Radiation Safety Information Computational Center



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

Managed by UT-Battelle, LLC for the U.S. Department of Energy under contract DE-AC05-00OR22725

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

No. 496 June 2006

"We are now officially a neutron source," Thom Mason shortly after 2:04 pm on April 28, 2006, when 5.5 x 10¹⁰ (or 55 billion) protons were sent to the target of the Spallation Neutron Source in Oak Ridge, Tennessee.

TAMU Forms the Nuclear Security Science and Policy Institute	. 1
CONFERENCES, COURSES, SYMPOSIA	. 2
MCNPX Workshops	. 2
Year 2006 MCNP Class Schedule	
PENELOPE Training Course/Tutorial	
Practical MCNP for the Health Physicist, Medical Physicist, and Rad Engineer	
PHYSOR 2006	
ISRP-10	
2 nd International Symposium on Radionuclide Therapy and Radiopharmaceutical Dosimetry	. 5
ICNCT-12	
First European Workshop on Monte Carlo Treatment Planning	. 6
PHYTRA1	
ND2007	. 7
International Conference on Emerging Nuclear Energy Systems (ICENES 2007)	. 8
	9

TAMU Forms the Nuclear Security Science and Policy Institute

The proliferation of nuclear weapons threatens the security of all mankind. Where will the next generation of leaders to combat this threat cultivate their skills? The Nuclear Security Science and Policy Institute (NSSPI) at Texas A&M University (TAMU) provides graduate-level educational resources to fuel the nonproliferation regime. NSSPI was approved by the TAMU System Board of Regents on Friday, March 24, 2006. The first official presentation on NSSPI was made on March 28, 2006 at Oak Ridge National Laboratory.

NSSPI is housed in the Nuclear Engineering Department at TAMU and operates in partnership with the Bush School of Government and Public Service. Collaborating with the national laboratory complex, NSSPI is one of the first campus-based entities, with a higher education mission, focusing on the technical details of nuclear security science and its interface with policy. There is a strong need for graduates with combined technical and policy based skills at the national laboratories, in government services, and in industry. NSSPI provides research, education, and support in the area of nuclear security including such work as nuclear nonproliferation, safeguards development, detector development, intelligence analysis tools, and many other areas. NSSPI also has produced one of the first Master of Science degree programs specializing in nuclear nonproliferation. Details regarding NSSPI as well as contact information are available at: nsspi.tamu.edu.

Dr. William S. Charlton, Director, Nuclear Security Science and Policy Institute

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.

MCNPX Workshops

Lead Teachers: Drs. John Hendricks, Gregg McKinney, Laurie Waters

Organizer: HQC Professional Services Contact: bill@mcnpxworkshops.com

Information: http://mcnpxworkshops.com and MCNPX homepage: http://mcnpx.lanl.gov

2006 Schedule			
July 17–21	Intermediate	Bologna, Italy	
July 31–Aug 4	Intermediate	West Point, NY	
Sept 18–22	Intermed./Adv.	Santa Fe, NM	
Oct 30–Nov 3	Intermediate	Tokyo, Japan	

MCNPX is packed with new and exciting plotting features, including numerous mesh tally options which can be superimposed on your geometry plot and plotted within the MCNPX run, eliminating the need for post-processing and costly additional plotting package(s). You can plot particle flux, tracks, dosage, and energy deposition as well as source points and many others.

The workshops include hands-on instruction, generally on PC Windows machines. Subject to participant export approval from the MCNPX beta test team, participants will be able to access the Fortran 90 version of MCNPX 2.4, the LA150 (150 MeV) cross-section data for over 40 isotopes for incident neutrons and protons and 12 for photonuclear interactions, and a notebook of viewgraphs.

Follow-up consultation for class participants will be provided.

The classes are taught by experienced MCNPX code developers and instructors. More information on code versions and capabilities is available at MCNPX Workshops web site http://mcnpxworkshops.com.

To register go to http://mcnpxworkshops.com/regform.html.

