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# Radiation Safety Information Computational Center

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*It is a fine thing to have ability, but the ability to discover ability in others is the true test.—Elbert Hubbard*

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## Change to the Computer Code and Data Collection

### [DLC-223/FSXLIB-J33](#)

The Nuclear Data Center at Japan Atomic Energy Research Institute, Tokai-mura, Naka-gun, Ibaraki-ken, Japan, through the Research Organization for Information Science & Technology (RIST), contributed corrections to this continuous energy neutron cross section library for use with MCNP. In this update, index files xmdir.fsxl331 and xmdir.fsxl332 were modified to include atomic weights, which were missing for 23 nuclides in the previous release. No other files were modified.

The NJOY 99.67 processing code from LANL was used to produce ACE type cross section data from JENDL 3.3. FSXLIB-J33 was developed for solving neutron transport calculations with the CCC-700/MCNP4C code system. The data can also be used with other versions of MCNP. Photon production data are supplied for some nuclides in the expanded photon production format. Kerma factors are provided. The processing temperature of cross sections is 300 K. The FSXLIB-J33 library includes 337 nuclides. It is transmitted as GNU compressed Unix tar files and can be read on Windows with WinZIP 8.0 or later. The xmdir files and report are also included on the distribution CD. Reference: JAERI-Data/Code 2003-011 (July 2003). Note that the MATXS library referenced in this report is not included in the DLC-222 package. ASCII card images and 32-bit x86 CPU binary; Windows, Linux or Unix. (RSICC package id: D00223/MNYCP/01).



I am pleased to inform you that the ENDF/B-VII.0 library was officially released. It can be conveniently accessed from the top of the NNDC webpage, [www.nndc.bnl.gov](http://www.nndc.bnl.gov).

This is the first major release since 1990, when the ENDF/B-VI library was initially made available. I would like to use this opportunity and express my deepest thanks and appreciation to all CSEWG members and also to many other colleagues for their hard work, dedication and contribution to this unique project.

The redesigned ENDF webpage, [www.nndc.bnl.gov/endl7](http://www.nndc.bnl.gov/endl7), offers a number of new features, such as library download, access to Big Paper with convenient cut-and-paste reference, description of processing with NJOY, benchmarking information, access (restricted) to processed ACE library, and covariance plots. In addition to the standard retrieval interface, we also offer an initial version of our new interface "Sigma" (full functionality expected in spring 2007).

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## 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](mailto: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.

### [MCNPX Workshops](#)

Lead Teachers: Drs. John Hendricks, Gregg McKinney, Laurie Waters

Organizer: HQC Professional Services

Contact: [bill@mcnpxworkshops.com](mailto:bill@mcnpxworkshops.com)

Information: <http://mcnpxworkshops.com> and MCNPX homepage: <http://mcnpx.lanl.gov>

2007 Schedule		
Mar 12-16	San Francisco, CA	Intermediate
Apr 30-4 May	Honolulu, HI	Introductory
June 4-8	Santa Fe, NM	Introductory
Sept 17-21	Santa Fe, NM	Advanced
October 22-26	Europe	Intermediate

MCNPX is packed with new and exciting plotting features, including numerous mesh tally options which can be superimposed on your geometry plot and plotted within the MCNPX run, eliminating the need for post-processing and costly additional plotting package(s). You can plot particle flux, tracks, dosage, and energy deposition as well as source points and many others.

The workshops include hands-on instruction, generally on PC Windows machines. Subject to participant export approval from the MCNPX beta test team, participants will be able to access the Fortran 90 version of MCNPX 2.6, the LA150 (150 MeV) cross-section data libraries for over 40 isotopes for incident neutrons and protons and 12 for photonuclear interactions, and a notebook of viewgraphs.

Follow-up consultation for class participants will be provided.

The classes are taught by experienced MCNPX code developers and instructors. More information on code versions and capabilities is available at MCNPX Workshops web site <http://mcnpxworkshops.com>.

To register go to <http://mcnpxworkshops.com/regform.html>.

### **Spring 2007 SCALE Training Courses at ORNL**

<b>Spring 2007 SCALE Training Courses at ORNL</b>		
<b>Date</b>	<b>Title</b>	<b>Description</b>
March 5–8	<b>TSUNAMI Sensitivity/ Uncertainty Tools Course</b> (Experienced KENO users only)	1-D and 3-D sensitivity/uncertainty analysis using XSDRNPM and KENO V.a
March 12–16	<b>ORIGEN-ARP/ TRITON Course</b>	ORIGEN-ARP: Isotopic depletion/decay and source terms using latest version of ORIGEN TRITON: 2-D reactor physics analysis using NEWT
March 19–23	<b>KENO-VI Course</b>	Criticality safety using the generalized geometry version of KENO

The registration fee is \$1800 for each course. A late fee of \$300 will be applied for late registrations. A discount of \$300 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 5 or 5.1 users.** All foreign national visitors must register 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](http://www.ornl.gov/sci/scale/course_description.htm).

