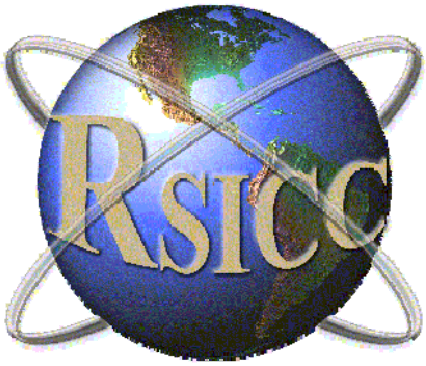
# Radiation Safety Information Computational Center




**Oak Ridge National Laboratory**
**POST OFFICE BOX 2008**
**OAK RIDGE, TENNESSEE 37831-6171**

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**phone 865-574-6176 fax 865-241-4046**
**email PDC@ORNL.GOV**
**www http://rsicc.ornl.gov/**

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***A man without decision can never be said to belong to himself; he is as a wave of the sea, or a feather in the air which every breeze blows about as it listeth.—John Foster***



## CHANGES TO THE RSICC CODE AND DATA COLLECTION

### CCC-758/ACAB-2008

The Universidad Nacional de Educación a Distancia, Departamento de Ingenieria Energetica, and the Universidad Politecnica de Madrid, through the OECD Nuclear Energy Agency Data Bank, Issy-Les Moulineaux, France, contributed this code system which was designed to perform activation and transmutation calculations for nuclear applications. ACAB has been used to simulate realistic operational scenarios of very different nuclear systems: inertial fusion, magnetic fusion, accelerator driven systems, and fission reactors.

The main computational algorithm is based on that of the ORIGEN code. The method to compute uncertainties is based on the application of the Monte Carlo technique and allows the user to deal efficiently with the synergic/global effect of the uncertainties of the total set of cross sections to obtain the overall uncertainty on the radiological calculations.

ACAB2008 runs on Unix workstations and personal computers. The package is transmitted on a CD-R in a ZIP file, which contains documentation, source code, executables for Windows and Linux, and example problems. Reference: User's Manual V.2008 (December 2008). Standard FORTRAN 77; Linux and Windows PC. RSICC ID: C00758/MNYCP/00.

### PSR-550/ALICE2008

A collaboration of Lawrence Livermore National Laboratory, Livermore, California; Institut f. Reaktorsicherheit, Karlsruhe, FRG; Los Alamos National Laboratory, Los Alamos, New Mexico, and the Institute of Physics and Power Engineering, Obninsk, Russia, produced the newly frozen version of this statistical model code system to calculate particle spectra from HMS (Hybrid Monte-carlo Simulation) precompound nucleus decay. This release is designated HMS-ALICE-2008 and was contributed to the RSICC collection through the OECD NEA Data Bank, Issy-les-Moulineaux, France. The code uses the

HMS precompound decay model, the Weisskopf- Ewing evaporation model (optional with s-wave approximation) and Bohr-Wheeler fission models, all with multiple particle emission cascades to estimate single and double differential emission spectra and product yields of nuclear reactions induced by probes from photons to heavy ions. Initial excitations up to 980 MeV should be tolerated, but a range of 0.2-250 MeV is advised as pion production channels have not yet been programmed into the physics. Product yields include A,Z of fission products. An option exists to give output of exclusive particle emission spectra of up to multiplicity 3.

ALICE2008 runs on PCs under Windows or Linux and on Mac computers. A Fortran 95 compiler is required on all systems as no executables are distributed. The package is transmitted on a CD-R in a Unix tar file, which contains documentation, source code, and example problems. Reference: Manual (July 27, 2008). FORTRAN; PC and Mac. RSICC ID: P00550/PC586/00; NEADB ID: USCD1238/01.

**DLC-242/ MATJEFF31.BOLIB**

The ENEA, Bologna, Italy, through the OECD Nuclear Energy Agency Data Bank, Issy-Les Moulineaux, France, contributed the MATJEFF31.BOLIB data library. This is a multi-group, coupled (199 neutron groups + 42 photon groups) pseudo-problem-independent cross section library in MATXS format for nuclear fission applications. MATJEFF31.BOLIB is based on the JEFF-3.1 NEA Data Bank evaluated nuclear data library and was processed, through the NJOY-99 system, in the VITAMIN-B6 (DLC-184) library group structure. A set of processed data generated from the updated JEFF-3.1.1 library was recently included.