Year 2006 MCNP Class Schedule

1	July 10–14:	Introduction to MCNP	Japan
	Aug 22–24	Advanced Variance Reduction	Los Alamos National Laboratory
	Aug 29–31	Advanced Criticality	Los Alamos National Laboratory

Year 2006 classes will showcase the latest release of MCNP, Version 5. All classes provide interactive computer learning with time available to discuss individual questions and problems with MCNP experts. While MCNP supports a number of platforms, LANL class computers are usually PCs. The class fee includes a notebook with all class viewgraphs and handouts, dinner the first evening, and snacks and refreshments provided during class breaks. Registration and the most current information can be found at http://mcnp-green.lanl.gov/classinformation.html. For information regarding the class in Japan - Contact: Dr. Tadakazu Suzuki - Research Organization for Information Science & Technology (RIST), (phone 029-282-8309, 6335, fax 029-282-4282, email tadakazu@tokai.rist.or.jp, http://www.rist.or.jp/nucis).

Introductory classes are for people who have little or no experience with MCNP. This class surveys the features of MCNP so the beginning user will be introduced to the capabilities of the program, and will have hands-on experience at running the code to solve simple problems. Course topics include Basic Geometry, Source Definitions, Output (Tallies) Specification and Interpretation, Advanced Geometry (repeated structures specification), Variance Reduction Techniques, Statistical Analysis, Criticality, Plotting of Geometry, Tallies, and Particle Tracks, and Neutron / Photon / Electron Physics.

Advanced classes are for people with MCNP experience who want to extend their knowledge and gain depth of understanding. Most areas of MCNP operation will be discussed in detail, with emphasis on Advanced Geometry, Advanced Variance Reduction Techniques, and other Advanced features of the program. Time will be available to discuss approaches to specific problems of interest to students.

PENELOPE Training Course/Tutorial

The next PENELOPE training course/tutorial will be held from 4–7 July 2006, at the Facultat de Fisica (ECM), Universitat de Barcelona, Diagonal 647, 08028 BARCELONA, Spain. This course is addressed to researchers in radiation physics and its applications. The main objective is to provide participants with a detailed description of the 2006 version of PENELOPE, with an ample perspective on Monte Carlo methods for simulation of electron/photon transport. The reliability of the interaction models and the accuracy of the numerical methods and approximations implemented in the code will be discussed. Examples of simulation results and benchmark comparisons with experiment will be presented. The course will include practical sessions on the use of the generic main programs, PENCYL (cylindrical geometries) and PENMAIN (quadric geometries), and on the design of the main program for specific applications. Details and registration information can be found at http://www.nea.fr/html/dbprog/penelope2006.html.

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

DATES: 17-21 July 2006 (4.5 days)

FEE: \$1,450 per person

PLACE: The MESA Complex, Room 130, University of New Mexico-Los Alamos Campus

The Los Alamos MCNP code is a general and powerful Monte Carlo transport code for photons, neutrons, and electrons. MCNP can be safely described as the "industry standard" with more than 600 person-years of development effort behind it. It is supported on a variety of platforms and is now accessible to health physicists, medical physicists, and rad engineers using desktop or laptop personal computers. This 4.5 day course introduces the basic concepts of Monte Carlo, demonstrates how to put together an MCNP input file, and illustrates some health and medical physics applications of the code. No prior knowledge of Monte Carlo is assumed.

All of the input and output files for the class demonstrations will be provided for self-study on a diskette. The course will focus on providing a practical boost toward learning the program and guiding the student toward useful applications. Extensive practice sessions are scheduled using a personal computer in class.

Registration is available online at: http://drambuie.lanl.gov/~esh4/mcnp.htm. Make checks (U.S. dollars on a U.S. bank) payable to the University of California and mail with name, address, and phone number to: David Seagraves, Mail Stop J573, Los Alamos National Laboratory, Group HSR-4, MCNP Class, Los Alamos, NM 87545.

Inquiries regarding registration and class space availability should be made to David Seagraves, 505-667-4959, fax 505-665-7686, email: dseagrayes@lanl.gov. Technical questions may be directed to Dick Olsher, 505-667-3364; email dick@lanl.gov.

