Radiation Safety Information Computational Center

No. 519   **May 2008**

Every noble acquisition is attended with its risks; he who fears to encounter the one must not
expect to obtain the other.-—Metastasio

Changes to the Computer Code and Data Collection

CCC-695/SUSD3D-2008

Institute Jozef Stefan, Ljubljana, Slovenia, through the OECD NEA Data Bank, Issy-les-Moulineaux, France, contributed a newly frozen version of this code system to calculate sensitivity coefficients and standard deviation in calculated detector responses or design parameters due to input cross sections and their uncertainties. In SUSD3D, one-, two- and three-dimensional transport problems can be studied. Several types of uncertainties can be considered, i.e. those due to (1) neutron/gamma multi-group cross sections, (2) energy-dependent response functions, and (3) secondary angular distribution (SAD) or secondary energy distribution (SED) uncertainties. This package also contains NJOY-SUSD3D (SUNJOY), a nuclear data processing code based on the NJOY system, including the modules ERR34, GROUPS and SEADR.

This version differs from the previous one in the following points:

Modifications are relevant for the sensitivity calculations of the critical systems and include:

- Correction of the sensitivity calculation for prompt fission and number of delayed neutrons per fission (MT=18 and MT=455).

- An option allows the re-normalization of the prompt fission spectra covariance matrices to be applied via the "normalization" of the sensitivity profiles. This option is useful in case if the fission spectra covariances (MF=35) used do not comply with the ENDF-6 Format Manual rules.

- For the criticality calculations the normalization can be calculated by the code SUSD3D internally. Parameter NORM should be set to 0 in this case. Total number of neutrons per fission

(MT=452) sensitivities for all the fissile materials must be requested in the SUSD3D OVERLAY-2 input deck in order to allow the correct normalization.

The current release is written in Fortran 95 and runs on Linux-based personal computers. Included are the document, source code, and test problems which are transmitted on CD in Unix format. No executables are included with the package. References: SUSD3D (January 2008). Fortran 77; PC, VAX and Unix Workstations (C00695MNYCP01).

CCC-738/BULK_C-12

AREVA NP GmbH, Erlangen, Germany, through the OECD Nuclear Energy Agency Data Bank, Issy-les-Moulineaux, France, contributed this code system to estimate neutron and photon effective dose rates from medium energy protons or carbon ions penetrating through a concrete layer or two layers with iron and concrete in a particle accelerator facility. BULK_C-12 can handle protons with energies from 50 to 500 MeV and 12-C ions with energies from 155 to 430 MeV/u. The code can also be used for shielding calculations considering various particle energies and diverse beam directions as occurring in particle treatment facilities. BULK_C-12 is based on BULK-I (see NEA-1727/01). Like its predecessor, a simple formula is adopted for not only the equilibrium region but also for the build-up region. The parameters for concrete or two layers with (first) iron and (second) concrete are numerically obtained with the Monte Carlo code MCNPX, developed at Los Alamos National Laboratory. The geometry consists of a target (radiation source) placed at the origin in the rectangular room surrounded by six concrete walls. The target is assumed to be thick iron as a typical component of the proton accelerator. Protons with various energies and directions are taken into account in the dose rate calculation based on the gantry employed in a proton beam treatment facility.

BULK_C-12 runs on personal computers under Microsoft Windows XP. The package is transmitted on a CD which includes documentation and the Excel executable in a WinZIP file. Reference: BULK_C-12 Manual (2006). Microsoft Excel and Visual Basic; Pentium computers (C00738PC58600).

ANS News

2008 National Election Results

The ANS has announced the results of the 2008 ANS national election. All terms begin June 12, 2008.

Vice President / President-Elect–- Thomas L. Sanders, Sandia National Laboratories

US At-Large Board of Directors

Marvin S. Fertel, Nuclear Energy Institute

John R. McGaha, Entergy Nuclear

Jasmina L. Vujic, University of California - Berkeley

Loyd A. Wright, Southern California Edison

Non-US At-Large Board of Directors - Africa / Europe

Dominique Greneche, Areva

Be Media Savvy!

