
Radiation Safety Information Computational Center



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Themistocles said that a man's discourse was like to a rich Persian carpet, the beautiful figures and patterns of which can be shown only by spreading and extending it out; when it is contracted and folded up, they are obscured and lost. Plutarch. 46 (?) 120 (?) A. D. (From Dryden's translation of Plutarch's Lives, corrected and revised by A. H. Clough.)

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CHANGES TO THE RSICC CODE AND DATA COLLECTION

[CCC-737/GENII 2.10](#)

Pacific Northwest National Laboratory, Richland, Washington, contributed a new version of this environmental radiation dosimetry software system. FRAMES 1.701/GENII 2.10 is an update to GENII 2.09 which has been distributed by RSICC. The GENII system includes capabilities for calculating radiation doses following chronic and acute releases. The code provides risk estimates for health effects to individuals or populations; these can be obtained using the code by applying appropriate risk factors to the effective dose equivalent or organ dose. In addition, GENII Version 2 uses cancer risk factors from Federal Guidance Report 13 to estimate risk to specific organs or tissues.

Version 2.10 was released to correct two significant errors found in the water and air report generators. It also includes several less-significant upgrades to version 2.09 functionality. The significant errors are:

1. The user input of population and food production grids in the Atmospheric Pathway Report Generator, introduced in Version 2.09, was found to be mis-labeled by one sector. Labels have been corrected to prevent user misinterpretation.
2. The summary output of the Surface Water Report Generator was not including drinking water because of a difference in labeling between the User Interface (i.e. "Drinking Water", "ingestion") and the calculation module (i.e., "Water", "ingestion"). The calculation module has been revised to accept either or both as equivalent. The population was not correctly used in the estimation of population cancer incidence; this has also been corrected.

GENII 2.10 runs on Pentium computers under Windows. Source codes are not included in this distribution. References: PNNL-14583, Rev. 3a (June 2010) and PNNL-14584, Rev. 3 (December 2009). Pentium running Windows; Fortran and Visual Basic (C00737PCX8602).

[CCC-759 / TITAN version 1.21](#)

The University of Florida, Gainesville, contributed an updated version of TITAN, a time-independent deterministic radiation transport simulation code in 3-D Cartesian geometry. The hybrid approach in the TITAN code allows different transport solvers (Sn or Ray-tracing) to be applied in different regions. TITAN solves both the k-effective and fixed-source forward/adjoint problems. It has been benchmarked on a number of OECD/NEA benchmark problems. This Version 1.21 adds directional fixed source support, boundary surface source support, the capability for fixed source and fission (subcritical system with fixed source) simulation (forward/adjoint), and various bug fixes and improvements.

Titan1.21 was tested on X86-64 computers under Windows 7 and Linux platforms. The package is transmitted on CD in Windows and Linux format and includes an installation procedure, executables, source files, sample input and output and documentation. Fortran 90; X86 (C00759PCX8602).

[PSR-544/ANGELO-LAMBDA](#)

ANGELO-LAMBDA was contributed by NEA Data Bank, Issy-les-Moulineaux, France. The codes ANGELO-2.3 and LAMBDA-2.3 are used for the interpolation of the cross section covariance data from the original to a user defined energy group structure, and for the mathematical tests of the matrices, respectively. The LAMBDA-2.3 code calculates the eigenvalues of the matrices (both for the original or the converted) and lists them accordingly into positive and negative matrices. ANGELO-2.3 interpolates the covariance matrices to a union grid using flat weighting. LAMBDA-2.3 includes the mathematical routines to calculate the eigenvalues of the covariance matrices. P00544MNYCP01 contains minor updates over the previous version, P00544MNYCP00.

ANGELO-LAMBDA will run on personal computers running either Windows or Linux operating systems. The PC version was compiled with Lahey/Fujitsu Fortran 95 release 5.50h. This release was tested at RSICC on a Pentium PC running the Microsoft® Windows XP™ with Lahey/Fujitsu Fortran 95 release 5.50d. Included on the CD are the reference documents, Fortran 90 source code and executables for Windows and Linux. Requirements: Fortran-90; DOS or Linux PC; Reference: Short manual for ANGELO2.3 and LAMBDA2.3 codes, NEA/NSC/DOC(2007)23 December 2007 (P00544MNYCP01).

