
Radiation Safety Information Computational Center



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The future is not some place we are going, but one we create. The paths are not found, but made, and the activity of making them changes both the maker and the destination.—

John Schaar

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Jennie celebrates her retirement with the RSICC staff (from left, T. Moore, N. Hatmaker, M. Baird, Jennie, J. Arwood, B. Snow, A. Rice, and B. Kirk).

Life after RSICC

The end of 2009 ushered out an era at RSICC as we said “Goodbye,” to Jennifer B. Manneschmidt as she retired from RSICC and the Laboratory. As RSICC’s Software Coordinator, Jennie pursued and maintained many productive relationships with code and data developers and, RSICC will continue to benefit from her groundwork for many years. We wish Jennie well in retirement and know that she will find satisfaction in other pursuits, including being a free consultant to RSICC!

Janice Arwood has assumed the duties of Software Coordinator and will be the primary contact between RSICC and development teams. Mark Baird has joined RSICC to serve as the new Software Quality Control Manager and will continue the commitment to quality in the packaging of nuclear science and engineering code systems and data upon which RSICC’s mission as an international center rests.

CHANGES TO THE RSICC CODE AND DATA COLLECTION

[CCC-125/RSAC-6.2](#)

Idaho National Laboratory, Idaho Falls, Idaho, contributed a newly frozen version of this radiological safety analysis code system. RSAC-6.2 can be used to model complex accidents and radiological consequences to individuals from the release of radionuclides to the atmosphere. A user can generate a fission product inventory; decay and ingrow the inventory during transport through processes, facilities, and the environment; model the downwind dispersion of the activity; and calculate doses to downwind individuals. Doses are calculated through the inhalation, immersion, ground surface and ingestion pathways. New to RSAC-6.2 are the ability to calculate inhalation from release to a room, inhalation from resuspension of activities, and a new model for dry deposition. Doses can now be calculated as close as 10 meters from the release point. RSAC-6.2 has been subjected to extensive independent verification and validation for use in performing safety-related dose calculations to support safety analysis reports.

WinRP 2.0, a Windows based overlay to RSAC-6.2, assists users in creating and running RSAC-6.2 input files. RSAC-6.2 runs on Pentium computers under Windows operating systems. It was tested at RSICC on a Pentium 4 running Windows XP. The CD contains RSAC 6.2 Windows executable files, test cases and documentation. RSAC-6, Rev. 6.2 (03/11/02), corrects an earlier issue with RSAC-6 compiled with F77L-EM/32 Fortran 77 Version 5.10, which would not allow the executable to run with XP or VISTA Windows operating systems. Because this version is still in use at some facilities, it is being released through RSICC in addition to the new RSAC-7 (CCC-761). Fortran 77; PC 586 (C00125/PC586/03).

[CCC-761/RSAC-7](#)

Idaho National Laboratory, Idaho Falls, Idaho, has released the Radiological Safety Analysis Computer (RSAC) Program Version 7.0 (RSAC-7), the newest version of the RSAC code. RSAC-7 combines a user friendly interface with a powerful analysis tool. It calculates the dose consequences of a release of radionuclides to the atmosphere. A user can generate a fission product inventory from either reactor operating history or a nuclear criticality event. RSAC-7 includes the dose conversion factors from ICRP 68 and ICRP 72. In addition, it includes the analysis tool for generation of 24-hour acute organ dose. Joint frequency meteorological analysis combined with a summary of 50% and 95% conditions allow for an easy check or analysis of the sensitivity of meteorological conditions. RSAC-7 models the effects of high-efficiency particulate air filters or other cleanup systems and will calculate the decay and in-growth during transport through processes, facilities, and the environment. Doses are calculated for inhalation, air immersion, ground surface, ingestion, and cloud gamma pathways. RSAC-7 can be used as a tool to evaluate accident conditions in emergency response scenarios, radiological sabotage events and to evaluate safety basis accident consequences. RSAC-7 is fully verified and validated in accordance with NQA-1 2000 for Quality Level 1 applications. It has been proposed for inclusion in the Safety Software Toolbox. RSAC-7 can be used as either the primary or secondary dose consequence analysis tool.

RSAC-7 runs on Pentium computers under Windows operating systems. It was tested at RSICC on a Pentium 4 running Windows XP SP3. RSAC-7 is transmitted in Windows zip format on a CD, which contains RSAC-7 executables, test cases, reference material and documentation. Fortran 77; PC 586 (C00761/PC586/00).

