Radiation Safety Information Computational Center

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A man who is at the top is a man who has the habit of getting to the bottom.—Joseph E. Rogers

Changes to the Computer Code and Data Collection

PSR-146/ALICE-91

Oak Ridge National Laboratory contributed a new Windows executable for this statistical model code system with fission competition. ALICE-91 and later revisions of the ALICE/LIVERMORE 82 computer code do precompound, compound/statistical fission calculations in the general framework of the Weisskopf-Ewing evaporation model, the Bohr-Wheeler transition state model for fission, and the hybrid/geometry dependent models for precompound decay. The ALICE codes were developed at Lawrence Livermore National Laboratory, Livermore, California, in the 1980's and early 1990's. In this update, a new executable created under WindowsXP SP2 with the Lahey Fortran 95 v7.1 compiler was added to the package. No source code changes were required. This update was necessary because Lahey F77L3-EM/32 Version 5.2 executables in the previous release are incompatible with WindowsXP and generate stack fault errors when invoked. Also in this update, the Windows PC package and the existing CRAY and SUN versions were merged to create the new package. The source code, documentation, a Windows PC executable, and sample input and output are transmitted on a CD in a WinZIP file. References: UCID 19614 (November 1982) and UCRL-JC-109052 November 21, 1991). Fortran 77; IBM PC, Cray, and SUN (P00146MNYCP02).

PSR-158/SAMMY-7.0.1

Oak Ridge National Laboratory, Oak Ridge, Tennessee, contributed a corrected version of this multilevel multichannel R-matrix code system. Only a few files were changed to correct bugs. Details of the corrections are posted in the *errata* at http://www.ornl.gov/sci/nuclear_science_technology/nuclear_data/sammy/ErrataDetail.html. Numerous modifications, additions, and improvements were made in SAMMY-7.0.0 which was released in November 2007. The purpose of SAMMY is to analyze time-of-flight cross section data in the resolved and unresolved resonance regions where the incident

particle is either a neutron or a charged particle (p, α, d, ...). Energy-differential cross sections and angular-distribution data are treated, as are certain forms of energy-integrated data.

SAMMY has been tested on Unix (Compaq Alpha and IBM RS/6000), Linux and Windows operating systems. All Unix and Linux users require a Fortran compiler to create executables. Windows users may run the PC executables, which were created on a Dell Dimension 4100 operating under Windows 2000 SP4 with Compaq Visual Fortran Professional Edition 6.6.B; alternatively, users may create executables using information provided in the same subdirectory.

The package is distributed on CD which contains the referenced document in PDF format and a compressed Unix tar file with the source code, Windows executable files, tutorials, scripts, and test cases. WinZIP 8.0 is required to expand this file under Windows. Reference: ORNL/TM-9179/R7 (September 2006 corrected February 2007) and *Erratum* (April 4, 2007). Fortran; DEC Alpha, IBM RS/6000; PC Linux and Windows (P00158MNYCP11).

PSR-226/PRECO2006

Triangle Universities Nuclear Laboratory, Duke University, Durham, North Carolina, contributed a newly frozen version of this two-component exciton model code system for the calculation of double differential cross sections of light particle nuclear reactions. PRECO calculates the emission of light particles (A = 1 to 4) from nuclear reactions induced by light particles on a wide variety of target nuclei. Their distribution in both energy and angle is calculated. Since it currently considers only the emission of up to two particles in any given reaction, it is most useful for incident energies of 14 to 30 MeV when used as a stand-alone code. However, the preequilibrium calculations are valid up to at least around 100 MeV, and these can be used as input for more complete evaporation calculations, such as are performed in a Hauser-Feshbach model code. Finally, the production cross sections for specific product nuclides can be obtained.

The Microsoft Fortran compiler version 5.0 was used to build the executable included in the package. This executable was tested at RSICC in a DOS window of WindowsXP and Windows Vista. The code was also tested at RSICC on:

Pentium PC running Windows XP and with Lahey-Fujitsu lf95 v7.1

Pentium PC running Windows Vista with Compaq Digital Visual Fortran 6.6C

PC running Red Hat Enterprise Linux 4 and Ubuntu 7.04 with 32-bit g77 3.4.6

IBM RS/6000 running AIX 5.1 with IBM XL Fortran for AIX Version 8.01.

