Radiation Safety Information Computational Center

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The war for freedom will never really be won because the price of freedom is constant vigilance over ourselves and over our government.—Eleanor Roosevelt

RSICC will observe the holiday season beginning December 21, 2009, through January 4, 2010. RSICC will be happy to respond to your requests upon our return.

Merry Christmas and Happy 2010!

CHANGES TO THE RSICC CODE AND DATA COLLECTION

CCC-756/PENELOPE2008.1

The Facultat de Fisica (ECM) at Universitat de Barcelona and Universitat Politècnica de Catalunya de Barcelona, Spain, through the Nuclear Energy Agency Data Bank, Issy-les-Moulineaux, France, contributed PENELOPE2008.1. This code system performs Monte Carlo simulation of coupled electron-photon transport in arbitrary materials for a wide energy range, from a few hundred eV to about 1GeV. Photon transport is simulated by means of the standard, detailed simulation scheme. Electron and positron histories are generated on the basis of a mixed procedure, which combines detailed simulation of hard events with condensed simulation of soft interactions. A geometry package called PENGEOM permits the generation of random electron-photon showers in material systems consisting of homogeneous bodies limited by quadric surfaces, i.e. planes, spheres, cylinders, etc. Many new features and enhancements are included in this version which replaces PENELOPE2008 in the RSICC code collection.

PENELOPE 2008.1 runs on Pentium personal computers under either Windows XP/VISTA/7 or Linux and is expected to run on most Unix systems. A Fortran compiler is required on all computers as the user must supply the main program for his particular problem. Editing the included PENMAIN generally allows users to define their source characteristics without writing a single line of source code. The authors recommend GNU Fortran 90 (gfortran). Some other compilers which have been used include Compaq Visual Fortran 6.6 and Intel. To plot the results, a plotting program is needed. GNUPLOT is recommended. Some graphic tools that run under MS-Windows 9x/NT/2000/XP/VISTA/7 are included. GVIEW2D, GVIEW3D and GVIEWC are geometry viewers/debuggers that display 2- or 3-dimensional images of the geometry. SHOWER displays showers produced by primary particles of a given kind and energy in a slab. Windows executables are included for these viewers, but source codes are not provided.

The package is transmitted on a CD which includes the documents in PDF files, Penelope source codes, graphic tools, data files and example problems. The code system is distributed in a .tar file. Reference: Workshop Proceedings Barcelona, Spain, OECD ISBN 978-92-64-99066-1 (June/July 2009). Fortran; PC under Windows or Linux (RSICC ID: C00756PC58601).

DLC-236/ PHOBIA

The Los Alamos National Laboratory, New Mexico, North Carolina State University, Raleigh, and the Radiation Oncology Department of the Washington University School of Medicine, St. Louis, Missouri, contributed this data library of photon buildup factors to account for angular incidence on shield walls. Slant-path photon buildup factors for nine radiation shielding materials (air, aluminum, concrete, iron, lead, leaded glass, polyethylene, stainless steel, and water) are calculated with the most recent cross-section data available using Monte Carlo and discrete-ordinates methods. Buildup-factor calculations in discrete ordinates benefit from coupled photon/electron cross sections to account for secondary photon effects. Also, ambient dose equivalent buildup factors were analyzed at lower energies where corresponding response functions do not exist in the literature. The buildup factors utilized the following LANL codes: CEPXS, NJOY, and PARTISN. MCNPX was also used to provide a comparison to a few representative PARTISN buildup factor values. These codes are not included in this distribution but can be obtained from RSICC or the NEADB. Buildup factors determined in this work should be of general interest to the radiation shielding community. Sample input files for these codes can be found in the distribution of the code. Reference: LA-14296-T (July 2006). EXCEL on X86 PC Windows (RSICC ID: D00236PCX8600).

