which can be purchased from Academic Press, Inc., New York, N. Y. Nuclear Safety Information Center (NSIC) Oak Ridge National Laboratory P. O. Box Y Oak Ridge, Tennessee 37830 Telephone: 615-483-8611, Ext. 3-7253 Director: Wm. B. Cottrell Assistant Director: J. R. Buchanan

SPONSORS

U. S. Atomic Energy Commission, Divisions of Reactor Safety Research and Reactor Research and Development.

YEAR STARTED

1963

SCOPE

All aspects of nuclear safety, such as general criteria, analysis, and operating systems; environmental surveys; monitoring; siting and containment of facilities; transporting and handling of radioactive materials; reactor transients, kinetics, and stability; nuclear instrumentation and control; other engineered safety features, as emergency power systems, emergency core cooling systems, filter systems; release and transport of fission products; accident analyses and risk assessment; generally including all technical information involved in the licensing of nuclear facilities and all operational data relating to their safe operation.

SERVICES

Publishes state-of-the-art reports, the Technical Progress Review <u>Nuclear Safety</u>, and topical bibliographies.

Answers technical inquiries, and prepares retrospective bibliographies.

Provides current awareness (selective dissemination of information) service.

Makes the collection of documents at the center and technical consultations available to qualified users.

STAFF

20 part-time (equivalent to 8 full-time) professionals and 6 nonprofessionals.

QUALIFIED USERS

U. S. Government agencies and their contractors, research and educational institutions, and industry. NSIC reports are sold on a cost recovery basis by the National Technical Information Service (NTIS), U. S. Department of Commerce, Springfield, Va. 22151. All other services are provided free to AEC and AEC contract personnel. However, cost recovery will be initiated on SDI and retrospective searches to other users starting in FY-1975. Physical Data Group Lawrence Livermore Laboratory University of California Livermore, California 94550 Telephone: 415-447-1100, Ext. 3127 Group Leader: Robert J. Howerton

SPONSORS

U. S. Atomic Energy Commission, Division of Military Application; Defense Nuclear Agency.

YEAR STARTED

1957

SCOPE

Neutron, Photon and charged particle cross-section data required for weapons, weapon effects, shielding, and reactor calculations (experimental and evaluated data). Contact: S. T. Perkins.

Development of data processing codes for producing constants required for neutronic and photonic codes employing diffusion, discrete ordinates, and Monte Carlo methods. Contact: R. J. Doyas.

Integral neutron experiment data, critical and bulk, static and dynamic, required for the testing and evaluation of neutronic and photonic data, and for the improvement of calculational methods. Contact: S. T. Perkins.

Development of Monte Carlo neutronics and photonics computer codes including linked neutronics-photonics. Contact: E. F. Plechaty.

Development of advanced computer programs to unify storage, manipulation, reorganization, retrieval, and display of numeric and bibliographic information. Contact: D. E. Cullen.

SERVICES

Answers inquiries on topics within scope of the center. Publishes state-of-the-art reviews and data compilations.

STAFF

7 professional and 3 non-professional.

QUALIFIED USERS

Primarily U. S. Government agencies and their contractors; also available to others if work load permits.

Radiation Chemistry Data Center Radiation Laboratory University of Notre Dame Notre Dame, Indiana 46556 Telephone: 219-283-6527 Director: Prof. J. L. Magee Supervisor: Alberta B. Ross

SPONSORS

U. S. Atomic Energy Commission, Division of Physical Research, and National Bureau of Standards Office of Standard Reference Data.

YEAR STARTED

1965

SCOPE

Kinetic data on reactions of chemical systems brought about by ionizing radiation.

SERVICES

Answers inquiries on topics within scope. Prepares bibliographies and compilations of data. Publishes weekly list of papers on radiation chemistry.

STAFF

2 scientific and professional and 2.5 nonprofessional.

QUALIFIED USERS

Radiation Shielding Information Center (RSIC) Oak Ridge National Laboratory P. O. Box X Oak Ridge, Tenn. 37830 Telephone: 615-483-8611, Ext. 3-6944 Director: Betty F. Maskewitz

SPONSORS

Division of Reactor Research and Development (RRD) and Division of Controlled Thermonuclear Research (CTR), U. S. Atomic Energy Commission; Defense Nuclear Agency (DNA)

YEAR STARTED

1962

STAFF

12 full-time, 6 part-time, and a 5-member technical advisory committee, including research scientists, computer and programming specialists, information specialists, and clerical staff.

