

XVI ENAN ORAL TECHNICAL SESSIONS

MAY 7, TUESDAY

Auditorium Salão de Jogos A

E01 - Dosimetry and Nuclear Instrumentation

Time	Paper ID	Title / Authors
17:00 - 17:15	E01_ 23841	Dose Response of Fricke Gel Dosimeters with Distinct Indicators <i>Iasmin Nishibayaski, Anna Luiza Fraga da Silveira, Luiz Cláudio Meira-Belo</i> CDTN - Centro de Desenvolvimento da Tecnologia Nuclear
17:15 - 17:30	E01_ 23859	Thermoluminescent properties for silver-doped sodium borate glass <i>Caroline Fernandes, Sonia Hatsue Tatumi, René Rojas Rocca</i> USP - Universidade de São Paulo
17:30 - 17:45	E01_ 23913	Study of the Behavior of 3 MeV Proton Beams on PMMA: Monte Carlo Simulations and Experimental Data <i>Júlio José Pereira, Flávio Matias da Silva, Paula Cristina Guimarães Antunes, Julian Marco Barbosa Shorto, Paulo de Tarso Dalledone Siqueira, Tiago Fiorini da Silva, Cleber Lima Rodrigues, Larissa Otubo, Glauson Aparecido Ferreira, Hélio Yoriyaz</i> IPEN - Instituto de Pesquisas Energéticas e Nucleares
17:45 - 18:00	E01_ 24110	Secondary Standardization of Neutron Fluence Fields at the Argonaut Reactor - IEN: Assessment of Calibration and Irradiation Metrological Capacity for Samples and Instruments <i>Fellipe Souza da Silva, Francisco Jose de Oliveira Ferreira, Walsan Wagner Pereira</i> IRD - Institute of Radiation Protection and Dosimetry
18:00 - 18:15	E01_ 24191	Differentiation of Bone Submitted to Single dose from fractional of Ionizing Radiation by ATR-FTIR Spectroscopy <i>Gleice Germano, Pedro Arthur Augusto de Castro, Derly Augusto Dias, Marcelo Noronha Veloso, Denise Maria Zezell</i> IPEN - Instituto de Pesquisas Energéticas e Nucleares

E04 - Applications in Agriculture and Food

18:15 - 18:30	E04_ 23813	Food Irradiation: A Solution for the Conservation and Safety of Perishable Foods in Naval Environments by the Brazilian Navy <i>Roberto Gazola Ortiz, Pedro Alexandre Pinto Celestino, Denise Sahyun Levy</i> Marinha do Brasil
18:30 - 18:45	E04_ 23960	Radiation influence on antioxidant capacity, bioactive compounds and extractability of coffee processing residues <i>João Pedro Barros, Ana Sofia Martelli Chaib Saliba, Severino Matias de Alencar, Anna Lucia Casañas Haasis Villavicencio</i> IPEN - Instituto de Pesquisas Energéticas e Nucleares

E03 - Applications in Health and Industry

18:45 - 19:00	E03_ 23714	In Vivo Distribution Dynamics of Gold Nanoparticles: A Quantitative Analysis <i>Angélica Barbezan, Wilmer Alexandre Arcos Rosero, Luís Fernando de Almeida, Maria Eduarda Zaganin Rigo, Fábio Fernando Alves da Silva, Maria Elisa Chuery Martins Rostelato</i> IPEN - Instituto de Pesquisas Energéticas e Nucleares
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MAY 08 WEDNESDAY

Auditorium Salão de Jogos B

E02 - Applications to the Environment

Time	Paper ID	Title / Authors
14:30 - 14:45	E02_ 23686	<p>Potential applications of Water Stable Isotopes in Nuclear Facility Environmental Monitoring Programs</p> <p><i>Lucilena Monteiro, Thamiris Bernadino Stellato, Ricardo Gomes Passos, Ilza Dalmazio, H.B. Gomes, Ligia Santana de Faria Almeida, Germain Esquivel-Hernández, Sandra Regina Damatto, Marycel Elena Barboza Cotrim</i></p> <p><i>IPEN - Instituto de Pesquisas Energéticas e Nucleares</i></p>
14:45 - 15:00	E02_ 24035	<p>One year of Be-7 measurement in rainfall collected in different points in the city of São Paulo, Brazil</p> <p><i>Rafael Martins Domingos, Lucio Leonardo, Sandra Regina Damatto, Pedro Miranda Júnior, Vera Lúcia Isiki, Marcelo Bessa Nisti, Marcos Medrado de Alencar, Marcelo Francis Máduar, Luiz Flávio Lopes Teixeira, José Oliveira de Almeida Neto</i></p> <p><i>IPEN - Instituto de Pesquisas Energéticas e Nucleares</i></p>
15:00 - 15:15	E02_ 24144	<p>Evaluation of 40K and 210Pb levels in soil of the Caantiga biome in the desertification core in the semi-arid region of Brazil</p> <p><i>Bruno da Silva, Gustavo Pires Bertaco, Paulo Sergio Cardoso da Silva, Mechele da Silva Santos, Andrezza Karla de Oliveira Silva, Eugênia Cristina Pereira, Deoclecio Jardim Amorim, Plínio Barbosa de Camargo</i></p> <p><i>USP - Universidade de São Paulo</i></p>
15:15 - 15:30	E02_ 24162	<p>Dose Calculation on maintenance Team after aircraft flight inside Radioactive Plume</p> <p><i>Felipe Frigi, Maurício Tizziani Pazianotto, Claudio Antonio Federico, Edson Ramos de Andrade</i></p> <p><i>ITA - Instituto de Tecnologia Aeronáutica</i></p>

MAY 9, THURSDAY

Auditorium Salão de Jogos B

E03 - Applications in Health and Industry

Time	PaperID	Title / Authors
14:30 - 14:45	E03_ 23687	<p>Optimization of PSMA-IT radiolabeling with ¹⁷⁷Lu</p> <p><i>Luiza Mascarenhas Balieiro, Maria Das Dores Domingos, Luana Pereira da Silva, Elaine Bortoleti de Araujo</i></p> <p><i>IPEN - Instituto de Pesquisas Energéticas e Nucleares</i></p>
14:45 - 15:00	E03_ 23697	<p>Evaluation of HPLC chromatographic analytical method to determine radiochemical purity of [¹⁷⁷Lu]-PSMA I&T</p> <p><i>Joel Santos, Margareth Mie Nakamura Matsuda, Elaine Bortoleti de Araujo</i></p> <p><i>IPEN - Instituto de Pesquisas Energéticas e Nucleares</i></p>
15:00 - 15:15	E03_ 23713	<p>Determination of the linear attenuation coefficient for a heterogeneous material</p> <p><i>Vinicius Silva, Luís Eduardo Barreira Brandão, Eduardo Archanjo Cavalcante, Raphael Francisco Gomes Dos Santos</i></p> <p><i>IEN - Instituto de Engenharia Nuclear</i></p>
15:15 - 15:30	E03_ 23730	<p>PROCEDURES FOR PREPARING A RADIOLOGICAL PROTECTION PLAN FOR INSPECTION IN OFF SHORE INSTALLATIONS USING THE RADIOTRACER TECHNIQUE</p>

Raphael dos Santos, Luis E.B. Brandão, Valeska Peres de Araújo, Eduardo A. Cavalcanti, Claudia Cristina Braga, Peter P. Yoon, Vinicius S.P. Silva
IPEN - Instituto de Engenharia Nuclear

- 15:30 - 15:45** E03_ 23879 Lu and Yb Separation: an Ion Exchange Chromatography Process Optimized by Design of Experiments
Renata Nory, Marcos Oliveira Damasceno, Vitória Tapetti, Edson Gonçalves Moreira
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 15:45 - 16:00** E03_ 24107 Analysis of the behavior of SMD connectors injected with polyethylene and irradiated after lead-free soldering
Tania Zerbato, Leonardo Gondin de Andrade e Silva
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 16:00 - 16:15** E03_ 24140 Influence of dose rate on radiotherapy treatment of the U87MG cell line through cell viability
Arthur da Rocha, Ruy da Silva Rayol Neto, Déborah Assis de Almeida Carneiro, Delano Valdivino Santos Batista, Luiz Antonio Ribeiro da Rosa, Mariana Paranhos Stelling, Simone Coutinho Cardoso
UFRJ - Federal University of Rio de Janeiro

Auditorium Salão de Jogos A

E05 - Radioactive Waste

- | Time | PaperID | Title / Authors |
|----------------------|------------|---|
| 16:45 - 17:00 | E05_ 23865 | Atmospheric Dispersion of Rn-222 from Phosphogypsum Piles
<i>Victor Tsutsumiuchi, Roberto Vicente</i>
IPEN - Instituto de Pesquisas Energéticas e Nucleares |
| 17:00 - 17:15 | E05_ 23951 | Equation proposal for evaluating the level of surface contamination of metal scrap with NORM
<i>Vanderlei de Moura, Cláudia Pereira</i>
UFMG - Universidade Federal de Minas Gerais |
| 17:15 - 17:30 | E05_ 24159 | Safety Assessment in the Predisposal Management of DSRS
<i>Heloisa Reis, Roberto Vicente, Júlio Takehiro Marumo</i>
IPEN - Instituto de Pesquisas Energéticas e Nucleares |

E06 - Applications to Cultural Heritage

- | Time | PaperID | Title / Authors |
|----------------------|------------|--|
| 17:30 - 17:45 | E06_ 23665 | Preserving cultural heritage through radiation-curing resin consolidation: a case study of an indigenous ceramic vessel
<i>Ana Carolina Delgado Vieira, Pablo Antonio Vasquez Salvador, Maria José Alves de Oliveira, Fabíola Andréa Silva</i>
IPEN - Instituto de Pesquisas Energéticas e Nucleares |
| 17:45 - 18:00 | E06_ 23791 | Paraloid Resins with Polymeric Monomers cured by Gamma Radiation for Consolidation of Porous Wood
<i>Maria José de Oliveira, Mariana J. A. Araújo, Larissa Otubo, Sonia R. Castanho Mello, Pablo Antônio Salvador Vásquez</i>
IPEN - Instituto de Pesquisas Energéticas e Nucleares |
| 18:00 - 18:15 | E06_ 23880 | Gamma Radiation for Preservation: A Novel Approach to Disinfect VHS Tapes in Historical Archives
<i>Maria Luiza Nagai, Djalma Batista Dias, Pablo Antonio Vasquez Salvador</i>
IPEN - Instituto de Pesquisas Energéticas e Nucleares |