DLC-243/ TENDL-2008-ACE

NRG - Nuclear Research and Consultancy Group, Petten, The Netherlands, through the OECD NEA Data Bank, Issy-les-Moulineaux, France, contributed this new library for use with MCNP(X). The TENDL-2008 library (TALYS-based Evaluated Nuclear Data Library), developed at NRG, was processed

to the ACE format for use with Monte Carlo codes. It consists of a set of 348 neutron data files for isotopes from F-19 to Po-209, stable and long-lived nuclides, completely and consistently evaluated using the TALYS-1.0 nuclear reaction code package (NEA-1737 and PSR-539). For all isotopes and incident particles, the same methodology is applied to obtain cross sections, angular distributions, double differential data, gamma production data, isomeric production cross sections covariance information. The result is a nuclear data library with mutually consistent reaction and covariance information for all isotopes. ACE files are provided for neutrons, protons, deuterons, tritons, helions and alpha particles. The data libraries and documentation are transmitted on DVD in a WinZIP file which includes data libraries and xsdir files. Uncompressed ASCII files total about 5.8 GB. Reference: JEFF-DOC 1262 (November 17, 2008). ASCII card images; Unix workstation, PC, or Mac (RSICC ID: D00243MNYCP00).

People in the News

Samin Anghaie, ANS member since 1983, was awarded the 2009 Grand Medal by the French Nuclear Society for "outstanding achievements in research and his visionary leadership in the development and promotion of international collaboration regarding nuclear fuel." Agnhaie is a professor of nuclear and radiological engineering and the director of the Nuclear Space Power and Propulsion Institute at the University of Florida.

Berni Alder was awarded the 2009 National Medal of Science by the National Science Foundation for "outstanding contributions to science and engineering through his pioneering use of large-scale simulations for solving quantum mechanics problems and his development, with Stan Frankel, of the Monte Carlo methods for calculating results from random sampling." Alder is a retired physicist from Lawrence Livermore National Laboratory and professor emeritus in the University of California-Davis Department of Applied Science.

Bertrand R. Barré, ANS Fellow and member since 1981, was awarded the 2008 Global Award by the International Nuclear Societies Council for "his work as a scientist, teacher, diplomat, and driving force behind numerous scientific societies." Barré is a scientific advisor to AREVA.

Allison Davis and Kevin Eklund were awarded the 2009 Defense Programs Awards of Excellence by the National Nuclear Security Administration. Davis received the award for "vital and lasting contributions to NNSA Weapon Quality Assurance," and Eklund was recognized for "outstanding technical leadership of the B61 ALT 357 Life Extension Program." Both are on the staff at Sandia National Laboratories.

Julie Ezold, ANS member since 1992, was awarded the Patricia Bryant Leadership Award by U.S. Women in Nuclear for "significant contributions to U.S. WIN's core values of supporting an environment in the nuclear industry that enables success for both women and men, providing a network that furthers women's professional development, and maintaining an association that informs the public about nuclear." Ezold is a program manager in the Nuclear Materials Processing Group of the Nuclear Science and Technology Division at Oak Ridge National Laboratory.

Phillip J. Finck has been elected to membership in the International Nuclear Energy Academy where he joins with other prominent scientists, engineers, and nuclear energy specialists who develop recommendations on nuclear energy issues for the international community. Finck is a Fellow of the ANS and has been a member since 1994. He is associate laboratory director for nuclear science and technology at the Idaho National Laboratory, and is leader of the Fuel Cycle Research and Development Technical Integration Office in the Office of Nuclear Energy at DOE.

Siegfried S. Hecker, professor in the Department of Management Science and Engineering at Stanford University, was awarded the 2009 Enrico Fermi Award by DOE in recognition of "his contributions to plutonium metallurgy, his broad scientific leadership, and his continuing energetic efforts to reduce the danger of nuclear weapons globally." Hecker has been an ANS member since 2004.

Frank D. Hutchinson III, ANS member since 1961, was awarded a 2009 Distinguished Service Award by the National Council of Examiners for Engineering and Surveying for "his dedication to the engineering and surveying professions while serving on the New York State Board for Engineering and Land Surveying and contributing to various NCEES committees, including the Committee on Examinations for Professional Engineers and the Environmental Exam Development committee." Hutchinson retired from Gibbs & Hill were he served as vice president.