The package, which contains documentation, source files and sample problem, is transmitted on a CD in Unix tar and WinZIP formats. The Windows version also contains an executable. Reference: Users Manual (February 2007). Fortran 77; PC and IBM RS/6000 (P00226MNYCP02).

PSR-539/CALENDF-2005

CEA, DEN/DER/SPRC, 13108 Saint Paul lez Durance Cedex, France, and CEA, DEN/DM2S/ SERMA, 91191 Gif-sur-Yvette Cedex, France, through the Nuclear Energy Agency Data Bank, Issy-les-Moulineaux, France, contributed the CALENDF Nuclear Data Processing System. CALENDF-2005 is used to convert the evaluation defining the cross-section in ENDF format (i.e. the pointwise cross-sections and/or the resonance parameters, both resolved and unresolved) into forms useful for applications. Those forms used to describe neutron cross-section fluctuations correspond to “cross-section probability tables,” based on Gauss quadratures and effective cross-sections. CALENDF also provides capabilities for group collapsing, for merging several nuclei and for temperature interpolation; these calculations are based on a data probability table description.

CALENDF consists of a set of modules, each performing a well-defined processing task. Each of these modules is essentially a separate computer program linked together by input and output files and

some common constants. Devised to process multigroup cross-sections, it relies on GAUSS quadratures, mathematical principle, and strength. The following processes can be handled by the code:

- moment probability tables and effective cross-sections calculation,
- probability table condensation,
- probability table mix for several isotopes,
- probability table interpolation,
- effective cross section calculation based on probability table calculations,
- probability table calculations from effective cross-sections,
- effective cross-section comparison,
- complete energy pointwise cross-section processing, and
- thickness dependent averaged transmission sample calculation.

CALENDF-2005 runs on personal computers and IBM RS/6000, Sun and Mac OSX. The package is transmitted on a CD which includes source codes, executables, makefiles, and test cases. The Unix/Linux version is distributed in a tar file and the Windows version in a WinZIP file. References: CEA-R-6131, CEA-R-6100, CEA-R-6125. Fortran95; PC; IBM RS/6000; Sun; and MAC (P00539MNYCP00).

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.

MCNPX Workshops

2007 Schedule		
September 3–7	Paris, France	Intermediate
September 17–21	Santa Fe, NM	Advanced

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 the MCNPX Workshops web site http://mcnpx.lanl.gov/. The cost for U.S. workshops is $2,000 (U.S.) with a $300 early registration discount (30 days before the scheduled workshop). Workshops with fewer than 12 registrants on the early registration date are subject to cancellation or rescheduling. To register send an email to nbutner@lanl.gov indicating the workshop of interest to you.

Short Courses on Monte Carlo Analysis and Nuclear Criticality Safety

The Department of Nuclear Engineering at the University of Tennessee-Knoxville is offering short courses for radiation transport and criticality safety specialists during Tennessee Industries Week (TIW-42), August 13–18, 2007.

Nuclear Criticality Safety—Engineers, scientists, and technical managers who wish to increase their knowledge and understanding of nuclear criticality safety will be interested in the criticality safety course. The topics covered in the course are based primarily on the experience of the five instructors which totals over 120 years of nuclear criticality safety related experience. Such a wealth of experience needs to be shared with the criticality safety community including both new professionals in the field as well as experienced professionals.

Monte Carlo Analysis—Monte Carlo is often the method of choice to solve complex problems in nuclear criticality safety and radiation shielding. To use Monte Carlo effectively, the analyst must understand the theoretical and computational fundamentals of the method, as well as the computational options available in particular computer tools. Also, it is sometimes advantageous to create new special-purpose Monte Carlo programs to solve particular problems rather than use an existing program. The Monte Carlo course runs for 5 days.

The deadline for registration is July 30, 2007. Classes are limited in size and will be filled on a first-come, first-serve basis. For additional information on these and other courses offered during TIW-42, contact Kristin England at the University of Tennessee, phone (865) 974-5048, email kengland@utk.edu, url http://www.engr.utk.edu/nuclear/TIW.html.

Fall 2007 SCALE Training Courses at ORNL

Date	Title	Description
October 15–19	**ORIGEN-ARP/TRITON Course**	ORIGEN-ARP: Isotopic depletion/decay and source terms using latest version of ORIGEN TRITON: 2-D reactor physics analysis using NEWT
October 22–26	**KENO V.a**	CSAS/KENO V.a (including KENO3D and GeeWiz)
October 29–November 2	**TSUNAMI* Sensitivity/ Uncertainty Tools Course**	1-D and 3-D sensitivity/uncertainty analysis using XSDRNPM and KENO V.a
*Experienced KENO users only		

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.