[PSR-560/GADRAS V16.0](#)

Gamma Detector Response and Analysis Software (GADRAS) v. 16.0 was contributed by Sandia National Laboratories, Albuquerque, NM, through the Energy Science and Technology Software Center (ESTSC), Oak Ridge, TN. GADRAS is a general purpose application for the modeling and analysis of radiation detector responses, primarily gamma spectroscopic instruments and neutron detectors based on proportional counters. It employs radiation source and detector response models to predict the response of user-defined detectors to user-defined sources. GADRAS V16.0 implements methods to identify radiation sources from their measured signatures, primarily the measured gamma spectrum and neutron count rate. Radiation source emissions are calculated using analytical and numerical radiation transport models. Detector responses are calculated using point models of the detector material, dimensions, collimation, and scattering environment. Analytical methods are implemented using linear and nonlinear regression techniques.

The package contains setup executable, user manual, source code, and data files and is transmitted on one CD. Fortran, VISUAL BASIC 6 (P00560IBMPC00).

[PSR-561/GADRAS-LT 9.4](#)

Gamma Detector Response and Analysis Software – Light, GADRAS-LT 9.4, was contributed by Sandia National Laboratories, Albuquerque, NM, through the Energy Science and Technology Software Center (ESTSC), Oak Ridge, TN. GADRAS-LT is used to analyze gamma-ray spectra, which may be augmented by neutron count rate information. The fundamental capabilities of GADRAS-LT are imparted by physics-based detector response functions for a variety of gamma ray and neutron detectors. The software has provisions for characterizing detector response parameters so that spectra can be computed accurately over the range 30keV key to 11 MeV. Associated neutron detector count rates can also be computed for characterized detectors. GADRAS-LT incorporates a variety of analysis algorithms that utilize the computed spectra. The full version of GADRAS incorporates support for computation of radiation leakages from complex source models, but this capability is not supported by GADRAS-LT.

The GADRAS-LT package contains setup executable, user manual, source code, and data files and is transmitted on one CD. Fortran, VISUAL BASIC 6 (P00561IBMPC00).

ANS News

Visit ANS Nuclear Café—The American Nuclear Society has established a blog called the ANS Nuclear Café, an online forum that will include ANS member perspectives on a range of nuclear topics and activities. For further information regarding the blog, contact Laura Scheele (ANS Outreach) at lscheele@ans.org or (708) 579-8224. You may join the discussion at <http://www.ans.org/goto/nad.cgi?id=1284008400-10>.

ANS Social Media—The American Nuclear Society (ANS) Public Information Committee is operating a dedicated email discussion list for professionals engaged in pro-nuclear social media efforts. The discussion list is an ANS listserv focused on providing timely and accurate information about nuclear science and industry developments via online venues including social media. This is a high volume list with several discussions taking place daily. To subscribe, please send an email stating your preferred email address and a one-sentence statement of interest and involvement in the nuclear industry to either Laura Scheele (ANS Outreach) at lscheele@ans.org, phone 708-579-8224 or to Dan Yurman (Chair, ANS Social Media Group) at dan.yurman@usa.net, phone 208-521-5726.

Follow ANS on Twitter—Twitter users can follow the American Nuclear Society at @ans_org to stay up-to-date on ANS events. The ANS November 2010 meeting will also be tweeted using the hash mark #ans10. <http://www.ans.org/goto/nad.cgi?id=1284008400-11>

Erratum Issued on LWRS Fuel Assembly Mechanical Design and Evaluation Standard—An erratum was issued on ANSI/ANS-57.5-1996 (R2006), “Light Water Reactors Fuel Assembly Mechanical Design and Evaluation.” Copies of errata issued on ANS standards are available on the ANS Web site at <http://www.ans.org/goto/nad.cgi?id=1284008400-13>

News from 25,000 Global Sources—“Nuclear Headlines,” a free member benefit, provides links to nuclear-related news coverage from around the world. It's available on the members-only page of the ANS website. You can also sign up to receive it via email. Choose delivery up to three times a day and up to seven days a week. <http://www.ans.org/goto/nad.cgi?id=1284008400-14> (member login required).

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](#)

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.

2011 Classes		
January 24–28	Introduction to MCNP using the MCNPX Visual Editor	Seattle, WA
January 31–February 04	Intermediate MCNP Visual Editor with a special emphasis on tallies and variance reduction	Seattle, WA
March 7–11	Introduction to MCNP using the MCNPX Visual Editor	London, UK
April 11–15	Introduction to MCNP using the MCNPX Visual Editor	Las Vegas, NV
April 18–22	Intermediate MCNP Visual Editor with a special emphasis on tallies and variance reduction	Las Vegas, NV
June 6–10	Introduction to MCNP using the MCNPX Visual Editor	Anaheim, CA
June 13–17	Intermediate MCNP Visual Editor with a special emphasis on tallies and variance reduction	Anaheim, CA
September 12–16	Introduction to MCNP using the MCNPX Visual Editor	Myrtle Beach, SC
September 19–23	Intermediate MCNP Visual Editor with a special emphasis on tallies and variance reduction	Myrtle Beach, SC
October 24–28	Introduction to MCNP using the MCNPX Visual Editor	London, UK
November 7–11	Introduction to MCNP using the MCNPX Visual Editor	Las Vegas, NV
November 14–18	Intermediate MCNP Visual Editor with a special emphasis on tallies and variance reduction	Las Vegas, NV