Richard H. Olsher



PHYSOR 2006

The Canadian Nuclear Society has announced that the ANS Reactor Physics Topical PHYSOR-2006, "Advances in Nuclear Analysis and Simulation," will be held in Vancouver, BC, Canada, Sept. 10–14, 2006. The meeting is sponsored by the Reactor Physics Division of the ANS and co-sponsored by several international societies. The conference will be held at the Hyatt Regency in downtown Vancouver.

You are invited to visit the meeting website at http://www.cns-snc.ca/physor2006/ to obtain updated information and to download a copy of the <u>call for papers</u>. The conference chair is Benjamin Rouben, FCNS Manager, Reactor Core Physics Branch, AECL Sheridan Park (phone 905-823-9060 x 4550, fax 905-822-0567, email roubenb@aecl.ca). The technical program co-chair is Ken Kozier. Atomic Energy of Canada Limited (AECL), Chalk River Laboratories, Chalk River, Ontario, Canada K0J 1J0 (phone +1-613-584-8811 + ext. 5059, email physor2006@aecl.ca).

ISRP-10

The 10th International Symposium on Radiation Physics (ISRP-10) will be held at the University of Coimbra, Portugal, 17–22 September 2006. This event is organized jointly by the International Radiation Physics Society (IRPS) and the Physics Department of Coimbra University. The meeting is devoted to current trends in radiation physics research and will include a series of plenary talks given by prominent international researchers. The symposium in Coimbra is the latest in a series of triennial symposia which began in Calcutta in 1974 and continued in Penang (1982), Ferrara (1985), São Paulo (1988), Dubrovnik (1991), Rabat (1994), Jaipur (1997), Prague (2000) and Cape Town (2003). A 2½ day Workshop on the Use of Monte Carlo Techniques for Design and Analysis of Radiation Detectors will be held immediately prior to ISRP-10 (15–17 September 2006).

More information on the Symposium, the associate workshop, as well as on the venue, can be found at http://pollux.fis.uc.pt/isrp10.





The 2nd International Symposium on Radionuclide Therapy and Radiopharmaceutical Dosimetry will take place in conjunction with the annual congress of the European Association of Nuclear Medicine (EANM) in Athens, Greece, September 30–October 4, 2006. As a separate track within the EANM congress this symposium will bring together disciplines concerned with radiopharmaceutical dosimetry and radionuclide therapy stimulating interdisciplinary scientific discussion. The EANM Dosimetry and Therapy Committees and colleagues from the MIRD committee of the SNM will join to coordinate the scientific committee and program for the meeting. All organizational matters will be

- Clinical: mIBG and peptides
- Clinical: Radioimmunotherapy
- Clinical: Thyroid, bone pain palliation & miscellaneous
- Dosimetry: Data Collection Methods / Dosimetric Models / Pharmacokinetics

handled by the EANM secretariat and congress office. Conference topics include:

- Dosimetry: Quantitative Analysis and Treatment Planning / Dosimetry for Clinical Trials
- Biological and Long-Term Effects / Animal and in-vitro Studies
- Miscellaneous

The link to current information about the symposium can be found at http://eanm06.eanm.org/programme/prog isrtrd.php?navigationId=19&sessNavigationId=63.

ICNCT-12

The Twelfth International Congress on Neutron Capture Therapy (ICNCT-12) will be held October 9–13, 2006, in Takamatsu, Kagawa, Japan. The meeting is sponsored by the International Society for Neutron Capture Therapy (ISNCT) with the society president, Yoshinobu Nakagawa of the Kagawa National Children's Hospital, acting as chairman of the organizing committee. The meeting will focus on the many significant developments that have been made in neutron capture therapy in biology, medicine, physics and angineering, and clinical trials. One of the highlights of



chemistry, medical physics and engineering, and clinical trials. One of the highlights of the presentations will be the report of results from our Japanese NCT teams of clinical trials on brain, skin and head and

neck tumors. Results of recent treatments on liver and lung cancers will also be reported. These treatments have been carried out using a combination of BSH and BPA which have yielded successful results. The most up-to-date information as well as registration and submittal information can be found at the conference website: http://icnct-12.umin.jp/index.html.

