Radiation Safety Information Computational Center

No. 547   September 2010

*As soon as government management begins it upsets the natural equilibrium of industrial relations, and each interference only requires further bureaucratic control until the end is the tyranny of the totalitarian state.—Adam Smith (**Wealth of Nations**, published 1776)*

CHANGES TO THE RSICC CODE AND DATA COLLECTION

CCC-684/NRCDose 2.3.16

Chesapeake Nuclear Services, Inc., Annapolis, Maryland, contributed a corrected version of this user-friendly, 32-bit, PC-based, software interface for LADTAP II, GASPAR II, and XOQDOQ. This release operates under all Microsoft Windows platforms. In the NRCDose 2.3.16 release, LADTAP was modified to correct the input of biota dose information. Editorial changes were made to GASPAR in the "Location for Individual Doses" dialog. The install package was updated to load all DLLs and OCXs to the application directory to minimize any possible interference with other applications.

NRCDose was tested on x86_64 and i686 computers under Windows XP, Vista and Windows 7. The distributed executables were created with the Microsoft Fortran PowerStation Version 4.0 and Microsoft Visual Basic 6.0. Source files are not included, so this code system can be run only on PCs under Windows. The package is transmitted on CD in Windows format. References: "User's Guide," (Sept. 2009); NUREG/CR-4653, PNL-5907 (March 1987); NUREG/CR-4013, PNL-5270 (April 1986)' NUREG/CR-1276, ORNL/NUREG/TDMC-1 (March 17, 1980); NUREG/CR-2919 (PNL-4380) (September 1982). Fortran and Visual Basic; Pentium (C00684PC58613).

CCC-768/NRCDose72 1.1.9

Chesapeake Nuclear Services, Inc, Annapolis, Maryland, contributed an updated version of NRCDose72, a Code System for Evaluating Routine Radioactive Effluents from Nuclear Power Plants. NRCDose72 is a software program developed as a user interface for the Fortran programs LADTAP II, GASPAR II, and XOQDOQ and provides a user-friendly interface for running the codes on a PC. These

codes provide an accepted regulatory basis for assessing doses to the public as required for the licensing assessments for both license renewal and new build nuclear plants.

In the NRCDose 72.1.9 release, LADTAP72 corrects the input of biota dose information, removing the printout of biota doses in the second module (already displayed in first module). Editorial changes were made to GASPAR in the "Location for Individual Doses" dialog. The install package was updated to load all DLLs and OCXs to the application directory to minimize any possible interference with other applications.

NRCDose72 was tested on X86 computers under Windows XP, Windows Vista and Windows 7. The distributed executables were created with the Microsoft Fortran PowerStation Version 4.0 and Microsoft Visual Basic 6.0. Source files are not included, so this code system can be run only on PCs under Windows. The package is transmitted on CD in Windows format and includes an installation procedure, PC executables, data files and documentation. Reference: "User's Guide," (February 17, 2010); CNSI Report No 2010-001 (February 22, 2010). Fortran and Visual Basic; X86 (C00768PCX8601).

CCC-774/GRSAC

Graphite Reactor Severe Accident Code was contributed by Oak Ridge National Laboratory, Oak Ridge, Tennessee. GRSAC is an interactive, PC-based simulation code for studying postulated severe accidents in gas-cooled reactors. Code features include user-generated input applicable to a variety of modular high-temperature, gas-cooled reactor designs and gas-cooled test reactors. Features include a "smart front end" for detecting out-of-range or inconsistent data, online and off-line plotting, online help and documentation, and fast-running computational speeds. GRSAC model features include a three-dimensional thermal-fluid representation of the core, point kinetics for anticipated transients without scram (ATWS), and graphite oxidation for air ingress accident scenarios.

Included in the package is a CD in Microsoft Windows format which includes an installation procedure, executables, data files and documentation. Reference: ORNL/TM-2010/096 (June 2010). Fortran, C++; X86 (C000774PCX8600).

MIS-008/ENDF Utility Codes

The ENDF Checking and Utility Codes were contributed by the National Nuclear Data Center, Brookhaven National Lab, Upton, NY. The programs are written to process ENDF-6 formatted files including all formats approved up to and including the November 2004 CSEWG meeting except for the Generalized R-Matrix resonance region format and the generalized format for covariances (file 30) and the new "trial" formats for resonance parameters and their covariances. The programs will also process ENDF-5 formatted files.

