Complete Schedule of XXV ISSSD

September 22-26, 2025

Local Venue: CDTN - Belo Horizonte, Brazil

Summary

XXV International Symposium on Solid State Dosimetry

22-26 SEPTEMBER 2025 - BELO HORIZONTE, BRAZIL

General Schedule

Pre-Symposium - Monday, 22 Sep

			Hour
			8h
Registration			9h
			9h30
	Development of PET Radiopharmaceuticals - **Dr. Marina Bicalho Silveira** **Dr. Isabel Dregely** **Dr. Emerson Bernardes Soares** (Spectrum)	Introdution to Radiation Detectors - **Dr. Marco A Polo Labarrios** (Lattice)	10h
COFFE BREAK			10h30
			11h
			11h30
LUNCH			12h
			13h
			13h30
	Importancia de la física en una imagen por resonancia magnética en el diagnóstico clínico - **Dr. Silvia S Hidalgo Tobón** (Spectrum)	Solid State Dosimetry: Principles and Applications & OSL Advanced Materials - **Dr. Ivonne Berenice Lozano Rojas** **Dr. Alida Tamar-Gabor** (Lattice)	14h
COFFE BREAK			14h30
			15h
			15h30
			16h
			16h30
			17h

Tuesday, 23 Sep	Wednesday, 24 Sep	Thursday, 25 Sep	Friday, 26 Sep	Hour
				8h
Registration	Oral Sessions (Spectrum and Lattice) / *Poster Session:* ***10h00 to 12h30*** *- Referees for evaluation (Hall, Virtual Room)*	*Invited Speaker*: Luciana Carvalheira (Lumina)	*Invited Speaker*: Rolf Behrens (Lumina)	8h40
			Invited Speaker: Susana Lalic (Lumina)	9h
Opening Ceremony (Lumina)		*Invited Speaker*: Bernardo Maranhão Dantas Maria Jose Neves (Lumina)	*Invited Speaker*: Thiago Viana Miranda Lima (Lumina)	9h20
COFFE BREAK	*COFFE BREAK*	*COFFE BREAK*	*COFFE BREAK*	10h
Invited Speaker: Wilson Calvo (Lumina)	Oral Sessions (Spectrum and Lattice) / *Poster Session:* ***10h00 to 12h30*** *- Referees for evaluation (Hall, Virtual Room)*	*Invited Speaker*: Ademar Lugão (Lumina)	Oral Sessions (Lumina and Spectrum)	10h30
				11h
Invited Speaker: Yvone Maria Mascarenhas (Lumina)		*Invited Speaker*: Richard Hugtenburg (Lumina)	*Invited Speaker*: Tarcísio Campos and Alberto Campos (Lumina)	11h30
				12h
LUNCH	*LUNCH*	*LUNCH*	*LUNCH*	12h30
Oral Sessions (Lumina and Spectrum) / *Poster Session:* ***14h30 to 16h30*** *- Referees for evaluation (Hall)* / Roundtable: Radon in Environment: Tracer Applications and Public Health Risks (Lattice) / Roundtable: AI's challenges and Opportunities: Connecting research, industry and society (Lumina)	***Technical Visit*** / Oral Sessions (Virtual Room)	Invited Speaker: Helio Yoriyaz (Lumina) / *Invited Speaker*: Georgia Joana (Lumina) / *Poster Session:* ***14h30 to 17h*** *- Referees for evaluation - (Hall)* / Oral Sessions - (Spectrum and Lattice)	Oral Sessions (Lumina, Spectrum and Lattice) / *Invited Speaker*: Carmen Bueno (Lumina)	13h30
				14h
				14h30
				15h
				15h30
COFFE BREAK		*COFFE BREAK*	*COFFE BREAK*	16h
Poster Session: ***14h30 to 16h30*** *- Referees for evaluation (Hall)* / *Invited Speaker*: Silvia Tobón (Lumina)		Helen Khoury Mentorship WIN-Brasil (Spectrum) / *Poster Session:* ***14h30 to 17h*** *- Referees for evaluation - (Hall)* / Roundtable: Leadership in Scientific and Technological Research (Lumina) / Oral Sessions (Lumina and Lattice)	**Closing Session:** Honor award & Helen Khoury award for best works (Lumina)	16h30
				17h
Welcome & Honors Night (Lumina)				17h30
				18h00
				20h00

Monday, 09/22/2025

08:00 *Registration*

	Courses Pre-Symposium	
	Spectrum Auditorium	**Lattice Auditorium**
	Chair: Marina Bicalho	**Chair: Álvaro M. L. Gómez**
10:30 COFFE BREAK	**08:00** Dr. Marina Bicalho, Dr. Isabel Dregely and Dr. Emerson Bernardes *Development of PET Radiopharmaceuticals*	**08:00** Dr. Marco Antonio Polo Labarrios *Introduction to Radiation Detectors*
12:00 LUNCH		
	Courses Pre-Symposium	
	Spectrum Auditorium	**Lattice Auditorium**
	Chair: Angel Ramirez	**Chair: Carlos E. Velasquez**
15:00 COFFE BREAK	**13:00** Dr. Silvia S Hidalgo Tobón *Importancia de la física en una imagen por resonancia magnética en el diagnóstico clínico*	**13:00** Dr. Ivonne Berenice Lozano Rojas and Dr. Alida Tamar-Gabor *Solid State Dosimetry: Principles and Applications & OSL Advanced Materials*

Tuesday, 09/23/2025

08:00 *Registration*

Opening Cerimony - Lumina Auditorium

09:00 Opening Ceremony – **Amenônia Maria Ferreira Pinto** – Centro do Desenvolvimento da Tecnologia Nuclear (CDTN/CNEN), **Bruno Melo Mendes (ISSSD 2025 – Chair)**, **Henrique Resende Martins** – Vice-director of Escola de Engenharia of Universidade Federal de Minas Gerais (UFMG), **Silvia S. Hidalgo Tobón (ISSSD 2025 – Chair)** – Universidad Autónoma Metropolitana (UAM), **Telma C. F. Fonseca (ISSSD 2025 – Chair)** – Universidade Federal de Minas Gerais (UFMG), **Wilson Aparecido Parejo Calvo** – Comissão Nacional de Energia Nuclear (CNEN).

10:00 COFFEE BREAK

Invited Speaker - Lumina Auditorium **Chair: Silvia Hidalgo**

10:30 *Invited Speaker* – Wilson Aparecido Parejo Calvo,
Current Status of Strategic Projects at CNEN.

11:20 *Invited Speaker* – Yvone Maria Mascarenhas,
Personal Dosimetry: The Importance of Regulation, Technology, and Culture. Evaluation of Dosimetry Services in Latin America and the Caribbean.