The Public Information Committee will be conducting media training at the 2008 Annual Meeting in Anaheim, CA. Practice interview opportunities, conducted by experienced media professionals, will provide ANS members with candid feedback to help them cultivate their ability to tell their stories, respond to tough questions, and confidently share their knowledge with not only the news media but also

policymakers and the public. Sessions will be conducted Monday, Tuesday and Wednesday, June 9–11. You may register at http://www.ans.org/pi/pros/mediatraining/ . **Reserve your practice interview time today!**

Also plan on attending the ANS Public Communications Workshop, "Focus on Communications: Speaking with the Media." The event will be held on Wednesday, June 11, 2008, from 4–6 p.m. in Dreams D.

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.

Introductory and Advanced MCNP Visual Editor Training

Date	Class	Location
July 21–25, 2008	Introduction to the Visual Editor for Advanced MCNP/MCNPX Users	Seattle, WA
Sept. 8–12, 2008	Introduction to MCNP using the MCNP/MCNPX Visual Editor	Richland, WA
Nov. 3–7, 2008	Introduction to MCNP using the MCNP/MCNPX Visual Editor	Reno, NV

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

June 16–20, 2008	Introduction to MCNP5 and MCNPX	Los Alamos National Laboratory
August 18–21, 2008	Advanced - Variance Reduction	Los Alamos National Laboratory
August 25–28, 2008	Advanced - Criticality	Los Alamos National Laboratory
Sept. 29–Oct. 3, 2008	Introduction to MCNP5 and MCNPX	Los Alamos National Laboratory
October 27–31, 2008	MCNP/MCNPX Intermediate Workshop	Munich, Germany
November 3–7, 2008	MCNP/MCNPX Intermediate Workshop: Focus on Homeland Security	Washington, DC

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.

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

DATES: 23–27 June 2008
FEE: $1,800 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^{TM} 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^{TM} to solve a variety of practical problems in radiation shielding and dosimetry. The intent is to "jump start" the student toward using MCNP^{TM} 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^{TM} 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. Non-US citizens need to register 60 days in advance to allow for necessary visitor approvals. 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

PENELOPE-2008 Training Course/Workshop

A PENELOPE-2008 Training Course / Workshop will be held June 30–July 3, 2008, at the Universitat de Barcelona in Barcelona. This course is addressed to researchers in Radiation Physics and its applications. The main objective is to provide the participants with a detailed description of the new version 2008 of PENELOPE, with an ample perspective on Monte Carlo methods for simulation of electron/photon transport. The reliability of the interaction models and the accuracy of the numerical methods and approximations implemented in the code will be discussed, and examples of simulation results and benchmark comparisons with experiment will be presented. The course will include practical sessions on the use of the generic main programs, PENCYL (cylindrical geometries) and PENMAIN (quadric geometries), and on the design of the main program for specific applications. Detailed information about the course and the registration form are available at http://www.nea.fr/html/dbprog/Newsletter/penelope-2008-Announcement.pdf and http://www.nea.fr/html/dbprog/Newsletter/penelope2008-reg.html.

Verification and Validation for Nuclear Systems Analysis Workshop

Dates: July 21–25, 2008
Location: Center for Higher Education, Idaho Falls, ID
Workshop Cost: $250.00
Leading international nuclear experts will conduct sessions on the current and future issues of verification and validation (V&V) and uncertainty quantification (UQ) for nuclear systems analysis. In addition, key national and international experts will conduct plenary lectures and tutorials.

Topics include:

Reactor physics
Thermal Fluids and multiphysics
Fuels development
Data V&V methods

The workshop is sponsored by the Center for Advanced Energy Studies (CAES), Idaho National Laboratory (INL), Idaho State University (ISU), and North Carolina State University (NCSU). Contact: Nikki Iwert-Bays (Nikki.Iwert-Bays@inl.gov).