Susan M. Jablonski, ANS member since 1992, director of the Radioactive Materials Division of the Texas Commission on Environmental Quality (TCEQ), was awarded the Elda E. Anderson Award by the Health Physics Society at it's 54th Annual Meeting in July for her "leadership and innovation in public communication methods and licensing practices resulting in TCEQ's issuance of the first license for a low-level radioactive waste disposal facility in nearly 20 years."

Gerald Kulcinski, ANS Fellow and member since 1966, was awarded the 2008-2009 Hilldale Award by the University of Wisconsin in recognition of his "excellence in teaching, research in numerous areas, including the conceptual design of fusion power plants and the economic and environmental issues related to fusion power, and for his service on several university boards and committees." Kulcinski is the director of the Fusion Technology Institute and associate dean at the College of Engineering at the University of Wisconsin-Madison.

Susan Livenick, project manager for the B3 administration office for National Security Technologies, and **Lance Rakow**, logistics services manager for the company, have been awarded the 2009 U.S. Department of Energy Management Award. Livenick received the award for her role in completing the first green building at the Nevada Test Site, and Rakow for his role in instituting the use of environmentally friendly fuel in nearly all the Nevada Test Site's fleet vehicles.

Edward "Ted" L. Quinn, 1998–1999 ANS president, was awarded a 1906 Award for 2009 by the International Electro-technical Commission for "exceptional technical contributions to the development of international nuclear standards on set points and electromagnetic interference and for his long-standing leadership of the IEC Nuclear Instrumentation Systems Standards Working Group." Quinn is president of Technology Resources.

A. René Raffray, ANS member since 1999, was awarded the 2009 Fusion Technology Award by the IEEE Nuclear and Plasma Sciences Society for "outstanding contributions to fusion technology in the area of high-heat flux components for magnetic and inertial fusion energy." Raffray is the engineering leader of the ARIES Fusion Advanced Design Program and chamber task coordinator for the High Average Power Laser inertial fusion energy program in the Advanced Energy Technology Group at the Center for Energy Research of the University of California at San Diego.

Kristine L. Svinicki, ANS member since 1988, was awarded the 2009 Alumni Society Merit Award by the Nuclear Engineering and Radiological Science Department of the University of Michigan for "tremendous accomplishments in the nuclear field." Svinicki is a commissioner on the U.S. Nuclear Regulatory Commission.

Friedrich Wagner was awarded the Stern-Gerlach Medal for 2009 by the German Physical Society for his work in "high-temperature physics and fusion research, including his discovery of self-organized transport barriers as a milestone on the way to producing fusion plasmas." Wagner is a retired professor of the Greifswald Branch of the Max Planck Institute of Plasma Physics.

Amy Whitworth has been named a Fellow of the Institute of Nuclear Materials for "attaining distinction throughout her nearly 20 years in the field of nuclear materials management in numerous areas, including accountability implementation and safeguards- and security-related aspects of international treaties and arms control agreements." Whitworth is materials control and accountability program manager at the National Nuclear Security Administration.

Obituaries

Aage N. Bohr, son of Niels Bohr, a Nobel Prize winner for physics, died September 8. Aage was born in Copenhagen to Niels and Margrethe Bohr, June 19, 1922, mere months before his father was awarded the Nobel Prize for Physics. Exposed throughout his childhood to the many prominent scientists who worked with and visited with his father at the University of Copenhagen Institute for Theoretical Physics, it was no surprise that Aage followed his father in the field of physics. His education at the University of Copenhagen was interrupted when the family made their escape from the Nazi occupation. The elder Bohr joined the Manhattan Project traveling between London and the U.S., with his son acting as his assistant. Aage resumed his education when the family returned to Denmark in 1945, earning his masters degree in physics in 1946. He followed up with additional study at Princeton and Columbia Universities in the U.S., where he began the work on nuclear structure that led to the Nobel Prize for Physics in 1975, which he shared with long-time collaborator, Ben R. Mottelson, and James Rainwater. Upon returning to Denmark he continued with his career at the University of Copenhagen and in 1963 succeeded his father as director of the Institute for Theoretical Physics, which was later named the Niels Bohr Institute. He left that position to return to research in 1967. He became director of the Nordic Institute for Theoretical Physics (Nordita) in 1975.