The distributed version of the programs, STANEF, CHECKR, FIZCON, and PSYCHE have been updated for format changes and modified to conform with the requirements of the Modlib Project of the NEA Working Party on International Evaluation Cooperation. The GETMAT, LISTEF, and PLOTEF programs are no longer supported.

Included in the package is a CD with Fortran source code and documentation: Fortran90, PC or MAC (M000008MNYCP00).

DLC-241/ VITJEF22.BOLIB

VITJEF22.BOLIB was contributed by the ENEA, Italian National Agency for New Technologies, Energy and the Environment, 'E. Clementel' Research Centre, Bologna, Italy, and Institute of Physics and Power Engineering, Obninsk, Russian Federation, through the OECD Nuclear Energy Agency Data Bank, Issy-les Moulineaux, France. The VITJEF22.BOLIB library for nuclear fission applications was conceived as a European counterpart of the VITAMIN-B6 American library, based on the ENDF/B-VI Release 3 nuclear data file. The present library has in particular the same group structure and general

features as VITAMIN-B6 and was produced using the same data processing methodologies, based on the NJOY-94.66 and SCAMPI data processing systems.

VITJEF22.BOLIB is a pseudo-problem-independent library based on the Bondarenko (f-factor) method for the treatment of neutron resonance self-shielding and temperature effects. The library contains 133 nuclides at 4 temperatures, obtained for the most part with 6 to 8 values for the background cross section. Thermal scattering cross sections were processed at all temperatures available in the JEF-2.2 thermal scattering law data file for 5 additional bound nuclides [H-1 in light water (H-H2O), H-1 in polyethylene (H-CH2), H-2 in heavy water (H2-D2O), C in graphite (C-GPH) and Be in beryllium metal (Be-TH)].

The package is transmitted on a CD which contains the report, the data files, and test cases. References: FIS-P815-001 (D00241MNYCP00).

DLC-244/ FSXJ32

Nuclear Data Center, Japan Atomic Energy Research Institute, Tokai-mura, Ibaraki-ken 319-1195, Japan, through the OECD Nuclear Energy Agency Data Bank, Issy les Moulineaux, France, contributed FSXJ32, a Continuous Energy Cross Section MCNP nuclear data library based on JENDL-3.2. Temperatures at which the library is prepared are 293K, 600K, 900K, 1200K, 1500K and 2000K. The library contains cross section data for all the 340 nuclides stored in JENDL-3.2.

The data libraries and electronic document are transmitted on DVD in a WinZIP file. Uncompressed ASCII files require about 3GBytes. Reference: JAERI-Data/Code 94-020 (December 1994) and JAERI Research 96-010 (March 1996). ASCII data; Many Computers (D00244MNYCP00).

ANS News

Honors and Awards

Kenneth D. Lewis, dean of the college of Science, Mathematics, Engineering and Technology at South Carolina State University, was presented with the *Arthur Holly Compton Award in Education* for "five years of dedicated work to achieve a milestone in education by establishing a nuclear engineering program at South Carolina State University." The university is now the only historically black university with a nuclear engineering program accredited by the Accreditation Board for Engineering and Technology. Dr. Lewis has been a member of ANS since 1994.

Theodore M. Besmann, Group Leader of the Surface Processing and Mechanics Group at Oak Ridge National Laboratory, received the *Mishima Award* in recognition of his "pivotal contributions to the thermochemical understanding of nuclear fuels and waste glasses and his development of ceramic composites for nuclear applications." Besmann has been a member of ANS since 1997.

David J. Diamond, Brookhaven National Laboratory, received the *Theos J. "Tommy" Thompson Award* for "significant contributions to ensuring the safety of power and research reactors by applying neutronics and thermal-hydraulics models and combining deterministic and statistical analyses." Diamond has been a member of the ANS since 1969 and was designated an ANS Fellow in 1997.

Nicholas Tsoulfanidis, adjunct professor at the University of Nevada-Reno and professor emeritus at Missouri University of Science and Technology, received the *Rockwell Lifetime Achievement Award* at the 2010 ANS Radiation Protection and Shielding, Isotopes and Radiation, and Biology and Medicine Divisions Joint Topical Meeting in April. Tsoulfanidis was recognized for "distinguished service as former chair of the ANS RPSD, editor in chief of the ANS journal *Nuclear Technology,* and author of numerous peer-reviewed journal articles and the textbook *Measurement and Detection of Radiation*."

