
Radiation Safety Information Computational Center



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There is honor in labor. Work is the medicine of the soul. It is more: it is your very life, without which you would amount to little.—Grenville Kleiser

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MCNP/MCNPX distributed without charge until September 30, 2006

Change to the Computer Code and Data Collection

CCC-638/TART2005

Lawrence Livermore National Laboratory, Livermore, California, contributed a newly frozen version of this coupled neutron-photon Monte Carlo transport code designed to use three dimensional (3-D) combinatorial geometry. Neutron and/or photon sources as well as neutron induced photon production can be tracked. It is a complete system that assists with input preparation, running Monte Carlo calculations, and analyzing output results. TART2005 is also incredibly fast. Using the entire system saves a great deal of time and energy.

TART2005 extends the general utility of the code to more areas of application than available in previous releases by concentrating on improving the physics, particularly with regard to improved treatment of neutron fission, resonance self-shielding, molecular binding, and extending input options used by the code. Several utilities are included for creating input files and displaying TART results and data.

TART2005 uses the latest ENDF/B-VI, Release 8, data. New for TART2005 is the use of continuous energy neutron cross sections, in addition to its traditional multigroup cross sections. For neutron interaction, the data are derived using ENDF-ENDL2005 and include both continuous energy cross sections and 700-group neutron data derived using a combination of ENDF/B-VI, Release 8, and ENDL data. The 700-group structure extends from 10⁻⁵ eV up to 1 GeV. Nuclear data are presently only available up to 20 MeV, so that only 616 of the groups are currently used. For photon interaction, 701 point photon data were derived using the Livermore EPDL97 file. The new 701-point structure extends from 100 eV up to 1 GeV, and is currently used over this entire energy range.

TART2005 completely supersedes all older versions of TART, and it is strongly recommended that one use only the most recent version of TART2005 and its data files. Check the author's homepage for related information: <http://www.llnl.gov/cullen1/>.

TART2005 is designed to run on any computer. It is presently implemented on Cray, various Unix workstations, IBM-PC (Windows and Linux), and Power MAC. For use on IBM-PC and Power MAC, the entire system is distributed in executable form, so that no compiler or loader is required on these systems. Since executables are distributed for these computers, Fortran source code is not included. The ABSOFT Fortran compiler was used to create included executables for Windows, which run under 32-bit systems.

The package is distributed on CD in MAC, Windows and Unix formats. The CD contains the source codes for Unix, executables for MAC and IBM-PC, data files and test cases for use on a variety of computers. Installation and verification instructions for each type of computer are also included with the package. References: UCRL-SM-218009 (Nov. 22, 2005). Fortran and C; CRAY, UNIX workstations (Sun, IBM RS/6000; DEC-Alpha), IBM-PC (Windows or Linux) and Power MAC (C00638/MNYCP/06).

PWANS Offers Aid for Winter Meeting

The Professional Women in the ANS (PWANS) Committee awards supplemental funding (up to \$500) to an ANS female student member to cover travel, hotel, and meal expenses for attending an ANS national meeting (either the Annual Meeting in June or the Winter Meeting in November). Two students will benefit from this initiative for the 2006 Winter Meeting. Applications must be submitted by September 18 for the November meeting. The application and other information about the PWANS Committee can be found at <http://committees.ans.org/pwans/Students.htm>.

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.

Year 2006 MCNP Class Schedule

Aug 22–24	Advanced Variance Reduction	Los Alamos National Laboratory
Aug 29–31	Advanced Criticality	Los Alamos National Laboratory

Year 2006 classes will showcase the latest release of MCNP, Version 5. All classes provide interactive computer learning with time available to discuss individual questions and problems with MCNP experts. While MCNP supports a number of platforms, LANL class computers are usually PCs. The class fee includes a notebook with all class viewgraphs and handouts, dinner the first evening, and snacks and refreshments provided during class breaks. Registration and the most current information can be found at <http://mcnp-green.lanl.gov/classinformation.html>.