### **Introductory and Advanced MCNP Visual Editor Training**

The Introductory class will be held May 7–11 and September 17–21, 2007, in Richland, Washington. It will be taught using the most recent (beta) version of the Visual Editor Code. Beta versions will only be available to students that own the RSICC version 5 release. Bring proof of ownership to the class.

The introductory classes combine teaching on MCNP physics, along with instructions on how to use the Visual Editor. Computer demonstrations and exercises will focus on creating and interrogating input files with the Visual Editor. Demonstrations of advanced visualization work using MCNP will also be

made. The advanced class assumes the user has experience using MCNP and focuses on Visual Editor topics.

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.mcnvised.com/visedtraining/trainvised.html>.

## **PHYTRA1**

The First International Conference on Physics and Technology of Reactors and Applications (PHYTRA1) will be held March 14–16, 2007, in Marrakech City, Morocco. This is the first International Conference organized by the Moroccan Association for Nuclear Engineering and Reactor Technology “GMTR” after a series of three national conferences. The objective is to provide scientists and engineers from different countries an opportunity to present their recent work in reactor physics and nuclear technology. Industrial vendors may exhibit their products and innovations in different domains related to reactor physics and nuclear technology. The PHYTRA1 conference will also be a celebration for the operation of the first research reactor (TRIGA Mark II) in Morocco which is expected to be commissioned in 2006.

Information on the conference can be found at the website, <http://www.fst.ac.ma/gmtr/phytra1/phytra1.html>, or by contacting Pr. A. Jehouani, Faculty of Sciences SEMLALIA, Dept. of Physics, University Cadi Ayyad- Marrakech, Morocco (email [PHYTRA1@fsr.ac.ma](mailto:PHYTRA1@fsr.ac.ma) or [jehouani@ucam.ac.ma](mailto:jehouani@ucam.ac.ma), fax 212-44-43-74-10) or Pr. L. Erradi, GMTR President, Mohammed V Agdal University, Faculty of Sciences, Department of Physics, B. P. 1014 Rabat, Morocco (email [erradi@fsr.ac.ma](mailto:erradi@fsr.ac.ma) or fax 212-0-37-77-89-73).

## **M&C + SNA 2007**

The Joint International Topical Meeting on Mathematics & Computations and Supercomputing in Nuclear Applications (M&C+SNA) will be held April 15–19, 2007, in Monterey, California. The conference will provide an international forum to review recent research results, and the status and trends in high performance computing, numerical simulation and physical modeling of current and advanced nuclear systems. Topics include:

- Computational Methods Using High Performance Computers
- Computational Reactor Physics and Particle Transport
- Nuclear Reactor Analysis
- Computational Biomedical Applications
- Computational Nuclear Fuel Cycle/Repository Performance
- Computational Plasma Physics/Fusion
- Computational Thermal Hydraulics
- Computational Materials Sciences
- Computational Science
- Planned Special Sessions
  - Domain Representation for Advanced Nuclear Applications
  - Nuclear Methods for Nonproliferation and Homeland Security
  - Analytical Benchmarks
  - Tomographic Phantoms
  - Stochastic Considerations in Particle Transport

Program, registration, and other significant information about the conference may be found at the website, <http://mc-sna07.nuc.berkeley.edu/>. General questions about the conference may be addressed to [mcinfo@nuc.berkeley.edu](mailto:mcinfo@nuc.berkeley.edu) and questions regarding the program should be submitted to [vujic@nuc.berkeley.edu](mailto:vujic@nuc.berkeley.edu).

## **ND2007**

The International Conference on Nuclear Data for Science and Technology will be held April 22–27, 2007, in Nice, France. The conference is organized by the Commissariat à l'Énergie Atomique (CEA) under the auspices of the OECD Nuclear Energy Agency (NEA). The General Chairs are B. Bigot, Haut-commissaire à l'Énergie Atomique and L. Echávarri, NEA Director-General. The technical program includes the following topics:

- Nuclear structure and decay data
- Experimental facilities and detection techniques
- Nuclear data measurements and analysis
- Nuclear theories, models and data evaluation
- Standards
- Evaluated nuclear data libraries and processing
- Validation, benchmarking of evaluated data
- Integral experiments
- Uncertainties quantification
- Data dissemination and international collaboration
- Fission energy applications
- Accelerator-related applications
- Fusion technology applications
- Dosimetry and shielding applications
- Safeguards and security
- Space, cosmic-ray applications, radiation effects on electronics
- Astrophysics and cosmology applications
- Medical and environmental applications

The most current information will be posted on the website at [http://www-dapnia.cea.fr/Sphn/nd2007/site\\_nd2007/](http://www-dapnia.cea.fr/Sphn/nd2007/site_nd2007/) and questions or comments may be addressed to [nd2007@cea.fr](mailto:nd2007@cea.fr).

## **WIN Global 2007**

The Women in Nuclear (WIN) Global Conference 2007 will be held in Bali, Indonesia, April 22-27, 2007. Unlike previous meetings, this one will be held over five consecutive days in three different locations: Bali, Yogyakarta and Jakarta. Bookmark <http://www.win-ina.org/> and check it often for details of the conference or contact the secretariat, Ms. Renaningsih, Center for Application of Isotope and Radiation Technology, (PATIR - BATAN) Jl. Cinere, Pasar Jumat, PO. Box 7002 JKSKL, Jakarta 12070, Indonesia (phone: +6221 7659375 / +6221 7690709, fax +6221 7691607 / +6221 7513270; or email: [setjor@yahoo.com](mailto:setjor@yahoo.com)).