CONFERENCES, COURSES, SYMPOSIA

RSICC attempts to keep its users and 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 via email to riceaf@ornl.gov with "conferences" in the subject line by the 20th of each month. Please include the announcement in its native format as an attachment to the message. If the meeting is on a website, please include the url.

Every attempt is made to ensure that the links provided in the Conference and Calendar sections of this newsletter are correct and live. However, the very nature of the web creates the possibility that the links may become unavailable. In that case, please call or mail the contact provided.

TRAINING

Introductory MCNP, Advanced MCNP, and Visual Editor Training

Classes are taught using the most recent (beta) version of the Visual Editor Code. All class attendees must have a valid MCNP/MCNPX RSICC license. Bring proof of receipt (letter or email) to the class.

Date 2010	Class	Location
November 15–19	Introduction to MCNP using the MCNPX Visual Editor	Las Vegas, NV

The introductory classes combine teaching on MCNP physics, along with instructions on how to use the Visual Editor. The advanced class assumes the user has experience using MCNP or MCNPX and focuses on Visual Editor topics. Computer demonstrations and exercises will focus on creating and interrogating input files with the Visual Editor. Advanced visualization work using MCNP will also be demonstrated. Both the introductory and advanced classes will be taught on Pentium computers running Windows 2000. Attendees are encouraged to bring their own input files for viewing and modifying in the visual editor. The course description and registration information can be found at http://www.mcnpvised.com/index.html.

MCNPX Training

2010 Classes		
Date	Class	Location
October 25–29	Intermediate MCNP5/MCNPX	Barcelona

The MCNPX team at Los Alamos National Laboratory offers interactive workshops for training users in the capabilities of MCNPX. Three levels are offered:

- introductory (for users with 0–1 year of experience),
- intermediate (for users with 1–3 years of experience), and
- advanced (for users with more than 3 years of experience).

The list of workshops is tentative, as workshops may be added, removed, or modified throughout the year, depending on user interests.

Cost of the U.S. workshops is $2,300 US with an early registration discount of $300 (i.e., if paid 30 days before the scheduled workshop). Workshops with fewer than 15 registrants on the early registration date are subject to cancellation or rescheduling.

In order to process non-U.S. citizens by the class date, non-U.S. citizens must register at least 6 weeks prior to the start of the training class. All non-U.S. citizens who reside in countries listed in the U.S. Code of Federal Regulations, Title 10, Part 810.8, are required to register at least 8 weeks prior to the start of the training class. These participants must be processed by the DOE and should not make travel arrangements until approval from DOE has been obtained.

Additional information about the courses can be found at the website, http://mcnpx.lanl.gov/. To register send an email to Randy Schwarz, indicating the workshop of interest to you.

SCALE Training Courses

Date	Title	Description
October 11-15	SCALE Lattice Physics and Depletion Course	ORIGEN-ARP: Isotopic depletion/decay and source terms using latest version of ORIGEN-S TRITON: 2-D reactor physics analysis using NEWT/ORIGEN-S and 3-D Monte Carlo depletion using KENO/ORIGEN-S (**ORIGEN-ARP**/**TRITON**)
October 18-22	SCALE Criticality Safety and Shielding Course	KENO-VI: Criticality safety using the generalized geometry version of KENO MAVRIC: 3-D Monte Carlo shielding analysis automated variance reduction for deep-penetration and complex shielding problems Criticality accident alarm system analysis (**KENO-VI**/**MAVRIC**)
October 25-29	SCALE Sensitivity/Uncertainty Tools Course	1-D and 3-D sensitivity/uncertainty analysis using TSUNAMI with XSDRNPM and KENO. Advanced S/U methods for code and data validation. (**TSUNAMI**)
November 1-5	SCALE Criticality Safety Course	Criticality safety with the most widely used version of KENO, KENO V.a. (**KENO V.a**)

The registration fee is $2000 for each course. A discount of $200 per each additional week will be applied for registration to multiple courses. Class size is limited and course may be canceled if minimum enrollment is not obtained one month prior to the course. Course fees are refundable up to one month before each class. Note that all attendees must be registered SCALE 6 users. All foreign national visitors must register a minimum of 40 days prior to the start date of the training course they plan to attend. Course descriptions may be found at http://www.ornl.gov/sci/scale/course_description.htm.