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](#)

2011 Classes		
January 10–14	MCNPX Intermediate Workshop	Las Vegas, NV
Feb 28–March 4	MCNPX Intermediate Workshop	Paris, France
May 9–13	MCNPX Intermediate Workshop	Chicago, IL
September 26–30	MCNPX Intermediate Workshop	Washington DC
October 17–21	MCNPX Intermediate Workshop	London, U.K.

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. 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.

[SCALE Training Courses](#)

Date	Title	Description
October 25-29	SCALE Sensitivity/Uncertainty Tools Course	1-D and 3-D sensitivity/uncertainty analysis using TSUNAMI with XSDRNPM and KENO. Advanced S/U methods for code and data validation. (TSUNAMI)
November 1-5 CANCELLED	SCALE Criticality Safety Course	Criticality safety with the most widely used version of KENO, KENO V.a. (KENO V.a)

The registration fee is \$2000 for each course. 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.

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

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
Gamma Spectroscopy	December 6–10, 2010
MARSSIM	January 10–14, 2011
Site Characterization in Support of Decommissioning: Planning, Implementation, and Evaluation	January 24–28, 2011
Applied Health Physics	February 28–April 1, 2011
CHP Part I Review	April 5–7, 2011
Gamma Spectroscopy	April 11–15, 2011

CONFERENCES

Advancing Tools and Solutions for Nuclear Material Detection

The 2nd National Conference on Advancing Tools and Solutions for Nuclear Material Detection will be held in Salt Lake City, UT, February 3–4, 2011. Full papers are requested by January 10, 2011, on the following topics:

- Detector & Detector Materials
- Network Systems & Algorithms
- Active Interrogation
- Nuclear Forensics
- Nuclear Safeguards
- Passive Detection
- Nuclear Data & Active Detection Technologies
- Artificial Intelligence in Homeland Security Applications
- Advanced Computational Solutions for Nuclear Material Detection
- Advanced Interactive Visualization Techniques of Interest to Material Detection for Homeland Security

A summary of the Conference will be presented in April 2011 at the ARI Workshop in Washington, DC. Further information may be obtained from Tatjana Jevremovic, Nuclear Engineering Director, University of Utah 2298 MEB, 50 South Central Drive, University of Utah, Salt Lake City, UT 84112 (phone 801-587-9696, email Tatjana.Jevremovic@utah.edu).

[CONTE 2011](#)

The 2011 Conference on Nuclear Training and Education (CONTE 2011) will be held in Jacksonville, Florida, February 6–9, 2011. A call for papers has been issued for summaries on the following topics:

1. Human performance improvement
2. Workforce planning/recruiting
3. Personnel training/qualification/education
4. Accreditation
5. Developing educational partnerships—university/industry/government

6. Engineering education/distance learning
7. Leadership development
8. International perspectives
9. Training for new nuclear power facilities

Summaries must be submitted using the ANS template and “Guidelines for Summary Preparation” provided on the ANS Web site, www.ans.org, by **October 29, 2010**. General chair of the meeting is Stephen Kuczynski, Senior VP of Engineering and Technical Services, Exelon Nuclear. For further information, please visit the ANS website, http://www.new.ans.org/meetings/c_2.

[NETS-2011](#)

The Nuclear and Emerging Technologies for Space (NETS-2011) topical meeting will be held February 7–10, 2011, in Albuquerque, NM. The meeting is sponsored by the ANS Aerospace Nuclear Science and Technology Division and the ANS Trinity Section. NETS-2011 will address strategies for implementing advanced power and propulsion technologies, as well as radiation shielding protection, in support of manned and unmanned missions into space. It will provide a communications network and forum for information exchange for research and management personnel from government, industry, academia, and the national laboratory system who are involved in space nuclear activities. Registration, program, exhibit, and other information may be found on the conference website at <http://anstd.ans.org/NETS2011/AboutNETS2011.htm>.