FLUKA Training Course

A Training Course on FLUKA, a fully integrated particle physics Monte Carlo simulation package, will be held September 29–October 3, 2008, at OECD/NEA Data Bank, Issy-les-Moulineaux, France. The course will be based on the new release of FLUKA, which, among other improvements, will contain a new and improved neutron library. If you are interested in attending, please complete the registration form at http://www.nea.fr/html/dbprog/Newsletter/FLUKA-course2008-09.html. Contact Cristina Lebunetelle, OECD/Nuclear Energy Agency Data Bank (email programs@nea.fr or fax +33 1 45241109).

CAARI-2008

This year CAARI-2008 (Conference on the Application of Accelerators in Research and Industry) will be held August 10–15, 2008, in Fort Worth, Texas. CAARI-2008 brings together scientists, engineers, physicians, and industrial leaders from all over the world who use particle accelerators in their research and industrial applications. The CAARI conference can be considered a collection of symposia

for topics ranging from Accelerator Technology to Ion Beam Analysis to Nanoscale Fabrication. In particular, the National and Homeland Security (NHS) topic area consists of seven sessions covering the broad use of accelerators in security applications. More information about the conference can found at http://www.caari.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 Scherer 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. Relevant information may be found at http://www.physor2008.ch/.

18th Topical Meeting on the Technology of Fusion Energy

The 18th Topical Meeting on the Technology of Fusion Energy (18th TOFE) will be held in San Francisco, California, September 28–October 2, 2008. The TOFE meeting provides a forum for sharing the exciting progress made in fusion research as well as presenting the future plans for national and worldwide fusion programs. The conference is sponsored by the American Nuclear Society (ANS), Northern California Section of the ANS, Lawrence Livermore National Laboratory, and the Atomic Energy Society of Japan. The call for papers has been issued and abstracts on the following topics may be submitted beginning on March 1, 2008.

- NIF, ITER and other experimental devices
- Material and component testing facilities
- Magnets
- Next step facilities & Demo
- Diagnostics
- Power plant studies
- First walls, blankets & shields
- Alternate, non-electric applications
- IFE driver and chamber technology
- Plasma engineering, heating and control
- IFE target design, fabrication and injection
- Diverters and other high heat flux components
- Tritium breeding, handling and processing
- Nuclear analysis and experiments
- Safety and environment
- Computational tools and validation experiments
- Materials development and modeling
- Fabrication, assembly and maintenance
- Power conversion and conditioning

For additional information, please contact the General Chair: Jeff Latkowski, 18th TOFE Meeting, 4435 First Street #155, Livermore, CA 94551 (phone 925-423-9378, fax 925-424-6401, email: latkowski@llnl.gov). Check the website, http://www.18th-tofe.com/, frequently for updated information, registration information, etc.

IRPA 12

The 12th International Congress of the International Radiation Protection Association (IRPA 12), will take place in Buenos Aires, Argentina, October 19–24, 2008. To support the Congress motto, "strengthening radiation protection worldwide" the scientific areas and topics are divided into three parts:

Part 1: Epistemological Basis of Radiation Protection
    1. Characterisation of Radiation Exposure
    2. Biological Effects of Radiation Exposure

Part 2: Radiation Protection Paradigm

1. Developing the Radiation Protection Framework
2. Developing Protection Policies, Criteria, Methods and Culture
3. Emergency Planning, Preparedness and Response

Part 3: Radiation Protection and Safety in Practice
1. Nuclear Installations
2. NIRs
3. Medicine
4. NORM in Industry
5. Other Applications and Practices

All information regarding registration, technical program, etc., may be found at the website, www.irpa12.org.ar. Questions regarding all aspects of the Congress may be addressed to secretariat@irpa12.org.ar.

5th Workshop on Neutron Measurements, Evaluations and Applications Nuclear Data for Sustainable Nuclear Energy

The 5th Workshop on Neutron Measurements, Evaluations and Applications Nuclear Data for Sustainable Nuclear Energy will be held October 27-29, 2008, in Ljubljana, Slovenia. The workshop aims at providing a comprehensive overview of nuclear data production methods and their relation to the data needs for applications with potential economic impact. Contributions should highlight state-of-the-art and new developments of relevance for meeting the requirements on nuclear data associated with advanced reactor systems. Data users are invited to present comprehensive views on data needs.