ORAU Offers Health Physics and Radiation Safety Training

ORAU is pleased to offer the following courses. If you wish to discuss having a customized course delivered at your site, please contact Paul Frame at 865-576-3388 or Paul.Frame@orau.org.

Course	Dates
Air Sampling for Radioactive Materials	October 18–22, 2010
Radiation Medicine for Safety Professionals	November 1–5, 2010
MARSSIM	November 1–5, 2010
Introduction to Radiation Safety	November 8–12, 2010
Gamma Spectroscopy	December 6–10, 2010
MARSSIM	January 10–14, 2011
Site Characterization in Support of Decommissioning: Planning, Implementation, and Evaluation	January 24–28, 2011
Applied Health Physics	February 28–April 1, 2011
CHP Part I Review	April 5–7, 2011
Gamma Spectroscopy	April 11–15, 2011

CONFERENCES

Technical Meeting on Low-Power Critical Facilities and Small Reactors

A mini-conference on small research reactors and critical facilities will be held in Ottawa, Ontario, Canada, November 1–3, 2010, approximately one week before the ANS Winter Meeting in Las Vegas. This conference is inspired by the upcoming 50th Anniversary of the ZED-2 Heavy Water Critical Facility at AECL - Chalk River Laboratories.

Those performing work relating to research reactors and/or critical facilities at government or national laboratories, or universities, will benefit from this opportunity to share experiences, exchange ideas, and to network with peers in the international community. Further information can be found at the website, http://www.cns-snc.ca/events/tmlpcfsr/.

CONTE 2011

The 2011 Conference on Nuclear Training and Education (CONTE 2011) will be held in Jacksonville, Florida, February 6–9, 2011. A call for papers has been issued for summaries on the following topics:

1. Human performance improvement
2. Workforce planning/recruiting
3. Personnel training/qualification/education
4. Accreditation
5. Developing educational partnerships—university/industry/government
6. Engineering education/distance learning
7. Leadership development
8. International perspectives
9. Training for new nuclear power facilities

Summaries must be submitted using the ANS template and "Guidelines for Summary Preparation" provided on the ANS Web site, www.ans.org, by **October 29, 2010**. General chair of the meeting is Stephen Kuczynski, Senior VP of Engineering and Technical Services, Exelon Nuclear. For further information, please visit the ANS website, http://www.new.ans.org/meetings/c_2.

NETS-2011

The Nuclear and Emerging Technologies for Space (NETS-2011) topical meeting will be held February 7–10, 2011, in Albuquerque, NM. The meeting is sponsored by the ANS Aerospace Nuclear Science and Technology Division and the ANS Trinity Section. NETS-2011 will address strategies for implementing advanced power and propulsion technologies, as well as radiation shielding protection, in support of manned and unmanned missions into space. It will provide a communications network and forum for information exchange for research and management personnel from government, industry, academia, and the national laboratory system who are involved in space nuclear activities. Registration, program, exhibit, and other information may be found on the conference website at http://anstd.ans.org/NETS2011/AboutNETS2011.htm.

WM 2011

The annual Waste Management Conference (WM 2011) will be held February 27–March 3, 2011, in Phoenix, Arizona. The conference theme is "Global Achievements and Challenges in Waste Management". Regarded as the premier international organization for the management of radioactive material and related topics, the 2011 conference attracts decision makers, project managers, and technical and procurement specialists representing the government and private organizations from over 35 countries. In addition to the conference, two workshops are scheduled for March 3 and 4, titled "Commercial Low-Level Waste (LLW) Disposal Performance Assessment, the Safety Case, and Long-Term Monitoring " and "Joint Public Federal Workshop," respectively. Bookmark the website, http://www.wmsym.org/, to monitor the latest information with regard to the workshops, program, arrangements, etc.

PSA 2011

The 2011 Probabilistic Safety Analysis conference (PSA 2011) will be held in Wilmington, North Carolina, March 13–17, 2011. The conference is sponsored by the ANS Nuclear Installations Safety Division (NISD) and the Wilmington Area Local Section of the ANS (WLS). Those who intend to submit a paper should contact Dennis@psa2011.org.