[WM 2011](#)



The annual Waste Management Conference (WM 2011) will be held February 27–March 3, 2011, in Phoenix, Arizona. The conference theme is “Global Achievements and Challenges in Waste Management”. Regarded as the premier international organization for the management of radioactive material and related topics, the 2011 conference attracts decision makers, project managers, and technical and procurement specialists representing the government and private organizations from over 35 countries. In addition to the conference, two workshops are scheduled for March 3 and 4, titled “Commercial Low-Level Waste (LLW) Disposal Performance Assessment, the Safety Case, and Long-Term Monitoring” and “Joint Public Federal Workshop,” respectively. Bookmark the website, <http://www.wmsym.org/>, to monitor the latest information with regard to the workshops, program, arrangements, etc.

[PSA 2011](#)

The 2011 Probabilistic Safety Analysis conference (PSA 2011) will be held in Wilmington, North Carolina, March 13–17, 2011. The conference is sponsored by the ANS Nuclear Installations Safety Division (NISD) and the Wilmington Area Local Section of the ANS (WLS). Bookmark and check the conference website at <http://meetingsandconferences.com/psa2011/> often to remain informed about deadlines and activities.

[MTAA 13](#)



Texas A&M will host the 2011 Modern Trends in Activation Analysis (MTAA-13) Conference March 13–18, 2011—fifty years after the first MTAA conference also hosted by what was then the A&M College of Texas. 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).

ICAPP



The 2011 International Congress on Advances in Nuclear Power Plants (ICAPP 2011) will be held May 2–5, 2011, in Nice, France. Participants in the conference will benefit from the opportunity to meet experts of the nuclear industry and to review the recent evolution in reactor physics, thermal-hydraulics, materials, operation and maintenance, safety and licensing of new nuclear power plants. Information regarding the conference will be posted at the website, https://www.sfen.fr/index.php/plain_site/icapp_international_congress_on_advances_in_npps. You may also contact Sylvie Delaplace at icapp2011@sfen.fr.

MC 2011

The 2011 International Conference on Mathematics and Computational Methods applied to Nuclear Science and Engineering (MC 2011) will be held in Rio de Janeiro, May 8–12, 2011. The conference will provide an international forum for scientists to present their most recent work and exchange ideas on a powerful class of methodologies extensively used for solving mathematical models of physical phenomena and processes applied to nuclear science and engineering. One of the aims is to promote new research tools and procedures that help link mathematics, applied sciences and technology. Therefore, MC 2011 will offer an opportunity for direct information exchange between participants from both academia and industry. The interdisciplinary technical program will consist of plenary sessions, workshops, parallel oral presentation sessions and poster sessions. Papers may be submitted electronically by **October 31, 2010**, on the following subject categories:

- Accelerator & subcritical systems
- Advanced nuclear reactor concepts
- Atmospheric and ocean radiative transfer
- Computational fluid dynamics & thermal hydraulics
- Deterministic & stochastic neutral and charged particle transport modeling
- High-fidelity multiphysics simulations
- Medical physics
- Nuclear chemistry
- Nuclear criticality safety
- Nuclear data evaluation & application
- Nuclear fuel cycle
- Nuclear fuels
- Nuclear geophysics
- Nuclear materials sciences
- Nuclear non-proliferation and homeland security
- Nuclear production of hydrogen

- Nuclear radiation shielding & dosimetry
- Nuclear reactor analysis
- Optimization, data assimilation & artificial intelligence
- Plasma physics/fusion
- Radiobiology
- Structural mechanics
- Uncertainty quantification
- Verification & validation

General Chair of the meeting is Cassiano de Oliveira (cassiano@unm.edu). Bookmark the conference website, <http://www.mc2011.org>, to keep abreast of conference information.

ISR-14

The 14th International Symposium on Reactor Dosimetry (ISR-14) will be held May 22–27, 2011, at the Omni Mount Washington Resort, Bretton Woods, New Hampshire. This Symposium is held approximately every three years to provide a forum for the interchange of state-of-the-art techniques, data bases and standardization of radiation metrology. The Symposium will be of value to those involved in reactor dosimetry, including researchers, manufacturers and representatives from industry, utilities and regulatory agencies. The Symposium is jointly sponsored by ASTM International and the European Working Group on Reactor Dosimetry (EWGRD). It is organized by ASTM Committee E10 on Nuclear Technology and Applications.

The Symposium theme is dosimetry for the assessment of irradiated reactor materials and reactor experiments, featuring radiation metrology techniques, data bases and standardization. The Symposium will be organized into oral and poster presentations, as well as informal round-table workshops. The meeting language will be English. Papers accepted for presentation at the symposium will be published in the on-line *Journal of ASTM International*. Bookmark the conference website, <http://www.reactordosimetry.com/>, to remain current with conference information.