12:30 LUNCH

Roundtable Session (Lattice Auditorium)

13:30 Radon in Environment: Tracer Applications and Public Health Risks
Chair: Talita Santos,
Panelists: Elydio Soares, Laura Takahashi, and Nathan da Silva

Radiobiology	**Luminescent Materials/ Applications of Thermoluminescence**
Spectrum Auditorium	**Lumina Auditorium**
Chair: Tarcísio Campos	**Chair: Susana Lalic**

13:30 Jhon Brandon Felix Ferreira
G07-002 - *Low-Dose Neonatal Ionizing Radiation Induces Modest, Sex-Specific Changes in Adult Mouse Behavior and Hippocampal Oxidative Stress*

13:45 Lucas Siqueira de Lima Neto
G07-013 - *Radiometric Analysis by gamma spectrometry of copaiba oil using a Hyper*

14:00 Iris Bomfim Martins Ferreira
G07-015 - *Radiometric analysis of the bivalve mollusk Perna*

13:30 João Pedro
VanellusRad - *The First Brazilian Real-Time IoT Electronic Dosimeter for Radiation Monitoring*

14:00 Ángel Ramírez Luna
G01-002 - *Afinando la Cronología Relativa de Cerámicas de la Zona de Playa Vicente, Veracruz, México Aplicando el Método de Datación Absoluta por Termoluminiscencia*

Roundtable Session (Lumina Auditorium)

14:30 AI's Challenges and Opportunities: Connecting Research, Industry, and Society
Chair: Telma C. F. Fonseca,
Panelists: Ana Carolina Costa, Andre Henrique Alves Carneiro and Rita Sebastião

13:30 to 16:30 - Poster Session (Main Hall)

Note: 14:30 to 16:30 - Referees for evaluation
In-Person

G1 - Applications of thermoluminescence (dosimetry, dating, industrial, etc.)

G01-001 - Olania Herrera González, *Involvement of SMARCB1 subunit of the mSWI/SNF and GLI-1 epigenetic complex and their radiolabeling as a strategy for ionizing therapy in lung cancer*
G01-011 - Samira Batista da Silva, *Enzymatic biocatalysis of alginate spheres and iodinated amino acids for applications in embolization guided by SPECT*
G01-026 - Roseli Künzel, *A low-cost integrated system for thermoluminescence and optically stimulated luminescence measurements*
G01-029 - Yuri Avelino Costa, *Analysis of the average geometric parameters of the closed pores of the fine aggregate matrix using X-ray micro-computed tomography and linear regression*
G01-032 - Danilo O. Junot, *Crab shell biowaste composites as luminescent radiation detectors*
G01-035 - Luiz Matheus de Souza Aguiar Leite, *Development of a radiochromic film using a polyacetylene compound*
G01-036 - Thalles Oliveira Campagnani, *Development of a test bench using a CsI/SiPM detector for mass flow measurement in industrial processes*
G01-038 - Ketrim Regina Souza, *Empowering the Future of Nuclear Energy: A Mentorship Program for the Development of Female Leadership*
G01-040 - Raissa Alexia Camargo Guassu, *Estimation of absorbed dose in critical organs during interventional procedures: experimental and computational approach*
G01-041 - Danilo O. Junot, *Influence of precursor purity on the synthesis and TL/OSL response of $CaSO_4$-based radiation detectors*
G01-044 - Vinicius Costa Silva, *Radiological characterization of the waters feeding the Camorim Reservoir by alpha–beta – Pedra Branca State Park*
G01-045 - Margarete Cristina Guimarães, Thessa Cristina Alonso, *Standardization of gamma irradiation procedures for the preservation of bibliographic heritage*

G5 - Radiological Protection

G05-003 - Adriana de Souza Medeiros Batista, *Assessment of volcanic rock adsorbents for the remediation of acid mine drainage in uranium mining*
G05-006 - Daniel de Castro Pacheco, *Development of a distributed monitoring system for active radiological protection*
G05-007 - Cássio Miri Oliveira, *Dose evaluation and suggestion of typical values for head CT headache protocols: a preliminary study*
G05-015 - Thamyra Cybelle Vieira dos Santos, *Quality assurance in ^{90}Y radioembolization: an intercomparison protocol for activity optimization*
G05-017 - Fábio Lima Guimarães, *Radiometric survey at the Stone House Lookout, Saquarema-RJ*
G05-019 - Marcela Morais Freitas, *Structural and compositional changes in zeolitic materials exposed to uranium mine effluents: implications for environmental radioprotection*
G05-022 - Bianca Rossini Marques, *Validation of analytical methods using gamma spectrometry applied to the radiometric characterization of monazite sand*

G8 - Luminescent materials

G08-004 - Divanizia do Nascimento Souza, *Development of high-sensitivity $CaSO_4$:Tm,Mn detectors for thermoluminescent and optically stimulated luminescent dosimetry*
G08-007 - Roseli Künzel, *Effect of silver doping concentrations on the structural and luminescence properties of $CaMoO_4$ powders*
G08-008 - Paula Thays Santos Malachias, *Investigation of the luminescent properties of zirconia-enriched dental resins*
G08-009 - Bruno Araújo, *Optically stimulated luminescence (OSL) characteristics of seven different color types of quartz samples under 405 nm stimulation*
G08-010 - Rafael dos Santos Viana, *Promotion of the Compton effect of ^{137}Cs photons to enhance the effi-*

ciency of radioluminescent batteries
G08-011 - Anderson Bezerra, *Properties of $CaSO_4$:Eu,Mn for Luminescent Dosimetry*
G08-012 - Patrícia de Lara Antonio, *PTTL and PTOSL of TLD-100 exposed to ^{60}Co and lighting with LEDs*
G08-013 - Daniele Gonçalves Mesquita, *Radiation Detection of Lead-Free $BaZrO_3$ Perovskite Scintillators*
G08-014 - Claudete Roberta Evangelista, *Feasibility of Retrospective Dosimetry Using Ceramic Material from Spark Plugs*
G08-015 - Anderson Manoel Bezerra da Silva, *Structural, Morphological, Luminescent, and Dosimetric Properties of $CaSO_4$:Yb,Mn Phosphors*
G08-016 - André Felipe de Oliveira, *Tailored theranostic nanocomposites: mesoporous silica, gold nanoparticles, and gadolinium complexes for cancer diagnosis and treatment*
G08-020 - Jéssica Pauline Nunes Marinho, *Potential theranostic nanoparticles of HAp-Gd^{3+} with curcumin and folic acid for cancer therapy*

15:30 COFFEE BREAK

Invited Speaker - Lumina Auditorium **Chair: Ivonne B. L. Rojas**

16:00 *Invited Speaker* – Silvia S. Hidalgo Tobón,
State of the art of magnetic resonance imaging: from fundamental physics to clinical applications.