First European Workshop on Monte Carlo Treatment Planning



The European Workgroup on MCTP (EWG-MCTP) is sponsoring the First European Workshop on Monte Carlo Treatment Planning, October 22–25, 2006, in Gent, Belgium. The conference theme is "Introduction of MCTP into the Clinic." The workshop will offer the opportunity for scientists to exchange information, to develop new ideas and initiate international collaborative programs on the exciting and fast developing research domain of Monte Carlo treatment planning. This workshop will

also provide an overview of the current state of the art to clinical physicists who are thinking of introducing MCTP into their clinic.

The venue of the meeting is "Het Pand," a former Dominican monastery located in the historical centre of the city. The oldest parts of the building date from the 13th century and houses some valuable collections of the University such as the Museum for the History of Medicine and the ethnographical and archaeological collections.

Scientific sessions will consist of general talks and poster presentations. The research topics covered will be the following:

- Industry MCTPS
- 4D MCTP
- General multipurpose codes
- Dosimetry
- Photon MCTP
- Electron MCTP
- Proton MCTP
- Brachytherapy MCTP
- Clinical studies
- MC in optimisation
- Portal dosimetry

Inquiries may be sent to N. Reynaert, Lab for Standard Dosimetry Gent, Gent University –FANC, Proeftuinstraat 86 – B-9000 Gent, BELGIUM (phone + 32 9 264 66 48, fax + 32 9 264 66 96, email nick.reynaert@ugent.be). Details and updated information can be found at http://www.ewg-mctp.ugent.be.

PHYTRA1

The First International Conference on Physics and Technology of Reactors and Applications (PHYTRA1), will be held March 14–16, 2007, in Marrakech City, Morocco. This is the first International Conference organized by the Moroccan Association for Nuclear Engineering and Reactor Technology "GMTR" after a series of three national conferences. The objective is to provide scientists and engineers from different countries an opportunity to present their recent work in reactor physics and nuclear technology. Industrial vendors may exhibit their products and innovations in different domains related to reactor physics and nuclear technology. The PHYTRA1 conference will also be a celebration for the operation of the first research reactor (TRIGA Mark II) in Morocco which is expected to be commissioned in 2006.

Conference topics include:

- Deterministic and Monte Carlo Transport Theory Methods
- Reactor Core and Lattice Physics Methods
- Physics and Computational Methods for Advanced Reactors
- Reactor Theory and Reactor Concepts
- Neutron Kinetics and Dynamics
- Criticality and Safety Analysis
- Fuel Loading Optimization and Fuel Design
- Nuclear Data Analysis and Methods
- Computer Codes and Benchmarks
- Computational Methods for Research Reactors
- High Temperature Reactor Physics and Methods
- Reactor Thermal Hydraulics
- Radioactive Waste Management
- Research Reactor Utilization
- Reactor Dosimetry and Reactor Shielding

A one-page abstract should be sent by **July 15, 2006**, via email, to Pr. A. Jehouani, Faculty of Sciences SEMLALIA, Dept. of Physics, University Cadi Ayyad- Marrakech, Morocco (email PHYTRA1@fsr.ac.ma or jehouani@ucam.ac.ma, fax 212-44-43-74-10) or Pr. L. Erradi, GMTR President, Mohammed V Agdal University, Faculty of Sciences, Department of Physics, B. P. 1014 Rabat, Morocco (email erradi@fsr.ac.ma or fax 212-0-37-77-89-73) http://www.fst.ac.ma/gmtr/phytra1/phytra1/phytra1/phytra1.html.