ANS News

Nominating Committee Selects 2010 Candidates

Vice President / President-Elect Candidates

The ANS Nominating Committee has selected as the candidates for Vice President / President-Elect: *Jacques Besnainou* (AREVA Inc.), and *Eric P. Loewen* (GE).

Board of Directors Candidates

The ANS Board of Directors each serve a three year term that begins and ends during an ANS Annual Meeting. The ANS Bylaws and Rules require that U.S. and non U.S. members be proportionately represented; therefore, in the 2010 election, there are four U.S. Director At-Large, and one non-U.S. Director At-Large positions to be filled.

U.S. Director At-Large Position Candidates

Nominated to run for the U.S. Director At-Large positions are: *Kelle J. Barfield* (Entergy), *Carol L. Berrigan* (Nuclear Energy Institute), *Sama Bilbao y Leon* (International Atomic Energy Agency), *Jack S. Brenizer, Jr.* (Penn State University), *K. Michael Goff* (Idaho National Laboratory), *John S. Hendricks* (Los Alamos National Laboratory), *Donald R. Hoffman* (EXCEL Services Corporation), and *Amir Shahkarami* (Exelon).

Non-U.S. Director At-Large Position Candidates

Nominated to run for the Non-U.S. Director At-Large---the Americas---position are: *Amares Chatt* (Dalhousie University), and *Daniel A. Meneley* (AECL).

Join the Nuclear Advocacy Network Today

Your views of nuclear topics now being debated are important! Nuclear energy is again at the center of energy debates throughout the United States, and nuclear professionals must mobilize for some tough political battles. You can do your part to promote nuclear energy by joining the ranks of the Nuclear Advocacy Network. To register, enter the code word uranium, indicate your affiliation with ANS, and provide your home mailing address (required to connect constituents with their elected representatives) at <http://www.ans.org/goto/nad.cgi?id=1260338400-9>.

It's not only important to advocate for nuclear energy in the public forum, but to also combat prevailing myths held by the general public regarding the efficiency and safety of nuclear power. To that end, the Public Information Committee is offering a new graphic layout of the Top Ten Myths about Nuclear Energy which is available at <http://www.ans.org/goto/nad.cgi?id=1260338400-10> (Adobe Acrobat required).

New Clarification Issued On ANSI/ANS-8.1-1998 (R2007), *Nuclear Criticality Safety in Operations with Fissionable Materials Outside Reactors*. Copies of all clarifications are available on the ANS Web site at: <http://www.ans.org/goto/nad.cgi?id=1260338400-12>.

Obituaries

Talmadge Ray England (1929-2009) died Thursday, December 3, 2009, at his home in White Rock, New Mexico. He had retired from group T-2 at the Los Alamos National Laboratory (LANL) following a distinguished career in nuclear data and transmutation at the Bettis Atomic Power Laboratory (BAPL), University of Wisconsin and Los Alamos National Laboratory (LANL).

Tal spent his youth in Bonham, Texas, and southern Oklahoma. He joined the Navy at 15 prior to the end of WWII and was trained in maintenance of electrical equipment before U.S. House Speaker Sam Rayburn, also of Bonham, arranged his early discharge. While attending school in electronics and radio engineering he met and married his life's partner, Carol, and they embarked on a career of building and operating a series of radio stations in rural Virginia and Tennessee. While following this career and growing a family of four daughters, he attended Lincoln Memorial University and graduated with highest honors in physics. He then began a fellowship at BAPL/University of Pittsburgh where he earned an MS in physics and enjoyed a career in the naval reactors program—a career centered on the CINDER code project, transmutation, nuclear data and reactor transients and spiced with associations with many other great minds of the early years of reactor and nuclear physics. He joined Prof. Charles Maynard at the University of Wisconsin, where he earned his Ph.D. in nuclear engineering. Tal and Charlie continued CINDER code and data library work from BAPL and, based on CINDER results, testified at congressional committee hearings on reactor emergency core cooling. Tal continued his CINDER code and nuclear data work at BAPL and LANL and contributed heavily to laboratory projects, American Nuclear Society reactor physics standards, International Atomic Energy Agency research efforts, and leadership in the Cross Section Evaluation Working Group for the Evaluated Nuclear Data File and the National Nuclear Data Center.

His contributions to nuclide inventory calculations, reaction cross sections, decay energies and spectra defined the paths of development in these areas of nuclear science. The CINDER data and code are being applied now to work in astrophysics and cosmology in studies related to the origin of the universe.