XVI ENAN POSTER SESSIONS

MAY 7, TUESDAY

Biblioteca -TOTEN 6

E02 - Applications to the Environment

Time	Paper ID	Title / Authors
14:30 - 14:45	E02_ 23647	Exploring Radionuclide Behavior: A Study in the 'Karpov' Institute Vicinity <i>Levy Maciel, Galina Lavrentyeva</i> <i>IPEN - Instituto de Pesquisas Energéticas e Nucleares</i>
14:45 - 15:00	E02_ 23648	Evaluation of Radionuclides in sugar samples from different regions of Brazil <i>Marco Antonio Frota Lima, Clarisse Alcantara, Ian Kastrup, Alphonse Kelecom, Jardel Lemos, Rayline Silva, Lorena Santos, Leandro Barbosa, Carlos Pastrana</i> <i>UFF - Universidade Federal Fluminense</i>
15:00 - 15:15	E02_ 23660	Pb-210 Activity Concentration Measured in Rainfall in Different Sampling Heights <i>José Almeida Neto, Sandra Regina Damatto, Marcelo Francis Maduar, Lúcio Leonardo, Luiz Flávio Lopes Teixeira</i> <i>IPEN - Instituto de Pesquisas Energéticas e Nucleares</i>
15:15 - 15:30	E02_ 23676	Byproduct-based zeolite type A as absorbent material for decontamination of simulated radioactive wastewater <i>Mariana Silva Araujo, Danilo Lopes Costa e Silva, Sonia Regina Homem de Mello Castanho, Denise Alves Fungaro</i> <i>IPEN - Instituto de Pesquisas Energéticas e Nucleares</i>
15:30 - 15:45	E02_ 23694	Application of WDXRF and EDXRF Spectrometry for Major and Minor Elemental Analysis in Oil Sludge by Fundamental Parameter Algorithm <i>Aline Leone Muguet Pinto, Marcos Antonio Scapin, Marycel Elena Barboza Cotrim, Julio Takehiro Marumo, Sabine Neusatz Guilhen</i> <i>IPEN - Instituto de Pesquisas Energéticas e Nucleares</i>
15:45 - 16:00	E02_ 23707	Babassu coconut endocarp-derived activated biochar for efficient cesium adsorption from aqueous solution <i>Gabriela Garcia, Leandro Goulart de Araujo, Júlio Takehiro Marumo, Sabine Neusatz Guilhen</i> <i>IPEN - Instituto de Pesquisas Energéticas e Nucleares</i>
16:00 - 16:15	E02_ 23708	Natural radionuclides in surface soils from Biritiba-Mirim reservoir, state of São Paulo, Brazil <i>Pedro Gonçalves, Sandra Regina Damatto, Lúcio Leonardo, Marycel Elena Barboza Cotrim, Thiago Costa Silva</i> <i>IPEN - Instituto de Pesquisas Energéticas e Nucleares</i>
16:15 - 16:30	E02_ 23710	Geological study of sediments from the Negro and Solimões rivers <i>Casimiro Munita, Patricia Ramos Carvalho, Rogério B. Ribeiro, Emílio A. A. Soares, Ricieri R. P. Tarabossi</i> <i>IPEN - Instituto de Pesquisas Energéticas e Nucleares</i>
16:30 - 17:00	Coffee Break (Biblioteca)	
17:00 - 17:15	E02_ 23768	Nuclear Energy as Part of the Climate Solution and Instrument for Sustainable Development

COPPE - UFRJ

- 17:15 - 17:30** E02_ 23785 High resolution X-ray microtomography as a tool for observation and classification of individual microplastics
Atila Teles, Marcus Vinicius Santos da Silva, Davi Ferreira de Oliveira, Ricardo Tadeu Lopes
COPPE - UFRJ
- 17:30 - 17:45** E02_ 23802 Be-7 Behavior in Iperó (Brazil) due to Atmospheric and Solar Activity Influences
Renata Saito, Cássia Maria Leme Beu, André Luis Lima de Araújo, Beatriz Guimarães Nunes Lambiasi
CTMSP - Centro Tecnológico da Marinha em Sao Paulo
- 17:45 - 18:00** E02_ 23809 Quality Assurance and Quality control of pH measurements for urban wastewater of a Nuclear and Radioactive Facility
Lucilena Monteiro, Thamiris Bernadino Stellato, Lucilena Rebelo Monteiro, Debora Almeida Pirani, Samia R. Maracaipe Lima, Stella Ros Blat, Felipe Viana, Marycel E. B. Cotrim
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 18:00 - 18:15** E02_ 23823 Comparison of ERICA Tool versions 1.3 and 2.0 in an environmental scenario using NORM residue
Marcelo Nisti, Cátia Heloisa Rosignoli Saueia
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 18:15 - 18:30** E02_ 23829 Inorganic chemical characterization of the soil from the springs at RPPN Fazenda Renópolis
Carlos Eduardo Cunha Rodrigues, Sandra Regina Damatto, Lucio Leonardo
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 18:30 - 18:45** E02_ 23849 Potential of Ionizing Radiation Application for Reducing Environmental Risks Related to Solids Residues
Sueli Borrely, Maria Veronica Vogt, Jose Pachado, Simone Aquino
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 18:45 - 19:00** E02_ 23857 The Production of Clean and Low-cost Hydrogen Through Nuclear Power Plants
Eduardo Moraes, Electo Eduardo Lora da Silva, Marcelo Silva Rocha
Universidade Federal de Itajubá - UNIFEI

Biblioteca -TOTEN 8

E02 - Applications to the Environment

Time	Paper ID	Title / Authors
14:30 - 14:45	E02_ 23867	Determination of radon concentration in the premises of the Institute of Radioprotection and Dosimetry. <i>Lucas Rezende, Fernando Carlos Araujo Ribeiro, Paulo Roberto Rocha Ferreira, Ricardo Alberto Giannoni</i> IRD - Institute of Radiation Protection and Dosimetry
14:45 - 15:00	E02_ 23891	Evaluation of sugarcane bagasse use for the synthesis of reduced graphene oxide by using microwave process <i>Sumair Araujo, Liliane Landini, Sumair Gouveia de Araujo, Vera Lucia Ribeiro Salvador, Rafael Henrique Lazzari Garcia, Eguiberto Galego, Marilene Morelli Serna, Horácio Marconi da Silva Matias Dantas Linhares</i> IPEN - Instituto de Pesquisas Energéticas e Nucleares
15:00 - 15:15	E02_ 23908	Assessment of Naturally Occurring Radionuclides in a Pre-operational Stage of a Shrimp Farm in Southern Bahia, Brazil <i>R. R. Cabral, J. M. Lopes, G. M. Hadlich, A. B. Costa, M. R. Zucchi, J. G. G. Santos, W.S. Pereira</i> COPPE - UFRJ

- 15:15 - 15:30** E02_ 23910 Dose assessment due to the intake of ²²⁶Ra and ²²⁸Ra contained in vegetables grown both organically and conventionally in regions with high natural radioactivity
A. K. S. Paiva, W.S. Pereira, A. Kelecom, J. M. Lopes, A. S. do Carmo, M. Charles-Pierre, E. L. C. Campelo, L. G. Padilha Filho, A. X. da Silva
COPPE-UFRJ - UFRJR
- 15:30 - 15:45** E02_ 23914 Radiological risk due to ingestion of water from an old uranium mine: releases from waste pond
A. X. Silva, W.S. Pereira, A. Kelecom, J. M. Lopes, M. Charles-Pierre, E. L. C. Campelo, A. S. do Carmo
COPPE - UFRJ
- 15:45 - 16:00** E02_ 23917 Using MCNP to obtain efficiency curves for quantifying activity concentration in environmental samples
M. Charles-Pierre, W. S. Pereira, J. M. Lopes, A. S. do Carmo, E. L. C. Campelo, L. G. Padilha Filho, A. X. Silva
COPPE - UFRJ
- 16:00 - 16:15** E02_ 23919 The risk assessment due to intake of uranium: the case of a semi-arid region of Brazil
A. S. Carmo, W. S. Pereira, A. Kelecom, J.M.LOPES, S. G. Pelegrineli, E. L. C. Campelo, N. R. E. P. Potenciano, A. C. G. Schenberg, A. X. SILVA
CBPF
- 16:15 - 16:30** E02_ 23921 Synchrotron Microtomography to Explore the Anatomy of Insects
Gabriela Souza, Thaina Alvarenga, Tayane Tanure, Samara Oliveira, Katrine Paiva, Marcos Vinicius Colaço, Ademir Xavier da Silva, Cícero Mello, Ruan Ingliton, Regina Cely Barroso
COPPE - UFRJ
- 16:30 - 17:00** **Coffee Break (Biblioteca)**
- 17:00 - 17:15** E02_ 23925 Determination of natural radioactivity levels in drinking water and soil at APA Passaúna (Curitiba, PR)
Rodrigo Zamboni, Camila Sampaio Nogueira, Sergei Anatolyevich Paschuk, Janine Nicolosi Corrêa
UTFPR - Federal University of Technology - Paraná
- 17:15 - 17:30** E02_ 23955 Evaluation of the combination of Linear Alkylbenzene Sulfonate (LAS) with emerging pollutants: an approach to aquatic ecotoxicity and Electron Beam treatment
Vanessa Granadeiro, Flávio Kioyshi Tominaga, Nathalia Fonseca Boiani, Anselmo Feher, Sueli Ivone Borrely
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 17:30 - 17:45** E02_ 23966 Human biomonitoring in residents of a NORM area using the comet assay, Pernambuco-Brazil
Vinicius Moraes, Dewson Rocha Pereira, João Emanuel Firmo Pinto, Osana Diniz Ferreira, Ana Maria Mendonça de Albuquerque Melo
UFPE - Universidade Federal de Pernambuco
- 17:45 - 18:00** E02_ 24005 Radiometric Characterization of Pandeiros River Basin (Minas Gerais - Brazil)
Lucas Cunha de Paula, Rubens Martins Moreira, Eduardo Duarte Marques, Claudio Jose Chagas, Carlos Alberto de Carvalho Filho, Fernando Machado de Mello
CDTN - Centro de Desenvolvimento da Tecnologia Nuclear
- 18:00 - 18:15** E02_ 24022 Tritium as a tracer to landfill leachate liquid migration in groundwater
Rafael de Oliveira, Carlos Alberto de Carvalho Filho, Rubens Martins Moreira, Eliana Nonato Knup
CDTN - Centro de Desenvolvimento da Tecnologia Nuclear
- 18:15 - 18:30** E02_ 24029 Determination of ²¹⁰Pb and ⁷-Be in Amazon Rainfall - site ATTO.
Tamires Mora, Paulo Sérgio Cardoso da Silva, Guilherme Soares Zahn, Frederico Antonio Genezini
IPEN - Instituto de Pesquisas Energéticas e Nucleares/ USP

18:30 - 18:45 E02_ 24033 Radon dosimetry and water chemical and radiological characterization of Brazilian spas
Paulo Sergio Silva, Guilherme de Lima Reis, Marcia Pires de Campos, Jefferson Koyaishi Torrecilha, Nicolly Santana de Oliveira, Dagnaldo de Araújo Silva, Jussara Marques Oliveira Marrichi, Barbara Pacci Mazzilli
 IPEN - Instituto de Pesquisas Energéticas e Nucleares/ USP