Eugene J. Kosiancic, ANS member since 1974, died September 6 at the age of 73. Kosiancic earned his Ph.D. in nuclear engineering at the Michigan Technological University in 1961. He taught at the university and at Purdue before joining Babcock &Wilcox where he served in various management roles in the Nuclear Fuels Division for 10 years. He continued his career at Atlantic Richfield Hanford Company and Rockwell Hanford Operations before joining Westinghouse Hanford where he served as deputy manager of analytical services. He retired in 1997 and founded the consulting firm Kosiancic and Associates.

Richard M. Lessler, ANS member since 1994, died August 12 at the age of 78. He earned his Ph.D. in chemistry at the University of California-Berkeley in 1959. He worked for Lawrence Livermore National Laboratory, the U.S. Nuclear Regulatory Commission, the United Nations, Bechtel, TRW, Inc, and the Aerospace Corporation before joining the U.S. Environmental Protection Agency as an environmental engineer.

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.

TRAINING

Introductory MCNP, Advanced MCNP, and Visual Editor Training

Date 2010	Class	Location
March 29-April 2	MCNP5/MCNPX Intermediate Workshop	Paris
April 26-30	Introduction to MCNPX using the MCNPX Visual Editor	Las Vegas, NV
May 16-20	Advanced Visual Editor	Orlando, FL
May 24-28	MCNP5/MCNPX Intermediate Workshop	Orlando, FL
June 21-23	CAD to MCNP	Seattle, WA
July 12-16	Introduction to MCNPX using the MCNPX Visual Editor	Anaheim, CA
August 2-4	Visualization	Seattle, WA
August 16-20	MCNP5/MCNPX Intermediate Workshop	Seattle, WA
September 13-17	Introduction to MCNPX using the MCNPX Visual Editor	Myrtle Beach, SC
September 20-24	MCNP5/MCNPX Intermediate Workshop	Virginia Beach, VA
October 25-29	MCNP5/MCNPX Intermediate Workshop	Spain
November 15-19	Introduction to MCNPX using the MCNPX Visual Editor	Las Vegas, NV

Classes are taught using the most recent (beta) version of the Visual Editor Code. All class attendees must have a valid MCNP/MCNPX RSICC license. Bring proof of receipt (letter or email) 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.

MCNPX Training

2010 Classes		
Date	**Class**	**Location**
March 29–April 2	Intermediate MCNP5/MCNPX	Paris, France
May 24–28	Intermediate MCNPX	Orlando, FL
August 16–20	Intermediate MCNPX	Seattle, WA
September 20–24	Intermediate MCNPX	Virginia Beach, VA
October 25–29	Intermediate MCNP5/MCNPX	Barcelona, Spain

The MCNPX team at Los Alamos National Laboratory offers interactive workshops for training users in the capabilities of MCNPX. Three levels are offered: introductory (for users with 0-1 year of experience), intermediate (for users with 1-3 years of experience), and advanced (for users with more than 3 years of experience). The list of workshops below is somewhat tentative, as workshops may be added, removed, or modified throughout the year, depending on user interests.

Cost of the U.S. workshops is $2,300 US with an early registration discount of $300 (i.e., if paid 30 days before the scheduled workshop). This fee includes applicable Gross Receipt taxes. Workshops with fewer than 15 registrants on the early registration date are subject to cancellation or rescheduling.

In order to process non-US citizens by the class date, non-US citizens shall register at least 6 weeks prior to the start of the training class. All non-US citizens who reside in countries listed in the U.S. Code of Federal Regulations, Title 10, Part 810.8, are required to register at least 8 weeks prior to the start of the training class. These participants must be processed by the DOE and should not make travel arrangements until approval from DOE has been obtained.