The MATJEFF31.BOLIB library was conceived as a European counterpart of the VITAMIN-B6 American library, based on the ENDF/B-VI Release 3 evaluated data library. In particular, the present library has the same group structure and general features as VITAMIN-B6 and was produced using similar data processing methodology using the NJOY99.160 data processing system with an ENEA-Bologna modified version of the GROUPR module.

The library contains 176 nuclides at 4 temperatures, obtained for the most part with 6 to 8 values for the background cross section. Thermal scattering cross sections were processed at all temperatures available in the JEFF-3.1 thermal scattering law data file for 6 additional bound nuclides. From MATJEFF31.BOLIB it is possible to generate, with the use of the TRANSX code, working libraries of collapsed and self-shielded cross sections in GOXS or FIDO-ANISN format. The library was extensively tested on many criticality benchmark experiments. Reference: ENEA Internal Report FPN-P9H6-014, May 5, 2009. ASCII data; Many Computers (D00242/MNYCP/00).

# 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 |
|---|---|---|
| January 4-8 | MCNP5/MCNPX Intermediate Workshop | Las Vegas, NV |
| January 18-22 | Introduction to MCNPX using the MCNPX Visual Editor | Seattle, WA |
| 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 |
| January 4-8 | MCNP5/MCNPX Intermediate Workshop | Las Vegas, NV |
| January 18-22 | Introduction to MCNPX using the MCNPX Visual Editor | Seattle, WA |

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

| 2009 Classes | | |
|---|---|---|
| **Date** | **Class** | **Location** |
| January 4–8, 2010 | Intermediate MCNPX + Homeland Security | Las Vegas, NV |
| March 29–April 2, 2010 | Intermediate MCNP5/MCNPX | Paris, France |
| May 24–28, 2010 | Intermediate MCNPX | Orlando, FL |
| August 16–20, 2010 | Intermediate MCNPX | Seattle, WA |
| September 20–24, 2010 | Intermediate MCNPX | Virginia Beach, VA |
| October 25–29, 2010 | 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.

## Principles and Operation of Nuclear Reactors

The Institut National des Sciences et Techniques Nucléaires (INSTN) is organizing Principles and Operation of Nuclear Reactors, to be held in Saclay, France, January 25–February 5, 2010. Participants will be drawn from professionals, researchers and students with an interest in the global understanding of reactor theory and operation.

The main objective of this seminar is to acquire knowledge on:

- theory and kinetics of nuclear reactors,
- reactor thermo-hydraulics,
- insight into the reactor operation (practical courses),
- presentation of the actual and future reactors, and
- safety principles and background.

The registration form is available from Nadia Nowacki (nadia.nowacki@cea.fr). Registering for the seminar is a commitment to attend all lectures and technical visits and the condition to get the attendance certificate at the end of the seminar. The registration deadline is **December 23, 2009**. Note that the number of places is limited and registrations will be classified by date of arrival.

# 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.

Papers may be submitted until December 15 for work related to the following main topics:

- Nuclear reactor technology
- Education & training
- Policy studies & issues
- Nuclear radiation and shielding
- Nuclear physics
- Nuclear power in developing countries
- Enabling technologies for nuclear applications
- Renewable energy
- Water, hydrogen and energy storage

Authors should follow the guidelines posted in the symposium website: http://inrec10.inrec-conf.org/default.aspx?id=submission. Submitted papers will be peer-reviewed. Accepted and presented papers will be published in the proceedings of the INREC'10 conference. A poster session will also be organized to report the latest research/project findings.

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. Note that extended abstracts are due **November 23**.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, 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. The technical committee is encouraging potential attendees to submit papers; the deadline for submission of abstracts is **December 1**. Abstracts for the following technical tracks are requested:

TRK 1 Plant Operations, Maintenance, Engineering, Modifications, Life Cycle and Balance of Plant
TRK 2 Component Reliability and Materials Issues
TRK 3 Structural Integrity

TRK 4 Nuclear Technology Applications and Innovations
TRK 5 Advanced Reactors
TRK 6 Safety and Security
TRK 7 Codes, Standards, Licensing and Regulatory Issues
TRK 8 Fuel Cycle and Decommissioning
TRK 9 Thermal Hydraulics
TRK 10 Reactor Physics and Transport Theory
TRK 11 Nuclear Education, Public Acceptance and Related Issues
TRK 12 Instrumentation & Controls (I&C)
TRK 13 Fusion Engineering
TRK 14 Panel Sessions
TRK 15 Student Paper Competition

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-Kyiv2010), 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 on the conference website.

*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.

Make sure you 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://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/.