Biblioteca -TOTEN 9

E03 - Applications in Health and Industry

Time	Paper ID	Title / Authors
14:30 - 14:45	E03_ 23626	Efficacy of [223Ra]RaCl ₂ in Nanomicellar Form: Targeting Renal Pathways, Osteosarcoma Therapy in PDX Models, and Pharmacokinetic-Biochemical Analysis <i>Natália Cristina Gomes-da-Silva, Eduardo Ricci-Junior, Luciana Magalhães Rebelo Alencar, Derya Iem-Özdemir, Amanda dos Santos Cavalcanti, Daniel Escorsim Machado, Jamila Alessandra Perini, Ralph Santos-Oliveira</i> CNEN - Comissão Nacional de Energia Nuclear
14:45 - 15:00	E03_ 23641	Evaluation of bioindicator in ampoules by membrane filtration <i>Carlos Farias Felgueiras</i> IPEN - Instituto de Pesquisas Energéticas e Nucleares
15:00 - 15:15	E03_ 23688	Radiochemical Stability Study of Therapeutic doses of Lu-177-PSMA-I&T. <i>Luiza Mascarenhas Balieiro, Maria Renata Brandão Freire, Joel Mendes dos Santos, Elaine Bortoleti de Araujo</i> IPEN - Instituto de Pesquisas Energéticas e Nucleares
15:15 - 15:30	E03_ 23689	Tin quantification in lyophilized reagents by dithiol spectrophotometric method <i>Margareth Mie Nakamura Matsuda, Joel Mendes dos Santos</i> IPEN - Instituto de Pesquisas Energéticas e Nucleares
15:30 - 15:45	E03_ 23690	Analysis of hydrothermal quartz from States Rio Grande do Sul, Bahia and Minas Gerais induced by gamma radiation <i>Cyro Enokihara, Rainer Alloys Schultz Guttler, Paulo Roberto Rela</i> IPEN - Instituto de Pesquisas Energéticas e Nucleares
15:45 - 16:00	E03_ 23701	Preliminary Study of Sterilizing Filtration Validation: Microscopy of DOT-IPEN-177 Filtration Membrane <i>Vinicius Lima Torres de Oliveira, Luan Junior dos Santos, Laura Cavalcante Cidrão, Luis Alberto Pereira Dias, Carlos Farias Felgueira, Margareth Mie Nakamura Matsuda</i> IPEN - Instituto de Pesquisas Energéticas e Nucleares
16:00 - 16:15	E03_ 23703	Monte Carlo Method for Simulating a Technique for Measuring the Proton Beam Energy from a Commercial Cyclotron <i>Henrique Barcellos, Luiza Mascarenhas Balieiro, Isabel Ponce de Miranda, Isabela Castro de Moraes, Tanus Vaz Szabo</i> IPEN - Instituto de Pesquisas Energéticas e Nucleares
16:15 - 16:30	E03_ 23711	Determination of the activity of iodine-125 by the sum peak method for application in brachytherapy <i>Ilca Marli Medeiros, Ana Catarina Koka de Souza Silva, Ana Laura Burin, Cristhian Ferreira Talacimon, João Augusto Moura, Lara El Hajj Teodoro, Priscila Santos Rodrigues, Sabrina Spigaroli Sgrignoli, Maria Elisa Chuey Martins Rostelato, Carlos Alberto Zeituni</i> IPEN - Instituto de Pesquisas Energéticas e Nucleares
16:30 - 17:00	Coffee Break (Biblioteca)	
17:00 - 17:15	E03_ 23712	Monte Carlo Method applied to nanobrachytherapy simulations

Ana Catarina Silva, Ilca Marli Moitinho Amaral Medeiros, Ana Laura Burin, Cristhian Ferreira Talacimon, Giovanna Martins Rosa, Lara El Hajj Teodoro, Priscila Santos Rodrigues, Sabrina Spigaroli Sgrignoli, Maria Elisa Chuery Martins Rostelato, Carlos Alberto Zeituni

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17:15 - 17:30	E03_ 23727	Study of the Radiomodifying Effect of Folic Acid Clovis Santos IPEN - Instituto de Pesquisas Energéticas e Nucleares
17:30 - 17:45	E03_ 23729	X-ray Computed Microtomography for the Inspection of Flexible Risers Adriana Moreira, Olga Maria Oliveira de Araújo, Alessandra Silveira Machado, Ricardo Tadeu Lopes, Davi Ferreira de Oliveira UFRJ - Federal University of Rio de Janeiro
17:45 - 18:00	E03_ 23737	Comparison between the average glandular dose (AGD) calculated using the Volpara software and DICOM Header. Camila Engler, Laila Fernanda Moreira de Almeida, Elaine Rodrigues Leite, Fernando Leyton, Maria do Socorro Nogueira CDTN - Centro de Desenvolvimento da Tecnologia Nuclear
18:00 - 18:15	E03_ 23741	Manufacturing of Physical Phantom and Evaluation of a Software for Remote Quality Control in Mammography Using a Retrofit DR System Laila Fernanda Moreira de Almeida, Camila Engler, Peterson Lima Squair, Maria do Socorro Nogueira CDTN - Centro de Desenvolvimento da Tecnologia Nuclear
18:15 - 18:30	E03_ 23743	Analysis of the Impact of Digital Image Format on the Evaluation of a Mammography Phantom Laila Fernanda Moreira de Almeida, Roger Ferreira da Silva, Camila Engler, Elaine Rodrigues Leite, Peterson Lima Squair, Maria do Socorro Nogueira, Frederico Gadelha Guimarães CDTN - Centro de Desenvolvimento da Tecnologia Nuclear
18:30 - 18:45	E03_ 23749	Cerebral angiography: Are the patient's doses high? Raquel Assimos, Lucía Viviana Canevaro IRD - Institute of Radiation Protection and Dosimetry

Biblioteca -TOTEN 10

E03 - Applications in Health and Industry

Time	Paper ID	Title / Authors
14:30 - 14:45	E03_ 23754	Estimation of Dose Deposition by 198-AuNPs in the Prostate with MCNP in Simplified Geometry Sabrina Spigaroli Sgrignoli, Lucas Verdi Angelocci, Henrique Santos de Chico, Carla Daruich de Souza, Ana Laura Burin, Priscila Santos Rodrigues Lara El Hajj Teodoro, Ilca Marli Moitinho Amaral Medeiros, Carlos Alberto Zeituni, Maria Elisa Chuery Martins Rostelato IPEN - Instituto de Pesquisas Energéticas e Nucleares
14:45 - 15:00	E03_ 23756	Separation of Sc and Ti using cation exchange resin Lilian Muriel Braguin, Gustavo Seiji Pó, Iberê Ribeiro de Souza Junior, Paulo Sergio Cardoso da Silva IPEN - Instituto de Pesquisas Energéticas e Nucleares
15:00 - 15:15	E03_ 23757	Analysis of ISO 5832-1 Stainless Steel Alloys by Nuclear Techniques Lilian Muriel Braguin, Caio Almeida Justino da Silva, Marcos Scapin, Isolda Costa, Mitiko Saiki IPEN - Instituto de Pesquisas Energéticas e Nucleares
15:15 - 15:30	E03_ 23765	Optimization of concentration and activity in the production of radioactive gold nanoparticles for cancer treatment Wilmer Arcos Rosero, Angelica Bueno Barbezan, Luis Fernando De Almeida, Maria Elisa Chuery Martins Rostelato

- 15:30 - 15:45** E03_ 23787 Development and Analyses of Transparent Silicate Glassy System with BaO Inclusion to Application Radiation Shield
Ronaldo Viscovini, Robson Ferrari Muniz
UEM - State University of Maringa (PR)
- 15:45 - 16:00** E03_ 23804 Performance of the SEM (Scanning Electron Microscope), Raman Spectroscopy, and Industrial Computed Tomography used for characterization of the vesicular volcanic rock as applied in Carbon Capture and Storage (CCS)
Rodrigo Santos, Alexandre França Velo, Francisco de Assis Cavallaro, Rafael Henrique Lazzari Garcia, Carlos Henrique de Mesquita, Wilson Aparecido Parejo Calvo
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 16:00 - 16:15** E03_ 23806 Development of a software for cropping and alignment of CBR mammography phantom images
Roger Ferreira da Silva, Laila Fernanda Moreira de Almeida, Maria do Socorro Nogueira, Frederico Gadelha Guimarães
CDTN - Centro de Desenvolvimento da Tecnologia Nuclear
- 16:15 - 16:30** E03_ 23810 Some Physical Chemical Aspects of Non-Woven Fabric Polypropylene Exposed to Electron-Beams
Maiara Ferreira, Eduardo Moura, Samir Somessari, Elisabeth Somessari, Aurea Beatriz Cerqueira Geraldo

IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 16:30 - 17:00** **Coffee Break (Biblioteca)**
- 17:00 - 17:15** E03_ 23824 Possible new phosphorus-32 source for paraspinal brachytherapy
Lara El Hajj Teodoro, Ana Laura Burin, Ana Catarina Koka de Souza Silva, Cristhian Ferreira Talacimon, Maria Eduarda Zaganin Rigo, Ilca Marli Moitinho Amaral Medeiros, Priscila Santos Rodrigues, Paulo Victor dos Santos Tavares, Sabrina Spigaroli Sgrignoli, Maria Elisa Chuery Martins Rostelato

USP - Universidade de São Paulo
- 17:15 - 17:30** E03_ 23834 Development of spheroids in co-culture of prostate tumor with human fibroblasts, using the Hangin-drop technique with plate inversion for analysis of gamma irradiation in (Cobalt 60)
Thais Monteiro, Alex Alves Rodrigues, Giovana Dias da Silva, Esther Carolina dos Santos, Suleyna Ribeiro Prudente, Patricia Lima Falcão, Mayelle Maria Paz Lima, Daniel Perez Vieira

IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 17:30 - 17:45** E03_ 23855 Soluble polymer- curcumin encapsulation to protect against gamma irradiation and increase the water solubility
Lucas Almeida, Duclerc Fernandes Parra
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 17:45 - 18:00** E03_ 23878 Analysis of the Participation of the Nuclear Technology Development Center (CDTN) in Proficiency Tests to Measure the Activity of Radiopharmaceuticals Organized by the Institute of Radioprotection and Dosimetry (IRD)
Enzo Cortez, Leonardo Tafas Constantino Nascimento, Andrea Vidal Ferreira, Karla Cristina de Souza Patrão, Johnny de Almeida Rangel
CDTN - Centro de Desenvolvimento da Tecnologia Nuclear
- 18:00 - 18:15** E03_ 23881 Analysis of the coxal liquid of *O. brasiliensis* tick species by analytic techniques
Cibele Zamboni, Dalton Nogueira da Silva Giovanni, Simone Michaela Simons
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 18:15 - 18:30** E03_ 23882 Development of the nanoparticle synthesis process
José dos Santos Guerra, Hugo Araujo Santos, Arthur Wilson Carbonari
IPEN - Instituto de Pesquisa Energetica e Nuclear

- 18:30 - 18:45** E03_ 23883 Radiolabeling of porcine, murine growth hormone and a potential antagonist G118R-mGH for biodistribution study
Amanda Nunes, Filipe Menezes, Larissa Andrade Almeida, Stephanie Angelo Pomin, Patricia Lima Falcão, Carlos Roberto Jorge Soares
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 18:45 - 19:00** E03_ 23893 The role of Prolactin (PRL) in activating the signaling pathways of the Jak STAT complex as a potential candidate in radioresistant MDAMB-231 cells in 3D cultures
Patricia Falcão, Daniel Perez Vieira, Giovana Dias da Silva, Amanda Palermo Nunes, Filipe Menezes, Suleyna Ribeiro Prudente, Thais Monteiro da Silva, Ester Carolina dos Santos, Mayelle Maria Paz, Carlos Roberto Jorge Soares
IPEN - Instituto de Pesquisas Energéticas e Nucleares