In order to enhance the workshops' potential for high-quality networking, experts worldwide are invited to attend and the participation of post doctoral fellows and PhD students who wish to present their work is encouraged.

Workshop topics include:
- Advanced reactor concepts–-Generation IV, GNEP,
- Accelerator driven systems
- Advanced fuel cycles
- Measurements
- Evaluations
- Benchmarking, testing and adjustments

September 15, 2008, is the deadline for submitting abstracts. Details regarding the submission of abstracts and other information related to the workshop may be found at http://candide.nri.cz/nemea.php. Contact Carmen Cabanillas Platero, European Commission, Joint Research Centre, Institute for Reference Materials and Measurements, Retieseweg 111, B-2440 Geel, Belgium (phone +32 (0)14 571 411, fax+32 (0)14 571 862, email jrc-irmm-nemea-5@ec.europa.eu).

LOWRAD 2008

The 7th International Meeting on the Effects of Low Doses of Radiation in Biological Systems: New Perspectives on Human Exposure will be held in Lisbon, Portugal, November 27–29, 2008. The meeting is being organized by members of the Radiobiology group of the Department of Radiological Protection and Nuclear Safety of the Portuguese Nuclear and Technological Institute. Topics include:

- Epidemiology of occupational and environmental low dose exposure
- Novel biomarkers for population screening
- in low dose exposures
- Non-targeted effects
- Computer simulation and modelling for low

dose radiation risk
- Genetic susceptibility
- Radioecology
- Low dose and protracted exposure effects
- Validity of the linear non-threshold model
- Hormesis and adaptive response
- Microenvironment modulation of radiation response
- Radioactive waste management
- Micro-array and proteomic analysis

- DNA repair and misrepair
- Radioprotectors and radiosensitizers
- Molecular and biophysical approaches to radiation-induced carcinogenesis
- Non-genetic effects of radiation
- Genomic and chromosomal instability
- Long term effects of the medical applications of radiation
- Microdosimetry and nanodosimetry

Contact Margarida Goulart de Medeiros (phone +351 21 994 6347, fax +351 21 994 1995), Octávia Monteiro Gil (phone +351 21 994 6344, fax +351 21 994 1995), or Secretariat, Luisa Oliveira (email lowrad2008@itn.pt), Nuclear and Technological Institute Department of Radiological Protection and Nuclear Safety Estrada Nacional 10, 2686 - 953 Sacavém, Portugal. Watch the website, http://www.lowrad2008.itn.pt/index.html, for abstract submission and up-to-date information.

Advances in Nuclear Fuel Management IV

Advances in Nuclear Fuel Management IV will be held April 12–15, 2009, in Hilton Head, South Carolina. The meeting is a forum for addressing a broad spectrum of front-end nuclear fuel management activities, within the context of reactor physics and fuel cycle economics. Topics will range from methods development and verification to design and implementation of new in-core fuel products and strategies.

Technical sessions will include the following proposed topics:
- Addressing Practical Design Constraints On Fuel Management
- Advanced Fuel Assembly and Burnable Absorber Designs
- Advanced Fuel Management and Multi-dimensional Burnup Analysis
- Advances In Reactor Stability
- Automated and Interactive Fuel Management Design and Optimization Tools
- Error Quantification of Core Simulation Capabilities
- Experiences and Advances In On-Line Core Monitoring
- Extended Fuel Cycles and Economic Analysis
- Fuel and Core Design Based On Thorium Cycles
- Fuel Cycle Core Design for Advanced Reactor Concepts
- Fuel Temperature Feedback for Steady-State and Transients
- Generation of Cross Section Libraries and Whole Core Transport Calculations
- Generation-IV Design Concepts

- High Enrichment >5wt% UO2 Studies
- Innovative Core Loading Strategies and Methods
- Management, Design, and Operation Issues of Advanced Reactor Fuels
- Model Comparisons Against Measured Reactor Power Data
- Monte Carlo-based Depletion and Full Core Analysis: New Developments and Issues
- MOX Utilization In Reactors
- Nodal and Lattice Physics Methods
- Nuclear Data Needs to Enhance Core Simulation Fidelity
- Reactor-Based Plutonium Disposition
- Research Reactor Topics—Fuel Management Practices
- Simulation and Study of Advanced Nuclear Fuel Cycles
- Utilities Experience In Reload Design and Licensing
- Utilization of Zero Power Physics Tests and Core Follow Data to Enhance Core Simulation Fidelity