William B. Wilson wbw@lanl.gov



Michael B. Wells, 87, passed away Friday, Dec. 11, 2009, in Fort Worth, Texas. Mr. Wells was born July 3, 1922, in Olathe, Kansas. He earned a M. S. degree in mathematics from the University of Kansas City, Missouri. He served in the U. S. Navy and Naval Reserve from 1942 to 1957. After honorable discharge from military service, Mr. Wells taught mathematics at the University of Kansas City until 1956 when he joined the nuclear engineering department of the Convair Division of General Dynamics Corporation in Fort Worth. In the mid-sixties, he joined Dr. Norman M. Schaeffer in forming Radiation Research Associates, Inc. in Fort Worth, where he served as Vice President until retirement in the early nineties.

During his career, Mr. Wells authored or co-authored numerous technical articles, reports, and papers. He made many innovations in computational methods and directed numerous code-development projects in the fields of nuclear radiation shielding and atmospheric thermal radiation transport analysis. He was a member of the American Nuclear Society Standards Committee, and he contributed to the development of the 1979 and 1987 revisions of ANS-6.6.1, "Calculation and Measurement of Direct and Scattered Gamma Radiation from LWR Nuclear Power Plants".

J. Karl Warkentin

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

[27th Short Courses for Modelling and Computation of Multiphase Flows](#)

The Swiss Federal Institute of Technology (ETH) is hosting the 27th Short Courses for Modelling and Computation of Multiphase Flows in Zurich, February 15–19, 2010. Multiphase flows and heat transfer with phase change are of interest to researchers and engineers working in power, nuclear, chemical-process, oil-and-gas, cryogenic, space, food, bio-medical, micro-technology, and other industries. Courses similar to this one have been offered in the past at Stanford University, the University of California-Santa Barbara and elsewhere. These courses have taken place annually at ETH-Zurich since 1984. The courses continue to evolve, reflecting on-going progress and developments. The Zurich courses not only offer the opportunity to meet and interact with outstanding lecturers, but also with colleagues working worldwide on similar topics but possibly in different industries. The curriculum, fees, registration form, and other information related to the course may be found at <http://www.ascomp.ch/ShortCourse/Short-Course.html>. Address correspondence to Prof. G. Yadigaroglu, ETH, WEN B-13, Weinbergstrasse 94, CH-8006 Zurich, Switzerland (phone +41-44-632-4615). Registration and other communication may be sent to yadi@ethz.ch.

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
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

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 is 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). Workshops with fewer than 15 registrants on the early registration date are subject to cancellation or rescheduling.

In order to process non-U.S. citizens by the class date, non-U.S. citizens must register at least 6 weeks prior to the start of the training class. All non-U.S. 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](mailto:Randy.Schwarz@lanl.gov), 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.

[SCALE Training Courses at ORNL](#)

Date	Title	Description
March 1-5	SCALE Criticality Safety Course (KENO V.a)	Criticality safety with the most widely used version of KENO
March 8-12	SCALE Criticality Safety and Shielding Course (KENO-VI/MAVRIC)	KENO-VI: Criticality safety using the generalized geometry version of KENO MAVRIC: 3-D automated variance reduction for deep-penetration and complex shielding problems
March 15-19	SCALE Lattice Physics and Depletion Course (ORIGEN-ARP/TRITON)	ORIGEN-ARP: Isotopic depletion/decay and source terms using latest version of ORIGEN TRITON: 2-D reactor physics analysis using NEWT
March 22-26	SCALE Sensitivity/ Uncertainty Tools Course (TSUNAMI) (Experienced KENO users only)	1-D and 3-D sensitivity/uncertainty analysis using XSDRNPM and KENO V.a

The registration fee is \$2000 for each course; after February 1 registration is \$2300. A discount of \$200 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 6 users. All foreign national visitors must register a minimum of 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.