ND2007

The International Conference on Nuclear Data for Science and Technology will be held April 22–27, 2007, in Nice, France. The conference is organized by the Commissariat à l'Énergie Atomique (CEA) under the auspices of the OECD Nuclear Energy Agency (NEA). The General Chairs are B. Bigot, Hautcommissaire à l'Énergie Atomique and L. Echávarri, NEA Director-General. Abstracts should be submitted by **September 2006** on the following topics:

- Nuclear structure and decay data
- Experimental facilities and detection techniques
- Nuclear data measurements and analysis
- Nuclear theories, models and data evaluation
- Standards
- Evaluated nuclear data libraries and processing
- Validation, benchmarking of evaluated data
- Integral experiments
- Uncertainties quantification
- Data dissemination and international collaboration
- Fission energy applications
- Accelerator-related applications
- Fusion technology applications
- Dosimetry and shielding applications
- Safeguards and security
- Space, cosmic-ray applications, radiation effects on electronics
- Astrophysics and cosmology applications

• Medical and environmental applications

The most current information will be posted on the website at http://www-dapnia.cea.fr/Sphn/nd2007/site nd2007/ and questions or comments may be addressed to nd2007/ocea.fr.

<u>International Conference on Emerging Nuclear Energy Systems</u> (ICENES 2007)

The committee for the 13th International Conference on Emerging Nuclear Energy Systems (ICENES 2007) has issued a call for papers for the conference to be held June 3–8, 2007, at Gazi University in Istanbul.

The main objective of ICENES is to provide a broad review and discussion of various advanced, innovative and non-conventional nuclear energy production systems to scientists, engineers, industry leaders, policy makers, decision makers and young professionals who will shape future energy supply and technology. ICENES 2007 will also open the forum to innovative non-nuclear technologies, such as hydrogen energy, solar energy, deep space exploration, etc. with an emphasis on *unthinkable ideas* with a sound scientific-technical basis. The program will include invited papers, submitted contributions in oral and poster sessions, as well as an industrial exhibition and social tours. Topical areas include:

- Advanced Fission Systems
- Fusion Energy Systems
- Accelerator Driven Systems
- Exotic Nuclear Reactor Concepts
- Transmutation and Fuel Cycle
- Co-Generation and Non-Electricity Production Applications
- Generation IV Reactors
- Space Power and Propulsion
- Deep Space Exploration, general
- Nuclear Hydrogen Production
- Radiation Protection & Shielding
- Hydrogen Energy, general including non-nuclear applications
- Solar Energy
- Other Alternative Energies
- Societal Issues

The official language of the conference will be English. Authors should submit abstracts of 300–500 words to abstract@icenes2007.org for review by the Program Committee. Abstracts should include sufficient information to explain and support the new and significant results to be presented in the proposed paper. The topical area appropriate to the abstract and the name and address of the author to whom correspondence should be addressed must be clearly stated at the top of the first page. Abstracts may be submitted in "pdf" or "doc" format via e-mail by **September 22, 2006.** Authors will be notified by November 17, 2006. The deadline for full papers is **March 2, 2007.** The proceedings will be produced on an interactive CD-ROM with an ISBN registration number. A selection of ICENES 2007 papers will be published in a special edition of the journal *Energy Conversion & Management.* Scientific and technical inqueries may directed to Prof Dr. Sümer Şahin, Gazi University 06500 ANKARA/TURKEY (phone +90 (312) 212 43 04, fax +90 (312) 212 43 04, email sumersahin@icenes2007.org). Updated information will be posted to http://www.icenes2007.org/.

CALENDAR

July 2006

- US WIN Meeting (WIN 2006), "Leadership, Education and Outreach in the 21st Century," July 16–18, 2006, Pittsburgh, Pennsylvania. Contact: WIN Coordinator, Carol Berrigan (phone 202-739-8050, email clb@nei.org) http://www.winus.org.
- 47th Annual Meeting of the Institute of Nuclear Materials Management, July 16–20, 2006, Nashville, Tennessee. Contact: INMM (phone 847-480-9573, fax 874-480-9282, email inmm@inmm.org) http://www.inmm.org/meetings/.
- 14th International Conference on Nuclear Engineering (ICONE 14), July 17–20, 2006, Miami, Florida. Contact: Kim Punter (email <u>punterk@asme.org</u>) http://www.asmeconferences.org/ICONE14/.
- American Association of Physicists in Medicine (AAPM) Annual Meeting, July 30–Aug. 3, 2006, Orlando, Florida. Contact: For general meeting information, please contact Hadijah Robertsonat hadijah@aapm.org. For scientific program or exhibitor information, please contact Lisa Rose Sullivan at https://aapm.org/meetings/06AM/

