Radiation Safety Information Computational Center



Oak Ridge National Laboratory POST OFFICE BOX 2008 OAK RIDGE, TENNESSEE 37831-6171

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No. 542

April 2010

Liberty is the only thing you cannot have unless you are willing to give it to others.—William Allen White

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CHANGES TO THE RSICC CODE AND DATA COLLECTION

CCC-684/NRCDose 2.3.15

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 2.3.15 release, LADTAP was modified to make corrections to irrigated food pathway handling to ensure correct ordering of the Vegetable, Leafy Vegetables, Milk, and Meat pathways. This release also increased the size of the report viewing dialog to display the entire report.

NRCDose was tested on Pentium computers under Windows XP 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-1276, ORNL/NUREG/TDMC-1 (March 1980); NUREG/CR-2919 (PNL-4380) (September 1982). Fortran and Visual Basic; Pentium (RSICC ID: C00684PC58612).

CCC-766/BOXER

BOXER, contributed by the Paul Scherrer Institute (PSI) CH-5232 Villigen PSI, Switzerland, through the OECD/NEA Data Bank, Issy-les-Moulineaux, France, will perform neutron transport, calculation of multiplication factors and neutron fluxes in 2-D configurations, cell calculations, 2-D diffusion and transport, and burnup. Preparation of a cross section library for the code BOXER from a basic library in ENDF/B format is generated by ETOBOX, which is included in the package. Methods that BOXER employ include:

- Resonance treatment: point wise calculation of flux in 2 zones in the resonance range, and interpolation in tables out of this range.
- Cell calculation: integral transport method.
- 2-D x-y: diffusion or transport (quadruple P1).
- Burnup: coupling of nuclides through matrices, development of nuclide densities as polynomials of the time.

All the variables, including the integers, must be represented in 64-bit words. Only the formats until ENDF/B-5 can be treated. ETOBOX is not adapted to ENDF/B-6. The gamma-part of ENDF/B is not treated.

The package is transmitted on a CD containing reference material, documentation, source files, cross section library, sample problems and sample problem output file for comparison. UNIX, Fortran 77: (RSICC ID: C00766MNYWS00, NEADB ID: NEA-1852/01 and 1048/01).

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 <u>riceaf@ornl.gov</u> 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

| Date 2010 | Class | Location |
|-----------------|--|------------------|
| June 28–30 | CAD to MCNP | Seattle, WA |
| July 12–16 | Introduction to MCNP using the MCNPX Visual Editor | Anaheim, CA |
| July 29–23 | Intermediate MCNP Visual Editor | Las Vegas, NV |
| August 2–4 | Visualization of MCNP Data | Seattle, WA |
| September 13–17 | Introduction to MCNP using the MCNPX Visual Editor | Myrtle Beach, SC |
| November 15–19 | Introduction to MCNP using the MCNPX Visual Editor | Las Vegas, NV |

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.

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 | | |
| May 24–28 | Intermediate MCNPX | Orlando, FL | | |
| August 16–20 | Intermediate MCNPX | Seattle, WA | | |
| September 20–24 | Intermediate MCNPX | Virginia Beach, VA | | |
| 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, <u>http://mcnpx.lanl.gov/</u>. To register send an email to <u>Randy Schwarz</u>, indicating the workshop of interest to you.

SCALE Training Courses

| Date | Title | Description |
|---------|----------------|----------------------|
| May 3–7 | KENO-VI/MAVRIC | NEA Data Bank, Paris |

The registration fee is \$2000 for each course; after February 1 registration is \$2300. 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.

NEA PENELOPE-2008 Course and Workshop

Training course on Electron-Photon Transport Modeling with PENELOPE-2008, Physics, Code Structure and Operation, 5–8 July 2010, Universitat de Barcelona, Barcelona, Spain. The course is addressed to researchers in Radiation Physics and its applications. The main objective is to provide the participants with a detailed description of the 2008 version of PENELOPE, with an ample

perspective on Monte Carlo methods for simulation of electron/photon transport. The reliability of the interaction models and the accuracy of the numerical methods and approximations implemented in the code will be discussed. Examples of simulation results and benchmark comparisons with experiment will be presented. The course will include practical sessions on the use of the generic main programs PENCYL (cylindrical geometries) and PENMAIN (quadric geometries), and on the design of the main program for specific applications. The syllabus, registration, and other information can be found at http://www.nea.fr/dbprog/courses/PENELOPE-syllabus2010.html.