Advanced classes are for people with MCNP experience who want to extend their knowledge and gain depth of understanding. Most areas of MCNP operation will be discussed in detail, with emphasis on Advanced Geometry, Advanced Variance Reduction Techniques, and other advanced features of the program. Time will be available to discuss approaches to specific problems of interest to students.

MCNPX Workshops

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

Organizer: HQC Professional Services

Contact: bill@mcnpxworkshops.com

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

2006 Schedule		
Sept 18–22	Santa Fe, NM	Intermed./Adv
Oct 30–Nov 3	Tokyo, Japan	Intermediate
2007 Schedule		
Jan 29–Feb 2	Paris, France	Introductory
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 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://mcnpworkshops.com>.

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

Introduction to MCNP Using the Visual Editor Training

This class will be held September 11-15, 2006, at the Hampton Inn 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 class combines 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 class 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 last date to register without a late fee is August 28, 2006. The course description and registration information can be found at <http://www.mcnpvised.com/visedtraining/2006sep/2006sep.html>.

Fall 2006 SCALE Training Courses at ORNL

Date	Title	Registration Fee	Description
October 23–27	ORIGEN-ARP/TRITON Course	\$1800	ORIGEN-ARP: Isotopic depletion/decay and source terms using latest version of ORIGEN TRITON: 2-D reactor physics analysis using NEWT
October 30–November 2	TSUNAMI Sensitivity/Uncertainty Tools Course (Experienced KENO users only)	\$1800	1-D and 3-D sensitivity/uncertainty analysis using XSDRNPM and KENO V.a
November 6–10	KENO V.a Course	\$1800	CSAS/KENO V.a (including KENO3D and GeeWiz)

A late fee of \$300 will be applied after September 22, 2006. 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.

PHYSOR 2006



The Canadian Nuclear Society has announced that the ANS Reactor Physics Topical PHYSOR-2006, “Advances in Nuclear Analysis and Simulation,” will be held in Vancouver, BC, Canada, Sept. 10–14, 2006. The meeting is sponsored by the Reactor Physics Division of the ANS and co-sponsored by several international societies. The conference will be held at the Hyatt Regency in downtown Vancouver.

You are invited to visit the meeting website at <http://www.cns-snc.ca/physor2006/> to obtain updated information. The conference chair is Benjamin Rouben, FCNS Manager, Reactor Core Physics Branch, AECL Sheridan Park (phone 905-823-9060 x 4550, fax 905-822-0567, email roubenb@aecl.ca). The technical program co-chair is Ken Kozier, Atomic Energy of Canada Limited (AECL), Chalk River Laboratories, Chalk River, Ontario, Canada K0J 1J0 (phone +1-613-584-8811 + ext. 5059, email physor2006@aecl.ca).

ISRP-10

The 10th International Symposium on Radiation Physics (ISRP-10) will be held at the University of Coimbra, Portugal, 17–22 September 2006. This event is organized jointly by the International Radiation Physics Society (IRPS) and the Physics Department of Coimbra University. The meeting is devoted to current trends in radiation physics research and will include a series of plenary talks given by prominent international researchers. The symposium in Coimbra is the latest in a series of triennial symposia which began in Calcutta in 1974 and continued in Penang (1982), Ferrara (1985), São Paulo (1988), Dubrovnik (1991), Rabat (1994), Jaipur (1997), Prague (2000) and Cape Town (2003). A 2½ day [Workshop on the Use of Monte Carlo Techniques for Design and Analysis of Radiation Detectors](#) will be held immediately prior to ISRP-10 (15–17 September 2006).

More information on the Symposium, the associate workshop, as well as on the venue, can be found at <http://pollux.fis.uc.pt/isrp10>.