MISSION

The Center functions as a technical institute, serving as an information exchange medium between shielding research and design projects throughout the government and industry with the purpose of saving time and preventing duplication of work, always seeking to advance the technology.

SCOPE

RSIC, a radiation interaction and transport information analysis center, serves its sponsor's programs as a national technology resource, collecting, organizing, evaluating, and disseminating information related to radiation from reactors, radioisotopes, weapons, accelerators, and to that occurring in space. In addition to published information, RSIC collects, examines, packages, and disseminates complex digital computer codes, evaluated cross-section data sets, multigroup data libraries, radiation environment data, and benchmark problems for use in shielding calculations.

SERVICES

With the assistance of the computerized Storage and Retrieval Information System (SARIS), the Center answers technical inquiries, publishes general bibliographies, writes state-of-the-art reviews and routinely disseminates selected information to fill individual needs indicated by customer profiles.

A monthly newsletter covers current activities, literature accession lists, news of current work and problems in the shielding community, additions and corrections to the data and code collections, and general shielding information.

RSIC publishes abstracts of computer code and data packages and fills requests for the packages; makes recommendations, advises, and trouble-shoots on problems connected with the code and data collection. The "open" code-and-data exchange feature (subject to public scrutiney, criticism and collaborative improvement) is utilized to advance the technology at an effective pace.

RSIC serves as a clearinghouse for DNA and AEC-CTR sponsored nuclear data activities, maintaining and distributing evaluated and processed cross section libraries.

Seminar-workshops on specific topics are held and the proceedings are published as state-of-the-art reviews.

Technical conferring services and personal assistance to visitors to the Center are provided.

QUALIFIED USERS

All scientific and technical personnel.

Rare-Earth Information Center Energy and Mineral Resources Research Institute Iowa State University Ames, Iowa 50010 Telephone: 515-294-2272 Director: Dr. Karl A. Gschneidner, Jr.

SPONSORS

Ames Laboratory, U. S. Atomic Energy Commission and Iowa State University's Energy and Mineral Resources Research Institute. Approximately 60% of the support is from the world-wide rare earth industry.

YEAR STARTED

1966

SCOPE

Concerned with the metallurgy and solid state physics of the rare earth metals, intermetallic compounds and alloys, the analytical, inorganic and physical chemistry, ceramics, technology, geochemistry, and toxicity of the rare earth elements and compounds. Emphasis on the physical metallurgy and solid state physics of the metals and their alloys.

SERVICES

Answers inquiries on topics related to the scope of the Center for a minimum service charge of \$25.00. Call the Center for details of this policy.

Makes referrals.

Provides extensive surveys and in-depth analyses on a costrecovery basis.

Prepares and publishes reviews, bibliographies and compilations at irregular intervals.

Publishes <u>RIC News</u>, a quarterly newsletter containing items of current interest concerning the science and technology of the rare earths.

Maintains a file of journal articles, reports, books and translations concerned with the rare earths. Files are accessible for on site use by prior arrangements.

STAFF

1 full- and 2 part-time professional and 1 part-time nonprofessional.

QUALIFIED USERS

Research Materials Information Center Oak Ridge National Laboratory P. O. Box X Oak Ridge, Tennessee 37830 Telephone: 615-483-8611, Ext. 3-1287 Director: T. F. Connolly

SPONSOR

U. S. Atomic Energy Commission, Division of Physical Research, Washington, D. C.

YEAR STARTED

1964

SCOPE

Primary emphasis is placed on the availability, the preparation, and the physical, optical, magnetic, and electrical properties of high-purity inorganic research materials.

SERVICES

Answers specific inquiries regarding availability of research-quality specimens, maintains an up-to-date listing of available and desired materials, and serves as a focal point for exchange of information between producers and users of research-quality materials.

Provides references to documents and to current research and development projects, conducts literature searches, and publishes data compilations and bibliographies.

STAFF

2 professionals and 1 nonprofessional.