## **McGill Workshop on Monte Carlo Techniques in Radiotherapy Delivery and Verification**

“Monte Carlo Techniques in Radiotherapy Delivery and Verification: Third McGill International Workshop” will be held May 29–June 1, 2007, at McGill University in Montreal. This workshop intends to cover recent Monte Carlo code developments, applications to higher level biological models as well as the role of MC simulations in clinical applications related to improved estimations of delivered dose and the verification of delivered dose. In tune with the two previous workshops (2001, 2004) the present workshop setup encourages in-depth discussions on specialized topics. To this end, the number of participants will be limited to around 100. For more information, a preliminary program and instructions

for abstract submission, please see the link: <http://www.medphys.mcgill.ca/~meworkshop2007/>. The deadline for submissions of abstracts is Friday, February 23, 2007.

Note that the timeframe of this workshop is the week just before the "International Conference on the Use of Computers in Radiation Therapy (ICCR 2007)" in Toronto and the topics covered in the McGill workshop are designed to complement topics on the program of the ICCR 2007 meeting (<http://www.iccr2007.org/>).

## **International Conference on Emerging Nuclear Energy Systems (ICENES 2007)**

The committee for the 13<sup>th</sup> International Conference on Emerging Nuclear Energy Systems (ICENES 2007) will be held June 3–8, 2007, at Gazi University in Istanbul.

The main objective of ICENES is to provide a broad review and discussion of various advanced, innovative and non-conventional nuclear energy production systems to scientists, engineers, industry leaders, policy makers, decision makers and young professionals who will shape future energy supply and technology. ICENES 2007 will also open the forum to innovative non-nuclear technologies, such as hydrogen energy, solar energy, deep space exploration, etc. with an emphasis on *unthinkable ideas* with a sound scientific-technical basis. The program will include invited papers, submitted contributions in oral and poster sessions, as well as an industrial exhibition and social tours. Topical areas include:

- Advanced Fission Systems
- Fusion Energy Systems
- Accelerator Driven Systems
- Exotic Nuclear Reactor Concepts
- Transmutation and Fuel Cycle
- Co-Generation and Non-Electricity Production Applications
- Generation IV Reactors
- Space Power and Propulsion
- Deep Space Exploration, general
- Nuclear Hydrogen Production
- Radiation Protection & Shielding
- Hydrogen Energy, general including non-nuclear applications
- Solar Energy
- Other Alternative Energies
- Societal Issues

The official language of the conference will be English. The proceedings will be produced on an interactive CD-ROM with an ISBN registration number. A selection of ICENES 2007 papers will be published in a special edition of the journal *Energy Conversion & Management*. Scientific and technical inquiries may be directed to Prof. Dr. Sümer Şahin, Gazi University 06500 ANKARA/TURKEY (phone +90 (312) 212 43 04, fax +90 (312) 212 43 04, email [sumersahin@icenes2007.org](mailto:sumersahin@icenes2007.org)). Updated information will be posted to <http://www.icenes2007.org/>.

## **XV<sup>th</sup> International Conference on the Use of Computers in Radiation Therapy**

The XV<sup>th</sup> International Conference on the Use of Computers in Radiation Therapy (ICCR 2007), will be held in Toronto, Canada, from June 4–7, 2007. This conference offers the opportunity to explore advancements in radiation oncology through investigations in modeling of biological systems, interactive radiation therapy treatment planning, deformation and shape change, schemes for adaptation/feedback, multi-modality image registration and image segmentation, and systems for fully four-dimensional radiotherapy. The early registration deadline is March 1. Registration and program details can be found at <http://www.iccr2007.org/>. If you require additional information, please contact the Secretariat at [iccr@rmp.uhn.on.ca](mailto:iccr@rmp.uhn.on.ca).

## Practical MCNP for the Health Physicist, Medical Physicist, and Rad Engineer

DATES: June 18–22, 2007

FEE: \$1,500 per person

PLACE: The MESA Complex, Room 130, University of New Mexico-Los Alamos Campus

Monte Carlo type calculations are ideally suited to solving a variety of problems in radiation protection and dosimetry. The Los Alamos MCNP™ code is a general and powerful Monte Carlo transport code for photons, neutrons, and electrons, and can be safely described as the “industry standard.” This course is aimed at the HP, medical physicist, and rad engineer with no prior experience with Monte Carlo techniques. The focus is almost entirely on the application of MCNP™ to solve a variety of practical problems in radiation shielding and dosimetry. The intent is to “jump start” the student toward using MCNP™ productively. With a little practice and study of the examples, many will find they are able to solve problems that have, in the past, been out of reach.