September 2006

- International Congress on Medical Physics, A Satellite Meeting of the World Congress 2006 -Seoul, South Korea, Sept. 3–6, 2006, Hangzhou, China. Contact: Raymond K. Wu, Ph.D., Medical Physics Department, OhioHealth Hospitals, 3535 Olentangy River Road, Columbus, OH 43016 USA (phone 1-614-566-4427, email RayKWu@GMail.com) url http://arooj.org/hangzhou/.
- PHYSOR-2006, "Advances in Nuclear Analysis and Simulation," Sept. 10–14, 2006, Vancouver, BC, Canada. Contact: Ken Kozier, Technical Program Co-Chair, Atomic Energy of Canada Limited (AECL), Chalk River Laboratories, Chalk River, Ontario, Canada K0J 1J0 (phone 613-584-8811 ext. 5059, email physor2006@aecl.ca) http://www.cns-snc.ca/physor2006/.
- Imaging as a Biomarker: Standards for Change Measurements in Therapy, Sept. 14–15, 2006, Gaithersburg, Maryland. Contact: Linda Beth Schilling (linda.schilling@nist.gov, 301-975-2887), Ram Sriram (ram.sriram@nist.gov, 301-975-3507) or Laurence Clarke (lclarke@mail.nih.gov, 301-451-4775). Updated workshop information and registration links are available on the NIST U.S. Measurement System website http://usms.nist.gov.
- Workshop on the Use of Monte Carlo Techniques for Design and Analysis of Radiation Detectors, Sept. 15–17, 2006, Coimbra, Portugal. Contact: (email workshop@lipc.fis.uc.pt), http://pollux.fis.uc.pt/isrp10/workshop/index.htm.
- ISRP-10, Sept. 17–22, 2006, Coimbra, Portugal. Contact: ISRP-10, Departamento de Física, Universidade de Coimbra, 3004-516 Coimbra, Portugal (fax +351 239 829158, email isrp10@pollux.fis.uc.pt, http://pollux.fis.uc.pt/isrp10).
- 2nd International Symposium on Radionuclide Therapy and Radiopharmaceutical Dosimetry, Sept. 30—Oct. 4, 2006 Athens, Greece. The url is http://eanm06.eanm.org/programme/prog_isrtrd.php?navigationId=19&sessNavigationId=63.

October 2006

13th Workshop on Monte Carlo Simulation of Radiotherapy Treatment Sources using the BEAMnrc Code System, Oct. 2–5, 2006, Ottawa, Canada. Contact: Dave Rogers, Physics Department, Carleton University, 1125 Colonel By Drive, Ottawa, Ontario, Canada, K1S 5B6 (phone 613-520-2600x4374, fax 613-520-4061, e-mail drogers@physics.carleton.ca) http://www.physics.carleton.ca/~drogers/BEAM/course/.

- 12th International Congress on Neutron Capture Therapy (ICNCT-12), Oct. 9–13, 2006, Takamatsu, Kagawa, Japan. Contact: ICNCT-12 Secretariat, Association for Nuclear Technology in Medicine, 2 Masumoto Bldg., 1-8-16 Toranomon, Minato-ku, Tokyo 105-0001, Japan (phone 81-3-3504-3961, fax 81-3-3504-1390, email ICNCT2006@antm.or.jp) https://icnct-12.umin.jp/.
- 2nd Asian and Oceanic Congress for Radiological Protection (AOCRP-2), Oct. 9–13, 2006, Beijing, P. R. China. Contact: Mr. Chai Luquan (phone 86-351-2202030, fax 86-351-7020407, email chailuquan@cirp.org.cn) http://www.aocrp-2.org/index.asp.
- 15th Pacific Basin Nuclear Conference (15PBNC), Oct. 15–20, 2006, Sydney, Australia. Contact: PBNC 2006 Conference Managers, GPO Box 128, Sydney NSW 2001, Australia (phone + 612 9265 0700, fax + 612 9267 5443, email pbnc2006@tourhosts.com.au, url http://www.pbnc2006.com/).
- First European Workshop on Monte Carlo Treatment Planning, Oct. 22–25, 2006, Gent, Belgium. Contact: N. Reynaert, Lab for Standard Dosimetry Gent, Gent University –FANC, Proeftuinstraat 86 B-9000 Gent, Belgium (phone + 32 9 264 66 48, fax + 32 9 264 66 96, email nick.reynaert@ugent.be) http://www.ewg-mctp.ugent.be/.