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 <u>Paul.Frame@orau.org</u>.

| Course | Dates |
|---|-------------------------------|
| MARSSIM | May 17–21, 2010 |
| Radiation Safety Officer Training | June 21–25, 2010 |
| NEW—MARSAME | August 31–September 3, 2010 |
| Applied Health Physics | September 13–October 15, 2010 |
| Air Sampling for Radioactive Materials | October 18–22, 2010 |
| Radiation Medicine for Safety Professionals | November 1–5, 2010 |
| Introduction to Radiation Safety | November 8–12, 2010 |
| MARSSIM | November 29–December 3, 2010 |
| Gamma Spectroscopy | December 6–10, 2010 |
| MARSSIM | January 10–14, 2011 |
| Site Characterization in Support of | |
| Decommissioning: Planning, | January 24–28, 2011 |
| Implementation, and Evaluation | |
| Applied Health Physics | February 28–April 1, 2011 |
| CHP Part I Review | April 5–7, 2011 |
| Gamma Spectroscopy | April 11–15, 2011 |

AVS-NM Short Courses

The New Mexico Chapter of the American Vacuum Society (AVS) Science & Technology of Materials, Interfaces and Processing is offering the following short courses:

- Tritium Science and Technology Fundamentals and Applications, 25–26 May, 2010, http://www-chne.unm.edu/avs/avsinformation.htm
- Nuclear Critality Safety Manager's Workshop, 13–15 July 2010, <u>http://www-chne.unm.edu/crit/information.htm</u>
- Nuclear Critality Safety Short Course, 19–23 July 2010, <u>http://www-chne.unm.edu/crit/information.htm</u>
- Assessments & Critality Safety Evaluations Workshop, 27–29 July 2010, <u>http://www-chne.unm.edu/crit/information.htm</u>

All courses are held at the Embassy Suites Hotel in Albuquerque, New Mexico. You may contact: Cheryl M. Brozena at <u>cbrozena@unm.edu</u> for details.

2010 RELAP5 User Training

The Nuclear Research Group of San Piero a Grado (GRNSPG) of University of Pisa (UNIPI) and the Institute for Energy (IE) of the Joint Research Center (JRC) of European Commission (EC) are jointly organizing the 2010 RELAP5 User Training Course. The training course will be held June 28–July 2, 2010 at the Institute for Energy (IE) of JRC in Petten (The Netherlands). The registration deadline is May 3, 2010. The registration form and further details are available at: <u>http://www.grnspg.ing.unipi.it/</u><u>3dsuncop/RELAP5/index.html</u>. Additional information may be requested from Alessandro Petruzzi at the following email address: a.petruzzi@ing.unipi.it.

CONFERENCES

ANS 2010 Annual Meeting

The theme for the 2010 ANS Annual Meeting is "Nuclear Science and Technology—The Right Fit. The Right Time." It will be held in San Diego, CA, June 13–17, 2010. The general chairman is Ross T. Ridenoure of Southern California Edison, and the program Chair is Dr. A. Kurshad Muftuoglu of GE-Hitachi Nuclear Energy. Bookmark <u>http://www.new.ans.org/meetings/ calendar/d_6-13-2010</u> where announcements and updates will be posted.

ITART 2010

Imaging for Treatment Assessment in Radiation Therapy (ITART 2010) is the first biennial meeting to focus on quantitative imaging in radiation therapy. It will be held June 21–22, 2010, at the Gaylord National Resort & Convention Center, National Harbor, Maryland. Cancer therapy is rapidly shifting from a population-based to a personalized patient-based treatment plan tailored to the spatial distribution of biological properties in the tumor. Incorporation of comprehensive patient- and tumor-specific information enables design of more effective therapies and monitoring the treatment response will provide grounds for treatment adaptation if necessary. Rapid developments in imaging, particularly adoption of molecular imaging, offer unprecedented opportunities for achieving these goals. Unfortunately, several roadblocks, particularly related to inadequate image quantification, prevent full exploration of these strategies.