Course content: Extensive interactive practice sessions are conducted on a personal computer. Topics will include an overview of the MCNP™ code and the Monte Carlo method, input file preparation, geometry, source definition, standard MCNP tallies, interpretation of the output file, exposure and dose rate calculations, radiation shielding, photon skyshine, detector simulation and dosimetry. Students will be provided with a comprehensive class manual and a CD containing all of the practice problems. This course has been granted 32 Continuing Education Credits by the AAHP (2005-00-003), and 4.5 CM points by the American Board of Industrial Hygiene. The course is offered by the Health Physics Measurements Group at the Los Alamos National Laboratory and is co-sponsored by RSICC.

Registration is available online at: <http://drambuie.lanl.gov/~esh4/mcnp.htm>. Make checks payable to the University of California (checks must be in U.S. dollars on a U.S. bank) and mail together with name, address, and phone number to David Seagraves, Mail Stop J573, Los Alamos National Laboratory, Group RP-2, MCNP Class, Los Alamos, NM 87545. Inquiries regarding registration and class space availability should be made to David Seagraves, 505-667-4959, fax: 505-665-7686, e-mail: [dseagraves@lanl.gov](mailto:dseagraves@lanl.gov). Technical questions may also be directed to Dick Olsher, 505-667-3364; e-mail: [dick@lanl.gov](mailto:dick@lanl.gov).

Please note that this course is separate from and independent of the courses being offered by the MCNP and MCNPX Teams at LANL.

*[Dick Olsher](#)*

## ANS Annual Meeting

The 2007 ANS Annual Meeting will be held June 24–28, 2007, in Boston. The meeting theme is “It’s all About the People: The Future of Nuclear.” The meeting is organized around the following tracks:

1. Meeting Theme—It’s All About the People: The Future of Nuclear
2. Nuclear Power and New Construction of Nuclear Systems
3. Fuel Cycle, Waste Management, and Decommissioning Technologies
4. Nuclear Facility and Criticality Safety
5. Environmental Science and Technologies
6. Medical and Nonpower Applications of Radiation
7. Nuclear Science and Engineering
8. Advanced Energy Research and Emerging Technologies
9. Education, Training, and Communication with the Public
10. Nuclear Nonproliferation and Security

## 11. Professional Development

General Co-chairs of the meeting are J. Art Stall of Florida Power & Light and David P. Barry of Shaw Stone and Webster Nuclear Services. Raymond Klann of Argonne National Laboratory is the Technical Program Chair. Information may be found at <http://www.ans.org/meetings/index.cgi?c=n>.

### **Space Nuclear Conference 2007 (SNC '07)**

The second topical meeting organized by the Aerospace Nuclear Science and Technology (ANST) technical group, Space Nuclear Conference 2007 (SNC '07), will take place June 24–27, 2007, in Boston. NASA funding has been established to develop capabilities for unmanned and manned missions to the moon, Mars, and beyond. Strategies implementing nuclear based power and propulsion technology, as well as radiation shielding protection, will be an integral part of these missions.

The purpose of the meeting is to bring together research and management personnel from government, industry, academia, and the national laboratory system and provide a forum for information exchange for those who are involved in space projects. The meeting will include topics ranging from overviews of current programs and plans to detailed issues related to space travel, such as nuclear-based power and propulsion systems designs, materials, testing, safety, space environmental effects and nuclear power system radiation shielding for humans and electronic components, and human factor strategies for the safe and reliable operation of nuclear power and propulsion plants. Full-length, peer-reviewed technical papers will be published on a CD which will be available at the conference. The call for papers and other information relevant to the conference is available at the website, <http://www3.inspi.ufl.edu/space07/>, or contact Lynne Schreiber, Conference Administrator, (phone 352-392-9722, fax 352-392-8656, email [space@ans.org](mailto:space@ans.org)).

### **AccApp'07**

The jointly sponsored ANS/IAEA International Conference on Applications and Utilization of Accelerators (AccApp'07) to take place in Pocatello, Idaho, on July 30-August 2, 2007, will be hosted by Idaho State University and the Idaho Accelerator Center. There will be plenary sessions and a separate embedded Accelerator-Driven Subcritical System Experiments Workshop of five sessions. The website, <http://www.iac.isu.edu/accapp07/>, is prepared to accept abstracts for the meeting; the deadline for submission is February 15. Program topics are listed in the following table and instructions for submitting abstracts can be found at the website. The general chair of the meeting is Dr. Denis Beller (University of Nevada, Las Vegas). Questions or comments should be directed to the Conference Administrator, Ms. Nikki Iwert-Bays of the Idaho National Laboratory ([Nikki.Iwert-Bays@inl.gov](mailto:Nikki.Iwert-Bays@inl.gov)), who will direct your question to the responsible individual.