Additional information about the courses can be found at the website, http://mcnpx.lanl.gov/. To register send an email to Randy Schwarz, indicating the workshop of interest to you.

PRACTICAL MCNP FOR THE HP, MEDICAL PHYSICIST, AND RAD ENGINEER

DATE: March 22-26, 2010
FEE: $1,800 per person
PLACE: RIO Grande Radiological Physics Group, LLC, 2820 Broadbent Parkway NE, Suite E&F, Albuquerque, New Mexico 87107 USA (www.riophysics.com).

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. The lead instructor will be Dick Olsher, who developed the course at the Los Alamos National Laboratory, and has taught this course since its inception in 1996.

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 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.

Payment: Register online (www.riophysics.com) or via mail. Major credit cards (VISA, MC & AMEX) are accepted. Inquiries regarding registration should be made to David Hunter, 505-341-4994; fax: 505-332-9320; e-mail: david@riophysics.com. Technical questions should directed to Dick Olsher, e-mail: dick@blackdahlia.com. Foreign students must obtain a licensed copy of the MCNP code prior to attending class.

CONFERENCES

1st International Nuclear & Renewable Energy Conference

The 1st International Nuclear & Renewable Energy Conference (INREC'10) will be held March 21–24, 2010, in Amman, Jordan. It is the first in a planned series of biannual meetings focusing on the practical aspects of nuclear energy. The meeting covers the synergetic integration of nuclear engineering with electrical power production, coupling to existing power grids and the design of smart grid systems, to intelligent instrumentation and control, and monitoring of processes relevant to radiation safety and nuclear safeguards. Research work addressing alternate energy forms are also welcome.You will find the necessary conference information at the website, http://inrec10.inrec-conf.org/.

2010 Topical in Radiation Protection and Shielding (RPSD), Isotopes & Radiation (IRD), and Biology and Medicine (BMD)

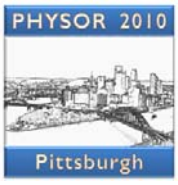
The Radiation Protection and Shielding Division, the Isotopes and Radiation Division, and the Biology and Medicine Division of ANS are joining to organize the 2010 Topical in Radiation Protection and Shielding (RPSD), Isotopes & Radiation (IRD), and Biology and Medicine (BMD), April 19–23, 2010, in Las Vegas, Nevada. Check the conference website, http://www.rpsd2010.com/ often for up-to-date information.

ND2010

The 2010 International Conference on Nuclear Data for Science and Technology (ND2010) will be held April 26–30, 2010, at Jeju Island, South Korea. The meeting is organized by the Korean Nuclear Society and Korea Atomic Energy Research Institute under the auspices of the OECD Nuclear Energy Agency. The conference is the 11th in a series held every three years.

The purpose of these conferences is to bring together scientists and engineers involved in the production or use of nuclear data for various applications. The ND2010 conference will cover measurements, theoretical model developments, evaluation, processing, validation and dissemination activities. The scope of the conference includes the following fields of application: fission and fusion energy, accelerator technology, dosimetry and shielding, astrophysics and cosmology, safeguards and security, space, medicine, and environment. The corresponding needs for improved nuclear data will be addressed. Additional information about the conference may be obtained from Jonghwa Chang, jhchang@kaeri.re.kr or Young-Ouk Lee, yolee@kaeri.re.kr. The website is http://www.nd2010.org/.

PHYSOR 2010



The PHYSOR 2010 Topical Meeting will be held May 9–14, 2010, in Pittsburgh, Pennsylvania. The conference is sponsored by the American Nuclear Society (ANS) Reactor Physics Division and co-sponsored by the ANS Mathematics and Computation Division and the American Society of Mechanical Engineers (ASME). The conference theme, *Advances in Reactor Physics to Power the Nuclear Renaissance*, will provide a platform for international experts to exchange ideas and the latest developments in reactor physics, mechanical and material engineering and related nuclear technologies in light of the nuclear renaissance. Bookmark the website, www.physor2010.org, and check it periodically for news and updates. You may also contact the PHYSOR 2010 Technical Program Chair, Mohamed Ouisloumen, Westinghouse Electric Company, 4350 Northern Pike, Monroeville, PA 15146 (phone +1-412-374-2148, fax +1-412-374-4500, email info@physor2010.org).