2nd International Symposium on Radionuclide Therapy and Radiopharmaceutical Dosimetry



The 2nd International Symposium on Radionuclide Therapy and Radiopharmaceutical Dosimetry will take place in conjunction with the annual congress of the European Association of Nuclear Medicine (EANM) in Athens, Greece, September 30–October 4, 2006. As a separate track within the EANM congress this symposium will bring together disciplines concerned with radiopharmaceutical dosimetry and radionuclide therapy stimulating interdisciplinary scientific discussion. The EANM Dosimetry and Therapy Committees and colleagues from the MIRD committee of the SNM will join to coordinate the scientific committee and program for the meeting. Conference topics include:

- Clinical: mIBG and peptides
- Clinical: Radioimmunotherapy
- Clinical: Thyroid, bone pain palliation & miscellaneous

- Dosimetry: Data Collection Methods / Dosimetric Models / Pharmacokinetics
- Dosimetry: Quantitative Analysis and Treatment Planning / Dosimetry for Clinical Trials
- Biological and Long-Term Effects / Animal and in-vitro Studies
- Miscellaneous

The link to current information about the symposium can be found at http://eanm06.eanm.org/programme/prog_isrtrd.php?navigationId=19&sessNavigationId=63.

[ICNCT-12](#)

The Twelfth International Congress on Neutron Capture Therapy (ICNCT-12) will be held October 9–13, 2006, in Takamatsu, Kagawa, Japan. The meeting is sponsored by the International Society for Neutron Capture Therapy (ISNCT) with the society president, Yoshinobu Nakagawa of the Kagawa National Children's Hospital, acting as chairman of the organizing committee. The meeting will focus on the many significant developments that have been made in neutron capture therapy in biology, medicine, chemistry, medical physics and engineering, and clinical trials. One of the highlights of the presentations will be the report of results from our Japanese NCT teams of clinical trials on brain, skin and head and neck tumors. Results of recent treatments on liver and lung cancers will also be reported. These treatments have been carried out using a combination of BSH and BPA which have yielded successful results. The most up-to-date information as well as registration and submittal information can be found at the conference website: <http://icnct-12.umin.jp/index.html>.



[First European Workshop on Monte Carlo Treatment Planning](#)



The European Workgroup on MCTP (EWG-MCTP) is sponsoring the First European Workshop on Monte Carlo Treatment Planning, October 22–25, 2006, in Gent, Belgium. The conference theme is “Introduction of MCTP into the Clinic.” The workshop will offer the opportunity for scientists to exchange information, to develop new ideas and initiate international collaborative programs on the exciting and fast developing research domain of Monte Carlo treatment planning. This workshop will also provide an overview of the current state of the art to clinical physicists who are thinking of introducing MCTP into their clinic.

The venue of the meeting is “Het Pand,” a former Dominican monastery located in the historical centre of the city. The oldest parts of the building date from the 13th century and houses some valuable collections of the University such as the Museum for the History of Medicine and the ethnographical and archaeological collections.

Scientific sessions will consist of general talks and poster presentations. The research topics covered will be the following:

- | | |
|------------------------------|----------------------|
| • Industry – MCTPS | • Proton MCTP |
| • 4D MCTP | • Brachytherapy MCTP |
| • General multipurpose codes | • Clinical studies |
| • Dosimetry | • MC in optimisation |
| • Photon MCTP | • Portal dosimetry |
| • Electron MCTP | |

Inquiries may be sent to N. Reynaert, Lab for Standard Dosimetry Gent, Gent University –FANC, Proeftuinstraat 86 – B-9000 Gent, BELGIUM (phone + 32 9 264 66 48, fax + 32 9 264 66 96, email nick.reynaert@ugent.be). Details and updated information can be found at <http://www.ewg-mctp.ugent.be/>.

33rd Waste Management Conference



The 33rd Waste Management Conference (WM'07) will be held February 25–March 1, 2007, in Tucson, Arizona. The conference is organized by WM Symposia, Inc., an Arizona non-profit corporation and hosted by the University of Arizona.

Sponsoring organizations include the American Nuclear Society, the American Society of Mechanical Engineers, New Mexico State University Waste-Management Education and Research Consortium (WERC) and OECD/NEA. The conference is also organized in cooperation with the US Department of Energy (DOE), Nuclear Regulatory Commission (NRC), Environmental Protection Agency (EPA) and International Atomic Energy Agency (IAEA). Information relevant to the conference is available on the website (<http://www.wmsym.org/>).

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.