### AccApp'07 Call for Papers Subject Areas

<b>High-power Accelerator Operations:</b>	<b>Applications:</b>	<b>Other:</b>
<ul style="list-style-type: none"> <li>• Operational Experience</li> <li>• Beam Interface Issues</li> <li>• Instrumentation &amp; Controls</li> <li>• Shielding</li> <li>• Remote Handling</li> <li>• Health Physics &amp; Dosimetry</li> <li>• Waste Management</li> </ul> <p><b>Systems Engineering &amp; Integration:</b></p> <ul style="list-style-type: none"> <li>• Accelerator Driven System (ADS) Simulations</li> <li>• ADS Experiments</li> <li>• Design Optimizations</li> <li>• Reliability Analysis</li> <li>• Cost Estimating &amp; Economics</li> </ul>	<ul style="list-style-type: none"> <li>• Spallation Neutron Sources</li> <li>• Industrial Applications</li> <li>• Accelerator Mass Spectrometry</li> <li>• Medical Imaging and Therapy</li> <li>• Nuclear Waste Transmutation</li> <li>• Energy Production</li> <li>• Environmental Applications</li> <li>• Food Safety</li> <li>• Free Electron Lasers</li> <li>• Portable Accelerators</li> <li>• Radioisotope Production</li> <li>• Inspection Technology for Explosives and Fissile Materials</li> <li>• Radiation Damage and Biological Effects</li> <li>• Imaging and Advances in Detectors</li> </ul>	<ul style="list-style-type: none"> <li>• Neutronics Calculations</li> <li>• Codes and Models for Beam Transport and Experiment Validation</li> <li>• Nuclear Data</li> <li>• Photonuclear Cross Sections</li> <li>• Safety and Source Term</li> <li>• Subcritical Assembly Design</li> <li>• Transmutation fuels</li> <li>• Separations Technologies</li> <li>• Target Engineering</li> <li>• Materials for Accelerator Applications</li> <li>• Long-lived Fission Product Transmutation</li> <li>• Accelerator-driven University Neutron Sources</li> <li>• Positron Annihilation Spectroscopy</li> </ul>

### Global '07

The main focus of Global '07 will be “Advanced Nuclear Fuel Cycles and Systems.” The conference, to be held September 9–13, 2007, in Boise, Idaho, is jointly sponsored by the Idaho National Laboratory, American Nuclear Society, Idaho Section of American Nuclear Society, European Nuclear Society and Atomic Energy Society of Japan. Conference topics include:

- Advanced Integrated Fuel Cycle Concepts
- Spent Nuclear Fuel Reprocessing
- Advanced Reprocessing Technology
- Advanced Fuels and Materials
- Advanced Waste Management Technology
- Novel Concepts for Waste Disposal and Repository Development
- Advanced Reactors
- Partitioning and Transmutation
- Hydrogen Production with Nuclear Energy
- Developments in Nuclear Nonproliferation Technology, Policy, and Implementation
- Sustainability and Expanded Global Utilization of Nuclear Energy
- International Cooperation on Nuclear Energy

Conference and registration information is posted to <http://nuclear.inel.gov/global07/index.shtml>.

## Regional Congress for Central and Eastern Europe



The International Radiation Protection Association (IRPA) Regional Congress for Central and Eastern Europe will be held in Brasov, Romania, September 24–28, 2007. Organized by the Romanian Society for Radiological Protection (RSRP), this Regional Congress will present an opportunity to debate those subjects which will determine the future of this specialty, ranging from the science of biological radiation effects to the regulation and practice of radiation protection, which includes the control of natural, occupational and medical exposures, the development of the radiological protection system, protection against non-ionizing radiation and the participation of the public. The Congress technical program will be led by renowned experts as invited speakers, with refresher courses and poster sessions, some of which will be selected for oral presentations. There will be an IRPA Associated Societies Forum and a Technical Exhibition, and the Third Workshop of the Regional East European and Central Asian Countries ALARA Network, which is supported by the IAEA, will take place during the same period. Topics include:

- Radiation biology
- Health effects of ionizing radiation
- Radiological protection infrastructure, regulation and policy
- From legal requirements to practical regional aspects
- Dosimetry and instrumentation
- Education and training
- Radiation protection at workplaces
- Radiation protection of patients
- Radiation protection, environment and public
- Waste management and treatment
- Decommissioning and site remediation
- Incidents, accidents and post accident
- Non-ionizing radiations
- Radiation protection and safety in nuclear fuel cycle

Complete and updated information can be found at <http://www.irpa2007romania.com/>.

## CONRAD-WP4

The European Radiation Dosimetry Group (EURADOS) is sponsoring the CONRAD WP4 workshop on “Uncertainty Assessment in Computational Dosimetry: A Comparison of Approaches.” The workshop will be held in Bologna, Italy, October 1–3, 2007. The aims of the workshop are to discuss the results of a questionnaire on the expression of uncertainties in dosimetry measurements and calculations and to present contributions of general relevance within the scope of the WP4 action. Summaries of the results will be presented together with oral and poster communications by the participants on the following topics:

Recoil-proton telescope detector  
Bonner sphere spectrometer  
Sigma simulated workplace neutron field  
Photon irradiation facility  
Manganese bath  
Iron sphere experiments  
Energy response characteristics of a RadFET radiation detector  
Recoil-proton telescope detector; sensitivity and uncertainty analysis

The workshop chairman is Dr. Gianfranco Gualdrini, ENEA-Instituto di Radioprotezione, 16 Via dei colli, 40136 Bologna (BO) Italy (email [guald@bologna.enea.it](mailto:guald@bologna.enea.it). Phone 39 051-6098350, fax 39 051-6098003). Preliminary registration will begin February 15, 2007. Details and the latest news regarding the workshop can be found at <http://www.eurados.org/>.