Introductory and Advanced MCNP Visual Editor Training

Date (Click Date for Info)	Class	Course Content	Location
Sept. 17–21, 2007	Introduction to MCNP using the MCNP/MCNPX Visual Editor	Detailed Description	Richland, WA
Nov. 5–9, 2007	Introduction to MCNP using the MCNP/MCNPX Visual Editor	Detailed Description	Richland, WA

Classes are 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. 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.

MCNP Class Schedule

October 1–4, 2007	Variance Reduction with MCNP	Los Alamos National Laboratory
October 9–12, 2007	Criticality Calculations with MCNP	Los Alamos National Laboratory
October 15–19, 2007	Introduction to MCNP	Los Alamos National Laboratory

Introductory classes are for people who have little or no experience with MCNP. This class surveys the features of MCNP so the beginning user will be introduced to the capabilities of the program and will have hands-on experience at running the code to solve simple problems. Course topics include Basic Geometry, Source Definitions, Output (Tallies), Advanced Geometry (repeated structures specification), Variance Reduction Techniques, Statistical Analysis, Criticality, Plotting of Geometry and Tallies, and Neutron / Photon / Electron Physics.

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. Classes on specific topics are offered when there is sufficient interest. In the recent past, classes on variance reduction and on criticality have been taught.

Registration and the most current information can be found at http://mcnp-green.lanl.gov/classinformation.html.

SCALE TRITON—Multidimensional Transport & Depletion Course

The OECD NEA Data Bank is offering a SCALE TRITON—Multidimensional Transport & Depletion Course scheduled September 10–14, 2007. This is the first course of this kind organized at the OECD/NEA involving the TRITON sequence of SCALE.

The TRITON sequence in SCALE combines deterministic and Monte Carlo capabilities into a multipurpose transport analysis tool. TRITON can be used to perform cross-section processing for a two-dimensional NEWT transport calculation. NEWT is an arbitrary-geometry, discrete ordinates transport solver that can be used for eigenvalue calculation, critical buckling searches, forward and adjoint flux solutions, cross-section weighting, collapse, and homogenization, and can be used to generate few-group constants for lattice physics calculations. Coupled with ORIGEN-S via TRITON, NEWT is most often used in 2-D depletion calculations. Such calculations can be used to calculate isotopic concentrations as a function of burnup, decay heat, neutron and gamma, source terms, radiotoxicity and dose estimates. Used in lattice physics calculations, TRITON can be used to perform transport branch calculations at each depletion step, and to save lattice physics cross sections and other physics parameters for use in subsequent analysis. NEWT's arbitrary-geometry capability lends it to a wide variety of lattice analyses, including but not limited to PWR, BWR with control blades, VVER, and CANDU and ACR-700 designs. Experienced KENO-VI users will find that NEWT geometry input is based on that of KENO-VI, and exchanging (2-D) models between the two codes is trivial. However, for some inherently three-dimensional configurations, the 2-D solution of NEWT is inadequate; in such cases, the alternative is to use TRITON with KENO V.a or KENO-VI as the transport solver, to accommodate 3-D depletion.

This course will teach attendees how to use NEWT for transport calculations and the use of TRITON for depletion calculations. The course will also instruct users on the use of KENO in place of NEWT for Monte Carlo-based depletion; however, attendees must be familiar with KENO input, as this is not covered within this course.

For more information on the training course, its program, registration form and downloading of a presentation describing the TRITON sequence, please access http://www.nea.fr/html/dbprog/Newsletter/Triton-2007-registration.html.

Test, Research, and Training Reactors Annual Meeting

The National Organization of Test, Research, and Training Reactors (TRTR) is holding its 2007 Annual Meeting in Lincoln City, Oregon, September 17–20. A wide range of topics relating to research and test reactor operations, maintenance, security and safety, will be discussed. Topics include:

- Nuclear reactor operations and maintenance, troubleshooting, security and safety
- Research, service, and production activities
- Education, outreach and training programs
- Reactor siting and decontamination and decommissioning activities
- Current regulatory issues for research reactor operators

Information related to the conference can be found at http://www.trtr.org/Ann_Mtg/2007%20meeting/Index.html.