17:00 - 20:00 Welcome & Honors Night - Lumina Auditorium

- For the Ceremony: Bruno M. Mendes, Marco Aurélio de Sousa Lacerda and Telma C. F. Fonseca
- Award Ceremony for Honored Researchers: Dr. Tarcísio P. R. de Campos and Dr. Teógenes Augusto da Silva
- Cultural Performance by Aruanda Group
- Welcome Cocktail Gathering

Wednesday, 09/24/2025

Applications of Thermoluminescence
Spectrum Auditorium
Chair: Andrea Mantuano

08:00 Rafael Cogollo
G01-004 - *Dosimetric characteristics and kinetic analysis of pure and cerium-doped alumina (α-Al_2O_3) for low-dose thermoluminescent dosimetry applications*

08:15 Héctor Maya
G01-006 - *Kinetic analysis method for general order TL glow curves*

08:30 Natalia Barbosa Gonzaga Mendes
G01-024 - *Using gamma spectrometry as a tool for assessing residual dose in irradiated topaz*

08:45 Alberto Mizrahy Campos
G01-027 - *Random walk of neutrons in a rotational environment*

09:00 Enrique Alejandro Chávez Camacho
G01-030 - *Analysis of the effects of gamma radiation on amaranth seeds and sprouts: a design of experiments (DoE) approach*

Dosimetry
Lattice Auditorium
Chair: Ana Carolina Costa

08:00 Berenice Guadalupe Olmos Grimaldo
G02-006 - *Medición de radón en la zona del Peñón Blanco, Salinas de Hidalgo, San Luis Potosí, México*

08:15 Renato Monaco Nunes
G02-018 - *A Monte Carlo-based software for photon transport in water using the CUDA platform*

08:30 Iasmin Vieira Nishibayaski
G02-019 - *A new formulation of Fricke gel dosimeter development using salicylic acid*

08:45 Camilla da Silva Sampaio
G02-026 - *Assessing the applicability of TDCR counting for nonpure beta emitters: the case of ^{210}Pb in liquid scintillation cocktails*

09:00 Laura Cardoso Takahashi
G02-040 - *Development of an integrated national database for effective dose calculation from environmental radiation exposure in Brazil*

09:15 Laisa de Almeida Neves
G05-023 - *Analysis of Natural Radioactivity in Beach Sands Along the Rio de Janeiro State Coast by Gamma Spectrometry*

10:00 COFFEE BREAK

Radiation Sources
Spectrum Auditorium
Chair: Denison Santos

10:30 Nayelly Nikole Díaz Gutiérrez
G06-002 - *Estimación del término fuente de un irradiador gamma de ^{60}Co utilizando el código MCNP*

10:45 Ismael Teixeira Vicente
G06-004 - *Alpha particle spectrometry and Monte Carlo evaluation of ^{241}Am sources for use in Elastic Recoil Detection Analysis (ERDA)*

11:00 Estela Maria de Oliveira
G06-006 - *Comparative study of gamma efficiency curves in HPGe detector with different calibration standards*

Medical Physics
Lattice Auditorium
Chair: Lucas Paixão

10:30 Sara Suely Ventura da Silva Lima
G04-004 - *Comparative Monitoring of Lens, Thyroid, and Whole Body in Interventional Cardiology Procedures*

10:45 Prycylla Gomes Creazolla
G02-089 - *Volumetric dose evaluation using 6 MV linear accelerators for blood irradiation*

11:00 Juraci Passos dos Reis Junior
G04-011 - *An AI revolution in radiotherapy in SUS: The example of Mário Kroeff Hospital*

11:15 Natasha Briggs e Silva
G04-020 - *Determination of the mass attenuation coefficient of thermoset and thermoplastic resins at energies used in conventional mammography*

11:15 Roos S. de Freitas Dam
G06-012 - *Neutron Source Applied for Eccentric Scale Prediction in Oil Pipelines using Deep Learning*

11:30 Roger Ferreira da Silva
G04-033 - *Mammography quality assurance based on phantom image with deep learning*

08:00 to 12:30 - Poster Session (Main Hall)

Note: 10:00 to 12:30 - Referees for evaluation
In-Person

G2 - Dosimetry (environmental, personal, internal, external, computational, etc.)

G02-003 - Emilia Suárez, *Development and Assessment of Perovskite-based X-Ray Detectors for In Vivo Dosimetry Applications*
G02-017 - Tales Noujaim Silveira, ^{68}*Ga Production with the GE PETtrace-8 Cyclotron: a Monte Carlo study*
G02-020 - Leanderson Pereira Cordeiro, *AI-based segmentation performance and implications for organ-level dosimetry in radionuclide therapy*
G02-021 - José Marques Lopes, *An Environmental Radiometric Assessment Based on Airborne Gamma Spectrometry Data in the State of Rio de Janeiro*
G02-023 - Hugo Leonardo Lemos Silva, *Analytical and simulation methods in determining radiation exposure time of healthcare waste*
G02-027 - Alessandra Vaz dos Anjos Santos, *Automated System for Visual Detection of Personal Dosimeters Using Convolutional Neural Networks*
G02-028 - Tiago Macedo da Cunha e Silva, *Bayesian-Optimized Monte Carlo Modeling of CyberKnife Collimators and Source Parameters for Small-Field Dosimetry*
G02-030 - Heloísa Milena Caldeira Rhodes, *Comparison of Methods for Determining the Half-Value Layer (Hvl) in Computed Tomography Equipment*
G02-031 - Nicolle Marques Cardoso Ignacio, *Comparison of the Dosimetric Properties of EBT-3 and EBT-4 Radiochromic Films for Application in Hemocomponent Dosimetry*
G02-032 - Fernanda Rocha Cavalcante, *Comparison of X-ray spectral correction software for a CdTe detector*
G02-033 - Guilherme Gazolla Santana, *Computational Modeling of an Anthropomorphic Phantom for Applications in Aerospace Dosimetry*
G02-034 - José Marques Lopes, *Computational Simulation of a NaI(Tl) Detector and Definition of Its Main Parameters for Application in a Neutron Activation Analysis Laboratory*
G02-035 - Lucas Beloti Silva, *Computational Tools for Automatic Conversion of Microscopy Images into Voxelized Cellular Phantoms*
G02-043 - João Vinícius Batista Valença, *Dose estimation in organs of a pediatric patient undergoing brain radiotherapy via Monte Carlo simulation*
G02-045 - Guilherme Cavalcante de Albuquerque Souza, *Dosimetric comparison of methods for obtaining dose profiles in head CT scans using 120 kV X-ray beams*
G02-046 - Frederico Possato Tagliaferro, *Dosimetry Of Electret Microphones Irradiated By X-Rays*
G02-047 - Josemary A. C. Gonçalves, *Energy Dependence of an Epitaxial Diode for Radioprotection Dosimetry*
G02-048 - Enzo Cortez, *Estimating the dose rate constant for Iodine-131 via Monte Carlo simulation: a first step towards pediatric radioiodine therapy shielding evaluation*
G02-050 - João Vinícius Batista Valença, *Evaluating Radiation Dose in Veterinary Professionals: MCNPX-Based Simulation of Equine Radiography Exposure*
G02-051 - Camila Nunes Carvalho Souza, *Evaluating the Performance of Bayesian Optimization in High-Dose-Rate Brachytherapy Planning*
G02-052 - Maria Rita Pascoal de Souza Barros, *Evaluation of Absorbed Dose Uniformity in Irradiated Foods with Different Packaging Geometries Using PMMA Dosimetry*
G02-054 - Gabriel Gomes do Nascimento, *Evaluation of the reproducibility of a new lens dosimeter holder*
G02-061 - João Victor Ramos Oliveira, *Influence of detector geometry on small-field radiotherapy simulations*
G02-066 - Daniel de Castro Pacheco, *Modeling and validation of a Whole Body Counter for in vivo measurements using CAD and MCNP6*