The American Association of Physicists in Medicine (AAPM), American Society for Therapeutic Radiation Oncology (ASTRO), European Society for Therapeutic Radiation Oncology (ESTRO), Radiological Society of North America (RSNA) and the National Cancer Institute (NCI) have come together to establish this biennial forum for basic and clinical researchers, practicing clinicians, industry and regulatory bodies to review what has already been achieved, brainstorm about needs and opportunities, and discuss strategies on how to most effectively overcome the roadblocks. While radiation therapy is a specific focus, many of the topics will be of general interest to researchers involved in quantitative imaging applications. The meeting will feature a combination of renowned invited speakers and proffered content.

Program information, exhibitor information, registration, etc. is available at the conference website, <u>http://www.aapm.org/meetings/2010ITART/</u>. For general meeting questions you may contact Corbi Foster at <u>corbi@aapm.org</u>.

AFRIRPA 2010

The Eastern Africa Association for Radiation Protection (EAARP) invites you to the 3rd African Regional IRPA Congress (AFRIRPA 2010) in Nairobi, Kenya, September 13–17, 2010. The theme is "Strengthening Radiation Protection Infrastructures in Africa: Towards Establishing Effective and Sustainable Regional Cooperation and Networks." AFRIRPA 2010 is co-sponsored by the International Atomic Energy Agency (IAEA), World Health Organization (WHO), International Radiation Protection Associaton (IRPA), the Government of Kenya, and others. It is organized in collaboration with the Association Marocaine de Radioprotection (AMR), South African Radiation Protection Association (SARPA) and Egyptian Radiation Protection Association (Egypt-IRPA).

AFRIRPA 2010 will attract radiation protection professionals; users and manufacturers of radiation technologies; service providers; regulators; governmental, non-governmental and international organizations; and members of the general public. It will provide a platform to share the latest scientific updates, current developments, and future trends in radiation technology and radiation protection.

For information on registration, as well as sponsorship and exhibition opportunities, contact: Amidu Mustapha (email <u>amustapha@uonbi.ac.ke</u>, <u>info@eaarp.or.ke</u>, or <u>eaarp@yahoo.co.uk</u>). The conference website is <u>http://www.eaarp.or.ke</u>.

<u>SNA & MC 2010</u>

Japan Atomic Energy Agency is organizing the Joint International Conference on Supercomputing in Nuclear Application + Monte Carlo 2010 Tokyo (SNA + MC2010) to be held in Tokyo, October 17–20, 2010, at the Hitotsubashi Memorial Hall. The conference is designed to discuss computational science, technology and applications concerning nuclear research and Monte Carlo simulation from wide viewpoints. The conference is mainly composed of plenary and technical sessions. Submitted papers will be presented in oral or poster sessions. It is planned that papers of high quality will be peer reviewed and published in special issues of *Journal of Nuclear Science and Technology*. Student awards will be given to young students presenting outstanding work. Bookmark the website, http://www.sna-mc-2010.org/, to keep abreast of developments for the meeting. You may also 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 or fax: +81-3-5246-2537).

3D S.UN.COP 2010

The Nuclear Research Group of San Piero a Grado (GRNSPG) of University of Pisa (UNIPI), the Institute for Energy (IE) of the Joint Research Center (JRC) of European Commission (EC), the University of Zagreb (FER) and the School of Industrial Engineering of Barcelona (ETSEIB) are jointly organizing the Seminar and Training to transfer competence, knowledge and experience in the area of Scaling, Uncertainty and 3D Coupled Code Calculations (3D S.UN.COP 2010).

The Seminar will take place from October 18–22, 2010, in Amsterdam, and October 25–November 5, 2010, at the Institute for Energy (IE) of JRC in Petten (The Netherlands). The deadline for registration is June 15, 2010. The seminar is divided into three parts and participants may choose to attend a one-, two- or three-week course depending on their interest in the following topics:

- 1) Fundamental Theoretical Aspects of the Methodologies;
- Industrial Applications (e.g. AECL, AREVA, Westinghouse, GEH) Coupling Methodologies and Code Hands-on Training (e.g. RELAP, CATHARE, PARCS, TRACE, Star-CD) and Special Sessions devoted to Computational Fluid Dynamics, Severe Accident Analysis, WEER and CANDU Technologies and GEN-IV;

3) Advanced User Training, including Code Hands-on Training for Transient Analysis and Foundation of Statistical Methods.

Further details will be available at: <u>http://nrgspg.ing.unipi.it/3dsuncop</u>.