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 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/.

"CMPWG-II" Computational Medical Physics Working Group Workshop II

"CMPWG-II" Computational Medical Physics Working Group Workshop II will be hosted by the University of Florida, in Gainesville on September 30–October 3, 2007. This is the Second Computational Medical Physics Working Group Workshop ("CMPWG-II"). The first workshop was held at Oak Ridge National Laboratory in 2005 and was well-attended. Guest speakers from Shands Hospital Oncology and Radiology will discuss the unique challenges ahead for medical physics simulations in therapy and diagnostic applications. The purpose of this meeting is to provide a technical exchange of ideas and a forum for novel approaches to simulating radiation transport and dosimetry for accurate and efficient assessments for the enhancement of dose assessment, treatment planning, image quality evaluations, calibration, etc. Conference registration is $300/person, $100/student participants.

Abstracts of 500–1000 words, due by **August 1, 2007,** may be submitted to sjoden@ufl.edu . Full papers in MS-Word or PDF format for approved abstracts are due upon arrival at the workshop and will be published as a Technical Proceedings. Instructions for accepted papers will be provided at the time of acceptance, on or before 15 August 2007. "Best" quality full papers presented upon registration will be selected and forwarded for further peer review and publication in a special edition of the *Nuclear Technology Journal*, a publication of the American Nuclear Society. A template will be made available for download at http://cmpwg.ans.org. The Technical Program Committee will select the best paper submitted by a graduate.

The conference will be held at the Hilton Hotel and Conference Center; reservations may be made directly with the hotel by specifying the rate code to be supplied later. Questions on facilities related to the workshop can be directed to Geri Roberts, 352-392-1401, x306. For information about the conference, contact Dr. Glenn Sjoden, (352) 392-1401, x323, fax: (352) 392-3380, email: sjoden@ufl.edu.

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, and
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 gauald@bologna.enea.it, phone 39 051-6098350, fax 39 051-6098003). Details and the latest news regarding the workshop can be found at http://www.eurados.org/conrad/wg6_Bologna.htm.

10th 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, in Obninsk. The following topics are included in the technical program:

- 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, and
- reliability, endurance and lifetime resource management.

Contact the Conference Secretary, Ms. Elena Zinovieva, Obninsk State Techn. Univ. (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 Nov. 17–21, 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, and
- 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. 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 or comsanmn@hotmail.com).

WM2008

The theme for the WM2008 is "*Phoenix Rising: Moving Forward in Waste Management*." The conference will be held in Phoenix, Arizona, February 24 – 28, 2008. The organizing committee has issued the call for papers, which can be found at http://www.wmsym.org/pdf/WM08Call.pdf. The website, http://www.wmsym.org/html/wm_conference.cfm, is open for abstract submission. The deadline to submit an abstract is August 31, 2007. Papers describing research, development and operational experience over the complete spectrum of nuclear waste activities are requested. Topics are categorized into general tracks which are listed in the Call for Papers. Check the website for updates to conference information often. Technical program questions may be directed to WM08 Program Advisory Committee Chairman Gary Benda at +1-803-345-2170 or email gbenda@wmarizona.org. For non-technical questions related to the Program, authors and speakers may contact: WM Administration at +1-520-696-0399 or papers@wmarizona.org, or WM Technical Program Coordinator Michelle Rehmann - michelle_rehmann@wmarizona.org.

NPAE-Kyiv2008

The 2nd International Conference on Current Problems in Nuclear Physics and Atomic Energy (NPAE-Kyiv2008) will be held June 9–15, 2008 in Kyiv, Ukraine.

The first International Conference on Current Problems in Nuclear Physics and Atomic Energy (NPAE-Kyiv2006) was held in Kyiv (Ukraine) in 2006; the proceedings are available at http://www.kinr.kiev.ua/NPAE_Kyiv2006/.

This conference brings together scientists to share knowledge in current problems of nuclear physics and atomic energy. The NPAE-Kyiv2008 conference will cover the following topics:

- collective processes in atomic nuclei,
- nuclear reactions at low and high energies,
- nuclear structure and decay data,
- rare nuclear processes,
- nuclear astrophysics,
- neutron and reactor physics,
- nuclear data and data evaluation,
- problems of atomic energy,
- applied nuclear physics in medicine and industry, and
- experimental facilities and detection techniques.