G02-070 - Greiciane de Jesus Cesário, *Monte Carlo Simulation of Depth Dose in Mammography Using Geant4 and 3D-Printed ABS and PETG Phantoms*
G02-071 - Kyssylla Monnyelle Araujo Silva, *Multielectrode Array Devices for dosimetry and dose enhancement factor analysis in nanoparticle radiotherapy*
G02-072 - Mateus de Souza Resende, *^{99m}Tc Radiolabeled Papain Nanoparticle: in silico Dosimetry Evaluation using DM BRA phantom and the experimental biodistribution data*
G02-074 - Henrique Chaves Gulino, *New Low Cost Process of PIN Diode Fabrication for Radiation Detection*
G02-077 - Carmen C. Bueno, *Online response of a homemade diode dosimetry system in a mobile 500-700 keV electron beam facility*
G02-078 - Anderson Manoel Bezerra da Silva, *Optimization of Mn^{2+} and Tb^{3+} Concentrations in $CaSO_4$:Mn,Tb and Advanced Investigation of its TL/OSL Dosimetric Properties*
G02-079 - Rômulo Monteiro Lopes, *Parametrization and Validation of a HPGe Detector by Monte Carlo Simulation*
G02-080 - Hugo Leonardo Lemos Silva, *Assessing Photon and Electron Ranges in Healthcare Waste for Radiation Sterilization*

Note: 10:00 to 12:30 - Referees for evaluation
On-line

G1 - Applications of thermoluminescence (dosimetry, dating, industrial, etc.)

G01-007 - Lenin Estuardo Cevallos Robalino, *Monte Carlo characterization of neutron personal dosimeter based on TLD-600 and TLD-700 irradiated with ^{252}Cf neutron source on the ISO-phantom at LPN-CIEMAT*
G01-010 - Abel Fernando Martínez Cruz, *Thermoluminescence of MgO Chemically Modified with Nd and Li Ions, Obtained by Glycine-based Solution Combustion Synthesis*
G01-013 - Hassan Salah, *Assessing Patient Exposure in PET/CT scans: A Head and Neck Dose Parameter Study*
G01-019 - Mohammed, *Evaluation of Radiation Dose Reduction Strategies in Whole-Body PET/CT Imaging*
G01-021 - Hassan Salah, *Optimizing Radiation Dose Parameters in PSMA PET/CT for Prostate Cancer: Balancing Diagnostic Efficacy and Patient Safety*
G01-022 - Abdelmoneim Sulieman, *Patient-Specific Dose Optimization in Breast PET/CT: Towards ALARA-Compliant Protocols*
G01-033 - Edwar Alonzzo Canaza Mamani, *Datación OSL-SAR y caracterización tecnológica de las cerámicas arqueológicas de los grupos de tradición ceramista Tupiguarani: Pirajuí I y Arataca II, Pernambuco, Brasil*
G01-034 - David Alexander Urbina Leal, *Design and Analysis of FDM Prototypes for Gold-198 Nanoparticles*

G2 - Dosimetry (environmental, personal, internal, external, computational, etc.)

G02-001 - Alejandro Ferreira Tapia, *Caracterización Física y Computacional de Dispositivos Modeladores de Radiación Electromagnética mediante Simulación Monte Carlo*
G02-008 - Whoody Alem Wanderley Araripe Farias, *A platform for creating computational exposure models: personalized dosimetry with Holmium-166*
G02-009 - Whoody Alem Wanderley Araripe Farias, *All about MARTIN: a BREP phantom with blood and lymphatic vessels applied to Yttrium-90 radioembolization*
G02-012 - Aline Fabiane Gonçalves de Oliveira, *Geospatial assessment of radionuclide dispersion and associated effective dose modeled with ARTM View: a case study at CDTN's radiopharmaceutical unit*
G02-015 - Jardel Lemos Thalhofer, *Radiometric Profile Analysis of Soils from the São José de Itaboraí Paleontological Natural Park*
G02-016 - Marcelo Franklin da Silva Santos, *Synthesis and Luminescent Characterization of $CaSO_4$:Tm,Li via Slow Evaporation, Co-precipitation, and Solid-State Diffusion Routes*
G02-022 - Akemi Yagui, *Organ Dose Estimation in Pediatric Abdomen and Pelvis Radiographs Using Caldose_X Monte Carlo Simulations*
G02-025 - Ranulfo da Silva Dias, *Assembly and Geant4-based computational simulation of a Helium-3 de-*

tector for ground-level cosmic radiation monitoring
G02-029 - Daniel Vieira Lamas, *Characterization of the Ubatuba Formation: Integration of Gamma Radiometry, Total Organic Carbon, and Well Logs from the Upper Cretaceous to Lower Paleogene Intervals of the Campos Basin*
G02-037 - Paulo Sérgio de Abreu Junior, *Cytogenetic assessment of ionizing radiation exposure in Allium cepa using micronucleus frequency: a comparative study between Antarctic and control conditions*
G02-038 - Ana Laura Burin, *Development of a Computational Phantom of the Vertebral Column for Dosimetric Investigations*
G02-039 - Leonardo da Silva Boia, *Development of a Dedicated System for Generating Input Files for the MCNP and Adaptation of a Phantom with Edema for Simulation of Prostate Brachytherapy with* ^{125}I
G02-044 - Wallacy Viana, *Dose Rate Estimation by Extracting and Analyzing Colors from an Image Generated by a CMOS Image Sensor*
G02-059 - Lucas Fabricio de Araujo, *In Silico Investigation of the Impact of Gold Nanoparticles on the Radiosensitivity of 3D HeLa Cells Using the Monte Carlo Method*
G02-060 - Gabriela Rodé de Assis da Silva, *In Situ Gamma-Ray Spectrometric Mapping of Beach Sand Radioactivity in Niterói, Brazil*
G02-067 - Pedro Henrique Avelino de Andrade, *Monte Carlo Modeling of the BPW34 Photodiode for X-ray Dosimetry*
G02-073 - Nadia Rodrigues dos Santos, *Natural Radionuclide Activity and Radiological Risk Assessment in Brazilian Coffee Samples*
G02-086 - Marcelo Luís dos Santos Filho, *Study of CaSO4:Tm,Li Based Luminescent Composites Applied to TL/OSL Dosimetry in Mammography*
G02-087 - Leonardo da Silva Boia, *MCNP simulation of the effects of prostatic edema in LDR brachytherapy with* ^{125}I *using the adapted ICRP 110 voxel male phantom*
G02-093 - Daniel V. Lamas, *Quantification of Gamma Radiation on Drilling Cuttings Through HPGe Detector: Comparative Study With Well Logs Spectrometry Data*

G3 - Ionizing and non-ionizing radiation

G03-005 - Samara Mendes Matos, *Effect of Neutron Activation in the Biodegradable Chitosan polymer associated with Gold Nanoparticles.*
G03-010 - Angel Garcia-Duran, *Simulador de detector de Germanio de alta pureza con fuentes radiactivas, embebido en FPGA*