Papers describing significant work may be submitted electronically beginning September 2010 on the following topics:

Accident Analysis Level 2 & 3
Advanced Nuclear Systems
Dynamic PSA
Common Cause Failures
Computer Codes
Configuration Risk
  Management
Digital I&C
Cyber Security
Environmental Impact
Fire & NFPA 805
Flooding PSA
Fuel Cycle (Proliferation Risk)
Generation Risk (All operating
  modes)
Human Reliability

Human Factors & Behavioral
  Sciences
Incorporation of Ageing Aspects
Low Power / Shutdown PSA
Next-Generation Reactors
Non-Light Water Reactor
Mitigating Systems Performance
  Index (MSPI) Issues
NASA & Space Applications
Natural Hazards & External
  Events
Non-Reactor, Nuclear
  Applications
Parameter & Modeling
  Uncertainty
Passive Systems Safety
  Proliferation Risk

PSA Challenges – Manpower
PSA in DOE Facilities (Panel)
PSA Standards Development
Reliability Centered Maintenance
Risk Informed Plant Security
Risk Informed Regulation &
  Licensing
Risk Perception & Communication
Safety Culture & Organizational
  Factors
Safety Margins & PSA
Significance Determination Process
  (SDP) Issues
Seismic PSA
Software Reliability & Data Analysis
Spent Fuel & Rad Waste Issues

Standardized Plant Analysis Risk (SPAR) Models Status	Structural Reliability Methods	Waste Management & Decommissioning
Standards & Peer Reviews	PSA Training & Education	
	Transportation Risks	

Bookmark and check the conference website at http://meetingsandconferences.com/psa2011/ often to remain informed about deadlines and activities.

MTAA 13

Texas A&M will host the 2011 Modern Trends in Activation Analysis (MTAA-13) Conference March 13–18, 2011—fifty years after the first MTAA conference also hosted by what was then the A&M College of Texas. The scope of the conference will include activation analysis methodology, methodological enhancements, applications of activation analysis to the fields of energy, environment, biology and medicine, geology, archaeology, homeland security, etc. However, this conference will broaden the subject matter somewhat in that it will invite and entertain contributed presentations from all areas of nuclear analytical methods as well as competing technologies.

Conference organizers will provide incentives to selected potential attendees in the form of travel awards. We anticipate making up to twelve awards to students and another twelve to young scientists who submit applications. Awardees will be expected to participate in the meeting by submission of abstracts and manuscripts to the proceedings. While financial need will be considered, recipients will be those considered by the conference organizers to be most likely to provide meaningful participation and future advancement of the science. Details concerning application procedures and criteria for selection will appear in subsequent announcements as well as the conference website.

Make sure you are on the conference contact list by completing the form found at: https://tti.tamu.edu/conferences/mtaa13/registration_interest.htm. Information on the conference will be posted to http://tti.tamu.edu/conferences/mtaa13/. You may also contact William D. (Dennis) James, Center for Chemical Characterization and Analysis, Texas A&M University, 3144 TAMU, College Station, TX 77843-3144 (phone 979 845-7630, email wd-james@tamu.edu).

ICAPP

The 2011 International Congress on Advances in Nuclear Power Plants (ICAPP 2011) will be held May 2–5, 2011, in Nice, France. Participants in the conference will benefit from the opportunity to meet worldwide experts of the nuclear industry and to review the recent evolution in reactor physics, thermal-hydraulics, materials, operation and maintenance, safety and licensing of new nuclear power plants. Abstracts are due **September 20, 2010**, on papers that fall into the following technical tracks:

1. Water-Cooled Reactor Programs and Issues
2. High Temperature Gas Cooled Reactors
3. LMFR & Innovative Reactor Programs
4. Operation, Performance & Reliability Management
5. Plant Safety Assessment and Regulatory Issues
6. Reactor Physics and Analysis
7. Thermal Hydraulics Analysis and Testing
8. Fuel Cycle and Waste Management
9. Materials and Structural Issues
10. Nuclear Energy and Global Environment

11. Deployment and Cross-Cutting Issues
12. Plant Licensing and International Regulatory Issues

Authors should submit a one-page 500 word abstract (text only) with contact information and preferred track number through the SFEN web site: www.sfen.fr. Information regarding the conference will be posted at the website, https://www.sfen.fr/index.php/plain_site/icapp_international_congress_on_advances_in_npps. You may also contact Sylvie Delaplace at icapp2011@sfen.fr.