NEA Training courses and workshops

- 9-12 March 2010
A training course on the Monte Carlo computer code [TRIPOLI-4](#), in co-operation with French Atomic Energy Commission (CEA), will be held at the OECD/NEA Data Bank, Issy-les-Moulineaux, France. [Registration form](#). [Programme](#).
- 29 March - 2 April 2010
[MCNP/MCNPX Training course](#), OECD NEA Data Bank - co-sponsored by ORNL/RSICC, Issy-les-Moulineaux, France. [Registration form](#). [Syllabus](#).
- 6-9 April 2010
Training course on [Analytical Benchmarks: Case Studies in Neutron Transport Theory](#) using the Handbook (including computer codes) published on "Analytical Benchmarks for Nuclear Engineering Applications (Case Studies in Neutron Transport Theory)". This course is intended for transport methods developers and those who teach reactor physics and transport theory. In addition, the course would be appropriate for anyone with an analytical interest in solving equations and the application of numerical methods to obtain extreme accuracy. Teacher: Prof. Barry D. Ganapol. [Registration form](#).
- 3-7 May 2010
[SCALE Criticality Safety and Radiation Shielding Course](#), OECD/NEA Data Bank - co-sponsored by ORNL/RSICC, Issy-les-Moulineaux, France. [Registration form](#).
- 5-8 July 2010
Training course on [PENELOPE 2008](#) - A code system for Monte Carlo simulation of electron and photon transport. [Scope and objectives, syllabus and accommodation](#). [Registration form](#)

[ORAU Offers Health Physics and Radiation Safety Training](#)

Our customers recognize the value of the hands-on, laboratory-based health physics training offered by Oak Ridge Associated Universities' (ORAU) Professional Training Programs (PTP).

ORAU is pleased to offer the following courses. If you wish to discuss having a customized course delivered at your site, please contact Paul Frame at 865.576.3388 or Paul.Frame@orau.org.

Course	Dates
Applied Health Physics	Feb. 22–March 26
CHP Part I Review	April 6–8
Gamma Spectroscopy	April 12–16
Introduction to Radiation Safety	April 19–23
Environmental Monitoring	May 10–14
MARSSIM	May 17–21
Radiation Safety Officer Training	June 21–25
Medical Radiation Safety Officer Training	Aug. 16–20
Applied Health Physics	Sept. 13–Oct. 15
MARSSIM	Oct. 25–29
Air Sampling for Radioactive Materials	Oct. 18–22
Radiation Medicine for Safety Professionals	Nov. 1–5
Site Characterization in Support of Decommissioning: Planning, Implementation, and Evaluation	Nov. 1–5
Introduction to Radiation Safety	Nov. 8–12
Gamma Spectroscopy	Dec. 6–10

CONFERENCES

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

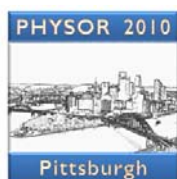
The Radiation Protection and Shielding Division, the Isotopes and Radiation Division, and the Biology and Medicine Division of ANS are joining to organize the 2010 Topical in Radiation Protection and Shielding (RPSD), Isotopes & Radiation (IRD), and Biology and Medicine (BMD), April 19–23, 2010, in Las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



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).

[Symposium on Radiation Measurements and Applications](#)

The 12th Symposium on Radiation Measurements and Applications (SORMA XII) will be hosted by the University of Michigan May 24—27, 2010. This Symposium has been held at four to five year intervals since the series of technical meetings dealing with ionizing radiation and its applications began in 1964. Its focus has expanded over the decades to include the breadth of ionizing radiation measurement applications and technologies. Interested authors are invited to review the primary topics of the Symposium and submit an abstract and 2-page summary paper by the **February 26, 2010**, deadline through the Symposium website. Papers physically presented at the conference by one of the authors and accepted for publication will appear in a special edition of *Nuclear Instruments and Methods in Physics Research A*. Topics include:

Technology Areas

Analytical standards
Advances/applications of radiation detectors
Neutron detection: materials & methods
Detector materials
Timing and spectroscopy
Elemental determination
Radiography
Radiation sources
Detector electronics and signal processing
X-ray analysis
Data analysis and image reconstruction

Application Areas

Energy technology
Environmental and geosciences
Examination and evaluation
Materials research
Medical applications
Life sciences
Nonproliferation and homeland security
Space and planetary science
Nuclear materials management

The conference chairman is Prof. David K. Wehe, SORMA XII, 1906 Cooley Building, University of Michigan, 2355 Bonisteel Boulevard, Ann Arbor, MI 48109-2104. Add the website, <http://rma-symposium.engin.umich.edu/>, to your bookmarks to keep up with current information.

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. 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 (MTAA-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).

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://pnwccgs.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.cn) url <http://www.asmeconferences.org/ICONE18/index.cfm>

SORMA XII, May 24–27, 2010, Ann Arbor, MI. Contact: Prof. David K. Wehe, SORMA XII, 1906 Cooley Building, University of Michigan, 2355 Bonisteel Boulevard, Ann Arbor, MI 48109-2104. URL <http://rma-symposium.engin.umich.edu/>.

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 npaekyiv2010@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/>.