Conference topics include:

- Deterministic and Monte Carlo Transport Theory Methods
- Reactor Core and Lattice Physics Methods
- Physics and Computational Methods for Advanced Reactors
- Reactor Theory and Reactor Concepts
- Neutron Kinetics and Dynamics
- Criticality and Safety Analysis
- Fuel Loading Optimization and Fuel Design
- Nuclear Data Analysis and Methods
- Computer Codes and Benchmarks
- Computational Methods for Research Reactors
- High Temperature Reactor Physics and Methods
- Reactor Thermal Hydraulics
- Radioactive Waste Management
- Research Reactor Utilization
- Reactor Dosimetry and Reactor Shielding

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 or 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 or fax 212-0-37-77-89-73).

National Physical Laboratory (UK) Hosts Two MC Events

The National Physical Laboratory (NPL) will host two Monte Carlo events in March 2007. The International Workshop on Monte Carlo Codes, a two-day workshop devoted to some of the most popular Monte Carlo radiation transport codes, will be held at NPL on 26–27 March 2007. It will include sessions on the following codes: EGSnrc, Geant4, MCNPX, and PENELOPE. Presentations will cover the important features, capabilities and recent developments of each code, as well as one or more demonstrations of real applications. There will also be several introductory lectures on general Monte Carlo techniques for novice users that are applicable to all radiation transport codes. At the end of the first day, there will be a session during which delegates may demonstrate their own applications and problems.

The workshop will be followed by the 13th UK Monte Carlo User Group Meeting (MCNEG 2007) March 28–29. The MCNEG 2007 meeting will provide delegates with the opportunity to present and discuss their applications and recent developments of Monte Carlo in radiotherapy, radiation protection, radioactivity, the nuclear and other industries. The meeting format will encourage extensive discussion and feedback on recent topics in these areas of Monte Carlo. The meeting will include several talks from the invited speakers on recent Monte Carlo topics, presentations by delegates on submitted topics, and tours of the new state-of-the-art radiation facilities at NPL.

Questions regarding the Monte Carlo workshop and MCNEG 2007 may be directed to one of the local organisers: David Shipley (phone +44 (0) 20 8943 6252, fax +44 (0) 20 8943 6070, email 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) or Alan DuSautoy (phone +44 (0) 20 8943 6563, fax +44 (0) 20 8943 6070, email alan.dusautoy@npl.co.uk). Relevant information for both events can be found at <http://www.npl.co.uk/ionrad/training/montecarlo/>. Mail can be sent to National Physical Laboratory, Hampton Road, Teddington, Middlesex, United Kingdom TW11 0LW.

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. Abstracts should be submitted by **September 2006** on 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/ and questions or comments may be addressed to nd2007@cea.fr.

International Conference on Emerging Nuclear Energy Systems (ICENES 2007)

The committee for the 13th International Conference on Emerging Nuclear Energy Systems (ICENES 2007) has issued a call for papers for the conference to 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. Authors should submit abstracts of 300–500 words to abstract@icenes2007.org for review by the Program Committee. Abstracts should include sufficient information to explain and support the new and significant results to be presented in the proposed paper. The topical area appropriate to the abstract and the name and address of the author to whom correspondence should be addressed must be clearly stated at the top of the first page. Abstracts may be submitted in “pdf” or “doc” format via email by **September 22, 2006**. Authors will be notified by November 17, 2006. The deadline for full papers is **March 2, 2007**. 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). Updated information will be posted to <http://www.icenes2007.org/>.

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 CDROM, 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).

AccApp'07

The jointly sponsored ANS/IAEA International Conference on Applications and Utilization of Accelerators (AccApp'07), will take place in Pocatello, Idaho, on July 30-August 2, 2007, and 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 organizing committee is asking for volunteers to be topic organizers and co-organizers. Contact Phil Cole, cole@athena.physics.isu.edu, and copy Phil Ferguson fergusonpd@ornl.gov and Alex Stanculescu A.Stanculescu@iaea.org on your message if you wish to volunteer.

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. It will be 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/>.