MAY 8, WEDNESDAY

Biblioteca -TOTEN 6

E04 - Applications in Agriculture and Food

Time	Paper ID	Title / Authors
14:30 - 14:45	E04_ 23704	Arsenic Content in Trahira (<i>Hoplias Malabaricus</i>) from São Paulo, Brazil, Determined by INAA <i>Daniele Prado dos Reis, Edson Gonçalves Moreira</i> <i>IPEN - Instituto de Pesquisas Energéticas e Nucleares</i>
14:45 - 15:00	E04_ 23715	Evaluations of the possible mutagenic and genotoxic effects of 2-ACBs: by-products generated from irradiated foods <i>Angélica Barbezan, Ana Carolina de Araújo Bispo, Bruno Melo Mendes, Daniel Perez Vieira, Luma Ramirez Carvalho, Glaucia Maria Machado-Santelli, Anna Lucia Casañas Haasis Villavicencio</i> <i>IPEN - Instituto de Pesquisas Energéticas e Nucleares</i>
15:00 - 15:15	E04_ 23744	Element Concentrations in Niobium Tailing Carbonate, Soil and Lettuce by Instrumental Neutron Activation Analysis and X-ray Diffraction <i>Rafaella Ayllon, Jefferson Koyaishi Torrecilha, Horácio Marconi da Silva Matias Dantas Linhares, Thamiris Mohamad El Hajj, Marcos Roberto Furlan, Paulo Sergio Cardoso Silva</i> <i>IPEN - Instituto de Pesquisas Energéticas e Nucleares</i>
15:15 - 15:30	E04_ 23833	Food Irradiation: Not all Foods can be Processed by Irradiation in Brazil. <i>Valter Arthur, Valter, Anna Lúcia Villavicencio</i> <i>CENA - Centro de Energia Nuclear na Agricultura</i>
15:30 - 15:45	E04_ 23945	Awareness of Irradiated Food Consumption between Brazil and Argentina <i>Anna Lucia Villavicencio, Tiago Russin</i> <i>IPEN - Instituto de Pesquisas Energéticas e Nucleares</i>
15:45 - 16:00	E04_ 23946	Effects of Gamma Radiation on Pupae of <i>Plutella xylostella</i> to phytosanitary treatment <i>Marcio Araujo, Amanda A. de Oliveira, Anna L. C. H. Villavicencio, Valter Arthur</i> <i>IPEN - Instituto de Pesquisas Energéticas e Nucleares</i>
16:00 - 16:15	E04_ 23947	Can gamma irradiation affect the reproductive system of insects? Exploring <i>Diabrotica speciosa</i> <i>Marcio Araujo, Amanda A. de Oliveira, Valter Arthur, Patrick J. Spencer</i> <i>IPEN - Instituto de Pesquisas Energéticas e Nucleares</i>
16:15 - 16:30	E04_ 23961	Effect of irradiation on residues from avocado oil processing <i>João Pedro Barros, Luz Merida Rondan-Flores, Bianca Guimarães Negrão, Daili de Andrade dos Santos Barreira, Viviane de Fátima Benedetti, Anna Lucia Casañas Haasis Villavicencio</i> <i>IPEN - Instituto de Pesquisas Energéticas e Nucleares</i>

16:30 - 17:00 Coffee Break (Biblioteca)

- 17:00 - 17:15** E04_ 24047 Physical properties of irradiated red pitaya (*Hylocereus costaricensis*) during storage
Luz Rondan-Flores, Bianca Guimarães Negrão, João Pedro Alves de Azevedo Barros, Daili de Andrade dos Santos Barreira, Anna Lucia Casañas Haasis Villavicencio
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 17:15 - 17:30** E04_ 24064 Investigation of inorganic elements in soil in the municipality of Barra do Corda using EDXRF technique.
Dalton Giovanni, Cibele Bugno Zamboni, Brigitte Roxana Soreanu Pecequilo, Selene Elifio Esposito, Daniel Carvalho Pimenta, Simone Michaela Simons
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 17:30 - 17:45** E04_ 24075 Effect of Ionizing Radiation on Starch Films Incorporated with Hibiscus or Turmeric Extracts
Nelida Del Mastro, Buna Saporito Teixeira
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 17:45 - 18:00** E04_ 24143 Applying irradiation technology in seeds to improve harvest performance: Challenges and potential responses
Bianca Guimarães Negrão, Luz Rondan-Flores, Anna Lucia Casañas Haasis Villavicencio
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 18:00 - 18:15** E04_ 24154 Dissemination of information on nuclear sciences and public acceptance of irradiated foods in Basic Education
Viviane Benedetti, João Pedro Alves de Azevedo Barros, Denise SahyunLevy, Anna Lucia Casanas Haasis Villavicencio
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 18:15 - 18:30** E04_ 24161 Determination of activity concentrations due to Ra-226, Th-232 and K-40 in sugar samples for different regions in Brazil: a study of Effective dose and Cancer risk
Clarisse F. Alcantara, Ian A. Kastrup, Alphonse Kelecom, Rayline L. Silva, Lorena V.S. Santos, Leandro S. Barbosa, Carlos O Pastrana, Jardel Lemos, Marco A. Frota
UFF - Universidade Federal Fluminense
- 18:30 - 18:45** E04_ 24195 Thermogravimetric analysis of irradiated sapodilla (*Manilkara zapota*) peel and seed flour
Luz Rondan-Flores, Daili de Andrade dos Santos Barreira, João Pedro Alves de Azevedo Barros, Anna Lucia Casañas Haasis Villavicencio
IPEN - Instituto de Pesquisas Energéticas e Nucleares

Biblioteca -TOTEN 7**E02 - Applications to the Environment**

Time	Paper ID	Title / Authors
18:45 - 19:00	E02_ 24040	Effect of pH on the ⁶⁰ Co adsorption capacity by micro particles of polystyrene <i>Marisa Iglesias Da Luz Da Luz, Otavio Gabriel Pontes Vieira, Guilherme Soares Zhan, Niklaus Ursus Wetter, Paulo Sergio Cardoso da Silva</i> <i>IPEN - Instituto de Pesquisas Energéticas e Nucleares</i>

Biblioteca -TOTEN 8**E06 - Applications to Cultural Heritage**

Time	Paper ID	Title / Authors
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- 14:30 - 14:45** E06_ 23669 Gamma ionization logistical protocol for decontamination of bibliographic collections: experimental research
Susyleide Brito, Maria José A. Oliveira, Pablo Vasquez
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 14:45 - 15:00** E06_ 23761 Imputation in experimental results
André L. Nogueira, Casimiro S. Munita, Patricia R. Carvalho
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 15:00 - 15:15** E06_ 23767 Gamma ionization logistical protocol for decontamination of bibliographic collections: experimental research
Janete Stanziani Gibba, Larissa Otubo, Maria Jose Alves de Oliveira, Pablo Antonio Vasquez Salvador
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 15:15 - 15:30** E06_ 23778 Effect of Gamma Irradiation on Crosslinking of Polyester-Styrene Resin: Experimental Study and Glass Transition Temperature Analysis
Anderson Jesus, Maria José Alves de Oliveira, Pablo Antonio Vásquez Salvador
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 15:30 - 15:45** E06_ 23797 Effects of ionizing radiation on artistic paints and pigments used in the restoration of works of art
Hilda Pereselevicius Antonietto, Maria Jose Oliveira, Mariana Araujo, Larissa Otubo, Sonia Mello Castanho, Pablo Antonio Salvador Vasquez
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 15:45 - 16:00** E06_ 23831 Non-destructive examination of a polychrome wooden sculpture from de 17th century
Roberta de Paula Sales Borges, Ísis Verona Nascimento da Silva Franzi, Josiane Emerich Cavalcante, Elaine Tavares de Gusmão, Anderson Gomes de Paula, Olga Maria Oliveira de Araújo, Ricardo Tadeu Lopes, Davi Ferreira de Oliveira
COPPE - UFRJ
- 16:00 - 16:15** E06_ 23886 Preservation of Taxidermied Animal Skins Involving the Use of Ionizing Radiation
Carmina Lupo, Maria José Alves de Oliveira, Mariana Silva de Araujo, Larissa Otubo, Sonia Regina de Mello Castanho, Pablo Antonio Vásquez Salvador
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 16:15 - 16:30** E06_ 24010 Restoration of culturally significant wooden artifacts using gamma radiation curable polymeric resins
Maria Aparecida Pereira, Maria José Alves de Oliveira, Maria José Alves de Oliveira, Larissa Otubo, Vagner Fernandes, Pablo Antonio Vasquez Salvador
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 16:30 - 17:00** **Coffee Break (Biblioteca)**
- 17:00 - 17:15** E06_ 24059 X-ray radiographic analysis of the two wooden sculptures of 18th century
Davi Oliveira, Soraia Rodrigues de Azeredo, Renan Borges de Oliveira, Elaine Tavares de Gusmão, Ricardo Tadeu Lopes
COPPE - UFRJ
- 17:15 - 17:30** E06_ 24083 Non-destructive Analytical Methods for the Analysis of Master Valentim's Wooden Works
Josiane Cavalcante, Roberta Manon de Paula Sales Borges, Isis Verona Nascimento da Silva Franzi, Rafael Azevedo Fontenelle Gomes, Anderson Gomes de Paula, Ricardo Tadeu Lopes, Davi Ferreira de Oliveira, Josiane Cavalcante, Roberta Manon de Paula Sales Borges
UFRJ - Federal University of Rio de Janeiro
- 17:30 - 17:45** E06_ 24103 Portable MA-XRF scanner development using a Raspberry Pi microcomputer for elemental characterization of a wood painting
Hamilton Gama Filho, Hugo Boareto Souza Borges, Diogo Santos Silva da Costa, Danilo de Oliveira Mansur, Fabio Takeo Shimizu Tsuyama, Roberta Gama Leitão, Catarine Canellas Gondim Leitão, Joaquim Teixeira de Assis, Marcelino José dos Anjos
Instituto de Física - UERJ

E02 - Applications to the Environment

- 17:45 - 18:00** E02_ 24044 Comparative study between the bromeliad *Tillandsia usneoides* and the *Tipuana tipu* tree barks for use in active biomonitoring of atmospheric pollution
Gabriel Ishimaru, Mitiko Saiki, Edson Gonçalves Moreira
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 18:00 - 18:15** E02_ 24049 Polymeric membranes grafted by ionizing radiation for uranium adsorption
Amanda Cardoso, Rafael Henrique Lazzari Garcia, Elita Fontenele Urano de Carvalho, Mohamad Al-Sheikhly, Yasko Kodama
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 18:15 - 18:30** E02_ 24054 The influence of radiation dose in composites of HDPE-silica films onto mechanical properties
Heloisa Zen, Heloisa Augusto Zen, Elisabete Inacio Santiago
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 18:30 - 18:45** E02_ 24063 Dose Rate in Corvina (*Micropogonias furnieri*) due to the intake of natural radionuclides in Espírito Santo, Brazil
Wagner Pereira, Kelecom, A., Lopes, J. M., Carmo, A. S., Vieira, R. F., Campelo, E. L. C., Charles-Pierre, M., Silva, A. X.
COPPE-UFRJ
- 18:45 - 19:00** E02_ 24065 Dose rate in Corvina (*Micropogonias furnieri*) due to the incorporation of natural radionuclides in Rio de Janeiro, Brazil
Wagner Pereira, KELECOM, A., LOPES, J. M., CARMO, S. A., CHARLES-PIERRE, M., FURTADO, R. V., CAMPELO, E. L. C., SILVA, A. X.
COPPE-UFRJ