ICONE18

The 18th International Conference on Nuclear Engineering (ICONE18) will be held May 17–21, 2010, in Xi'an, China. The American Society of Mechanical Engineers (ASME), Japan Society of Mechanical Engineers (JSME) and Chinese Nuclear Society (CNS) are jointly organizing the conference. Information regarding the conference can be found at the conference website, http://www.asmeconferences.org/ICONE18/index.cfm, which is also where abstracts must be submitted. In addition you may contact ICONE 18 Secretariat c/o Chinese Nuclear Society, P.O.Box 2125, Beijing 100822, China (phone 86-10-68555686, 68555597, fax 86-10-68527188, email icone18@ns.org.cn).

SATIF-10

The tenth meeting of the task force on Shielding Aspects of Accelerators, Targets and Irradiation Facilities (SATIF-10) will be held June 2–4, 2010, in Geneva, Switzerland. Particle accelerators have evolved over the last decades from simple devices to powerful machines and are having an increasingly important impact on research, technology and lifestyle. Today they cover a wide range of applications including material science and medical applications. In recent years, requirements from new technological and research applications have emerged and the number of accelerator facilities in operation, being commissioned, designed or planned has significantly increased. Their parameters (such as the beam energy, beam currents and intensities, targets composition, etc.) vary widely giving rise to new radiation shielding aspects and problems.

Abstracts may be submitted via the website through **February 28, 2010**, on the following topics:

- Source term and related topics
- Induced radioactivity
- Benchmarking- code/code and code/experimental data
- Dosimetry
- Medical and industrial accelerators
- Present status of data and code libraries
- Follow-up of past SATIF agreements and actions
- Accelerator Shielding Handbook
- Discussion/Summary and future actions

The activities of the Task Force on Shielding Aspects of Accelerators, Targets and Irradiation Facilities (SATIF) are sponsored by the OECD Nuclear Energy Agency (NEA) and its Nuclear Science Committee (NSC). The main objectives of the SATIF Meetings are to:

* Promote the exchange of information among experts in the field of accelerator shielding and related topics,

* Identify areas where international co-operation can be fruitful, and

* Carry on a program of work in order to achieve progress in specific priority areas.

The conference website is http://www.cern.ch/SATIF-10. The conference chair, Marco Silari, can be reached at Marco.Silari@cern.ch.

Current Problems in Nuclear Physics and Atomic Energy

The 3rd International Conference on Current Problems in Nuclear Physics and Atomic Energy (NPAE-Kyiv 2010), which will be held June 7–12, 2010, in Kyiv, Ukraine. This conference is the continuation of the conferences held in Kyiv in 2006 and

2008. The NPAE-Kyiv2010 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).

Authors are invited to submit a one page abstract (300–500 words) by **March 1, 2010**, via e-mail to npae-kyiv2010@kinr.kiev.ua on the following topics:

- Collective processes in atomic nuclei
- Nuclear reactions
- Nuclear structure and decay processes
- Rare nuclear processes
- Neutron and reactor physics, nuclear data
- Problems of atomic energy
- Applied nuclear physics in medicine and industry
- Experimental facilities and detection techniques

All correspondence concerning scientific program, publication and other questions should be sent to:

Dr. Vitali Yu. Denisov
Institute for Nuclear Research,
Prospect Nauky, 47
Kyiv, 03680
Ukraine
(fax +38 044 525 44 63, email npae-kyiv2010@kinr.kiev.ua)

Information on the Conference can be found at the website: http://www.kinr.kiev.ua/NPAE-Kyiv2010.