- Validation of Core Analysis Tools for Fuel Management

The deadline for electronic submission is October 31, 2008. General Chair for the conference is John Siphers, Progress Energy (phone 919-546-4032, email john.siphers@pgnmail.com) and the Technical Program Co-chairs are Ivan Maldonado, University of Tennessee (phone 865-974-7562, email imaldona@utk.edu) and Atul Karve, Global Nuclear Fuel, (phone 910-675-5802, email atul.karve@gnf.com). Additional details at the conference Web Site: http://anfm2009.org.

2009 International Conference on Advances in Mathematics, Computational Methods, and Reactor Physics

The 2009 International Conference on Advances in Mathematics, Computational Methods, and Reactor Physics will be held May 3–7, 2009, in Saratoga Springs, New York. The Conference will provide an international forum to present and discuss recent research in mathematical modeling and computing as applied to nuclear engineering and particle transport. This conference is part of a series of topical meetings organized by the Mathematics and Computation Division of the American Nuclear Society and returns to Saratoga Springs, New York—the site of the 1997 conference in this series. The technical program will consist of plenary sessions, parallel oral presentation sessions, and poster sessions. There will also be one or more workshops.

The call for papers has been issued soliciting work in all areas of computational and mathematical methods for analysis of nuclear systems as well as from related disciplines including reactor physics, materials science, shielding, fluid dynamics, medical and biological applications, environmental sciences, fundamental mathematics, and benchmarking. Subject categories include:

- Deterministic Transport Theory Methods
- Monte Carlo Transport Theory Methods
- Hybrid Methods in Particle Transport
- Perturbation and Variational Methods
- Computational Fluid Dynamics
- Computational Environmental Science
- Nuclear Data Methods and Analysis
- Criticality and Safety Analysis
- Computational Materials Science
- High-Performance / Large-Scale Computing
- High-Impact Software Design
- Characteristic and Diffusion Theory Methods

- Nuclear Reactor Analysis
- Reactor Kinetics Methods
- Accelerators and Subcritical Systems
- Computational Plasma Physics
- Radiation Protection and Shielding
- Methods for Advanced Reactor Concepts
- Optimization Methods
- Computer Codes and Benchmarks (Poster Session)
- Multi-Physics Simulation Methods
- Computational Medical Physics
- Verification and Validation Methods

A 1500-word summary must be submitted to the conference electronically no later than **September 30, 2008** in order to ensure that it is included in the review process. Check the conference website http://local.ans.org/ne-ny/topical_2009_neny.html for instructions for submitting your work for consideration and for general conference information. General chair of the conference is Ray Gamino (ray.g.gamino@lmco.com).

Radionuclide Therapy and Radiopharmaceutical Dosimetry

The 3rd International Symposium on Radionuclide Therapy and Radiopharmaceutical Dosimetry and Workshop on Alpha-Emitting Radionuclides in Therapy will convene June 13–17, 2009, in Toronto,

Canada, in conjunction with the 2009 Society of Nuclear Medicine (SNM) Annual Meeting, which is being planned. This symposium follows the successful first (Helsinki 2004) and second (Athens 2006) symposiums. This 2009 RTRD Symposium will blend with SNM sessions in oncology, radiopharmaceutical chemistry, radiobiology and dosimetry. The workshop will highlight current progress in the use of alpha-emitters for cancer therapy, continuing a series of successful alpha-emitter workshops. Symposium topics will include:

- Data collection and quantitative imaging
- Biodistribution and pharmacokinetics
- Clinical dosimetry and treatment planning
- Alpha emitters in cancer therapy
- Auger electron emitters
- Radiobiological studies
- Therapy of skeletal metastases and bone pain palliation

    All announcements and mailings for the symposium will be electronic and by website postings. Those who wish to participate in the symposium must register with SNM to attend the Annual Meeting. Separate symposium registration will not be offered. Registration, housing, local arrangements, transportation, and other logistical arrangements will be handled by SNM. Local arrangement details will be available at a later date on the SNM website at: www.snm.org. A future announcement will provide instructions for submitting abstracts. George Sgouros (gsgouros@jhmi.edu) is Vice-chair of the organizing Committee and Michael Lassmann (Lassmann_M@klinik.uni-wuerzburg.de) is Chair of the Committee.