Biblioteca -TOTEN 9

E05 - Radioactive Waste

- | Time | Paper ID | Title / Authors |
|----------------------|------------|---|
| 14:30 - 14:45 | E05_ 23656 | Methods of Leaching Release Modeling in Radiological Safety Assessments in Different Repositories
<i>Rafael Soares Souza Pimenta de Almeida, Valeria Cuccia, Stela Dalva Santos Cota</i>
<i>CDTN - Centro de Desenvolvimento da Tecnologia Nuclear</i> |
| 14:45 - 15:00 | E05_ 23674 | Use of Clays in the Treatment of Radioactive Aqueous Waste Generated at the CDTN
<i>Hellen K. S. de Souza, Daniela Hudson Hohleuwerger, Maria Judite Afonso Haucz, Carolina Braccini Freire</i>
<i>CDTN - Centro de Desenvolvimento da Tecnologia Nuclear</i> |
| 15:00 - 15:15 | E05_ 23679 | Thermal Evaluation of a Cs-Loaded Waste Vitrification
<i>Danilo Silva, Mariana Silva Araujo, Denise Alves Fungaro, Sonia Regina Homem de Mello Castanho</i>
<i>IPEN - Instituto de Pesquisas Energéticas e Nucleares</i> |
| 15:15 - 15:30 | E05_ 23683 | Impact of Distinct Temperatures in Pellets to Strontium Immobilization
<i>Gabriella Paschoal Sanches, Mariana Silva Araujo, Sonia Regina Homem de Mello Castanho</i>
<i>IPEN - Instituto de Pesquisas Energéticas e Nucleares</i> |
| 15:30 - 15:45 | E05_ 23702 | Characterization and Disposal of Radioactive Waste Produced by the Research and Production Facility for Radiopharmaceuticals (UPPR/CDTN)
<i>Beatriz Cancelier, Raquel Gouvêa dos Santos, Maria Ângela de Barros Correia Menezes</i>
<i>CDTN - Centro de Desenvolvimento da Tecnologia Nuclear</i> |
| 15:45 - 16:00 | E05_ 23783 | Modeling of a High-Security Radioactive Waste Management System
<i>Fábio de Oliveira Neves, Tadeu Augusto de Almeida Silva</i> |

- 16:00 - 16:15** E05_ 23800 Characterization of Soil with Bentonite Additions for Use in the CENTENA Disposal Area
Thais Braga Teixeira, Daisy Mary Marchezini dos Santos, Clédola Cássia Oliveira de Tello
CDTN - Centro de Desenvolvimento da Tecnologia Nuclear
- 16:15 - 16:30** E05_ 23821 Review and Establishment of the Quality Management System of the CENTENA: one Proposal
Daisy Marchezini dos Santos, Maria Judite Afonso Haucz, Clédola Cássia Oliveira de Tello, Maria Ângela de Barros Correia Menezes
CDTN - Centro de Desenvolvimento da Tecnologia Nuclear

16:30 - 17:00 Coffee Break (Biblioteca)

- 17:00 - 17:15** E05_ 23838 Development of a Method to Analyze Chlorine-36 Activity Concentration in Radioactive Wastes from Nuclear Power Plant
Gabriella Cardoso, Paulo Sérgio Cardoso da Silva, Suellen Nobrega Coutinho
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 17:15 - 17:30** E05_ 23854 Comparative Life Cycle Analysis of Geopolymers for Immobilization of Radioactive Waste
Valeria Cuccia, Yann Santos, Rafael Soares Souza Pimenta de Almeida
CDTN - Centro de Desenvolvimento da Tecnologia Nuclear
- 17:30 - 17:45** E05_ 23872 Use of Sand Extraction Residue for Sorption of Radioactive Waste
Juniara Versieux, Carolina Braccini Freire, Fernando Soares Lameiras, Jakeline Pereira de Carvalho
CDTN - Centro de Desenvolvimento da Tecnologia Nuclear
- 17:45 - 18:00** E05_ 23888 Long-term Institutional Stability for Radioactive Waste Governance
Cecília Madeira de Menezes, Roberto Vicente, Julio Takehiro Marumo
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 18:00 - 18:15** E05_ 23981 Accounting for Radionuclides Gamma Emitters Generated in Reactor IEA-R1
Jefferson Koyaishi Torrecilha, Alberto de Jesus Fernando, Vicente Rodrigues Junior, Julian Marco Barbosa Shorto, Roberto Vicente, Paulo Sergio Cardoso da Silva
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 18:15 - 18:30** E05_ 23997 Studies to Propose a Concrete Container to Condition Radioactive Waste Packages
Clédola Cássia Oliveira de Tello, Jamile Salim Fuina, Lídia Nara de Almeida Severo, Diego de Jesus Queiroz Rosa
CDTN - Centro de Desenvolvimento da Tecnologia Nuclear
- 18:30 - 18:45** E05_ 24003 HF Neutralization from Decontamination Process of UF6 Cryogenic Trap
Adriano da Cunha, Eduardo Medeiros Junior
AMAZUL - Amazônia Azul Tecnologias de Defesa S.A.
- 18:45 - 19:00** E05_ 24012 Roadmap of NORM Management in the Oil and Gas Industry
Ana Carolina Ribeiro, Wanderson Oliveira Souza, Francisco Cesar Augusto da Silva
IRD - Institute of Radiation Protection and Dosimetry

Biblioteca -TOTEN 10

E05 - Radioactive Waste

Time	Paper ID	Title / Authors
14:30 - 14:45	E05_ 24051	Methodology of Sludge Segregation in Oil and Gas Offshore Units in Brazil <i>Marcelo Valinhas, Marco Aurélio Santos</i> UFRJ - Federal University of Rio de Janeiro

- 14:45 - 15:00** E05_ 24120 Considerations on Historical Radioactive Wastes Acceptance Criteria for Final Disposal
Paloma Suzane Cabrera, José Claudio Dellamano, Roberto Vicente
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 15:00 - 15:15** E05_ 24134 Methodology for Filters Analyzing by Acid Extraction
Paulo Sergio Silva, Matheus Assis de Souza Almeida, Roberto Vicente, Marcus Paulo Raele, Suellen Nobrega Coutinho
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 15:15 - 15:30** E05_ 24136 Assessment of Corrosion Resistance of Packaging for Storage of Radioactive Waste
Raphael Gomes De Paula, Wagner de Almeida Machado, Amir Zacarias Mesquita, Luiz Leite da Silva
CDTN - Centro de Desenvolvimento da Tecnologia Nuclear
- 15:30 - 15:45** E05_ 24189 Sailing Through Atomic Hazards: Strategies for Nuclear Waste Management
Ricardo Alvarenga
ABEN - Associação Brasileira de Energia Nuclear
- 15:45 - 16:00** E05_ 24203 Modeling of the Leaching Test Results of Waste Products in the Encapsulation of Bituminized
Vanessa Vieira, Clédola Cássia Oliveira de Tello
CDTN - Centro de Desenvolvimento da Tecnologia Nuclear
- 16:00 - 16:15** E05_ 24429 A Radiochemical Methodology Applied to Analysis of Waste Samples from Petroleum Industry
Thiago de Oliveira, Roberto Pellacani Guedes Monteiro, Amenônia Maria Ferreira Pinto, Maria Ângela Menezes, Fernanda Cristina Fonseca Camargo, Wagner Sousa
CDTN - Centro de Desenvolvimento da Tecnologia Nuclear
- 16:15 - 16:30** E05_ 24439 Challenges Related to Communicating With the Public About Radioactive Waste Disposal
Lilian Bueno, Roberto Vicente
IPEN - Instituto de Pesquisas Energéticas e Nucleares

16:30 - 17:00 Coffee Break (Biblioteca)

- 17:00 - 17:15** E02_ 24068 Dose assessment due to radionuclide intake from shrimp farming
Wagner Pereira, SANTOS, J. G. G., LOPES, J. M., HADLICH, G. M., COATA, A. B., ZUCCHI, M. R., CABRAL, R. R., PEREIRA, W. S., SILVA, A. D.
COPPE-UFRJ
- 17:15 - 17:30** E02_ 24070 Algorithm Method for Chemical Analysis Elemental by WDXRF Technique
Marcos Scapin, Maria Cristina Tessari-Zampieri, Marycel Elenena Barbosa Cotrim
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 17:30 - 17:45** E02_ 24072 Radiological risk due to ingestion of water from an old uranium mine: releases from waste rock piles
Wagner Pereira, KELECOM, A., LOPES, J. M., FURTADO, R. V., CARMO, A. S., CHARLES-PIERRE, M., SILVA, A. X.
COPPE-UFRJ
- 17:45 - 18:00** E02_ 24073 Dose Rate in Mullet (*Mugil liza*) due to the intake of natural radionuclides in Espírito Santo, Brazil
Wagner Pereira, KELECOM, A., LOPES, J. M., CARMO, A. S., PELEGRINELI, S. G., CHARLES-PIERRE, M., CAMPELO, E. L. C., FURTADO, R. V., SILVA, A. X.
COPPE-UFRJ
- 18:00 - 18:15** E02_ 24074 Dose Rate in Mullet (*Mugil liza*) due to the intake of natural radionuclides in Rio de Janeiro, Brazil
Wagner Pereira, KELECOM, A., LOPES, J. M., CARMO, A. S., FURTADO, R. V., CAMPELO, E. L. C., SILVA, A. D.
COPPE-UFRJ

18:15 - 18:30	E02_ 24078	Dose Rate in parati (Mugil curema) due to the intake of natural radionuclides in Espírito Santo, Brazil <i>Wagner Pereira, KELECOM, A., LOPES, J. M., CARMO, S. A., CAMPELO, E. L. C., FURTADO, R. V., CHARLES-PIERRE, M., SILVA, A. X.</i> COPPE-UFRJ
18:30 - 18:45	E02_ 24088	Identification and assessment of the impact of plastic waste on sediments <i>Sivanilde Santos, Paulo Sergio Cardoso da Silva, Jefferson Koyaishi Torrecilha, Guilherme Soares Zahn</i> IPEN - Instituto de Pesquisas Energéticas e Nucleares
18:45 - 19:00	E02_ 24105	Groundwater vulnerability and aquifer recharge modeling by the water table fluctuation method on a nuclear and radioactive facility <i>Lucilena Monteiro, Debora Almeida Pirani, Samia R. M. Lima, Felipe de Sousa Viana, Lucilena Rebelo Monteiro, Sandra Regina Damatto, Marycel Elena Barboza Cotrim</i> IPEN - Instituto de Pesquisas Energéticas e Nucleares