QUALIFIED USERS

Shock Wave Data Center Lawrence Radiation Laboratory S Division P. O. Box 808 Livermore, California 94550 Telephone: 415-447-1100, Ext. 7791 Director: M. van Thiel

SPONSOR

Lawrence Radiation Laboratory

YEAR STARTED

1965

SCOPE

Shock wave information, on chemically classifiable materials, that allows the calculation of at least one Hugoniot curve. Shock and particle velocity, pressure, compression and density are listed for all Hugoniot curves. Other pressure volume curves will be listed as they become available.

SERVICES

Answers inquiries concerning data within the scope of the Center; publishes a compilation of shock wave data which is revised periodically.

STAFF

2 part-time physicists and part-time assistance of computer technicians.

QUALIFIED USERS

Table of Isotopes Project Lawrence Berkeley Laboratory University of California Berkeley, California 94720 Telephone 415-843-2740, Ext. 5995 Manager: C. Michael Lederer

SPONSORS

U. S. Atomic Energy Commission, Division of Physical Research, and the National Bureau of Standards.

YEAR STARTED

The first edition of the <u>Table of Isotopes</u> was published in 1940.

SCOPE

The primary purpose of this activity is to produce the <u>Table of Isotopes</u>. A seventh edition is scheduled for publication in July 1976. Secondary objectives are:

- A. Creation of computerized data files, development of programs for updating and editing the files, and for printing data compilations directly from them.
- B. The production of secondary nuclear data compilations, of use primarily to applied scientists. Examples of the type of compilations envisaged are tables of gamma rays (and/or other radiations) ordered by energy ("activation analysis tables"), and condensed tables of radioactive properties. These tables would contain only best values rather than selected experimental data.

SERVICES

Include answering requests for references or data, access to the primary data files and some computer services. All of these are limited by the need to direct full effort at completion of the seventh edition of the Table of Isotopes.

STAFF EFFORT

In fiscal year 1975 - 5.4 man-years (estimated).

Toxic Materials Information Center Environmental Information System Office Oak Ridge National Laboratory P. O. Box X Oak Ridge, Tennessee 37830 Telephone: 615-483-8611, Ext. 3-1623, 3-1639 Coordinator: E. D. Copenhaver

SPONSOR

National Science Foundation

YEAR STARTED

1972

SCOPE

The Toxic Materials Information Center is establishing a data base on environmental levels of toxic materials. The two classes of toxic materials included in this data base are toxic metals and synthetic and natural organic compounds, with major emphasis on toxic metals. Specifically, the types of data included in TMIC are (1) information on materials balances in and around mining and smelting operations as well as power plant facilities, (2) "natural" and man-influenced levels of toxic (and potentially toxic) materials in various areas of the country, and (3) information on the levels of toxic substances in plants and animals inhabiting these areas.

SERVICES

Answers specific inquiries regarding environmental levels of pollutants, maintains an up-to-date listing of criteria and standards available in this area, and serves as a focal point for exchange of information between researchers and users of the data obtained by the researchers.

Provides references to documents and to current research and development projects, conducts literature searches, and publishes data compilations, bibliographies, and state-of-the-art documents.

Produces a bimonthly abstract journal NSF-RANN Trace Contaminants Abstracts which reports the research results which have been published by investigators in the Environmental Aspects of Trace Contaminants Program, Research Applied to National Needs, National Science Foundation; this publication is available upon request.

STAFF

5 professional and 1 nonprofessional.

QUALIFIED USERS

Some services are available to everyone; others only to funding agencies.

Toxicology Information Response Center Information Center Complex Information Division Oak Ridge National Laboratory P. O. Box Y, Building 9224 Oak Ridge, TN 37830 Telephone: 615-483-8611, Ext. 3-5296 or 3-5476 Director: James Edward Huff Coordinator: H. B. Gerstner

SPONSOR

Toxicology Information Program, National Library of Medicine.

YEAR STARTED

1971

SCOPE

The Center gathers, selects, and disseminates toxicology and peripherally oriented information on drugs, food additives, pesticides, industrial chemicals, and environmental pollutants.

SERVICES

Reference services in toxicology include individualized literature searches and compilation of topical bibliographies. A fee for services is based on the scope and length of the individual search.

STAFF

8 professional (1 Ph.D., 3 M.S., and 4 B.S.) and 2 non-professional.

QUALIFIED USERS



U.S. ATOMIC ENERGY COMMISSION Office of Information Services