G4 - Medical Physics

G04-001 - Nicolás Eugenio Martín, *Adaptation and performance of CdTe-based XFCT detection system using Ag-tacers for Biomedical Applications*
G04-007 - Priscila Santos Amorim, *Implementation of free software for managing imaging protocols*
G04-008 - Angelica Viridiana Roman Martinez, *Magnetic Resonance Imaging Assessment of Corpus Callosum Volume in Pediatric Epilepsy Patients*
G04-009 - Jaime Torres Juárez, *Optimization of the Pulse Sequence for Visualization of Myocardial Fiber Architecture Using Diffusion Tensor Imaging in the Study of Cardiomyopathies*
G04-012 - Gisell Ruiz Boiset, *Assessment of radiologically tissue-equivalent materials for breast imaging phantoms using X-ray spectrometry*
G04-024 - Jesús Emmanuel Mares Ponce, *Evaluation of elemental Iron content in pharmaceutical formulations using magnetic susceptibility technique*
G04-026 - Camila Hitomi Murata, *Evaluation of the affect on performance of a 3T MRI by the proximity of a subway station and an adjacent MRI scanner*
G04-027 - Carolina Salinas Domján, *Experimental characterization of magnetic fields for dosimetric modelling with Monte Carlo methods in MR-Linac radiotherapy*
G04-029 - Ana Carolina Costa da Silva, *Global Usability of Mobile CT Scanners in Rapid Stroke Diagnosis: A Literature Review*
G04-030 - Raissa Alexia Camargo Guassu, *Impact of Body Mass Index on Radiation Doses in Interventional Radiology*

G5 - Radiological Protection

G05-002 - Wallacy Viana, *Analysis of the characteristics of the Ingeo™ 3D850 polymer in the context of its use in visual inspections in the TRIGA IPR-R1 nuclear reactor*
G05-004 - Hericka O. Kenup-Hernandes, *Computational Modeling for Radiological Risk Assessment: Simulation of Plume Dispersion in Radioactive Waste Fires Using HotSpot*
G05-008 - Akemi Yagui, *Evaluation of radiation exposure in pediatric interventional cardiology procedures*
G05-009 - Hericka O. Kenup-Hernandes, *Gadolinium Adsorption by Functionalized Mesoporous Silicas (MCM- 41/SBA-15): A Proposal for Volume and Dose Reduction in Radioactive Waste*
G05-018 - Watila Lins Silva, *Reference Measurements of Thermal Neutron Flux Using a Cadmium-Encapsulated ^{6}LiI (Eu) Detector at the Neutron Metrology Laboratory*
G05-020 - Fábio Sabará Dias, *Survey of radiation exposure from portable X-ray fluorescence*

G6 - Radiation Sources

G06-005 - Gláucia de Oliveira Barreto, *Axial neutron flux mapping in the Argonauta Research Reactor at IEN-CNEN using neutron activation and γ-ray spectrometry techniques*
G06-008 - João Pedro Carvalho Andrade, *Determination of the mass attenuation coefficient of polymers using Monte Carlo N-Particle simulation*
G06-011 - Gabriel Tura Echeverria, *Identification and quantification of K, Na and Mn in textured soy protein sold in the city of Rio de Janeiro using the Argonauta research reactor of IEN/CNEN and the techniques of instrumental neutron activation analysis and γ-ray spectrometry*

G7 - Radiobiology

G07-004 - Ivana Mara Gomes Andersen Cavalcanti, *Determination of mechanical and physical properties of pig ear cartilage through modeling and simulation using DFT*
G07-014 - Yasmym Sarmento Pereira, *Radiometric analysis of sediments and water from the Lagoons of East Fluminense, Rio de Janeiro.*
G07-016 - Gabriela Rodé de Assis da Silva, *Radiometric characterization of Erythrina verna Vell.: A study of natural radioactivity in plant tissues*

G8 - Luminescent materials

G08-003 - Marcelo Luis dos Santos Filho, *Development of $CaSO_4$:Li Composites by Different Synthesis Routes for Applications in TL and OSL Dosimetry*
G08-005 - Brunno Florencia de Oliveira, *Dosimetric Potential of Cowrie Shell Biomass under High Radiation Doses using TL and OSL Techniques*
G08-018 - Caroline Pereira dos Santos, *Repuesta Termoluminiscente ante rayos gamma de la HAp pura y dopada con tierras raras (Dy3+ y Eu3+) a dos concentraciones 0.1 M y 0.5 M*
G08-019 - André Luiz Tavares e Silva, *Unsupervised learning for pattern recognition in K-feldspar using cathodoluminescence emission and EDX composition mapping*
G08-021 - Joel Arturo Rivera-Garcia, *Estudio de las propiedades luminiscentes del aluminosilicato de estroncio dopado con Ce ($SrAl_2Si_2O_8$:Ce) sintetizado por el método de reacción en estado sólido*

