

Third International Conference on Applications of Radiation Science and Technology

ICARST-2025

7–11 April 2025

PROGRAMME

Organized by the
International Atomic Energy Agency (IAEA)

IAEA Headquarters Vienna, Austria

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Location of the Event:

International Atomic Energy Agency
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Working Language:

English

Resolutions:

No resolutions may be submitted for
consideration on any subject; no votes
will be taken.

TIMETABLE

Monday, 7 April 2025

Time	Session No.	Session Title / Break	Venue
08:00		Ground Pass Issuance	Gate 1
09:30–10:30		Opening Session: Radiation Science and Technology: Solutions for a Sustainable World	M-Plenary
10:30–11:00		<i>Coffee Break</i>	
11:00–12:30	PS01	Plenary Session: Trends in Radiation Science and Technology	M-Plenary
12:30–14:00		<i>Lunch Break</i>	
14:00–15:30	A01	Advances in Radiation Science and Technology	M-Plenary
	B01	Role of IAEA in Advancement of Radiation Science and Technology	M2
	C01	Advances in Radiotracer Technology and Sealed Source Applications	Board Room A
15:30–16:00		<i>Coffee Break</i>	
16:00–17:30	A02	Advanced Radiation Chemistry	M-Plenary
	B02	Sustainable Development with Radiation Science and Technology	M2
	C02	Trends in NDT in Civil Engineering	Board Room A
17:30–18:00		<i>Break</i>	
18:00–19:30		<i>Welcome Reception</i>	M-Building Ground Floor

Tuesday, 8 April 2025

Time	Session No.	Session Title / Break	Venue
09:00–10:30	A03	Advanced Nanomaterials and Composites	M-Plenary
	B03	Radiation Treatment of Pollutants in Aqueous Effluents	M2
	C03	Imaging Technologies and Thin Layer Activation	Board Room A
10:30–11:00		<i>Coffee Break</i>	
11:00–12:30	A04	Advanced Polymeric Materials	M-Plenary
	B04	Environmental Monitoring and Protection	M2
	C04	New Tracers and Methodologies for Mass Flow Monitoring	Board Room A
	D01	<i>Satellite Event</i>	<i>Press Room</i>

Time	Session No.	Session Title / Break	Venue
12:30–14:00		<i>Lunch Break</i>	
	<i>Side Event 01</i>	<i>Spotlight on the NUTEC Plastics</i>	<i>M4</i>
14:00–15:30	P01	Poster Session	M Building Poster Area
15:30–16:00		<i>Coffee Break</i>	
16:00–17:30	A05	Radiation-modified Natural and Bio-Based Polymer Materials	M-Plenary
	B05	Applications in Food and Agriculture	M2
	C05	Radiotracer Studies for Sediments Dynamics	Board Room A
	<i>D02</i>	<i>Satellite Event</i>	<i>Press Room</i>
17:30–18:00		<i>Break</i>	
18:00–19:30	<i>Side Event 02</i>	<i>Radiation Technology for a Better Home</i>	<i>Board Room A</i>
	<i>Side Event 03</i>	<i>Enhancing Global Collaboration in NDT for Disaster Recovery Enhancement</i>	<i>M2</i>

Wednesday, 9 April 2025

Time	Session No.	Session Title / Break	Venue
09:00–10:30	A06	Radiation Sterilization and Decontamination	M-Plenary
	B06	Current Status of EB, Gamma and X Ray Facilities	M2
	C06	Radiotracer Investigation in Process Industries	Board Room A
10:30–11:00		<i>Coffee Break</i>	
11:00–12:30	A07	Microbiological Qualification	M-Plenary
	B07	Advancements in Machine Sources	M2
	C07	Sealed Source and Radiotracer Techniques in Industry	Board Room A
	<i>D03</i>	<i>Satellite Event</i>	<i>Press Room</i>
12:30–14:00		<i>Lunch Break</i>	
	<i>Side Event 04</i>	<i>Radiotracer and Sealed Sources Certification for Industrial Excellence</i>	<i>M4</i>
14:00–15:30	P02	Poster Session	M Building Poster Area
15:30–16:00		<i>Coffee Break</i>	
16:00–17:30	A08	Tissue Engineering & Tissue Banking	M-Plenary

Time	Session No.	Session Title / Break	Venue
	B08	Dosimetry and Quality Management	M2
	C08	NDT Monitoring for Civil Infrastructure	Board Room A
	<i>D04</i>	<i>Satellite Event</i>	<i>Press Room</i>
<i>17:30–18:00</i>		<i>Break</i>	
<i>18:00–19:30</i>	<i>Side Event 05</i>	<i>Collaboration in Action: Advancing Research Through Coordinated Research (CRP)</i>	<i>Board Room A</i>
	<i>Side Event 06</i>	<i>Peaceful Uses of Machine Based Radiation Technologies</i>	<i>M2</i>

