
Radiation Safety Information Computational Center



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You can't sit on the lid of progress. If you do, you will be blown to pieces.—Henry Kaiser

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DOE Makes ATR Available to Others

[INL, 24 April] The US Department of Energy (DOE) has designated the Advanced Test Reactor (ATR) at its Idaho National Laboratory (INL) as a National Scientific User Facility. The move will enable universities, laboratories and industry to conduct research at the ATR, which has previously been used exclusively by the DOE. *WNN Daily*

Change to the Computer Code and Data Collection

[CCC-735/EASY-2003](#)

UKAEA/EURATOM Fusion Association, Oxfordshire, United Kingdom, and CEA Cadarache, CEDEX, France, through the OECD NEA Data Bank, Issy-les-Moulineaux, France, contributed the European Activation System - EASY-2003. This system is a complete tool for the calculation of activation in materials exposed to neutrons. It can be used for any application (fusion, transmutation, fission and accelerator) where the neutron energy does not exceed 20 MeV. EASY-2003 consists of the inventory code FISPACT-2003, the EAF-2001, EAF-2003 and the FENDL-2 data libraries.

FISPACT-2003 uses external libraries of nuclear data for all relevant nuclides to calculate the number of atoms of each species at a specified time during the irradiation or after a decay time following shutdown. The various species are formed either by a direct reaction on a starting material, by a series of reactions some of which can be on radioactive targets or by a decay or series of decays. EAF contains cross section data of neutron-induced reactions for energies between 1.0E-5 eV and 20 MeV. The library

contains data for targets up to and including fermium (Z-100). The EAF-2003 library contains 12617 excitation functions involving 774 different targets from H-1 to Fm-257, in the incident energy range up to 20 MeV.

Executables created by the developers are included for IBM-AIX, Compaq-Alpha, SUN-Solaris, Pentium PCs running Red Hat Linux and Windows. The package is transmitted on 2 CDs which include documents, executable files for all systems named above, source codes, Makefiles, Windows installer, data files and test cases. References: UKAEA FUS 484, UKAEA FUS 485, UKAEA FUS 486, UKAEA FUS 487, UKAEA FUS 488, and UKAEA FUS 454. Fortran and C; PC, IBM RS/6000, Sun, Compaq Alpha (C00735MNYCP00).

[CCC-737/GENII 2.06](#)

Pacific Northwest National Laboratory, Richland, Washington, contributed a new version of this environmental radiation dosimetry software system. FRAMES 1.7/GENII 2.06 replaces GENII 1.485, which has been distributed by RSICC since 1992 as CCC-601. The GENII system includes capabilities for calculating radiation doses following chronic and acute releases. Radionuclide transport via air, water, or biological activity may be considered. Air transport options include both puff and plume models, each allow use of an effective stack height or calculation of plume rise from buoyant or momentum effects (or both). Building wake effects can be included in acute atmospheric release scenarios. The code provides risk estimates for health effects to individuals or populations; these can be obtained using the code by applying appropriate risk factors to the effective dose equivalent or organ dose. In addition, GENII Version 2 uses cancer risk factors from Federal Guidance Report 13 to estimate risk to specific organs or tissues. Although the codes were initially developed at Hanford, they were designed with the flexibility to accommodate input parameters for a wide variety of generic sites.

The code system provides interfaces, through the Framework for Risk Analysis in Multimedia Environmental Systems (FRAMES), for external calculations of atmospheric dispersion, geohydrology, biotic transport, and surface water transport. Target populations are identified by direction and distance (radial or square grids for Version 2) for individuals, populations, and for intruders into contained sources.

GENII Version 1 implemented dosimetry models recommended by the ICRP in Publications 26, 30, and 48, and approved for use by DOE Order 5400.5. GENII Version 2 implements these models plus those of ICRP Publications 56 through 72, and the related risk factors published in Federal Guidance Report 13. Risk factors in the form of EPA developed "slope factors" are also included (these are a special subset of the FGR-13 values).

GENII Version 2 runs on Pentium PCs under Windows and requires a minimum of 80 MB on-line disk storage. Executables included in this package were tested under Windows XP and Windows 2000. They have also been installed, and a few problems have been run under the new Windows Vista operating system. The GENII developer created these executables under Windows using Visual Basic 6 for the interfaces and Digital Visual Fortran for GENII modules. Source codes are not included in this distribution. References: PNNL-14583, Rev. 2 (March 2007) and PNNL-14584, Rev. 2 (March 2007). Pentium running Windows; Fortran and Visual Basic (C00737PC58600).