12:30 LUNCH

Applications of Thermoluminescence / Luminescent Materials Virtual Room 1 Chair: Daniel Calheiro/Rodrigo Gadelha	Luminescent Materials / Dosimetry Virtual Room 2 Chair: Marco A. Labarrios/ Álvaro M. L. Gómez	Medical Physics / Ionizing and non-Ionizing / Radiobiology Virtual Room 3 Chair: Jaime T. Juárez/Bruno Gallotti
13:30 Katherine G. Delgado G01-005 - *Effective dose received by Dentistry students in intraoral dental radiology using TLD dosimetry*	**13:30** Jessica Paola C. Fraga G02-005 - *La termoluminiscencia del Grafito para su posible aplicación dosimétrica*	**13:30** Erika Patricia Azorín Vega G04-005 - *Dosimetric and Biological Characterization of a 3D Cell Culture Model for the Evaluation of Radiopharmaceutical Induced Bystander Effect*
13:45 Nayely D. M. Ramirez G01-008 - *Synthesis of Y_2O_3 nanophosphors and evaluation of their thermoluminescent response for use in radiation dosimetry*	**13:45** José Edgardo Arellano Hernández G02-004 - *Estudio de la respuesta termoluminiscente de NA2O-Y2O3-P2O5-SIO2 irradiados con Electrones*	**13:45** Leticia González Zamora G04-010 - *Study of Prefractal Antennas for Multiband Radiofrequency Applications*
14:00 Abel Fernando Martínez Cruz G01-009 - *Thermally Stimulated Luminescence of Chemically Modified Magnesium Oxide with Gd^{3+} and Li^{+}, Obtained by a Glycine-based Combustion Process*	**14:00** Marcelo F. da Silva Santos G02-014 - *New Approaches in the Synthesis of $CaSO_4$:Tm,Li Phosphors with Sugars as Chelating Agents for Dosimetry Applications*	**14:00** Maria L. Miranda Maciel G04-014 - *Calibration of radiochromic films EBT2, EBT3, EBT4 and RTQA2 and assessment of uncertainties for radiotherapy doses*
14:15 Radmila Sabitova G01-016 - *Characterization of additional irradiation positions in the IVG.1M research reactor*	**14:15** Vinícius R. A. A. Martins G02-055 - *Experimental Evaluation of the Mechanical and Dosimetric Properties of the Red Perspex 4034 Dosimeter After 15 Years of Aging*	**14:15** Elsa Bifano Pimenta G04-022 - *Evaluating Lung CT Protocols Using the Detectability Index: An Anthropomorphic Phantom-Based Evaluation of Photon-Counting and Conventional CT*
14:30 E. Cruz-Zaragoza G01-020 - *Optically -and thermally stimulated luminescence detection of irradiated oregano (Lippia graveolens) polymineral*	**14:30** Rayline Leite da Silva G02-084 - *Standardized Protocol for the Analysis of Cutting Samples and Lithological Materials by Gamma Spectrometry*	**14:30** Estefania Reyes Soto G04-002 - *Automated Classification and Manual Segmentation of Pediatric Brain Tumors Using Deep Learning on MRI Data*
14:45 Umme Muslima G01-023 - *Thermoluminescence Characterization of Natural Flake Graphite Under 6 MeV Electron Beam Exposure from Medical LINAC for Dosimetric Applications*	**14:45** Nadia Rodrigues dos Santos G02-049 - *Estimation of the soil-to-plant transfer factor of natural radionuclides in organic crop from Pedra Branca State Park*	**14:45** Giulia Rita de Souza Faés G04-035 - *Radiotherapy Planning with VMAT in Halcyon 2.0: Impacts of Isocenter Configuration on Dosimetric Parameters and Treatment Efficiency*
15:00 André Luiz Tavares e Silva G01-025 - *A Data Science Approach on the Study of Al_2O_3 Thermoluminescent Glow Curves Under Varying Heating Rates*	**15:00** Leonardo da Silva Boia G02-036 - *Construction of the Glioblastoma scenario in the right optic nerve region using DIP techniques for simulation in the MCNP code with conversion to lattice structure by SCAN2MCNP*	**15:00** Natalia Matos Orozco G04-003 - *Diseño y cálculo de blindajes para garantizar la protección radiológica en una radiofarmacia productora de radiofármacos*
15:15 Gabriela Pontes Cardoso G08-001 - *Cathodoluminescence behavior of PVDF films doped with $CuSO_4$ under high-dose gamma irradiation*	**15:15** Leonardo Santiago Melgaço Silva G02-041 - *Development of an optical sensor prototype for dose readings in Fricke gel dosimeters*	**15:15** Kuanysh Samarkhanov G05-016 - *Radiological Characterization and Dosimetric Assessment of Liquid Radioactive*

15:30 Júlia Carina Orfão Costa
G08-002 - *Characterizations of $SrMoO_4:Dy^{3+}$ powders synthesized by hydrothermal method*

15:45 Daniele da Silva Machado
G08-006 - *Dosimetric Properties of nanoDot OSL Detectors for Radiotherapy Quality Control: An Initial Characterization and Uncertainty Analysis*

16:00 Carina Oliva Torres Cortés
G08-023 - *Repuesta Termoluminiscente ante rayos gamma de la HAp pura y dopada con tierras raras (Dy3+ y Eu3+) a dos concentraciones 0.1 M y 0.5 M*

16:15 Caroline Pereira dos Santos
G08-017 - *Uncovering the intrinsic nature of the ternary metallic alloys CuNiPd and Cu_2PPd_2: A DFT study*

16:30 Rodrigo Martínez Baltezar
G08-022 - *Point defects study on Aluminum nitride for applications in luminescence dosimetry*

16:45 Pedro R. González
G08-024 - *Thermoluminescent properties of MgO:Sm,Tb+PTFE dosimeters*

17:00 Sandrith M. Pérez Ramos
G01-003 - *Análisis cinético de la curva de brillo termoluminiscente del Óxido de Berilio (BeO) irradiado con Rayos X en un rango de baja dosis*

15:30 Carolina Salinas Domján
G02-090 - *Assessing Water-Equivalence in Gram-Negative Bacteria-Hydrogel Radiation Dosimeters: A Comparative Analysis with Gram-Positive Bacterial Systems*

15:45 Rayline Leite da Silva
G07-017 - *Study of Drinking Water Quality in Rio de Janeiro: Assessment of Gamma Radiation Levels and Physicochemical Parameters*

16:00 Teodoro Córdova Fraga
G04-019 - *COVID largo y fibrosis pulmonar: clasificación basada en tomografía en población mexicana*

16:15 Teodoro Córdova Fraga
G04-013 - *Automated detection and characterization of renal calculi using U-Net and Hounsfield unit analysis in computed tomography scans*

16:30 Priscila Santos Rodrigues
G04-036 - *Three-dimensional dose mapping of gold-198 nanoparticles: A comparative study of 3D-printed matrices using Fricke xylenol gel and Monte Carlo simulations*

16:45 Arthur Reis Martins
G06-015 - *Production of Radioisotopes in Nuclear Microreactors for Medical, Industrial, and Scientific Applications*

17:00 Jardel Lemos Thalhofer
G02-010 - *Assessment of the level of natural radioactivity in the region of the future Municipal Environmental Protection Area (APA) Ilha Verde, Muriqui, Mangaratiba - RJ*

Waste from BN-350 Reactor

15:30 Stanislav Svetachev
G06-007 - *Determination of detection limits of elements in sediment and rock standards for INAA using the IGR reactor*

15:45 Jonathan O. dos Santos
G06-017 - *Response Function Validation of HPGe Detector Through GADRAS and MCNP Simulation*

16:00 Roberto Méndez Villafañe
G06-003 - *Neutron measurements around the research reactor RA-6 at Centro Atómico Bariloche with a Bonner Sphere Spectrometer*

16:15 Roberto Méndez Villafañe
G06-001 - *Development of a detailed model with MCNP of the Neutron Standards Laboratory at CIEMAT and validation with a Bonner Sphere Spectrometer System*

16:30 Fatima Castañeda Ortiz
G07-001 - *Pulsed X-ray-Induced Nuclear Fragmentation in a Radioresistant Ovarian Cancer Cell Line*

16:45 Daniele G. Mesquita
G07-006 - *Gamma Radiation Modulates Genomic Maintenance Pathways in T-Lymphocytes: An Analysis of Clinical Doses*

17:00 Emilio Romero Muñoz
G07-006 - *Germination response of 'Micro-Tom' to controlled magnetization by using a Rodin coil*

17:15 Raúl Ken Delgado Velázquez
G07-006 - *Magnetic stimulation as a promoting factor for germination and development in Guazuma ulmifolia L. seeds*

13:30 to 16:00 TECHNICAL VISIT **Chair: Camila Engler**

Places to visit at CDTN:

- Gamma Irradiation Laboratory - More information, acess here
- Dosimeter Calibration Laboratory - More information, acess here
- TRIGA IPR-R1 Reactor - More information, acess here

Thursday, 09/25/2025

Invited Speaker - Lumina Auditorium **Chair: Bernardo Dantas**

08:00 *Invited Speaker* – Luciana Carvalheira,
Neutrons, Knowledge, and New Generations: How Brazil's Argonauta Reactor is Shaping the Future of Radiochemistry and Its Impact on Global Dosimetry Challenges.