Thursday, 10 April 2025

Time	Session No.	Session Title / Break	Venue
09:00–10:30	PS02	Plenary Session: Panel Discussion on Equal Opportunities in Radiation Science and Technology	M-Plenary
	P03	Poster Session	M Building Poster Area
<i>10:30–11:00</i>		<i>Coffee Break</i>	
11:00–12:30	PS03	Plenary Session: Panel Discussion on Education and Training in Radiation Science and Technology	M-Plenary
<i>12:30–14:00</i>		<i>Lunch Break</i>	
	<i>Side Event 07</i>	<i>Empowering the Next Generation: The Impact of Mentoring</i>	<i>M4 / M5 / M6</i>
14:00–15:30	A11	Preservation of Cultural Heritage	M-Plenary
	B11	Advanced Radiation-Assisted Polymer Recycling	M2
	C11	Flow Modelling: RTD & CFD	Board Room A
<i>15:30–16:00</i>		<i>Coffee Break</i>	
16:00–17:30	A12	Computational Tools for Radiation Processing	M-Plenary
	B12	Emerging Applications in Radiation Processing	M2
	C12	Diagnostic Methods for Cultural Heritage	Board Room A
	<i>D05</i>	<i>Satellite Event</i>	<i>Press Room</i>
<i>17:30–18:00</i>		<i>Break</i>	
<i>18:00–19:30</i>	<i>Side Event 08</i>	<i>Radiation-based technology for Preservation of Cultural Heritage Objects</i>	<i>Board Room A</i>
	<i>Side Event 09</i>	<i>Tools for Radiation Technology Users</i>	<i>M2</i>

Friday, 11 April 2025

Time	Session No.	Session Title / Break	Venue
09:00–09:50	PS04	Plenary Session: Flagship Initiatives, Success Stories & Future Perspectives	M-Plenary
<i>09:50–10:10</i>		<i>Panel Discussion</i>	
<i>10:10–10:30</i>		<i>Coffee Break</i>	
10:30–12:00		Closing Session: Awards, Sessions Summary, Conference Highlights & Closing Plenary	M-Plenary
<i>12:00–16:00</i>		<i>Technical Tour: IAEA Laboratories in Seibersdorf</i>	

MONDAY, 7 April 2025

09:30–10:30 **Opening Session:**
Radiation Science and Technology: Solutions for a Sustainable World

Moderator: **N. Mokhtar, IAEA Deputy Director General**

Time	Name	Designating Member State/Organization	
09:30–09:35	Mr R. M. Grossi	IAEA Director General	Introductory Remarks
		High Level Panel Discussion	
09:35–10:10	HE Ms D. Hournau-Pouëzat	Ambassador of France	
	HE Ms M.A. Alomatu Osei-Agyeman	Ambassador of Ghana	
	HE Mr S.W. Ham	Ambassador of the Republic of Korea	
	HE Mr J. F. Facetti	Ambassador of Paraguay	
10:10–10:20	B. Han	Republic of Korea	Review of ICARST-2022
10:20–10:30	T. Kokalova-Wheldon	IAEA	Scene Setting ICARST-2025
10:30–11:00	<i>Coffee Break</i>		

11:00–12:30 **PS01:**
Trends in Radiation Science and Technology

Chairpersons: **M. Denecke, USA**
H. Affum, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
11:00–11:30	829	P. Ulanski	Poland	Ionizing Radiation in Action: From Crosslinking of Polyethylene to Smart, Green and High-Tech Solutions
11:30–12:00	813	S. Pillai	United States of America	Radiation Science and Technology for the Future
12:00–12:30	810	H. J. Pant	ISTRA	Applications of Radioisotope and NDT Techniques in Industry
12:30–14:00	<i>Lunch Break</i>			

14:00–15:30 A01:
Advances in Radiation Science and Technology

Chairpersons: **L. Abad, Philippines**
A. Othman, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
14:00–14:15	788	A. Chmielewski	Poland	Radiation Technologies for Environment Protection - Turning Rubbish into a Resource
14:15–14:30	366	X. Coqueret	France	On the Competition between Cross-Linking Agents and Anti-Oxidants in Radiation-Curable EVA-Blends of Technological Importance
14:30–14:45	815	N. Seko	Japan	Current Status of Radiation Processing Techniques for Functionalization of Polymeric Materials
14:45–15:00	338	S. Yu	Republic of Korea	Physico-Chemical Properties of Catalysts for the Mineralization of Sulfamethoxazole in a High Ionizing Radiation Treatment
15:00–15:15	270	A. Smeets	Belgium	PFAS Remediation: High-Energy Electron Beam Treatment for Water and Filter Matrices
15:15–15:30	Q&A			
15:30–16:00	Coffee Break			