November 2006

- ANS Winter Meeting and Nuclear Technology Expo, "Securing the Future in Times of Change," Nov. 12–16, 2006, Albuquerque, NM. Contact: Robert W. Kuckuck (phone 505-667-5101, email bobkuck@lanl.gov) http://www.ans.org/meetings/index.cgi?c=n.
- 17th Topical Meeting on the Technology of Fusion Energy, an embedded topical at the ANS Winter Meeting, Nov. 12–16, 2006, Albuquerque, NM. Contact: Craig Olson, General Chair, Sandia National Laboratory, Dept. 1600 MS-1190, P.O. Box 5800, Albuquerque, NM 87185-1188 (phone 505-845-7303, fax 505-845-7890) http://tofe17.sandia.gov/.
- International Conference on Quality Assurance and New Techniques in Radiation Medicine, Nov. 13–15, 2006, Vienna, Austria. Contact: Mr. K. R. Shortt, Division of Human Health, International Atomic Energy Agency, Wagramer Strasse 5, P.O. Box 100, 1400 Vienna, Austria (phone +43 1 2600 21664, fax +43 1 2600 7 21662, email r.perricos@iaea.org) url http://www-pub.iaea.org/MTCD/meetings/Announcements.asp?ConfID=146.
- International conference on Radiation Biology/8th Annual Meeting of the Indian Society of Radiation Biology, Nov. 20–22, 2006, Varanasi, India. Contact: Y. B. Tripathi, Dept. of Medicinal Chemistry, Inst. Of Medical Sciences, Banaras Hindu Universiy, Varanasi-221005, India (<u>isrbbhu@yahoo.com</u>) url www.bhu.ac.in or www.isrb-india.com.

December 2006

International Conference on Lessons Learned from Decommissioning of Nuclear Facilities and the Safe Termination of Nuclear Activities, Dec. 11–15, 2006, Athens, Greece, sponsored by the International Atomic Energy Agency. Contact: Dennis Reisenweaver, Div. of Radiation, Transport and Waste Safety, IAEA, P.O. Box 100, Wagramer Strasse, A-1400 Vienna, Austria. (phone 43-1-2600-22852, fax 43-1-26007, email d.reisenweaer@iaea.org).

March 2007

First International Conference on Physics and Technology of Reactors and Applications (PHYTRA1), March 14–16, 2007, Marrakech City, Morocco. Contact: Pr. A. Jehouani, Faculty of Sciences Semlalia, Dept. of Physics, University Cadi Ayyad- Marrakech, Morocco (email phytra@ucam.ac.ma or jehouani@yahoo.com, fax 212 44 43 74 10) or Pr. L. Erradi, GMTR President, Mohammed V. Agdal University, Faculty of Sciences, Department of Physics, B. P. 1014 Rabat, Morocco (email erradi@fsr.ac.ma or erradi@hotmail.com, fax 212-0-37-77-89-73) http://www.fst.ac.ma/gmtr/phytra1/phytra1.html.

June 2007

ICENES 2007, June 3–8, 2007, Istanbul. Contact: Prof Dr. Sümer Şahin, Gazi University 06500 Ankara/Turkey Contact: Prof Dr. Sümer Şahin, Gazi University 06500 Ankara/Turkey (phone +90 312 212 43 04, fax +90 312 212 43 04, email sumersahin@icenes2007.org) url http://www.icenes2007.org/.

ANS Annual Meeting, June 24–28, 2007, Boston, Massachusetts. URL http://www.ans.org/meetings/.