CALENDAR

June 2008

American Nuclear Society: 2008 Annual Meeting, "Nuclear Science and Technology: Now Arriving on Main Street," June 8–12, 2008, Anaheim, California. The call for papers can be found at http://www.ans.org/meetings/docs/2008/am2008-cfp.pdf.

2008 International Congress on Advances in Nuclear Power Plants (ICAPP'08), June 8–12, 2008, Anaheim, California. Information can be found at http://www.inspi.ufl.edu/icapp08/index.html.

Nuclear Fuels and Structural Materials for the Next Generation Nuclear Reactors, June 8–12, 2008, Anaheim, California. Contact: Todd Allen, University of Wisconsin, 529 Engineering Research Building, 1500 Engineering Dr., Madison, WI 53706 (phone 608-265-4083, email allen@engr.wisc.edu).

Isotopes for Medicine and Industry, June 9–12, 2008, Anaheim, California. Contact: Wynn A. Volkert, University of Missouri, Room 330 Hadley Hall, Columbia, MO 65211 (phone 573-882-6759, email VolkertW@health.missouri.edu).

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.

Introduction to MCNP5 and MCNPX, June 16–20, 2008, Los Alamos National Laboratory. Contact: nbutner@lanl.gov, url http://mcnpx.lanl.gov/.

LAS / ANS SYMPOSIUM 2008, June 16–20, 2008, Rio de Janeiro. Contact: Mr. Sergio Mathias, ELETRONUCLEAR - Rua da Candelária, 65, 3º andar - CEP: 20091-020 - Rio de Janeiro – Brazil: (phone 55.21 2588 7312, fax 55.21 2588 7238, email mathias@eletronuclear.gov.br). Detailed information and updates will be posted at http://www.las-ans.org.br/.

7th International Topical Meeting on Industrial Radiation and Radioisotope Measurement Application, June 22–27, 2008, Prague, Czech Republic. Contact: E-mail: irrma7@fjfi.cvut.cz (phone only if absolutely necessary 420 224358246, Ms. Niederlová) url http://irrma7.fjfi.cvut.cz/.

Practical MCNP for the Health Physicist, Medical Physicist, and Rad Engineer, June 23–27, 2008, 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.

Workshop on Neutron Cross Section Covariances, June 24–27, 2008, Port Jefferson, New York, organized by the National Nuclear Data Center, Brookhaven National Laboratory. Contact: Pavel Oblozinsky, Head, National Nuclear Data Center, Brookhaven National Laboratory, Bldg. 197D, Upton, NY 11973 (phone 631-344-2814, fax 631-344-2806, email oblozinsky@bnl.gov) url http://www.nndc.bnl.gov/cw2008/index.jsp.

PENELOPE-2008 Training Course / Workshop, June 30– July 3, 2008, Universitat de Barcelona, Barcelona. Contact: OECD/Nuclear Energy Agency Data Bank (email programs@nea.fr, fax +33 1 45241109), url http://www.nea.fr/html/dbprog/Newsletter/penelope-2008-Announcement.pdf.

July 2008

49th INMM Annual Meeting, July 13–17, 2008, Nashville, TN. Contact: INMM, Suite 100, 111 Deer Lake Road, Deerfield, IL 60015 USA (phone 847-480-9573, fax 847-480-9282, inmm@inmm.org) url http://inmm.org/meetings/index.htm.

Introduction to the Visual Editor for Advanced MCNP/MCNPX Users, July 21–25, 2008, Seattle, WA. Contact: http://www.mcnpvised.com/index.html.