CALENDAR

September 2006

International Congress on Medical Physics, A Satellite Meeting of the World Congress 2006 -Seoul, South Korea, Sept. 3–6, 2006, Hangzhou, China. Contact: Raymond K. Wu, Ph.D., Medical Physics Department, OhioHealth Hospitals, 3535 Olentangy River Road, Columbus, OH 43016 USA (phone 1-614-566-4427, email RayKWu@GMail.com) url <http://arooj.org/hangzhou/>.

Hadronic Shower Simulation Workshop, Sept. 6–8 2006, Batavia, Illinois. Contact: Cynthia Sazama (sazama@fnal.gov) url <http://conferences.fnal.gov/hss06/>.

PHYSOR-2006, “Advances in Nuclear Analysis and Simulation,” Sept. 10–14, 2006, Vancouver, BC, Canada. Contact: Ken Kozier, Technical Program Co-Chair, Atomic Energy of Canada Limited (AECL), Chalk River Laboratories, Chalk River, Ontario, Canada K0J 1J0 (phone 613-584-8811 ext. 5059, email physor2006@aecl.ca) url <http://www.cns-snc.ca/physor2006/>.

Imaging as a Biomarker: Standards for Change Measurements in Therapy, Sept. 14–15, 2006, Gaithersburg, Maryland. Contact: Linda Beth Schilling (linda.schilling@nist.gov, 301-975-2887), Ram Sriram (ram.sriram@nist.gov, 301-975-3507) or Laurence Clarke (lclarke@mail.nih.gov, 301-451-4775). Updated workshop information and registration links are available on the NIST U.S. Measurement System website <http://usms.nist.gov>.

Workshop on the Use of Monte Carlo Techniques for Design and Analysis of Radiation Detectors, Sept. 15–17, 2006, Coimbra, Portugal. Contact: (email workshop@lipc.fis.uc.pt) url <http://pollux.fis.uc.pt/isrp10/workshop/index.htm>.

ISRP-10, Sept. 17–22, 2006, Coimbra, Portugal. Contact: ISRP-10, Departamento de Física, Universidade de Coimbra, 3004-516 Coimbra, Portugal (fax +351 239 829158, email isrp10@pollux.fis.uc.pt) url <http://pollux.fis.uc.pt/isrp10/>.

First Canadian Geant4 Tutorial, Sept. 25–28, 2006, at McGill University in Montreal, Canada. Contact: Margery Knewstubb (email geant4@jmedphys.mcgill.ca, phone (514)-934-1934 x 44158) url <http://www.medphys.mcgill.ca/~geant4/Welcome.html>.

2nd International Symposium on Radionuclide Therapy and Radiopharmaceutical Dosimetry, Sept. 30–Oct. 4, 2006 Athens, Greece. The url is http://eanm06.eanm.org/programme/prog_isrtrd.php?navigationId=19&sessNavigationId=63.

October 2006

13th Workshop on Monte Carlo Simulation of Radiotherapy Treatment Sources using the BEAMnrc Code System, Oct. 2–5, 2006, Ottawa, Canada. Contact: Dave Rogers, Physics Department, Carleton University, 1125 Colonel By Drive, Ottawa, Ontario, Canada, K1S 5B6 (phone 613-520-2600x4374, fax 613-520-4061, email drogers@physics.carleton.ca) url <http://www.physics.carleton.ca/~drogers/BEAM/course/>.

12th International Congress on Neutron Capture Therapy (ICNCT-12), Oct. 9–13, 2006, Takamatsu, Kagawa, Japan. Contact: ICNCT-12 Secretariat, Association for Nuclear Technology in Medicine, 2 Masumoto Bldg., 1-8-16 Toranomon, Minato-ku, Tokyo 105-0001, Japan (phone 81-3-3504-3961, fax 81-3-3504-1390, email ICNCT2006@antm.or.jp) url <http://icnet-12.umin.jp/>.

2nd Asian and Oceanic Congress for Radiological Protection (AOCRP-2), Oct. 9–13, 2006, Beijing, P. R. China. Contact: Mr. Chai Luquan (phone 86-351-2202030, fax 86-351-7020407, email chailuquan@cirp.org.cn) url <http://www.aocrp-2.org/index.asp>.