ANS News

ONLINE SURVEY TO GAUGE MEMBERS' OPINIONS ABOUT U.S. LOCAL SECTIONS—Help the Local Sections Committee (LSC) plan for Local Section structure and function in the future. The LSC needs your input whether or not you are a member of a Local Section. Results will be published in a future issue of ANS NEWS. (This survey is for NON-STUDENTS in the U.S.; the ANS Student Section Committee oversees Student Section activities.) U.S. members are asked to complete the online survey found at: <http://www.ans.org/goto/nad.cgi?id=1178341200-2>

NEW ANS STANDARDS WRITING GROUP—A new ANS standards writing group is forming on “Estimating Present and Forecasting Future Population Distributions Surrounding Power Reactor Sites.” For participation requirements, email standards@ans.org.

ANS JOURNAL SPECIAL ISSUES AND ABSTRACTS—The May issue of *Nuclear Technology* is dedicated to select papers presented at NURETH-11. The April issue of *Fusion Science & Technology* contains dedicated coverage of the Alcator C-MOD Tokamak. View the most recent (April/May) tables of contents and abstracts from three journals: *Fusion Science and Technology*, *Nuclear Science and Engineering*, and *Nuclear Technology* at <http://www.ans.org/goto/nad.cgi?id=1178341200-6>. For access to full text, as well as archived papers from 1998 to the present, members can subscribe at reduced rates by calling Member Services at 708-579-8266 or online at <http://www.ans.org/goto/nad.cgi?id=1178341200-7>.

OESTMANN WOMEN'S ACHIEVEMENT AWARD DEADLINE JULY 1—To recognize outstanding personal dedication and technical achievement by a woman for work she has performed in the nuclear field. Nominations due July 1. For more information and a nomination form, click <http://www.ans.org/goto/nad.cgi?id=1178341200-9>.

Obituaries

Norman Alcock, born May 29, 1918, died March 11, 2007, at the age of 88 in Huntsville, Ontario. Highlights in his career include working on the development of radar during WWII, work at the Chalk River site of Atomic Energy Canada, and launching Isotope Products. After selling Isotope Products in 1961, he and his wife Patricia founded the Canadian Peace Research Institute (CPRI). Alcock was awarded the Order of Canada for his involvement in the CPRI and his commitment to peace and disarmament.

Robert A. Meyer, an ANS member since 1957, died March 21 at his home in Mercer Island, Washington; he was 84. Dr. Meyer received his education at the University of Rochester and Yale University. He was a U.S. veteran having served in both the Marines and the Navy, which included serving in connection with the Nevada Test Site. His long career in engineering physics included work at Brookhaven National Laboratory, General Atomic Corporation, McDonnell Douglas, and Aerospace Corporation.

Ralph T. Overman, a charter member of the ANS and ANS Fellow died February 19. Dr. Overman received his bachelor's and master's degrees from Pittsburg State University in Pittsburg, Kansas. He continued his education at Louisiana State University where he received a doctorate in physical chemistry in 1943. He served as a research chemist at Oak Ridge National Laboratory from 1945 to 1948; then served as chairman of the Special Training Division of the Oak Ridge Institute of Nuclear Studies (now Oak Ridge Associated Universities) from 1948 to 1965. Dr. Overman rounded out his career at the St. Louis University School of Medicine serving as an associate professor in the division of nuclear medicine until 1984. He also served as an educational specialist for the U.S. Veterans Administration from 1973 to 1984. Get a glimpse of the work Overman and others carried out at ORNL in the early years to further the use of radioisotopes in the practice of medicine in the article, “Oak-Ridge Remembered - 1944-1949,” *Journal of Nuclear Medicine* 18 (8): 759-763 1977; <http://jnm.snmjournals.org/cgi/reprint/18/8/759>.

University Corner

University of Kansas Department of Nuclear Engineering Celebrates 50 Years

Kansas State (K-State) established the nuclear engineering curriculum in 1952 under the department of chemical engineering, graduating the first class of K-State nuclear engineers in 1956. In 1958, K-State was one of the first institutions in the country to establish a separate department for nuclear engineering and only the third university in the United States to have a nuclear engineering program. In 1964, K-State's program became the first program in the nation to gain accreditation. The nuclear engineering department and the mechanical engineering department merged in 1996.