Verification and Validation for Nuclear Systems Analysis Workshop, July 21–25, 2008, Idaho Falls, ID. Contact: Nikki Iwert-Bays (Nikki.Iwert-Bays@inl.gov).

August 2008

CAARI-2008, August 10–15, 2008, Fort Worth, Texas. Contact: Ms. Margaret Hall, Conference Secretary, CAARI-2008, University of North Texas, PO Box 311427, Denton, Texas 76203-1427 USA (phone 940-565-3250, fax 940-565-2227, email caari@unt.edu) url www.caari.com.

September 2008

Introduction to MCNP using the MCNP/MCNPX Visual Editor, Sept. 8–12, 2008, Richland, WA. Contact: http://www.mcnpvised.com/index.html.

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

18th Topical Meeting on the Technology of Fusion Energy (18th TOFE), Sept. 28–Oct. 2, 2008, San Francisco, California. Contact: General Chair: Jeff Latkowski, 18th TOFE Meeting, 4435 First Street #155, Livermore, CA 94551 (phone 925-423-9378, fax 925-424-6401, email: latkowski@llnl.gov) url http://www.18th-tofe.com/.

FLUKA Training Course, Sept. 29–Oct. 3, 2008, OECD/NEA Data Bank, Issy-les-Moulineaux, France. Contact Cristina Lebunetelle, OECD/Nuclear Energy Agency Data Bank (email programs@nea.fr or fax +33 1 45241109) url http://www.nea.fr/html/dbprog/Newsletter/FLUKA-syllabus2008-09.html.

October 2008

12th International Congress of the International Radiation Protection Association (IRPA 12), Oct. 19–24, 2008, Buenos Aires, Argentina. Contact: secretariat@irpa12.org.ar, url www.irpa12.org.ar.

5th Workshop on Neutron Measurements, Evaluations and Applications Nuclear Data for Sustainable Nuclear Energy, Oct. 27–29, 2008, Ljubljana, Slovenia. Contact Carmen Cabanillas Platero, European Commission, Joint Research Centre, Institute for Reference Materials and Measurements, Retieseweg 111, B-2440 Geel, Belgium (phone +32 (0)14 571 411, fax+32 (0)14 571 862, email jrc-irmm-nemea-5@ec.europa.eu).

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/.

Introduction to MCNP using the MCNP/MCNPX Visual Editor, Nov. 3–7, 2008, Reno, NV. Contact: http://www.mcnpvised.com/index.html.

LOWRAD 2008, Nov. 27–29, 2008 Lisbon, Portugal. Contact: Margarida Goulart de Medeiros (phone +351 21 994 6347, fax +351 21 994 1995), Octávia Monteiro Gil (phone +351 21 994 6344, fax +351 21 994 1995), or Secretariat, Luisa Oliveira (email lowrad2008@itn.pt), Nuclear and Technological Institute Department of Radiological Protection and Nuclear Safety Estrada Nacional 10, 2686 - 953 Sacavém, Portugal. url http://www.lowrad2008.itn.pt/index.html.

April 2009

Advances in Nuclear Fuel Management IV, April 12–15, 2009, Hilton Head, South Carolina. Contact: General Chair John Siphers (phone 919-546-4032, email john.siphers@pgnmail.com), or Technical Program Co-chairs Ivan Maldonado (phone 865-974-7562, email imaldona@utk.edu) and Atul Karve (phone 910-675-5802, email atul.karve@gnf.com) url http://anfm2009.org.

May 2009

2009 International Conference on Advances in Mathematics, Computational Methods, and Reactor Physics will be held May 3–7, 2009, Saratoga Springs, New York. Contact: Ray Gamino (ray.g.gamino@lmco.com) url http://local.ans.org/ne-ny/topical_2009_neny.html.

June 2009

3rd International Symposium on Radionuclide Therapy and Radiopharmaceutical Dosimetry and Workshop on Alpha-Emitting Radionuclides in Therapy, June 13–17, 2009, Toronto, Canada. Contact: George Sgouros (gsgouros@jhmi.edu) orMichael Lassmann (Lassmann_M@klinik.uni-wuerzburg.de) url www.snm.org.