09:00 *Invited Speaker* – Bernardo Maranhão Dantas,
Diseminación de técnicas de monitoreo in vivo ocupacional en una Red de Clínicas de Medicina Nuclear.

09:25 *Invited Speaker* – Maria Jose Neves,
Range Radiation Exposure Indicator.

10:00 COFFEE BREAK

13:30 - 17:00 - Poster Session (Main Hall)

Note: 14:30 to 17:00 - Referees for evaluation
In-Person

G2 - Dosimetry (environmental, personal, internal, external, computational, etc.)

G02-081 - Felipe Mamed de Souza, *SMS Notification System for Potential Radiological Risk Scenarios*
G02-085 - Alcilene Cristina da Silva, *Study and Characterization of the EPR Response of New Materials for High Dose Dosimetry*
G02-088 - Ana Letícia Almeida Dantas, *The IRD In Vivo Monitoring Laboratory - LABMIV: Instrumental Capabilities applied in routine and emergency situations*
G02-091 - Maryanna Regina de Souza Roberto, *OSL Tandem Dosimeter for ICRU 95 Operational Quantities*
G02-092 - Thalys Matheus Gama de Oliveira, *Photons Response of an Albedo Monitor*

G3 - Ionizing and non-ionizing radiation

G03-001 - Paula Regina Rodriguez Coelho, *"Analysis of spatial resolution in two different phantoms as a quality parameter in MRI pediatric pathology"*
G03-002 - José Marques Lopes, *Adjustment Factor for Gamma Spectra Due to the Influence of Sample Density on the Shielding Background Radiation*
G03-003 - Davyd Soares Dunda, *Application of Steam Methodology in Science Teaching: Prototyping a Cloud Chamber*
G03-004 - José Marques Lopes, *Comparison of environmental sampling results using portable and benchtop scintillation detectors*
G03-006 - Adriana de Souza Medeiros Batista, *Effect of repolymerization and gamma irradiation on the morphology of styrene-divinylbenzene composites with magnetite*
G03-007 - Paulo Cezar Rocha Silveira, *Gamma Irradiation Effects on the Mechanical and Ballistic Performance of 3D-Printed Polylactic Acid*
G03-008 - Luciana Carvalheira, *Gold nanoparticles with potential for use in multimodal combat of head and neck cancer*

G4 - Medical Physics

G04-006 - Otávio Gabriel Moreira Silva, *SNR and CTDIvol study as a function of the Noise Index in Computed Tomography exams*
G04-016 - Rute Cristina de Oliveira Soares, *Chest Computed Tomography in Oncology: Clinical Contributions and Dosimetric Assessment*

G04-017 - Gustavo Freire Pereira da Silva, *Comparative Validation of the DEEDZ Methodology and a Photon-Interaction-Based Model Implemented in TEMPy for Estimating Effective Atomic Number and Electron Density*
G04-018 - Rute Cristina de Oliveira Soares, *Contributions of Computed Tomography to Breast Cancer Staging and Follow-Up: Justification of Practice and Dosimetric Analysis*
G04-021 - Iasmin Vieira Nishibayaski, *Dosimetric evaluation of EBT3 and EBT4 in superficial HDR brachytherapy for keloids*
G04-023 - Camila Engler, *Evaluation of Breast Positioning Quality and Its Association with Technical Parameters in Screening Mammography*
G04-031 - Douglas Philipe Martinho Dos Santos, *Investigation of Diagnostic Reference Levels (DRL) in medical radiography: dose-area product (DAP)*
G04-034 - Kellen Adriana Curci Daros, *Radiation dose from pediatric coronary artery calcium scoring CT scan to evaluate chronic kidney disease-mineral and bone disorder: Observational study*
G04-038 - Arícia Ravane Pereira da Cruz, *Validation of an alanine-based postal dosimetry system for quality control in radiotherapy*

G6 - Radiation Sources

G06-013 - Kathleen Martins, *Neutronic Analysis of an Accelerator-Driven Subcritical Reactor Utilizing Thorium Dioxide and Reprocessed Nuclear Fuels*

G7 - Radiobiology

G07-003 - Christiana da Silva Leite, *Comparative Study of Organ Mass in Healthy and Tumor-Bearing Mice for Preclinical Dosimetry Purposes*
G07-005 - Camila Ramos Silva, *Development and validation of a body-shielding device for radiotherapy of breast cancer in mice using a panoramic gamma source*
G07-008 - Luciana Penedo de Melo Teixeira, *Impact of Physical Exercise on Irisin Expression in the Brain of Irradiated Mice: Effects on Behavior and Memory*
G07-009 - Olania Herrera González, *Involvement of SMARCB1 subunit of the mSWI/SNF and GLI-1 epigenetic complex and their radiolabeling as a strategy for ionizing therapy in lung cancer*
G07-011 - Camila de Almeida Salvego, *Nitric Oxide-Donor Nanoparticles Potentiate Radiotherapy of TripleNegative Breast Cancer*
G07-018 - Bruno Gallotti, *Growth Inhibition of S. cerevisiae BY4741 Exposed to Gold Nanoparticles and Low-Energy Radiation*
G07-019 - Maurício Moacir da Silva Borges, *The Role of Caffeine in Reducing TNF-α and Improving Cognitive in Irradiated Mice in the Brain*
G07-020 - Luis Martín Garcia Ortiz, *Cellular response in human leukocytes (in vitro), due to exposure to UVB radiation using apoptotic biomarkers*

Invited Speaker - Lumina Auditorium **Chair: Telma C. F. Fonseca**

10:30 *Invited Speaker* – Ademar Lugão,
Use of ionizing radiation for the production of nanoparticles and advanced curatives.

11:30 *Invited Speaker* – Richard Hugtenburg,
New Technologies as a Route to Particle Therapy: Laser-Hybrid Acceleration for Radiobiology Applications – The LhARA Project.

12:30 LUNCH

Invited Speaker - Lumina Auditorium — **Chair: Richard Hugtenburg**

13:30 *Invited Speaker* – Hélio Yoriyaz,
Proton Beam Therapy: Main Characteristics and Challenges.

Dosimetry
Spectrum Auditorium
Chair: Peterson Squair

13:30 Divanizia do Nascimento Souza
G02-042 - *Dose Distribution in an Anthropomorphic Cervix Phantom Using Two Computer Modeling Approaches*

13:45 Francisco Harlley Dantas Hauradou Xavier
G02-057 - *Generator of Health Optimized Simulation Templates – GHOST a 3D Slicer plugin to voxelized medical images for MCNP*

14:00 Francisco H. D. Hauradou Xavier
G02-094 - *Optimization of dose rate map acquisition time for internal dosimetry in nuclear medicine using 3D U-Net convolutional neural networks*

14:15 José Elizeu de Souza Junior
G02-062 - *Influence of Photon Emission Spectra on Air Kerma Rate Constants for Radionuclides: A Monte Carlo EGSnrc Study*

14:30 Raphael Francisco Gomes dos Santos
G02-063 - *Influence of Radiation Shielding on Effective Dose in Prostate Cancer Radiotherapy with a Varian Clinac 15 MV*