Today, K-State can lay claim to one of fewer than 25 remaining research reactors in the country; K-State's TRIGA reactor was built in 1962.

Recent research projects at K-State's nuclear engineering program are making an impact on areas outside of the discipline, from archeology to anti-terrorism efforts. During the past two years, K-State has been providing leadership in forming a Big 12 nuclear engineering consortium. In January, K-State established a collaborative effort with the three other Big 12 universities with nuclear engineering programs to offer shared online courses for the Big 12 engineering colleges that currently do not have nuclear engineering programs.

More information about K-State's nuclear engineering program is available at <http://www.mne.ksu.edu/>. [<http://www.k-state.edu/media/newsreleases/apr07/nucengg40307.html>]

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		
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 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
July 16–20, 2007	Advanced Visual Editor Training for Experienced MCNP/MCNPX Users	Detailed Description	Richland, WA
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>.

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. Technical questions may also be directed to Dick Olsher, 505-667-3364; e-mail: 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](#)

[AAPM Annual Meeting](#)

The American Association of Physicists in Medicine (AAPM) is holding its 49th Annual Meeting July 22–26, 2007, in Minneapolis, Minnesota. The program will offer participants a significant opportunity to gain practical knowledge on emerging technical and professional issues. A major focus of the scientific program is the increasing integration of advanced imaging concepts in the routine practice of various therapies, especially radiotherapy. The scientific program will include the highest quality abstracts in oral, moderated poster, and poster sessions on basic research and clinical application topics in medical imaging and therapeutic medical physics. Continuing education will be offered through daily courses to keep the membership up to date on the current and new technologies and techniques. The registration and up-to-date meeting information can be found at <http://aapm.org/meetings/07AM/>.

[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. Dr. Denis Beller (University of Nevada, Las Vegas) is the general chair of the meeting. Questions or comments should be directed to the Conference Administrator, Ms. Nikki Iwert-Bays of the Idaho National Laboratory (Nikki.Iwert-Bays@inl.gov), who will direct your question to the responsible individual. The website is <http://www.iac.isu.edu/accapp07/>.

[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>.

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. You are invited to submit abstracts for the 2007 Test, Research and Training Reactor Conference. Conference topics to be considered 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

Abstracts should be 200 to 300 words in length. Deadline for submissions is **June 30, 2007**. Abstracts will be accepted either via e-mail (preferred) or fax (541-737-0480). All accepted authors will receive notification before July 31, 2007. Authors should submit abstracts to radiation.center@oregonstate.edu. 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:

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| <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • 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–Oct 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 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
- 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. 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. Abstracts may be submitted 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) 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. 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).

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
- 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

June 2007

- 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) 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) url <http://www.inspi.ufl.edu/space07/index.html>.

July 2007

- Sixth International Symposium on Physical, Molecular, Cellular, and Medical Aspects of Auger Processes, July 5–7, 2007, Harvard Medical School, Boston, MA. Contact: Amin I. Kassis, PhD, Radiation Biology and Experimental Radionuclide Therapy, Harvard Medical School, 200 Longwood Avenue, Boston MA 02115 (phone 617-432-7777, fax 617-432-2419, email amin_kassis@hms.harvard.edu or Auger6@hms.harvard.edu) url <http://medapps.med.harvard.edu/Auger6/>.
- U.S. Women in Nuclear Conference 2007, July 15-17, 2007, Anaheim, Calif. url <http://www.winus.org/>.
- Advanced Visual Editor for Experienced MCNP/MCNPX Users Training, July 16–20, 2007, Richland, WA. Contact: randyschwarz@mcnpvised.com or http://www.mcnpvised.com/visedtraining/2007jul_adv/2007jul_adv.html.
- AAPM Annual Meeting, July 22–26, 2007, Minneapolis, MN. Contact: Lisa Rose Sullivan (email rose@aapm.org) url <http://aapm.org/meetings/07AM/>.
- 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) url: <http://www.iac.isu.edu/accapp07/>.

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://icemconf.com/index.htm>.
- 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>.
- 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/>.

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, September 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 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).

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, October 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.

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>.

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/>.