MC 2011

The 2011 International Conference on Mathematics and Computational Methods applied to Nuclear Science and Engineering (MC 2011) will be held in Rio de Janeiro, May 8–12, 2011. The conference will provide an international forum for scientists to present their most recent work and exchange ideas on a powerful class of methodologies extensively used for solving mathematical models of physical phenomena and processes applied to nuclear science and engineering. One of the aims is to promote new research tools and procedures that help link mathematics, applied sciences and technology. Therefore, MC 2011 will offer an opportunity for direct information exchange between participants from both academia and industry. The interdisciplinary technical program will consist of plenary sessions, workshops, parallel oral presentation sessions and poster sessions. Papers may be submitted electronically by **October 31, 2010**, on the following subject categories:

- Accelerator & subcritical systems
- Advanced nuclear reactor concepts
- Atmospheric and ocean radiative transfer
- Computational fluid dynamics & thermal hydraulics
- Deterministic & stochastic neutral and charged particle transport modeling
- High-fidelity multiphysics simulations
- Medical physics
- Nuclear chemistry
- Nuclear criticality safety
- Nuclear data evaluation & application
- Nuclear fuel cycle
- Nuclear fuels

- Nuclear geophysics
- Nuclear materials sciences
- Nuclear non-proliferation and homeland security
- Nuclear production of hydrogen
- Nuclear radiation shielding & dosimetry
- Nuclear reactor analysis
- Optimization, data assimilation & artificial intelligence
- Plasma physics/fusion
- Radiobiology
- Structural mechanics
- Uncertainty quantification
- Verification & validation

General Chair of the meeting is Cassiano de Oliveira (cassiano@unm.edu). Bookmark the conference website, http://www.mc2011.org, to keep abreast of conference information.

ISRD-14

The 14th International Symposium on Reactor Dosimetry (ISRD-14) will be held May 22–27, 2011, at the Omni Mount Washington Resort, Bretton Woods, New Hampshire. This Symposium is held approximately every three years to provide a forum for the interchange of state-of-the-art techniques, data bases and standardization of radiation metrology. The Symposium will be of value to those involved in reactor dosimetry, including researchers, manufacturers and representatives from industry, utilities and regulatory agencies. The Symposium is jointly sponsored by ASTM International and the European Working Group on Reactor Dosimetry (EWGRD). It is organized by ASTM Committee E10 on Nuclear Technology and Applications.

The Symposium theme is dosimetry for the assessment of irradiated reactor materials and reactor experiments, featuring radiation metrology techniques, data bases and standardization. The Symposium

will be organized into oral and poster presentations, as well as informal round-table workshops. The meeting language will be English. Papers accepted for presentation at the symposium will be published in the on-line *Journal of ASTM International*. Bookmark the conference website, http://www.reactordosimetry.com/, to remain current with conference information.

CALENDAR

October 2010

Supercomputing in Nuclear Application and the 3rd Monte Carlo (SNA + MC2010), Oct. 17–20, 2010, Tokyo. Contact: CCSE, Japan Atomic Energy Agency, 8F, Sumitomo-Ueno Bldg. No.8, 6-9-3 Higashi-Ueno, Taito-ku, Tokyo 110-0015, Japan (email info@sna-mc-2010.org, fax +81-3-5246-2537) url: http://www.sna-mc-2010.org/.

3D S.UN.COP 2010, Oct. 18–22, 2010, Amsterdam, and Oct. 25–Nov. 5, 2010, Petten, The Netherlands. Contact: Alessandro Petruzzi (email: a.petruzzi@ing.unipi.it, fax 0039 050 2210384) url http://nrgspg.ing.unipi.it/3dsuncop.

International Symposium on Innovative Nuclear Energy Systems (INES-3), Oct. 31–Nov. 3, 2010, Tokyo. Contact:Yukitaka Kato, Associate Professor, CRINES, Tokyo Institute of Technology, 2-12-1-N1-22, Ookayama, Meguro-ku, Tokyo, 152-8550, Japan (phone/fax +81 3 5734 2967, email ines3@nr.titech.ac.jp) url http://www.nr.titech.ac.jp/ines3/.

November 2010

Technical Meeting on Low-Power Critical Facilities and Small Reactors, Nov. 1–3, 2010, Ottawa, ON, Canada. Contact: Blair Bromley, Computational Reactor Physics Branch (New), AECL - Chalk River Laboratories, Building 889 - Keys School - Room 130, 1 Plant Road, Chalk River, ON, K0J 1J0 (phone 613-584-8811 ext. 43676, fax 613-584-8055, email bromleyb@aecl.ca) url http://www.cns-snc.ca/events/tmlpcfsr/.