The conference will consist of plenary sessions, parallel sessions, and poster sessions. Plenary sessions are composed of invited talks, and parallel sessions consist of invited talks and oral presentations selected from contributions. The working language of the conference is English.

The NPAE-Kyiv2008 conference is organized by the National Academy of Sciences of Ukraine (NASU, http://www.nas.gov.ua), the Institute for Nuclear Research of NASU, Kyiv (KINR, http://www.kinr.kiev.ua) in collaboration with Taras Shevchenko National University of Kyiv (NTSU, http://www.univ.kiev.ua). The conference chairman is I.M. Vyshnevskyi (KINR) and the scientific secretaries are V.Yu. Denisov (KINR) and O.O.Gritzay (KINR)

The Proceedings of the Conference will be published by the Publishing Department of KINR; selected papers will be also published in the scientific journal *Nuclear Physics and Atomic Energy* (http://jnpae.kinr.kiev.ua).

Please, address all the mail and questions concerning scientific program, publication, etc. to: Dr. Vitali Yu. Denisov or Dr. Olena O. Gritzay, Institute for Nuclear Research, Prospect Nauky, 47, Kyiv, 03680, Ukraine (email npae-kyiv2008@kinr.kiev.ua). Information on the conference may be found at the website http://www.kinr.kiev.ua/NPAE-Kyiv2008.

PHYSOR'08

The International Conference on the Physics of Reactors (PHYSOR'08) will be held at the Kursaal Conference Center, Interlaken, Switzerland, September 14–19, 2008. The conference theme is "Nuclear Power: A Sustainable Resource," and is jointly organized by the Paul Scherrer Institut and the Swiss Nuclear Society. This international conference follows the tradition of the earlier PHYSOR meetings and seeks to provide a forum for worldwide experts in reactor physics, nuclear power plant analysis and related technologies.

Main topic areas include:

– neutronics calculations and experiments,
– reactor analysis methods,
– fuel and core design,
– fuel cycle physics,
– advanced systems,
– nuclear power and sustainable development,
– reactor materials challenges,
– nuclear safety analysis and multiphysics,
– experimental facilities for safety research, and
– biomedical and other non-power applications.

August 15, 2007, is the opening date for submission of extended summaries of 1,000–1,500 words. The submission deadline is October 5, 2007. Relevant information may be found at http://www.physor2008.ch/.

CALENDAR

August 2007

42nd Tennessee Industries Week, Specialized Short Courses for Nuclear and Other Industries, Aug. 13–17, 2007, University of Tennessee Main Campus, Knoxville, TN. Contact: Tennessee Industries Week, University of Tennessee, Nuclear Engineering Department, 207 Pasqua Building, Knoxville, TN 37996-2300 (email kengland@utk.edu) url http://www.engr.utk.edu/nuclear/TIW/tiw42reg.html.

September 2007

ICEM'07, the 11th International Conference on Environmental Remediation and Radioactive Waste Management, Sept. 2–6, 2007, Bruges, Belgium. Contact: Gary Benda, WM'07 Conference Organizer, STUDSVIK/RACE, LLC, (phone +1-803-345-2170, email GBenda_use@hotmail.com) url http://www.icemconf.com/.

MCNPX Intermediate Class, Sept. 3–7, 2007, OECD NEA Data Bank - co-sponsored by ORNL/RSICC, Issy les Moulineaux, France. Contact: Cristina Lebunetelle, OECD/Nuclear Energy Agency Data Bank (email programs@nea.fr, fax +33 1 45241109).

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.

SCALE TRITON - Multidimensional Transport and Depletion Course, Sept. 10–13, 2007, OECD NEA Data Bank - co-sponsored by ORNL/RSICC, Issy les Moulineaux, France. Contact: Cristina Lebunetelle, OECD/Nuclear Energy Agency Data Bank (email programs@nea.fr, fax +33 1 45241109).

2007 Decommissioning, Decontamination, and Reutilization Meeting and Expo, Sept. 16–19, 2007, Chattanooga, Tennessee. Contact: Joe Carignan, General Chair (phone 423-875-4555, email jecarignan@aol.com) url http://www.ans.org/meetings/index.cgi?c=t#ddr07.