CALENDAR

November 2010

International Workshop on Ageing-Management of Nuclear Power Plants and Waste Disposal Structures, Nov. 7–10, 2010, Toronto, Ontario, Canada. Contact: Elizabeth Muckle-Jeffs (phone 1-800-868-8776, international 1-613-732-7068, fax 613-732-3386, email Elizabeth@TheProfessionalEdge.com) url <http://www.amp2010toronto.com>.

2010 ANS Winter Meeting and Nuclear Technology Expo, Nov. 7–11, 2010, Las Vegas, NV. The website is: http://www.new.ans.org/meetings/c_1.

19th Topical Meeting on the Technology of Fusion Energy (TOFE), embedded in the ANS Winter Meeting, Nov. 7–11, 2010, Las Vegas, NV. Contact: General Chair: Farrokh Najmabadi, 9500 Gilman Drive, Mail Code 0407, UCSD, La Jolla, CA 92093 (phone 858-534-7869) url: <http://fed.ans.org/TOFE19/>.

2010 Isotopes for Medicine and Industry, embedded in the ANS Winter Meeting, Nov. 8–11, 2010, Las Vegas, NV. Contact: Rolf Zeisler (rolf.zeisler@nist.gov) url: http://www.new.ans.org/meetings/m_74.

IEEE Conference on Technologies for Homeland Security (IEEE HST '10), Nov. 8–10, 2010, Waltham, MA. The website is <http://ieee-hst.org/default.html>.

February 2011

2nd National Conference on Advancing Tools and Solutions for Nuclear Material Detection, Feb. 3–4, 2011, Salt Lake City, UT. Contact: Tatjana Jevremovic, Nuclear Engineering Director, University of Utah 2298 MEB, 50 South Central Drive, University of Utah, Salt Lake City, UT 84112 (phone 801-587-9696, email Tatjana.Jevremovic@utah.edu).

Conference on Nuclear Training and Education (CONTE 2011), Feb. 6–9, 2011, Jacksonville, Florida. Contact: Stephen Kuczynski, Senior VP of Engineering and Technical Services, Exelon Nuclear. The website is www.ans.org/meetings.

Nuclear and Emerging Technologies for Space 2011 (NETS 2011), Feb. 7–10, 2011, Albuquerque, NM. The website is <http://anstd.ans.org/NETS2011/AboutNETS2011.htm>

March 2011

International Topical Meeting on Probabilistic Safety Assessment and Analysis (PSA 2011), March 13–17, 2011, Hilton Wilmington Riverside, Wilmington, NC. Meeting information: <http://www.ans.org/goto/nad.cgi?id=1273208400-24>

Modern Trends in Activation Analysis (MTAA-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/>.

April 2011

AccApp '11 - Tenth International Topical Meeting on Nuclear Applications of Accelerators, April 3–7, 2011, Knoxville, TN. Contact: Conference Chair, Phil Ferguson, Oak Ridge National Laboratory (phone 865-241-5702, email fergusonpd@ornl.gov) url: <http://accapp11.org>.

May 2011

MC 2011, May 8–12, 2011, Rio de Janeiro, Brazil. Meeting information: <http://www.mc2011.org/>.

International Symposium on Reactor Dosimetry (ISR-14), May 22–27, 2011, Bretton Woods, New Hampshire. Contact: Dr. David W. Vehar, Sandia National Laboratories (dwwvehar@sandia.gov) url <http://www.reactordosimetry.com/>.

June 2011

Workshop on Activation Data (Kopeck), June 1–3, 2011, Charles University in Prague, Czech Republic. Contact: Jean-Christophe.Sublet@ccfe.ac.uk, url http://www.ccfe.ac.uk/EASY_workshops.aspx.

ANS Annual Meeting, June 26–30, 2011, Hollywood, FL. The website is <http://www.new.ans.org/meetings>.

Industrial Radiation and Radioisotope Measurement Applications (IRRMA-8), June 26–July 1, 2011, Kansas City, MO. Contact: William L. Dunn, Kansas State University (email dunn@k-state.edu) url <http://www.dce.k-state.edu/conf/irrma/>.

September 2011

22nd International Conference on Transport Theory (ICTT-22), Sept. 11–15, 2011, Portland, Oregon. Contact: Todd Palmer, Technical Program Chair, Oregon State University (palmerts@ne.orst.edu).

October 2011

2011 ANS Winter Meeting and Nuclear Technology Expo, Oct. 30–Nov. 3, 2011, Washington, DC. The website is http://www.new.ans.org/meetings/c_1.