MAY 9, THURSDAY

Biblioteca -TOTEN 1

E01 - Dosimetry and Nuclear Instrumentation

Time	Paper ID	Title / Authors
14:30 - 14:45	E01_ 23661	Dosimetry for FLASH Radiotherapy: A review of dosimetric systems <i>Karoline Suzart, Maria da Penha Albuquerque Potiens</i> IPEN - Instituto de Pesquisas Energéticas e Nucleares
14:45 - 15:00	E01_ 23722	Optical Computed Tomography for Chemical Dosimetry with Fricke Xylenol Gel <i>Paulo dos Santos Tavares, Rafael Diniz, Orlando Rodrigues Junior, Leticia Lucente Campos Rodrigues</i> IPEN - Instituto de Pesquisas Energéticas e Nucleares
15:00 - 15:15	E01_ 23723	Risk of radiation-induced cancer on pediatric patient exposures in later stages of life <i>Arthur Zuchetti, Douglas Gabriel Luz, Lúcio Pereira Neves, Ana Paula Perini, William de Souza Santos</i> UFU - Universidade Federal de Uberlândia
15:15 - 15:30	E01_ 23724	Stablishment of a quality control program to PKA meters <i>José Neres de Almeida Junior, Orlando Rodrigues Junior, Maria da Penha Albuquerque Potiens</i> IPEN - Instituto de Pesquisas Energéticas e Nucleares
15:30 - 15:45	E01_ 23732	Kinetic parameter study on ALOX-520 TLD Glow Curves performed by different methods using a 195-GC dataset <i>André Tavares e Silva, Daniel Silva Calheiro, Luiz Claudio Meira Belo</i> CDTN - Centro de Desenvolvimento da Tecnologia Nuclear
15:45 - 16:00	E01_ 23745	Developing and using international standards for neutron ambient dose equivalent rate meters <i>Radoslav Radev, Miroslav Voytchev</i> Lawrence Livermore National Laboratory
16:00 - 16:15	E01_ 23753	Development of a Submersible Robot (ROV) to Support Visual Inspection in Triga Type Research Nuclear Reactors <i>Wallacy Viana, Amir Zacarias Mesquita, Thêssa Cristina Alonso, Daniel Silva Calheiro, Wagner Machado, Anna Clara Oliveira Alves, Margarete Cristina Guimarães</i> CDTN - Centro de Desenvolvimento da Tecnologia Nuclear

16:15 - 16:45 Coffee Break (Biblioteca)

E03 - Applications in Health and Industry

- 16:45 - 17:00** E03_ 23895 The EDXRF analysis to monitor iron deficiency anemia
Maria Paula Goes, Cibele Bugno Zamboni, Maria Gabriela Miquelino Benedito, Maria Regina Andrade de Azevedo
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 17:00 - 17:15** E03_ 23907 Radiomodifying Evaluation of Folic Acid in Danio rerio Embryos Exposed to Gamma Radiation
Rodrigo Alavarse, José Roberto Rogero, Sizue Ota Rogero, Murilo Álison Vigilato Rodrigues, Daniel Perez Vieira
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 17:15 - 17:30** E03_ 23927 Assessment of trace elements concentration in cosmetic foundation using X-ray fluorescence technique
Camila Nogueira, Rodrigo Sanas Zamboni, Sergei Anatolyevich Paschuk, Janine Nicolosi Corrêa
UTFPR - Federal University of Technology - Paraná
- 17:30 - 17:45** E03_ 23972 Synthesis and characterization of holmium phosphate microspheres applied to radioembolization studies in the treatment of hepatocellular carcinoma
Ana Paula Curcio, Luis Antonio Genova, Frederico Antônio Genezini, Giovana Dias da Silva, Noé Gabriel Pinheiro Machado
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 17:45 - 18:00** E03_ 23985 Characterization of iron oxide nanoparticles for production of breast adenocarcinoma spheroids
Mayelle Lima, Giovana Dias da Silva, Patrícia Lima Falcão, Thais Monteiro da Silva, Rene Ramos de Oliveira, Daniel Perez Vieira
IPEN - Instituto de Pesquisas Energéticas e Nucleares

Biblioteca -TOTEN 2

E01 - Dosimetry and Nuclear Instrumentation

- | Time | Paper ID | Title / Authors |
|----------------------|------------|--|
| 14:30 - 14:45 | E01_ 23762 | Dosimetry in phantoms for intensity modulated brachytherapy
<i>Ana Gabryele dos Santos, Adriana Aparecida Flosi, Karina Waiswol Boccaletti, Daniela da Silva Oliveira, Paulo Victor dos Santos Tavares, Antônio Cassio Assis Pellizzon, Maria Elisa Chuery Martins Rostelato</i>
IPEN - Instituto de Pesquisas Energéticas e Nucleares |
| 14:45 - 15:00 | E01_ 23764 | Assessment of the Viability of Antimicrobial Peptides as Gamma Ionizing Radiation Sensitive Materials in Nuclear Applications
<i>Fabiane Garbim, Julianna Santos Pereira, João Nilton da Conceição Bandeira, Marcela Robelo de Lima, Nadja Serrano, Álvaro José Boareto Mendes, Fernando Manuel Araújo Moreira</i>
Instituto Militar de Engenharia (IME) |
| 15:00 - 15:15 | E01_ 23772 | State of the Art on Biodosimetry: An Overview of Methodologies
<i>Paulo de Abreu Junior, Claudio Antônio Federico</i>
ITA - Instituto de Tecnologia Aeronáutica |
| 15:15 - 15:30 | E01_ 23786 | Experimental Validation of the LabSOCS Detector Efficiency Simulation
<i>Guilherme Zahn, Frederico Antonio Genezini</i>
IPEN - Instituto de Pesquisas Energéticas e Nucleares |

- 15:30 - 15:45** E01_ 23792 Application of the Monte Carlo technique using the Geant4 toolkit to compute the dose uniformity ratio in irradiated products
Edson da Silva, Amir Zacarias de Mesquita, Thessa Cristina Alonso, Pablo Andrade Grossi
CDTN - Centro de Desenvolvimento da Tecnologia Nuclear
- 15:45 - 16:00** E01_ 23793 Development of a 3D anthropomorphic mammography simulator: Preliminary study
Alexander Firmino da Silva, Josilene Cerqueira Santos, João Emilio Peixoto, Ademir Xavier da Silva
Universidade Federal do Rio de Janeiro (UFRJ)
- 16:00 - 16:15** E01_ 23815 A dosimetric evaluation using the Monte Carlo method considering geometric variations of the iodine-125 seed for brachytherapy
Henrique Chico, Lucas Verdi Angelocci, Carlos Alberto Zeituni, Carla Daruich de Souza, Sabrina Spigaroli Sgrignoli, Maria Elisa Chuery Martins Rostelato
IPEN - Instituto de Pesquisas Energéticas e Nucleares

16:15 - 16:45 Coffee Break (Biblioteca)

Biblioteca -TOTEN 4

E01 - Dosimetry and Nuclear Instrumentation

Time	Paper ID	Title / Authors
14:30 - 14:45	E01_ 23819	Comparative study of thermal neutron flux from gold foil activation <i>Wátila Silva, Regio dos Santos Gomes, Max dos Santos Ramos, Achilles Astuto, Walsan Pereira Wagner</i> IRD - Institute of Radiation Protection and Dosimetry
14:45 - 15:00	E01_ 23827	Dosimetric analysis of iodine-125 seeds using the Fricke xylenol gel dosimeter <i>Cristhian Talacimon, Priscila Santos Rodrigues, Paulo Victor dos Santos Tavares, Lara El Hajj Teodoro, Ilca Marli Moitinho Amaral Medeiros, Maria Eduarda Zaganin Rigo, Ana Catarina Koka de Souza Silva, Ana Laura Burin, Orlando Rodrigues Junior, Maria Elisa Chuery Martins Rostelato</i> IPEN - Instituto de Pesquisas Energéticas e Nucleares
15:00 - 15:15	E01_ 23844	Study on Radiosensitization Using Nanoparticles in Fricke Xylenol Gel Dosimeters <i>Priscila Santos Rodrigues, Ana Laura Burin, Ana Catarina Koka de Souza Silva, Cristhian Ferreira Talacimon, Lara El Hajj Teodoro, Maria Eduarda Zaganin Rigo, Paulo Victor dos Santos Tavares, Wilmmar Alexander Arcos Rosero, Sabrina Spigaroli Sgrignoli, Maria Elisa Chuery Martins Rostelato</i> IPEN - Instituto de Pesquisas Energéticas e Nucleares
15:15 - 15:30	E01_ 23868	Re-characterization of pneumatic station irradiation position of IEA-R1 reactor for use in k0-INAA method <i>Renato Semmler, João Pedro de Oliveira Flores, Mauro da Silva Dias, Marina Fallone Koskinas, Denise Simões Moreira, Paulo Sergio Cardoso da Silva, Vera Akiko Maihara</i> IPEN - Instituto de Pesquisas Energéticas e Nucleares
15:30 - 15:45	E01_ 23911	Accessing high doses of gamma radiation through fracture patterns in dry drops of acrylic-styrene emulsions and machine learning techniques <i>Rômulo Tenório, Fabrício Ramos da Silva, Clayton Augusto Benevides</i> CRCN - NE - CENTRO REGIONAL CIÊNCIAS NUCLEARES DO NORDESTE
15:45 - 16:00	E01_ 23933	A study of a H ₂ O-moderated ²⁴¹ AmBe source for neutron metrology <i>Angela Gonçalves, Karla Cristina de Souza Patrão, Walsan Wagner Pereira</i> IRD - Institute of Radiation Protection and Dosimetry
16:00 - 16:15	E01_ 23952	Performance Check Bench of Cobalt-60 Radioactive Source for Steel Plant <i>Daniel Campolina, Daniel de Almeida Magalhães Campolina, Marluccio Antônio da Silva</i>

16:15 - 16:45 Coffee Break (Biblioteca)

E03 - Applications in Health and Industry

- 16:45 - 17:00** E03_ 23988 Investigation of the synergetic radiochemoterapeutic potential of the radiolabeled platinum complexes cisplatin and carboplatin
Alexandre Soares Leal, Juliana Batista Silva, Brígida G. de A. Schirmer
CDTN - Centro de Desenvolvimento da Tecnologia Nuclear
- 17:00 - 17:15** E03_ 23994 The TRIGA research reactor of CDTN: historic of the recent 20 years of utilization and perspectives
Alexandre Soares Leal
CDTN - Centro de Desenvolvimento da Tecnologia Nuclear
- 17:15 - 17:30** E03_ 24000 Radiation Induced Graft Polymerization (RIG) of B2MP onto Nylon Fabric for Uranium Adsorption
Yasko Kodama, Amanda Caroline Patrício Cardoso, Rafael Henrique Lazzari Garcia, Gustavo Belino, Elita Fontenele Urano de Carvalho, Mohamad Al Scheikhly
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 17:30 - 17:45** E03_ 24034 Determination of blood iron by edxf in the female population over 60 years of age
Maria Miquelino Benedito, Cibele Zamboni, Dalton Giovani
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 17:45 - 18:00** E03_ 24050 Gamma-ray and Electron beam biomass pretreatment: a review
Leonardo Zwetsch Varella, Amir Zacarias Mesquita, Daniel Bastos de Rezende, Érika Cristina Cren, Vitor Fernandes de Almeida, Walewska Gouveia Silva, Thessa Cristina Alonso
CDTN - Centro de Desenvolvimento da Tecnologia Nuclear