## 10<sup>th</sup> International Nuclear Power Safety and Nuclear Education Conference

Obninsk State Technical University for Nuclear Power Engineering will host the 10th International Nuclear Power Safety and Nuclear Education Conference, October 1–7, 2007. Abstracts may be submitted up until May 15 on the following topics:

- Innovative nuclear systems and fuel cycle
- Nuclear education, training and knowledge preservation
- Safety fundamentals of nuclear technologies
- Advanced fuel cycles and nonproliferation
- Radiological safety and environmental protection
- Reliability, endurance and lifetime resource management

Contact the Conference Secretary, Ms. Elena Zinovieva, Obninsk State Techn. Univ. ([zev@iate.obninsk.ru](mailto:zev@iate.obninsk.ru)) for details regarding registration and paper submission.

### NUPPAC' 07

The 6th Conference on Nuclear and Particle Physics (NUPPAC '07) will be held 17–21 Nov. 2007, in Luxor, Egypt. The conference topics are:

- Nuclear Scattering and Reactions
- Nuclear Models and Spectroscopy
- High Energy and Particle Physics
- Neutron and Reactor Physics
- Plasma and Fusion Physics
- Relativistic and Quantum Physics
- Computer Codes (modeling, simulation, analysis)
- Nuclear Analytical Techniques
- Reactor and Accelerator Utilization
- Detectors and Instrumentation
- Radiation Measurements and Dosimetry
- Applied Nuclear Physics

The registration and instructions for submitting abstracts to the conference can be found at the website, [http://www.geocities.com/Athens/Library/7348/NUPPAC\\_07.html](http://www.geocities.com/Athens/Library/7348/NUPPAC_07.html). Correspondence should be addressed to Prof. Dr. M.N.H. Comsan, Chairman of NUPPAC' 07, Egyptian Nuclear Physics Association (ENPA), 3 Ahmed Elzomor St., Elzohour District, Nasr City, Cairo, Postal Code 11787, Egypt (phone 202-4021018, fax 202-2876031, email [mnhcomsan@menanet.net](mailto:mnhcomsan@menanet.net) or [comsanmn@hotmail.com](mailto:comsanmn@hotmail.com)).

## CALENDAR

### February 2007

Conference on Nuclear Training and Education (CONTE III), Feb. 4–7, 2007, Jacksonville, FL.

Registration and Meeting Information: <http://www.ans.org/goto/nad.cgi?id=1157691600-16>.

Waste Management 2007 (WM 2007), Feb. 25–March 1, 2007, Tucson, Arizona. Contact: Gary Benda (phone 803-345-2170 or email [gbenda@wmarizona.org](mailto:gbenda@wmarizona.org)) url [www.wmsym.org](http://www.wmsym.org).

## March 2007

WIN Region II Conference 2007, March 5–6, 2007, Atlanta, GA. Contact: Equilla Minga at [mingabe@inpo.org](mailto:mingabe@inpo.org), url <http://www.winus.org/>.

SCALE Training: TSUNAMI Sensitivity/Uncertainty Tools Course, March 5–8, 2007, Oak Ridge National Laboratory, Oak Ridge, TN. Information and registration can be found at <http://www.ornl.gov/sci/scale/training.htm>.

SCALE Training: ORIGEN-ARP/TRITON Course, March 12–16, 2007, Oak Ridge National Laboratory, Oak Ridge, TN. Information and registration can be found at <http://www.ornl.gov/sci/scale/training.htm>.

MCNPX Intermediate Workshop, Mar 12–16, 2007, San Francisco, California. Contact: Bill Hamilton (phone 806-928-6021, email [bill@mcnpxworkshops.com](mailto:bill@mcnpxworkshops.com)) url <http://mcnpxworkshops.com>.

First International Conference on Physics and Technology of Reactors and Applications (PHYTRA1), March 14–16, 2007, Marrakech City, Morocco. Contact: Pr. A. Jehouani, Faculty of Sciences Semlalia, Dept. of Physics, University Cadi Ayyad- Marrakech, Morocco (email [phytra@ucam.ac.ma](mailto:phytra@ucam.ac.ma) or [jehouani@yahoo.com](mailto:jehouani@yahoo.com), fax 212 44 43 74 10) or Pr. L. Erradi, GMTR President, Mohammed V. Agdal University, Faculty of Sciences, Department of Physics, B. P. 1014 Rabat, Morocco (email [erradi@fsr.ac.ma](mailto:erradi@fsr.ac.ma) or [erradi@hotmail.com](mailto:erradi@hotmail.com), fax 212-0-37-77-89-73) url <http://www.fst.ac.ma/gmtr/phytra1/phytra1.html>.

SCALE Training: KENO-VI Course, March 19–23, 2007, Oak Ridge National Laboratory, Oak Ridge, TN. Information and registration can be found at <http://www.ornl.gov/sci/scale/training.htm>.