Medical Physics/Dosimetry
Lattice Auditorium
Chair: Lucas Paixão

13:30 Ana Beatriz Caldeira de Andrade
G04-025 - *Evaluation of spatial resolution in PET equipment with a Jaszczak-analog phantom built by additive manufacturing*

13:45 Crislane de Jesus Cesário
G04-028 - *Experimental Evaluation of 3D-Printed Materials (ABS and PETG) for Mammographic Phantom Applications Using $CaSO_4$:Dy Dosimetry*

14:00 Nathalia Luzia Aidar Alves
G04-032 - *Machine Learning in PSQA: Performance of a Random Forest Model on Radiotherapy Metrics*

14:15 André Luiz Espindola Fidelis
G04-037 - *Validation of a 3D-Printed Anthropomorphic Eye Phantom for Quality Assurance in External Beam Radiotherapy Using TLDs and Radiochromic Film*

14:30 Leonardo Gualberto Silva Macedo
G02-095 - *Mass Analysis of Computational Mouse Models Developed at CDTN: A Comparative Study of Male and Female Versions*

14:45 Beatriz Diniz de Oliveira Guedes
G02-082 - *Spectrophotometric Analysis of a 3D-Printed Photopolymerizable Resin Exposed to High-Dose Gamma Radiation*

15:00 Hirys Sales
G02-053 - *Evaluation of Polymeric Materials as Muscle Tissue Equivalents for Physical Phantoms Used in the Calibration of In Vivo Monitoring Systems*

Invited Speaker - Lumina Auditorium — **Chair: Teógenes da Silva**

14:30 *Invited Speaker* – Georgia Joana,
Win Brasil - Gestão Diversidade & Inclusão.

15:30 COFFEE BREAK

16:00 - Mentorship Helen Khoury WIN Brasil (Spectrum Auditorium)

Empowering the Future of Nuclear Energy: A Mentorship Program for the Development of Female Leadership
Moderator: Ketrim souza,
Panelists: Georgia Joana and Winners (Winbrasil)

Roundtable Session (Lumina Auditorium)

16:00 Leadership in Scientific and Technological Research
Moderator: Luciana Carvalheira,
Panelists: Adriana Marques and Anna Letícia Barbosa de Sousa

Radiation Protection **Lumina Auditorium** **Chair: Teógenes da Silva**	**Radiation Sources / Radiation Protection** **Lattice Auditorium** **Chair: Jhonny A. Benavente Castillo**
17:00 Mirella Maturo da Cruz G05-021 - *Transfer Factors of Natural Radionuclides in Organic Foods from Rio de Janeiro, Brazil*	**17:00** Gabriel do Nascimento Freitas G06-014 - *Nuclear simulation workflow to correct gamma ray well logs for radioactive contaminated drilling fluids*
17:15 Elydio J. D. Soares G05-010 - *Investigation of radon exhalation from mortars made from niobium tailings and the mitigating role of coating materials*	**17:15** José Alípio dos Santos Filho G06-016 - *Proposal for the construction of a neutron generator for application in research and industry*
17:30 Raphael Francisco Gomes dos Santos G05-005 - *Determination of Radiation Protection Procedures for an Offshore Plant Inspection in Brazil Using Radiotracer Techniques*	**17:30** Welen Nunes de Lima G05-014 - *Proposal for the use of thorium as fuel in TRIGA® research reactors*

Friday, 09/26/2025

Invited Speaker - Lumina Auditorium — **Chair: Richard Hugtenburg**

08:00 *Invited Speaker* – Rolf Behrens,
From dosemeter development to routine use – Standards and Uncertainties.

08:40 *Invited Speaker* – Susana Lalic,
Plant Stem Cells as an Ethical Alternative for Biodosimetry.

09:20 *Invited Speaker* – Thiago Viana Miranda Lima,
Current and Future Trends in Nuclear Medicine Dosimetry.

10:00 COFFEE BREAK

Radiological Sources Spectrum Auditorium Chair: Carmen C. Bueno	Dosimetry Lumina Auditorium Chair: Peterson Squair
10:30 Matheus R. do Nascimento G03-009 - *Speknife: open-source software for X-ray spectra correction in solid state dosimetry*	**10:30** Jhonny A. Benavente Castillo G02-007 - *Simulación del blindaje del búnker de un acelerador ciclotrón utilizando el código MCNP*
10:45 Eduardo B. de Paula G05-011 - *Metrological Enhancement of Radiopharmaceuticals Half-Lives Determination via γ-ray Spectrometry and Algorithmic Data Processing*	**10:45** Natasha Briggs e Silva G02-011 - *Preliminary Evaluation of a Positioning Phantom for Dosimetric Audit in Ir-192 HDR Brachytherapy: Results from an IAEA Collaborative Project*
11:00 Igor Andrade Machado G02-083 - *SpecUnPy code: updates and what is coming*	

Invited Speaker - Lumina Auditorium — **Chair: Bruno M. Mendes**

11:30 *Invited Speaker* – Tarcísio P. R. de Campos and Alberto Mizrahy Campos,
Challenges in Radioisotope Decontamination and Production through Neutron Spectral Selection.

12:30 LUNCH

Dosimetry Spectrum Auditorium Chair: Maria da Penha A. Potiens	Dosimetry Lattice Auditorium Chair: Bruno M. Mendes	Applications of Thermoluminescence Lumina Auditorium Chair: Teógenes da Silva
13:30 Isabela N. S. Ferreira G02-064 - *Mapping of natural radionuclides U, Th and K in the city of Belo Horizonte/Minas Gerais*	**13:30** Celso G. de Paulo G02-069 - *Monte Carlo simulation of a HPGe detector*	**13:30** Tarcísio P. R. Campos G01-046 - *The reduction of the radiological impact of nuclear fuel waste*
13:45 Claudio A. Federico G02-065 - *Measurements of Ionizing Radiation Dose Onboard an Aircraft from Southeastern Brazil to the Antarctic Continent*	**13:45** Ana G. Leão Ferro G02-075 - *Occupational exposure assessment in ROLL procedures with Tc-99m: A Monte Carlo simulation approach*	**14:00** Júlia B. Severo G01-039 - *Environmental Gamma Radiation and Radon Exposure in Areas Surrounding Urban Quarries in Belo Horizonte, Brazil*

14:00 Paulo J. Iack Silva
G02-068 - *Monte Carlo N-Particle (MCNP) Simulations for Scintillation Emission in Quantum Dot-Doped Systems*

14:00 Rafael S. Oliveira
G02-076 - *On the adaptation of a commercial Bonner Sphere Spectrometer to be used with thermoluminescent detectors*

Invited Speaker - Lumina Auditorium **Chair: Telma C. F. Fonseca**

14:30 *Invited Speaker* – Carmen Bueno,
Radiation processing with electron beams: On the feasibility of using electronic dosimeters for real-time dosimetry.

15:30 COFFEE BREAK

16:00 CLOSING SESSION

- Final Session: Summary and Perspectives: Telma C. F. Fonseca & Bruno M. Mendes
- Honorary Award in Memory of Helen Jamil Khoury: Carmen Bueno
- Helen Khoury Award for Best Works: Andrea Mantuano & Ester Andrade