ANS 2010 Annual Meeting

The theme for the 2010 ANS Annual Meeting is "Nuclear Science and Technology—The Right Fit. The Right Time." It will be held in San Diego, CA, June 13–17, 2010. The general chairman is Ross T. Ridenoure of Southern California Edison, and the program Chair is Dr. A. Kurshad Muftuoglu of GE-Hitachi Nuclear Energy. Abstracts may be submitted November 1–January 8 on the following main tracks:

1. Accelerator Applications (AAD)
2. Aerospace Nuclear Science and Technology (ANSTD)
3. Biology and Medicine (BMD)
4. Decommissioning, Decontamination, and Reutilization (DDRD)
5. Education, Training, and Workforce Development (ETWDD)
6. Environmental Sciences (ESD)
7. Fuel Cycle and Waste Management (FCWMD)
8. Fusion Energy (FED)
9. Human Factors, Instrumentation, and Controls (HFICD)
10. Isotopes and Radiation (IRD)
11. Mathematics and Computation (MCD)
12. Nuclear Criticality Safety (NCSD)
13. Nuclear Installation Safety (NISD)
14. Operations and Power (OPD)
15. Radiation Protection and Shielding (RPSD)
16. Reactor Physics (RPD)
17. Thermal Hydraulics (THD)
18. Young Members Group (YMG)

A detailed list of the subtracks, as well as specific instructions regarding paper submission, can be found at http://www.new.ans.org/meetings/file/133. Bookmark http://www.new.ans.org/meetings/calendar/d_6-13-2010 where announcements and updates will be posted.

2010 Joint Symposium on Supercomputing in Nuclear Applications + Monte-Carlo

The combined Supercomputing in Nuclear Applications (SNA) and Monte-Carlo (MC) 2010 meeting will be hosted by the Japan Atomic Energy Agency Center for Computational Science and e-systems and Nuclear Science and Engineering Directorate October 17–20, 2010, at the Hitotsubashi Memorial Hall in Tokyo.

Abstracts may be submitted by **January 30, 2010,** on the following topics:

- Applications
- Computational science
- Computer science
- Information technology and its applications
- High performance computing
- Theory for Monte Carlo simulation
- Physics modeling in Monte Carlo simulation

Bookmark the website, http://www.sna-mc-2010.org/, to keep abreast of developments for the meeting. You may also contact sna2010@ml.jaea.go.jp.

MTAA 13

Texas A&M will host the 2011 Modern Trends in Activation Analysis (MTTA-13) Conference—fifty years after the first MTAA conference also hosted by the what was then the A&M College of Texas. The meeting will take place March 13–18, 2011.* The conference is sponsored by Texas A&M with the cooperation of the International Atomic Energy Agency and the American Nuclear Society.

The scope of the conference will include activation analysis methodology, methodological enhancements, applications of activation analysis to the fields of energy, environment, biology and medicine, geology, archaeology, homeland security, etc. However, this conference will broaden the subject matter somewhat in that it will invite and entertain contributed presentations from all areas of nuclear analytical methods as well as competing technologies.

Conference organizers will provide incentives to selected potential attendees in the form of travel awards. We anticipate making up to twelve awards to students and another twelve to young scientists who submit applications. Awardees will be expected to participate in the meeting by submission of abstracts and manuscripts to the proceedings. While financial need will be considered, recipients will be those considered by the conference organizers to be most likely to provide meaningful participation and future advancement of the science. Details concerning application procedures and criteria for selection will appear in subsequent announcements as well as the conference website.

Make sure you are on the conference contact list by completing the form found at: https://tti.tamu.edu/conferences/mtaa13/registration_interest.htm. Information on the conference will be posted to http://tti.tamu.edu/conferences/mtaa13/. You may also contact William D. (Dennis) James, Center for Chemical Characterization and Analysis, Texas A&M University, 3144 TAMU, College Station, TX 77843-3144 (phone 979 845-7630, email wd-james@tamu.edu).