International Workshop on Monte Carlo Codes, March 26–27, 2007, NPL, Teddington, UK. Contact: David Shipley (phone +44 (0) 20 8943 6252, fax +44 (0) 20 8943 6070, email [david.shipley@npl.co.uk](mailto:david.shipley@npl.co.uk)), Mark Bailey (phone +44 (0) 20 8943 6797, fax +44 (0) 20 8943 6070, email [mark.bailey@npl.co.uk](mailto:mark.bailey@npl.co.uk)) or Alan DuSautoy (phone +44 (0) 20 8943 6563, fax +44 (0) 20 8943 6070, email [alan.dusautoy@npl.co.uk](mailto:alan.dusautoy@npl.co.uk)) url <http://www.npl.co.uk/ionrad/training/montecarlo/>.

13th UK Monte Carlo User Group Meeting (MCNEG 2007), March 28–29, 2007, NPL, Teddington, UK. Contact: David Shipley (phone +44 (0) 20 8943 6252, fax +44 (0) 20 8943 6070, email [david.shipley@npl.co.uk](mailto:david.shipley@npl.co.uk)), Mark Bailey (phone +44 (0) 20 8943 6797, fax +44 (0) 20 8943 6070, email [mark.bailey@npl.co.uk](mailto:mark.bailey@npl.co.uk)) or Alan DuSautoy (phone +44 (0) 20 8943 6563, fax +44 (0) 20 8943 6070, email [alan.dusautoy@npl.co.uk](mailto:alan.dusautoy@npl.co.uk)) url <http://www.npl.co.uk/ionrad/training/montecarlo/>.

## April 2007

Joint International Topical Meeting on Mathematics & Computations and Supercomputing in Nuclear Applications (M&C+SNA), April 15–19, 2007, in Monterey, California. Contact: general questions ([mcinfo@nuc.berkeley.edu](mailto:mcinfo@nuc.berkeley.edu)); questions regarding the program ([vujic@nuc.berkeley.edu](mailto:vujic@nuc.berkeley.edu)) url <http://mc-sna07.nuc.berkeley.edu/>.

International Conference on Nuclear Data for Science and Technology, April 22–27, 2007, Nice, France. Contact: [nd2007@cea.fr](mailto:nd2007@cea.fr), url: [http://www-dapnia.cea.fr/Sphn/nd2007/site\\_nd2007/](http://www-dapnia.cea.fr/Sphn/nd2007/site_nd2007/).

Women in Nuclear (WIN) Global Conference 2007, April 22-27, 2007, Bali, Indonesia. Contact: Ms. Renaningsih, Center for Application of Isotope and Radiation Technology, (PATIR - BATAN) Jl. Cinere, Pasar Jumat, PO. Box 7002 JKSKL, Jakarta 12070, Indonesia (phone: +6221 7659375 / +6221 7690709, fax +6221 7691607 / +6221 7513270; or email: [setjor@yahoo.com](mailto:setjor@yahoo.com)) url <http://www.win-ina.org/>.

MCNPX Introductory Workshop, April 30–4 May, 2007, Honolulu, Hawaii. Contact: Bill Hamilton (phone 806-928-6021, email [bill@mcnpxworkshops.com](mailto:bill@mcnpxworkshops.com)) url <http://mcnpxworkshops.com>.

## May 2007

ICAPP '07, International Conference on Advances in Nuclear Power Plants, May 14–16, 2007, Nice, France. Contact: Philippe Pradel, general chair, CEA Centre de Saclay, Bat 121, 91191 Gif-sur-Yvette, Cedex, France (phone 33-169-08-6190, fax 33-169-08-6185, email [philippe.pradel@cea.fr](mailto:philippe.pradel@cea.fr)).

Annual Meeting on Nuclear Technology 2007, May 22–24, 2007, Karlsruhe, Germany. Contact: Congress Office, dBCM GmbH, Kamillenweg 16-18, 53757 Sankt Augustin, Germany (phone 49-0-2241-93897-33, fax 49-0-2241-93897-12, email [jk@dbcm.de](mailto:jk@dbcm.de)).

International Conference on Nuclear Criticality Safety (ICNC 2007), May 28–June 1, 2007, St. Petersburg, Russia. Contact: Boris Ryazanov, general chair, State Scientific Center of the Russian Federation, Inst. Of Physics and Power Engineering, Bondarendko Square 1, 249020 Obninsk, Kaluga Region, Russia (email [ryazonov@ippe.ru](mailto:ryazonov@ippe.ru)).

McGill Workshop on Monte Carlo Techniques in Radiotherapy Delivery and Verification May 29–June 1, 2007, McGill University in Montreal. Contact: Jan Seuntjens, Medical Physics Unit, McGill University (phone 1 514 934 1934 Ext 44124, email: [jseuntjens@medphys.mcgill.ca](mailto:jseuntjens@medphys.mcgill.ca)).