INES-3

The Third International Symposium on Innovative Nuclear Energy System - Innovative Nuclear Technologies for Low-Carbon Society (INES-3) will be held on October 31–November 3, 2010, at Tokyo Institute of Technology, Tokyo, Japan. The Symposium aims to summarize recent research activities relevant to the development of innovative nuclear reactor systems and innovative separation/ transmutation systems with a broad perspective and flexible ideas for realization of a low-carbon society. The symposium is organized by the Center for Research into Innovative Nuclear Reactors, CRINES and Tokyo Tech. Conference topics include:

- 1. Innovative reactors
- 2. Innovative transmutation and separation systems
- 3. Fuel cycles including HLW disposal and nuclear nonproliferation issues
- 4. Innovative nuclear energy systems
- 5. Innovative neutron utilization
- 6. Materials for innovative nuclear energy systems

Please refer to the conference webpage, <u>http://www.nr.titech.ac.jp/ines3/</u>, for information regarding the submission of abstracts, registration, etc. You may also 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 <u>ines3@nr.titech.ac.jp</u>).

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, <u>www.ans.org</u>, 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, <u>www.ans.org/meetings</u>.

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. Under this theme, summaries must be submitted electronically by **September 10, 2010** in the following areas:

- Reactor surveillance and plant-life management
- Data evaluation, uncertainty analysis, and adjustment methods
- Retrospective dosimetry and decommissioning
- Dosimetry for assessment of reactor structural materials
- Neutron and gamma-ray transport calculations
- Dosimetry for core characterization and reactor physics
- Characterization of neutron and gamma-ray environments
- Damage correlation and exposure parameters
- Monitoring of irradiation experiments
- Nuclear data for dosimetry
- Benchmarking, calibrations and standards
- Fusion and high-energy neutrons
- Reactor and accelerator neutron sources
- Irradiation processing and testing of electronics
- Experimental techniques, new developments and optical methods
- Dosimetry for space nuclear power

Papers in these and other areas are expected to cover such applications as fission and fusion energy research and test and research reactor experiments. Health physics papers are outside the scope of this Symposium. The Symposium will be organized into oral and poster presentations, as well as informal round-table workshops. The meeting language will be English. No translations will be provided. All papers presented at the Symposium will be subject to peer-review before acceptance for publication in the on-line Journal of ASTM International. Registrants will receive a complimentary volume of the papers accepted for publication. Bookmark the conference website, <u>http://www.reactordosimetry.com/</u>, to remain current with conference information.

CALENDAR

May 2010

- Conference on Nuclear Engineering (ICONE18), May 17–21, 2010, Xi'an, China. Contact: ICONE 18 Secretariat c/o Chinese Nuclear Society, P.O.Box 2125, Beijing 100822, China (phone 86-10-68555686, 68555597, fax 86-10-68527188, email <u>icone18@ns.org.cn</u>) url: <u>http://www.asmeconferences.org/ICONE18/index.cfm</u>.
- Symposium on Radiation Measurements and Applications (SORMA XII), May 24–27, 2010, Ann Arbor, MI. Contact: Prof. David K. Wehe, SORMA XII, 1906 Cooley Building, University of Michigan, 2355 Bonisteel Boulevard, Ann Arbor, MI 48109-2104. The website is <u>http://rmasymposium.engin.umich.edu/</u>.
- CNS 31st Annual Conference and 34th CNS-CNA Student Conference, May 24–27, 2010, Montreal. Contact: Denise Rouben, CNS Office Manager (phone +1-416-977-7620, email <u>cns-</u><u>snc@on.aibn.com</u>) url <u>http://conf2010.cns-snc.ca/</u>.

- Radioactive Waste Management Conference 2010, May 26–27, 2010, London. Contact: Energy Customer Services, Informa UK LtdPO Box 406West Byfleet KT14 6NN UK (phone +44 (0) 20 7017 5518, fax +44 (0) 20 7017 4745, email <u>energycustserv@informa.com</u>) url <u>http://www.informaglobalevents.com/</u>event/radwaste2010?.
- European Nuclear Conference, May 30–June 2, 2010, Barcelona, Spain. Contact: European Nuclear Society, Kirsten Epskamp (phone +32 2 505 30 54, fax +32 2 502 39 02, email enc2010@euronuclear.org) url http://www.euronuclear.org/events/enc/enc2010/.