Biblioteca -TOTEN 6

E01 - Dosimetry and Nuclear Instrumentation

Time	Paper ID	Title / Authors
14:30 - 14:45	E01_ 23958	Assessing shielding thickness in Am-241 nuclear battery <i>Paula Antunes, Carla Daruich de Souza, Julian Marco Barbosa Shorto, Antônio Belchior Junior, Fernando Castro Junqueira, Carlos Alberto Zeitune, Eduardo Lobo Lustosa Cabral, Maria Alice Morato Ribeiro</i> IPEN - Instituto de Pesquisas Energéticas e Nucleares
14:45 - 15:00	E01_ 23973	Determination of the Total Retention Capacity of 99Mo in anionic extracting agent <i>Ione Yamazaki, Denise Simões Moreira, Mauro da Silva Dias, José Antonio Seneda, Marina Fallone Koskinas</i> IPEN - Instituto de Pesquisas Energéticas e Nucleares
15:00 - 15:15	E01_ 23982	Accumulated dose stability parameters in p-type and n-type silicon diodes <i>Carmen C. Bueno, Kelly Pascoalino, Josemary A. C. Gonçalves, Fabio de Camargo, Eija Tuominen</i> IPEN - Instituto de Pesquisas Energéticas e Nucleares
15:15 - 15:30	E01_ 23990	Calibration coefficients of epitaxial diodes used in diagnostic radiology and computed tomography <i>Josemary A. C. Gonçalves, Patricia Lara Antonio, Linda Viola Ehlin Caldas, Maria da Penha Potiens, Carmen C. Bueno</i> IPEN - Instituto de Pesquisas Energéticas e Nucleares

- 15:30 - 15:45** E01_ 23992 Study on Thermal Treatment Options for TLD-100 Thermoluminescent Dosimeters
Andrea Sanchez, Vicente Campos, Gaiané Sabundjian, Felícia Rocha
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 15:45 - 16:00** E01_ 23995 Technical Protocol for Calibration of Ambient Dose Equivalent (Rate) Meters in ISO Neutron Reference Fields
Lunia de Lima, Walsan Wagner Pereira, Antônio Carlos Ferreira
IRD - Institute of Radiation Protection and Dosimetry
- 16:00 - 16:15** E01_ 24004 Computational Analysis of Wax Deposition in Deepwater Pipelines Using Nuclear Techniques
Nalber Leite, Carlos Alberto Brayner de Oliveira Lira, Abel Gámez Rodriguez
CRCN - NE - CENTRO REGIONAL CIÊNCIAS NUCLEARES DO NORDESTE

16:15 - 16:45 Coffee Break (Biblioteca)

E03 - Applications in Health and Industry

- 16:45 - 17:00** E03_ 24056 The stability in different solvents of rGO/magnetite obtained via ionizing radiation
Miguel Duarte, Solange Kazumi Sakata, Raynara Maria Silva Jacovone, Mayelle Maria Paz Lima, Camila Lucas da Silva, Octávio Augusto Bernava Brandão
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 17:00 - 17:15** E03_ 24060 Production and characterization of radioactive antifungal Gallium complex thiosemicarbazone derived from 2-pyridineformamide
Thaissa de Oliveira Bastos, Raquel Gouvea dos Santo, Heloisa Beraldo
CDTN - Centro de Desenvolvimento da Tecnologia Nuclear
- 17:15 - 17:30** E03_ 24069 Study of the Gamma Irradiation Technique in the Conservation of Literary Works
Margarete Guimarães, Amir Zacarias Mesquita, Wallace Viana, Thessa Cristina Alonso
CDTN - Centro de Desenvolvimento da Tecnologia Nuclear
- 17:30 - 17:45** E03_ 24076 Effects of Gamma radiation on biopolymer processed by 3D printing
Karina Gonçalves, José Neres de Almeida Junior, Djalma Batista Dias, Orlando Ricardo Junior, Solange Kazumi Sakata
IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 17:45 - 18:00** E03_ 24082 Determination of iron in wheat and corn flour using x-ray fluorescence technique
Dalton Giovanni, Cibele Bugno Zamboni, Simone Maria de Lima Silva, Iris Martins Nogueira, Tamires Martins Nogueira, Elaine Cristina da Rocha Oliveira, Thielle de Oliveira Chollet, Elisa Andrade Costa
IPEN - Instituto de Pesquisas Energéticas e Nucleares

Biblioteca -TOTEN 7

E01 - Dosimetry and Nuclear Instrumentation

- | Time | Paper ID | Title / Authors |
|----------------------|------------|---|
| 14:30 - 14:45 | E01_ 24021 | Dose Rate Estimation by Extracting and Analyzing Colors from an Image Generated by a CMOS Image Sensor
<i>Wallacy Viana, Amir Zacarias Mesquita, Thessa Cristina Alonso, Daniel Silva Calheiro, Anna Clara Oliveira Alves</i>
<i>CDTN - Centro de Desenvolvimento da Tecnologia Nuclear</i> |
| 14:45 - 15:00 | E01_ 24024 | In vivo monitoring in radiological emergencies: a program to intercompare the physical quantity efficiency on NaI(Tl) portable detectors
<i>Alexandre Barbosa Soares, José Ubiratan Delgado, Alfredo Lopes Ferreira Filho</i>
<i>IRD - Institute of Radiation Protection and Dosimetry</i> |

- 15:00 - 15:15** E01_ 24037 Study of Dose Calculation of Beta-Emitting Source for Palliative Treatment of Spinal Cancer using MCNP6.2 Code
Ana Laura Burin, Ana Catarina Koka de Souza Silva, Cristhian Ferreira Talacimon, Ilca Marli Moitinho Amaral Medeiros, Lara El Hajj Teodoro, Paulo Victor dos Santos Tavares, Priscila Santos Rodrigues, Sabrina Spigaroli Sprignoli, Carla Daruich de Souza, Maria Elisa Chuery Martins Rostelato
 IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 15:15 - 15:30** E01_ 24039 Activimeter Calibration Application for 131I
Elaine Martins, Elaine Wirney Martins, Maria da Penha Albuquerque Potiens
 IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 15:30 - 15:45** E01_ 24046 Committed Effective Dose by Ingestion Food Grown in Pedra Branca State Park
Nadia Rodrigues dos Santos, Nadia Rodrigues dos Santos, Alessandro Mariano Domingues, Izabella Soares de Souza, Carlos Omar Pastrana Orejuela, Ademir Xavier da Silva, Edmilson Monteiro de Souza, Inayá Corrêa Barbosa Lima
 COPPE-UFRJ
- 15:45 - 16:00** E01_ 24058 Dosimetric evaluation of modified voxel phantom based on the Alderson Rando anthropomorphic simulator
Alice Albuquerque, Denison de Souza Santos, Luiz Antonio Ribeiro da Rosa
 IRD - Institute of Radiation Protection and Dosimetry
- 16:00 - 16:15** E01_ 24085 Effects of Ionizing Radiation on Bromine Doped Cesium Iodide Scintillator Crystals
João Paulo da Silva Alves, Maria da Conceição Costa Pereira, Tufic Madi Filho, José Roberto Berretta
 IPEN - Instituto de Pesquisas Energéticas e Nucleares

16:15 - 16:45 Coffee Break (Biblioteca)

E03 - Applications in Health and Industry

- 16:45 - 17:00** E03_ 24090 Evaluation of the degradation profile and stability of the MAG3lyophilized reagent
Renan Silva, Margareth Mie Nakamura Matsuda
 IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 17:00 - 17:15** E03_ 24092 The Brazilian panorama for the calibration of ⁹⁰Y microspheres
Thamyra Vieira dos Santos, Dayana Azeredo Conceição, José Ubiratan Delgado
 IRD - Institute of Radiation Protection and Dosimetry
- 17:15 - 17:30** E03_ 24093 Radiation Impacts on Raman spectra of PBAT/PLA (Ecovio) Bags Irradiated by Electron Beam
Yasko Kodama, Catharina Joventino Costa, Thamiris Marcondes da Silva
 IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 17:30 - 17:45** E03_ 24098 Application of the Convolutional Neural Network (CNN) in Image Inspection of Parts Used in Nuclear and Radioactive Installations
Kiyoko Marina Tukozaiki, Fernando Pagnin Schmid, Samir Luiz Somensari, Frederico Antonio Genezini, Wilson Aparecido Parejo Calvo
 IPEN - Instituto de Pesquisas Energéticas e Nucleares
- 17:45 - 18:00** E03_ 24104 Potential of artificial neural networks in predicting liquid samples density using transmission and scattering gamma radiation
Roos Sophia Dam, César Marques Salgado (Instituto de Engenharia Nuclear), William Luna Salgado (Instituto de Engenharia Nuclear), Roberto Schirru (Universidade Federal do Rio de Janeiro (UFRJ))
 UFRJ - Federal University of Rio de Janeiro

E01 - Dosimetry and Nuclear Instrumentation

Time	Paper ID	Title / Authors
14:30 - 14:45	E01_ 24091	Dosimagem Scattering Corection: a web application for use the TEW correction in raw DICOM images <i>Francisco Dantas Hauradou Xavier, Ademir Xavier da Silva, Mirta Bárbara Torres Berdeguez</i> COPPE/ UFRJ
14:45 - 15:00	E01_ 24100	Parameters for Validating a Spectrometric System with Itinerant NaI(Tl) in the Ativimeter's Calibration <i>Dayana da Conceição, José Ubiratan Delgado, Octavio Luiz Trindade Filho</i> IRD - Institute of Radiation Protection and Dosimetry
15:00 - 15:15	E01_ 24102	Improve the response of existing dosimeters to the new operational quantity validated by the algorithm <i>Gabriela Melo, Vinicius Saito Monteiro de Barros, Viviane Khoury Asfora, Helen Jamil Khoury</i> UFPE - Universidade Federal de Pernambuco
15:15 - 15:30	E01_ 24115	Eletronic Circuit Simulation for Nuclear Detection and Instrumentation <i>Joana Soares, Ary Machado de Azevedo, William Henrique Silva Profeta, Wallace Vallory Nunes, Paulo Cezar Rocha Silveira, Domingos D'Oliveira Cardoso</i> IME - Instituto Militar de Engenharia
15:30 - 15:45	E01_ 24122	Evaluation of luminescent response of magnesium tetraborate doped with rare earths <i>Alcilene Da Silva, Raquel Aline Pessoa Oliveira, Charles Nilton do Prado Oliveira, Vinicius Saito Monteiro de Barros, Helen Jamil Khoury, Viviane Khoury Asfora</i> UFPE - Universidade Federal de Pernambuco
15:45 - 16:00	E01_ 24130	Calculation of the transmission factor for electromagnetic radiation and neutrons for composites based on epoxy resin and silica nanoparticles <i>Ary de Azevedo, Thomaz Jacintho Lopes, Marcos Paulo Cavaliere de Medeiros, Fernando Manuel Moreira, Wallace Vallory Nunes, Joana Batista Soares, Paulo Cezar Rocha Silveira, Sérgio Neves Monteiro, Domingos D'Oliveira Cardoso, André Ben-Hur da Silva Figueiredo</i> IME - Instituto Militar de Engenharia
16:00 - 16:15	E01_ 24132	Calculation of the transmission factor for electromagnetic radiation and neutrons for composites based on epoxy resin and graphene nanotubes <i>Thomaz Lopes, Ary Machado Azevedo, Joana Batista Soares, Wallace Vallory Nunes, André Ben-Hur da Silva Figueiredo, Marcos Paulo Cavaliere de Medeiros, Paulo Cezar Rocha Silveira, Domingos D'Oliveira Cardoso, Sergio Neves Monteiro, Fernando Manuel Araújo Moreira</i> IME - Instituto Militar de Engenharia