15th Pacific Basin Nuclear Conference (15PBNC), Oct. 15–20, 2006, Sydney, Australia. Contact: PBNC 2006 Conference Managers, GPO Box 128, Sydney NSW 2001, Australia (phone + 612 9265 0700, fax + 612 9267 5443, email pbnc2006@tourhosts.com.au) url <http://www.pbnc2006.com/>).

First European Workshop on Monte Carlo Treatment Planning, Oct. 22–25, 2006, Gent, Belgium. Contact: N. Reynaert, Lab for Standard Dosimetry Gent, Gent University –FANC, Proeftuinstraat 86 – B-9000 Gent, Belgium (phone + 32 9 264 66 48, fax + 32 9 264 66 96, email nick.reynaert@ugent.be) url <http://www.ewg-mctp.ugent.be/>.

November 2006

ANS Winter Meeting and Nuclear Technology Expo, “Securing the Future in Times of Change,” Nov. 12–16, 2006, Albuquerque, NM. Contact: Robert W. Kuckuck (phone 505-667-5101, email bobkuck@lanl.gov) url <http://www.ans.org/meetings/index.cgi?c=n>.

17th Topical Meeting on the Technology of Fusion Energy, an embedded topical at the ANS Winter Meeting, Nov. 12–16, 2006, Albuquerque, NM. Contact: Craig Olson, General Chair, Sandia National Laboratory, Dept. 1600 MS-1190, P.O. Box 5800, Albuquerque, NM 87185-1188 (phone 505-845-7303, fax 505-845-7890) url <http://tofe17.sandia.gov/>.

International Conference on Quality Assurance and New Techniques in Radiation Medicine, Nov. 13–15, 2006, Vienna, Austria. Contact: Mr. K. R. Shortt, Division of Human Health, International Atomic Energy Agency, Wagramer Strasse 5, P.O. Box 100, 1400 Vienna, Austria (phone +43 1 2600 21664, fax +43 1 2600 7 21662, email r.perricos@iaea.org) url <http://www-pub.iaea.org/MTCD/meetings/Announcements.asp?ConfID=146>.

International conference on Radiation Biology/8th Annual Meeting of the Indian Society of Radiation Biology, Nov. 20–22, 2006, Varanasi, India. Contact: Y. B. Tripathi, Dept. of Medicinal Chemistry, Inst. Of Medical Sciences, Banaras Hindu University, Varanasi-221005, India (isrbbh@yaho.com) url www.bhu.ac.in or www.isrb-india.com.

92nd Scientific Assembly and Annual Meeting, Nov. 26–Dec. 1, 2006, Chicago, Illinois, sponsored by the Radiological Society of North America. Registration and program information can be found at <http://rsna2006.rsna.org>.

December 2006

International Conference on Lessons Learned from Decommissioning of Nuclear Facilities and the Safe Termination of Nuclear Activities, Dec. 11–15, 2006, Athens, Greece, sponsored by the International Atomic Energy Agency. Contact: Dennis Reisenweaver, Div. of Radiation, Transport and Waste Safety, IAEA, P.O. Box 100, Wagramer Strasse, A-1400 Vienna, Austria. (phone 43-1-2600-22852, fax 43-1-26007, email d.reisenweaver@iaea.org).

February 2007

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

March 2007

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 or 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 or erradi@hotmail.com, fax 212-0-37-77-89-73) url <http://www.fst.ac.ma/gmtr/phytra1/phytra1.html>.

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), Mark Bailey (phone +44 (0) 20 8943 6797, fax +44 (0) 20 8943 6070, email 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) 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), Mark Bailey (phone +44 (0) 20 8943 6797, fax +44 (0) 20 8943 6070, email 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) url <http://www.npl.co.uk/ionrad/training/montecarlo/>.

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) url <http://www.icenes2007.org/>.

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, 2006, Boston. Contact: Lynne Schreiber, Conference Administrator, (phone 352-392-9722, fax 352-392-8656, email space@ans.org) url www.ans.org/goto/space07.