June 2010

- Shielding Aspects of Accelerators, Targets and Irradiation Facilities (SATIF-10), June 2–4, 2010, Geneva, Switzerland. Contact: Marco Silari (<u>Marco.Silari@cern.ch</u>) url: <u>http://www.cern.ch/SATIF-10</u>.
- 3rd International Conference "Current Problems in Nuclear Physics and Atomic Energy," (NPAE-Kyiv2010), June 7–12, 2010, Kyiv, NPAE Ukraine. Contact: Dr. Vitali Yu. Denisov, Institute for Nuclear Research, Prospect Nauky, 47, Kyiv, 03680, Ukraine (fax +38 044 525 44 63, email <u>npaekyiv2010@kinr.kiev.ua</u>) url: <u>http://www.kinr.kiev.ua/NPAE-Kyiv2010</u>.
- Nuclear Power Europe, June 8–10, 2010, Amsterdam. Contact: Denne Johnson (phone +1 918 832 9264, email <u>dennej@pennwell.com</u>) url <u>http://www.nuclearpower-europe.com/index.html</u>.
- ANS Annual Meeting, June 13–17, 2010, San Diego, CA. Contact: url <u>http://www.new.ans.org/meetings/file/133</u>.
- IRPA 2010 Europe, June 14–18, 2010, Helsinki. Contact: IRPA 2010 Congress Secretariat, CONGREX / Blue & White Conferences Oy, P.O.Box 81, FI-00371 Helsinki, Finland (phone +358 9 5607 500, fax +358 9 5607 5020, email irpa2010europe@congrex.fi) url http://www.irpa2010europe.com/.
- Imaging for Treatment Assessment in Radiation Therapy (ITART 2010), June 21–22, 2010, National Harbor, MD. Contact: Corbi Foster (<u>corbi@aapm.org</u>) url: <u>http://www.aapm.org/meetings/2010ITART/</u>.
- 2010 LAS-ANS Symposium on "New Technologies for the Nuclear Fuel Cycle," June 21–25, 2010, Rio de Janeiro. Contact: Cláudio Almeida, CNEN Rua General Severiano 90, 22290-901, Rio de Janeiro Brazil (phone (+55-21) 2173-2108, fax (+55-21) 2173-2103, email <u>almeida@cnen.gov.br</u>) url <u>http://www.las-ans.org.br/</u>.

July 2010

International Youth Nuclear Congress, IYNC2010, July 12–18, 2010, Cape Town, South Africa. Contact: <u>http://www.iync.org/iync-2010.html</u>.

August 2010

2010 ASME Fluids Engineering Division Summer Meeting Symposium on "Application of Best Estimate and Uncertainty Methods," Aug. 1–4, 2010, Montreal. Contact: http://www.asmeconferences.org/FEDSM2010.

International Course on Thermalhydraulics of Light Water Reactors, Aug.23–Sept 3, 2010, Saclay, France.

September 2010

African Regional IRPA Congress (AFRIRPA 2010), Sept. 13–17, 2010, Nairobi, Kenya. Contact: Amidu Mustapha (email <u>amustapha@uonbi.ac.ke</u>, <u>info@eaarp.or.ke</u>, or <u>eaarp@yahoo.co.uk</u>) url <u>http://www.eaarp.or.ke/</u>.

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 <u>info@sna-mc-2010.org</u>, fax +81-3-5246-2537) url: <u>http://www.sna-mc-2010.org/</u>.
- 3D S.UN.COP 2010, Oct. 18–22, 2010, Amsterdam, and Oct. 25–Nov. 5, 2010, Petten, The Netherlands. Contact: Alessandro Petruzzi (email: <u>a.petruzzi@ing.unipi.it</u>, fax 0039 050 2210384) url <u>http://nrgspg.ing.unipi.it/3dsuncop</u>.
- International Symposium on Innovative Nuclear Energy System (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

2010 ANS Winter Meeting and Nuclear Technology Expo, Nov. 7–11, 2010, Las Vegas, NV. Url: <u>http://www.new.ans.org/meetings/c_1</u>.

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.

March 2011

Modern Trends in Activation Analysis (MTTA-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 <u>wd-james@tamu.edu</u>) url: <u>http://tti.tamu.edu/conferences/mtaa13/</u>.

May 2011

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

June 2011

ANS Annual Meeting, June 26–30, 2011, Hollywood, FL. Contact: 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 <u>dunn@k-state.edu</u>) url <u>http://www.dce.k-state.edu/conf/irrma/</u>.