*Conference dates are dependent on the Texas A&M University academic calendar and are tentative at this time and subject to change. Final calendar approval is expected before January 2010.

CALENDAR

March 2010

INREC'10, March 21–24, 2010, Amman, Jordan. URL http://inrec10.inrec-conf.org/.

Practical MCNP for the HP, Medical Physicist, and Rad Engineer, March 22-26, 2010. Contact: David Hunter (phone 505-341-4994, fax: 505-332-9320, email: david@riophysics.com).

April 2010

ANS Student Conference, April 8–11, 2010, Ann Arbor, Michigan. Contact Travis Trahan (tjtrahan@umich.edu) or Michaela Eddy (eddy.michaela@gmail.com) url http://committees.ans.org/students/.

Pacific Northwest International Conference on Global Nuclear Security-the Decade Ahead, April 11–16, 2010, Portland OR. Contact: Carrie Mathews (phone 509-375-6783, email carrie. mathews@pnl.gov) url http://pnwcgs.pnl.gov/PNIC/PNIC.stm.

1st Joint Topical Meeting of the Radiation Protection & Shielding, Isotopes & Radiation, and Biology & Medicine Divisions, April 19–23, 2010, Las Vegas, Nevada. Contact: http://local.ans.org/nv/jtm2010.html.

2010 International Conference on Nuclear Data for Science and Technology, April 26–30, 2010, Jeju Island, South Korea. Contact: Jonghwa Chang, jhchang@kaeri.re.kr or Young-Ouk Lee, yolee@kaeri.re.kr. The website is http://www.nd2010.org/.

May 2010

PHYSOR 2010, May 9–14, 2010, Pittsburgh, PA. Contact: Mohamed Ouisloumen, Westinghouse Electric Company, 4350 Northern Pike, Monroeville, PA 15146 (phone +1-412-374-2148, fax +1-412-374-4500, email info@physor2010.org) url: www.physor2010.org.

1st Annual WNU School on Radioisotopes, May 15–June 4, 2010, Seoul, Republic of Korea. URL http://www.world-nuclear-university.org/about.aspx?id=25726.

ICONE18, May 17–21, 2010, Xi'an, China. Contact: ICONE 18 Secretariat c/o Chinese Nuclear Society, P.O.Box 2125, Beijing 100822, China (phone 86-10-68555686, 68555597, fax 86-10-68527188, email icone18@ns.org.cn) url http://www.asmeconferences.org/ICONE18/index.cfm

June 2010

SATIF-10, June 2–4, 2010, Geneva, Switzerland. Contact: Marco Silari (Marco.Silari@cern.ch) url http://www.cern.ch/SATIF-10

3rd International Conference "Current Problems in Nuclear Physics and Atomic Energy," (NPAE-Kyiv2010), June 7–12, 2010, Kyiv, NPAE Ukraine. Contact: Dr. Vitali Yu. Denisov, Institute for Nuclear Research, Prospect Nauky, 47, Kyiv, 03680, Ukraine (fax +38 044 525 44 63, email npae-kyiv2010@kinr.kiev.ua) url http://www.kinr.kiev.ua/NPAE-Kyiv2010.

ANS Annual Meeting, June 13–17, 2010, San Diego, CA. Contact: url http://www.new.ans.org/meetings/file/133

October 2010

SNA2010 and MC2010, Oct. 18–21, 2010, Tokyo. Contact: CCSE, Japan Atomic Energy Agency, 8F, Sumitomo-Ueno Bldg. No.8, 6-9-3 Higashi-Ueno, Taito-ku, Tokyo 110-0015, Japan (email info@sna-mc-2010.org, fax +81-3-5246-2537) url http://www.sna-mc-2010.org/.

March 2011

MTTA-13, March 13–18, 2011, College Station, TX. Contact William D. (Dennis) James, Center for Chemical Characterization and Analysis, Texas A&M University, 3144 TAMU, College Station, TX 77843-3144 (phone 979 845-7630, email wd-james@tamu.edu) url http://tti.tamu.edu/conferences/mtaa13/.