16:15 - 16:45 Coffee Break (Biblioteca)

E03 - Applications in Health and Industry

16:45 - 17:00	E03_ 24108	Characterization of the anisotropy function of a new 125I brachytherapy source using thermoluminescent dosimetry <i>Thuany Nogueira, Lucas Verdi Angelocci, Hamona Novaes dos Santos, Cristhian Ferreira Talacimon, Lara El Hajj Teodoro, Maria Eduarda Zaganin Rigo, Priscila Santos Rodrigues, Carlos Alberto Zeituni, Ana Laura Burin, Maria Elisa Chuery Martins Rostelato</i> IPEN - Instituto de Pesquisas Energéticas e Nucleares
17:00 - 17:15	E03_ 24113	Typical value of the average glandular dose in Full-field Digital mammography at the Public Hospital in Brazil <i>Frederico Alvarenga, Camila Engler, Peterson Lima Squair, Maria do Socorro Nogueira Tavares</i> CDTN - Centro de Desenvolvimento da Tecnologia Nuclear
17:15 - 17:30	E03_ 24121	Long-term Stability Study for GERADOR-IPEN-TEC by IPEN-CNEN/SP

Patricia de A. Martins, Marcelo Percilio de Souza Ramos, Luiz Cabral Nascimento, Laercio Silva

IPEN - Instituto de Pesquisas Energéticas e Nucleares

17:30 - 17:45 E03_ 24124 Synthesis and characterization of Au-198 nanoparticles for radiotherapy
Maria Eduarda Rigo, Angelica Bueno Barbezan, Cristhian Talacimon, Lara El Hajj Teodoro, Priscila Santos Rodrigues, Wilmer Alexander Arcos Rosero, Thuany Correa Nogueira, Maria Elisa Chuery Martins Rostelato
IPEN - Instituto de Pesquisas Energéticas e Nucleares

17:45 - 18:00 E03_ 24125 Revolutionizing Nuclear Medicine: Assessing the Performance of Biopolymer-Based Macromolecules, Microparticles, and Nanoparticles Loaded with Iodine-131
Karine Ramos da Silva, Felipe Souza da Silva, Rogério Chaffin Nunes, Antônio Pedro Junior, José Carlos Costa da Silva Pinto, Luciana Carvalheira
IEN - Instituto de Engenharia Nuclear

Biblioteca -TOTEN 9

E01 - Dosimetry and Nuclear Instrumentation

Time	Paper ID	Title / Authors
14:30 - 14:45	E01_ 24147	Performance of the CDTN personal dosimetry system as far Hp(10) and Hp(0.07) dose equivalents evaluation <i>Claudete Roberta Silva, Peterson Lima Squair, Teógenes Augusto da Silva</i> CDTN - Centro de Desenvolvimento da Tecnologia Nuclear
14:45 - 15:00	E01_ 24149	Development of 3D-printed Diffusion Camera for Alpha-track Detectors <i>Laura Takahashi, Cláudio Cunha Lopes, Talita de Oliveira Santos, Isabela Nicomedes Silva Ferreira, Júlia Batista Severo, Ricardo Gomes Passos</i> CDTN - Centro de Desenvolvimento da Tecnologia Nuclear
15:00 - 15:15	E01_ 24153	Utilization of Drones for Monitoring and Estimating Ionizing Radiation Sources <i>Jonathan Lapa, Felipe Lopes Frigi, Claudio Antonio Federico, Edson Ramos de Andrade, Elcio Hideiti Shiguemori</i> ITA - Instituto de Tecnologia Aeronáutica
15:15 - 15:30	E01_ 24155	A Drone-Based Approach for Radiometric Mapping of Gamma Radiation <i>Felipe de Souza, Alessandra Vaz dos Anjos Santos, Ary Machado de Azevedo, Joana Batista Soares, Jonathan Oliveira dos Santos, Paulo Cezar Rocha Silveira, Paulo José Iack Silva, Paulo Sérgio Barreto Pinto, William Henrique Silva Profeta, Wallace Vallory Nunes</i> IME - Instituto Militar de Engenharia
15:30 - 15:45	E01_ 24168	Analyzing gamma irradiated Spectrolite in relation to the photo-transfer TL and OSL effects <i>Patricia Lara Antonio, Linda Viola Ehlin Caldas</i> IPEN - Instituto de Pesquisas Energéticas e Nucleares
15:45 - 16:00	E01_ 24190	Perturbed angular correlation technique applied for studies of formation hafnon structures of HfSiO ₄ at different temperatures <i>Tatiane Sales, Tatiane Silva Nascimento Sales, Anastasia Burimova, Luciano Fabrício Dias Pereira, Arnaldo A. M. Filho, Bruno S. Correa, Levy Scalise, Wanderson Lobato Ferreira, Katiusse Silva Souza, Iberé S. Ribeiro- Junior</i> IPEN - Instituto de Pesquisas Energéticas e Nucleares
16:00 - 16:15	E01_ 24427	Radioprotective Potential of Plant Specimens: A Review <i>Raquel de Oliveira, Suy Ferreira Hwang, Fabiana Farias de Lima Guimarães</i> CRCN - NE - CENTRO REGIONAL CIÊNCIAS NUCLEARES DO NORDESTE
16:15 - 16:45	Coffee Break (Biblioteca)	

E03 - Applications in Health and Industry

16:45 - 17:00	E03_ 24131	Computed Tomography: Current Brazilian Scenario <i>Arthur Bernardo Haiidamus, Simone Kodlulovich Renha</i> <i>IRD - Institute of Radiation Protection and Dosimetry</i>
17:00 - 17:15	E03_ 24225	Characterization and Antibacterial Activity of a Nickel Nanocomposite Based on Graphene <i>Miguel Duarte, Karina de Oliveira Gonçalves, Solange Kazumi Sakata</i> <i>IPEN - Instituto de Pesquisas Energéticas e Nucleares</i>
17:15 - 17:30	E03_ 24226	Sustainable synthesis of cobalt nanoparticles for supercapacitors application <i>Solange Sakata, Miguel Duarte, Choo, T. Foo, Karina Oliveira, Daniel V. da Silva, Rubens N Faria Jr</i> <i>IPEN - Instituto de Pesquisas Energéticas e Nucleares</i>
17:30 - 17:45	E03_ 24230	Comparison between methods for detecting bacterial concentration for the determination of bacterial radioresistance value. <i>Fernanda Barna, Giovana Dias, Daniel Perez Vieira, Monica Beatriz Mathor</i> <i>IPEN - Instituto de Pesquisas Energéticas e Nucleares</i>
17:45 - 18:00	E03_ 24244	Single nanoparticle ICP-MS for characterization of gold nanoparticles. A potential tool for bioassay <i>Adriana Geraldés, Marcos Antonio Hortellani, Jorge Eduardo de Souza Sarkis</i>

Biblioteca -TOTEN 10

E01 - Dosimetry and Nuclear Instrumentation

Time	Paper ID	Title / Authors
14:30 - 14:45	E01_ 24437	Study for the Development of a Biosensor Oriented at the Interaction-Response of Chemical War Agents and Ionizing Radiations <i>João Nilton Bandeira, Fabiane Modenese Garbim, Joyce Sobreiro Francisco Diz de Almeida, Álvaro José Boareto Mendes, Fernando Manuel Araújo Moreira</i> <i>IME - Instituto Militar de Engenharia</i>
14:45 - 15:00	E01_ 24450	Implementation of the Fluorescent in situ Hybridization Technique at the Northeast Regional Center for Nuclear Sciences <i>Gael de Lima, Amanda Silva de França, Raquel Cordeiro de Oliveira, Ana Maria Mendonça de Albuquerque Melo, Fabiana Farias de Lima</i> <i>UFPE - Universidade Federal de Pernambuco</i>

E02 - Applications to the Environment

15:00 - 15:15	E02_ 24112	Characterization of Phosphogypsum from Cartagena and Huelva, Spain <i>Carla Ricardo, Cristina Trull Hermandis, Belén Juste Vidal, Gumersindo Verdú Martín, Cláudia Pereira, Arno Heeren de Oliveira</i> <i>UFMG - UNIVERSIDADE FEDERAL DE MINAS GERAIS</i>
15:15 - 15:30	E02_ 24146	Evaluating the Impact of Ocean Acidification on Seafood - a Global Approach <i>Francisco Lamego Simões Filho, Fernando Lamego, Nikolas Machado, Debora Rufino, Elisabete Barbarino</i> <i>IEN - Instituto de Engenharia Nuclear</i>
15:30 - 15:45	E02_ 24158	Distribution of natural radioactive elements in soils in the state of goiás, estimation of external dose and correlation with environmental characteristics <i>Thiago Soares, Fernando C. A. Ribeiro, Eduardo P. Viglio, Julio Cezar Suita, Inayá Correa B. Lima</i> <i>COPPE-UFRJ</i>
15:45 - 16:00	E02_ 24187	Proposed method for studying radon exhalation

Natália Taveira, Talita de Oliveira Santos, Laura Cardoso Takahashi, Carolina Santos Lamounier, Ricardo Gomes Passos, Arno Heeren

UFMG - UNIVERSIDADE FEDERAL DE MINAS GERAIS

16:00 - 16:15 E02_ 24197 Development of methodologies for Ra - 226 and Ra - 228 radiometry to investigate NORM formation processes in unconventional gas exploration
Fernanda Camargo, Joyce Castro de Menezes Duarte, Rubens Martins Moreira, Amenônia Maria Ferreira Pinto, Thiago César Oliveira
CDTN - Centro de Desenvolvimento da Tecnologia Nuclear

16:15 - 16:45 Coffee Break (Biblioteca)

16:45 - 17:00 E02_ 24245 Pb and Cd assessment in three catfish species from an estuarine ecosystem in São Paulo State, Brazil
Jorge de Souza Sarkis, Larrisa Y. Miranda, Marcos A. Hortellani, Juliana S. Azevedo
IPEN - Instituto de Pesquisas Energéticas e Nucleares

17:00 - 17:15 E02_ 24430 Chemical characterization of oyster shells of the species *Crassostrea mangle* and *Crassostrea gigas*
Caroline Rodrigues Albuquerque, Paulo S. C. Da Silva, Jefferson K. Torrecilha, Horacio M. S. M. Linhares, Claudio M. R. de Melo
IPEN - Instituto de Pesquisas Energéticas e Nucleares

E03 - Applications in Health and Industry

17:15 - 17:30 E03_ 24447 A study comparative of dose parameters in the chest scans in Computerized Tomography
Warley Felix, Arno Heeren de Oliveira, Marcos Eugênio Silva Abrantes, Carla Pereira Ricardo
UFMG - UNIVERSIDADE FEDERAL DE MINAS GERAIS