## June 2007

ICENES 2007, June 3–8, 2007, Istanbul. Contact: Prof Dr. Sümer Şahin, Gazi University 06500 Ankara, Turkey Contact: Prof Dr. Sümer Şahin, Gazi University 06500 Ankara, Turkey (phone +90 312 212 43 04, fax +90 312 212 43 04, email [sumersahin@icenes2007.org](mailto:sumersahin@icenes2007.org)) url <http://www.icenes2007.org/>.

ICCR 2007, June 4–7, 2007, Toronto. Contact: Secretariat (email [iccr@rmp.uhn.on.ca](mailto:iccr@rmp.uhn.on.ca)) url <http://www.iccr2007.org/>.

MCNPX Introductory Workshop, June 4–8, 2007, Santa Fe, New Mexico. Contact: Bill Hamilton (phone 806-928-6021, email [bill@mcnpxworkshops.com](mailto:bill@mcnpxworkshops.com)) url <http://mcnpxworkshops.com>.

Practical MCNP for the Health Physicist, Medical Physicist, and Rad Engineer, June 18–22, 2007, University of New Mexico-Los Alamos Campus. Contact: David Seagraves (phone 505-667-4959, fax 505-665-7686, e-mail: [dseagraves@lanl.gov](mailto:dseagraves@lanl.gov)) url <http://drambuie.lanl.gov/~esh4/mcnp.htm>

ANS Annual Meeting, “It's All About the People: The Future of Nuclear,” June 24–28, 2007, Boston, Massachusetts. The url is <http://www.ans.org/meetings/>.

Space Nuclear Conference 2007 (SNC '07), an embedded topical of the ANS Annual Meeting, June 24–27, 2007, Boston. Contact: Lynne Schreiber, Conference Administrator, (phone 352-392-9722, fax 352-392-8656, email [space@ans.org](mailto:space@ans.org)) url <http://www.inspi.ufl.edu/space07/>.

## July 2007

U.S. Women in Nuclear Conference 2007, July 15-17, 2007, Anaheim, Calif. URL <http://www.winus.org/>.

ANS/IAEA International Conference on Applications and Utilization of Accelerators (AccApp'07), July 30-Aug. 2, 2007, Pocatello, Idaho. Contact: Conference Administrator, Ms. Nikki Iwert-Bays ([Nikki.Iwert-Bays@inl.gov@inl.gov](mailto:Nikki.Iwert-Bays@inl.gov@inl.gov)) url: <http://www.iac.isu.edu/accapp07/>.

## September 2007

Global '07 “Advanced Nuclear Fuel Cycles and Systems” Sept. 9–13, 2007, Boise, Idaho. Information is posted at <http://nuclear.inel.gov/global07/contacts.shtml>.

MCNPX Advanced Workshop, Sept 17–21, 2007, Santa Fe, New Mexico. Contact: Bill Hamilton (phone 806-928-6021, email [bill@mcnpxworkshops.com](mailto:bill@mcnpxworkshops.com)) url <http://mcnpxworkshops.com>.

International Radiation Protection Association (IRPA) Regional Congress for Central and Eastern Europe, Sept. 24–28, 2007, Brasov, Romania. Contact: Constantin Milu, Institute of Public Health, Str. dr. Leonte No.1-3, RO-050463 Bucharest 35, Romania (phone (40 21) 3141971, fax (40 21) 3183635, email [irpa2007@ispb.ro](mailto:irpa2007@ispb.ro)) url: <http://www.irpa2007romania.com/>.

#### **October 2007**

CONRAD WP4 workshop on “Uncertainty Assessment in Computational Dosimetry: A Comparison of Approaches,” Oct. 1–3, 2007, Bologna, Italy. Contact: Dr. Gianfranco Gualdrini, ENEA-Instituto di Radioprotezione, 16 Via dei colli, 40136 Bologna (BO) Italy (email [guald@bologna.enea.it](mailto:guald@bologna.enea.it), phone 39 051-6098350, fax 39 051-6098003) url: <http://www.eurados.org/>.

10th International Nuclear Power Safety and Nuclear Education Conference, October 1–7, 2007, Obninsk, Russia. Contact: Ms. Elena Zinovieva, Obninsk State Techn. Univ. ([zev@iate.obninsk.ru](mailto:zev@iate.obninsk.ru)).

MCNPX Intermediate Workshop, October 22–26, 2007, Europe. Contact: Bill Hamilton (phone 806-928-6021, email [bill@mcnpxworkshops.com](mailto:bill@mcnpxworkshops.com)) url <http://mcnpxworkshops.com>.

#### **November 2007**

NUPPAC '07, 17–21 Nov. 2007, Luxor, Egypt. Contact: Prof. Dr. M.N.H. Comsan, Chairman of NUPPAC' 07, Egyptian Nuclear Physics Association (ENPA), 3 Ahmed Elzomor St., Elzohour District, Nasr City, Cairo, Postal Code 11787, Egypt (phone 202-4021018, fax 202-2876031, email [mnhcomsan@menanet.net](mailto:mnhcomsan@menanet.net) or [comsanmn@hotmail.com](mailto:comsanmn@hotmail.com)) url: [http://www.geocities.com/Athens/Library/7348/NUPPAC\\_07.html](http://www.geocities.com/Athens/Library/7348/NUPPAC_07.html).