TRTR 2007 Annual Meeting, Sept. 17–20, 2007, Lincoln City, Oregon. Contact: Dina Pope, Oregon State University, Radiation Center, Corvallis, OR 97331 (phone 541-737-7052, fax 541-737-0480, dina.pope@oregonstate.edu) or Steve Reese (phone 541-737-2341, fax: 541-737-0480, steve.reese@oregonstate.edu) url http://www.trtr.org/Ann_Mtg/2007%20meeting/Index.html.

MCNPX Advanced Workshop, Sept 17–21, 2007, Santa Fe, New Mexico. Contact: Nancy Butner, D-5 Nuclear Design and Risk Analysis Group (phone 505-667-8016, email nbutner@lanl.gov) url http://mcnpx.lanl.gov/.

RIAC Training, Sept. 18–20, 2007, Las Vegas, Nevada, a series of courses offered by the Reliability Information Analysis Center. Contact: The Reliability Information Analysis Center, 6000 Flanagan Road, Suite 3, Utica NY 13502-1348 (email inquiry@TheRIAC.org, phone 315-351-4200 or toll free 877-363-7422 ,fax 315-351-4209) url http://quanterion.com/RIAC/Training/Presentations/September2007.asp.

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) url: http://www.irpa2007romania.com/.

"CMPWG-II" Computational Medical Physics Working Group Workshop II, Sept. 30–Oct 3, 2007, University of Florida-Gainesville. Contact: Dr. Glenn Sjoden, (352) 392-1401, x323, fax: (352) 392-3380, email: sjoden@ufl.edu.

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 gauald@bologna.enea.it, phone 39 051-6098350, fax 39 051-6098003) url: http://www.eurados.org/.

14th BEAMnrc Workshop, Oct. 1–4, 2007, 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, e-mail BEAM_Workshop@irs.phy.nrc.ca) url http://www.physics.carleton.ca/~drogers/BEAM/course/.

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

SCALE Training: ORIGEN-ARP/TRITON Course, Oct. 15–19, 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: KENO-VI Course, Oct. 22–26, 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, Oct. 22–26, 2007, Europe. Contact: Nancy Butner, D-5 Nuclear Design and Risk Analysis Group (phone 505-667-8016, email nbutner@lanl.gov) url http://mcnpx.lanl.gov/.

SCALE Training: TSUNAMI Sensitivity/Uncertainty Tools Course, Oct. 29–Nov. 2, 2007, Oak Ridge National Laboratory, Oak Ridge, TN. Information and registration can be found at http://www.ornl.gov/sci/scale/training.htm.

November 2007

NUPPAC ’07, Nov. 17–21, 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 or comsanmn@hotmail.com) url: http://www.geocities.com/Athens/Library/7348/NUPPAC_07.html.

February 2008

WM2008, Feb. 24–28, 2008, Phoenix, AZ. Contact: WM08 Program Advisory Committee Chairman Gary Benda (phone 803-345-2170 or email gbenda@wmarizona.org) url http://www.wmsym.org/html/wm_conference.cfm.

April 2008

11th International Conference on Radiation Shielding (ICRS-11) and the 15th Topical Meeting of the Radiation Protection and Shielding Division (RPSD-2008) of the American Nuclear Society, April 13–18, 2008, Callaway Gardens, Pine Mountain, Georgia. Contact: General Chair, Nolan Hertel, Georgia Institute of Technology (email nolan.hertel@me.gatech.edu) or General Co-Chair, Pedro Vaz, ITN, Portugal (email pedrovaz@itn.pt) url http://icrs11.me.gatech.edu/index.htm.

June 2008

2nd International Conference on Current Problems in Nuclear Physics and Atomic Energy (NPAE-Kyiv2008), June 9–15, 2008, Kyiv, Ukraine. Contact: Dr. Vitali Yu. Denisov or Dr. Olena O. Gritzay, Institute for Nuclear Research, Prospect Nauky, 47, Kyiv, 03680, Ukraine (email npae-kyiv2008@kinr.kiev.ua) url http://www.kinr.kiev.ua/NPAE-Kyiv2008.

September 2008

PHYSOR'08, Sept. 14–19, 2008, Interlaken, Switzerland. Contact: info@physor2008.ch, url http://www.physor2008.ch/.

November 2008

13th International Conference on Neutron Capture Therapy, Nov. 3–7, 2008, Florence, Italy. Contact: ICNCT-13 Secretary General (icnct-13@pv.infn.it) url http://www.pv.infn.it/icnct-13/.