2010 Annual Fall Meeting of the APS Division of Nuclear Physics, Nov. 2–6, 2010, Santa Fe, New Mexico. Contact: info@cccmeetings.com. The website is http://www.lanl.gov/dnp/.

International Workshop on Ageing-Management of Nuclear Power Plants and Waste Disposal Structures, Nov. 7–10, 2010, Toronto, Ontario, Canada. Contact: Elizabeth Muckle-Jeffs (phone 1-800-868-8776, international 1-613-732-7068, fax 613-732-3386, email Elizabeth@TheProfessionalEdge.com) url http://www.amp2010toronto.com.

2010 ANS Winter Meeting and Nuclear Technology Expo, Nov. 7–11, 2010, Las Vegas, NV. The website is: http://www.new.ans.org/meetings/c_1.

19th Topical Meeting on the Technology of Fusion Energy (TOFE), embedded in the ANS Winter Meeting, Nov. 7–11, 2010, Las Vegas, NV. Contact: General Chair: Farrokh Najmabadi, 9500 Gilman Drive, Mail Code 0407, UCSD, La Jolla, CA 92093 (phone 858-534-7869) url: http://fed.ans.org/TOFE19/.

2010 Isotopes for Medicine and Industry, embedded in the ANS Winter Meeting, Nov. 8–11, 2010, Las Vegas, NV. Contact: Rolf Zeisler (rolf.zeisler@nist.gov) url: http://www.new.ans.org/meetings/m_74.

IEEE Conference on Technologies for Homeland Security (IEEE HST '10), Nov. 8–10, 2010, Waltham, MA. The website is http://ieee-hst.org/default.html.

February 2011

Conference on Nuclear Training and Education (CONTE 2011), Feb. 6–9, 2011, Jacksonville, Florida. Contact: Stephen Kuczynski, Senior VP of Engineering and Technical Services, Exelon Nuclear. The website is www.ans.org/meetings.

Nuclear and Emerging Technologies for Space 2011 (NETS 2011), Feb. 7–10, 2011, Albuquerque, NM. The website is http://anstd.ans.org/NETS2011/AboutNETS2011.htm

March 2011

International Topical Meeting on Probabilistic Safety Assessment and Analysis (PSA 2011), March 13–17, 2011, Hilton Wilmington Riverside, Wilmington, NC. Meeting information: http://www.ans.org/goto/nad.cgi?id=1273208400-24

Modern Trends in Activation Analysis (MTAA-13), March 13–18, 2011, College Station, TX. Contact: William D. (Dennis) James, Center for Chemical Characterization and Analysis, Texas A&M University, 3144 TAMU, College Station, TX 77843-3144 (phone 979 845-7630, email wd-james@tamu.edu) url: http://tti.tamu.edu/conferences/mtaa13/.

April 2011

AccApp '11 - Tenth International Topical Meeting on Nuclear Applications of Accelerators, April 3–7, 2011, Knoxville, TN. Contact: Conference Chair, Phil Ferguson, Oak Ridge National Laboratory (phone 865-241-5702, email fergusonpd@ornl.gov) url: http://accapp11.org.

May 2011

MC 2011, May 8–12, 2011, Rio de Janeiro, Brazil. Meeting information: http://www.mc2011.org/.

International Symposium on Reactor Dosimetry (ISRD-14), May 22–27, 2011, Bretton Woods, New Hampshire. Contact: Dr. David W. Vehar, Sandia National Laboratories (dwvehar@sandia.gov) url http://www.reactordosimetry.com/.

June 2011

Workshop on Activation Data (Kopeck), June 1–3, 2011, Charles University in Prague, Czech Republic. Contact: Jean-Christophe.Sublet@ccfe.ac.uk, url http://www.ccfe.ac.uk/EASY_workshops.aspx.

ANS Annual Meeting, June 26–30, 2011, Hollywood, FL. The website is http://www.new.ans.org/meetings.

Industrial Radiation and Radioisotope Measurement Applications (IRRMA-8), June 26–July 1, 2011, Kansas City, MO. Contact: William L. Dunn, Kansas State University (email dunn@k-state.edu) url http://www.dce.k-state.edu/conf/irrma/.

October 2011

2011 ANS Winter Meeting and Nuclear Technology Expo, Oct. 30–Nov. 3, 2011, Washington, DC. The website is http://www.new.ans.org/meetings/c_1.