14:00–15:30 B01:
Role of IAEA in Advancement of Radiation Science and Technology

Chairpersons: **T. R. Edgecock, UK**
M. H. Casimiro, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
14:00–14:15	819	O. Guven	Türkiye	Direct Air Capture is the Only Solution to Remove Excess CO2 From the Atmosphere
14:15–14:30	569	F. Kuntz	France	An Irradiation Platform to Educate, Promote and Disseminate the Benefits of using Electron Accelerators
14:30–14:45	839	W. Calvo	Brazil	Development and Construction of a Mobile Electron Beam Accelerator to Treat and Recycle Industrial Effluents
14:45–15:00	330	L. Shen	China	New Progress and Development Trend of Radiation Science and Technology industry in China

15:00–15:15	841	C. Horak	IAEA	The IAEA's Role in Advancing Radiation Science and Technology
15:15–15:30	Q&A			
15:30–16:00	Coffee Break			

**14:00–15:30 C01:
Advances in Radiotracer Technology and Sealed Source Applications**

Chairpersons: **T. Bjørnstad, Norway**
H. Affum, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
14:00–14:15	644	M. Al-Dahhan	United States of America	Advancements in Dual Source Gamma-ray Computed Tomography for Enhanced Multiphase Flow System Analysis
14:15–14:30	568	D. Saengchantr	Thailand	A Study of Laminographic Scanning for Process Distillation Column using Pixel-Sum Simulation and Filtered Back Projection Algorithm of Image Reconstruction
14:30–14:45	399	A. Taheri	Iran	Development of a Gamma-Ray Multiphase Flow Monitoring System utilizing Machine Learning
14:45–15:00	184	M. F. Abdul Rahman	Malaysia	Multiphase Hold-up of Packed Bed Reactor using Gamma Densitometry
15:00–15:15	439	O. Potier	France	Scale-up, Scale-down: How Tracings are Important Tools to Help to Design Full-Scale Reactors and Representative Pilot Plants
15:15–15:30	Q&A			
15:30–16:00	Coffee Break			

**16:00–17:30 A02:
Advanced Radiation Chemistry**

Chairpersons: **P. Ulanski, Poland**
A. Othman, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
16:00–16:15	570	F. Boujelbane	Tunisia	Radiolytic Degradation of Two Emerging Pollutants: Kinetics Comparison, Mechanism Pathways, Toxicity Assessment and Effect Parameter Studies.

16:15–16:30	791	S. Le Caër	France	Radiation Chemistry as a Tool to Accelerate and Understand Ageing Processes in Lithium-ion Batteries
16:30–16:45	840	J. Huang	China	Research and Application of Electron Beam Irradiation for High-Performance Electrical Materials
16:45–17:00	332	A. Lugão	Brazil	Radiation Processing of Biomaterials as a Sustainable Solution for the Universal Health System
17:00–17:15	723	S. Kadlubowski	Poland	Influence of Ionizing Radiation on Hydrophilic Polymers Irradiated in Solid State and Aqueous Solutions
17:15–17:30	<i>Q&A</i>			
18:00–19:30	<i>Welcome Reception</i>			

**16:00–17:30 B02:
Sustainable Development with Radiation Science and Technology**

Chairpersons: **A. Chmielewski, Poland**
 M. H. Casimiro, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
16:00–16:15	820	O. Acuna	United States of America	Contribution of Radiation Technologies to Sustainable Development Goals, particularly Ensuring Food Security and Food Safety through the Adoption of E-Beam/X-ray Technologies
16:15–16:30	567	A. Saadaoui	Morocco	Scanning Solutions for Pipelines and Trees using Gamma Rays
16:30–16:45	732	H. AbdelRehim	Egypt	Application of Radiation Technology in Industrial Processes and Cultural Heritage Preservation
16:45–17:00	448	L. Cortella	France	Using Ionizing Radiation to Treat Cultural Heritage Artefacts for their Conservation
17:00–17:15	377	I. M. Zainal Abidin	Malaysia	Enhancing Regional Capabilities through NDT-CE Training: Insights from the IAEA-RCA Project in Asia and the Pacific
17:15–17:30	<i>Q&A</i>			
18:00–19:30	<i>Welcome Reception</i>			

16:00–17:30 C02:
Trends in NDT in Civil Engineering

Chairpersons: **C. Belinco, Argentina**
G. Maghella, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
16:00–16:15	352	E. Niederleithinger	Germany	Emerging Technologies for Non-Destructive Testing and Monitoring of Concrete Structures in Nuclear Facilities
16:15–16:30	610	S. Laprida	Argentina	NDT-CE in Heavy Industrial Facilities
16:30–16:45	685	E. Ilari	France	An Insight into Fire Behaviour of Concrete via Neutron Radiography
16:45–17:00	507	C. Caballero	Argentina	Non-Destructive Evaluation and Characterization of the Loma de la Lata Embankment Dam using Cosmic-Ray Muography
17:00–17:15	31	M. N. I. Mohamed	Malaysia	Low Frequency Ultrasonic Coded Waveform Technique for the Inspection of Highly Attenuation Concrete Samples
17:15–17:30	Q&A			
18:00–19:30	Welcome Reception			

TUESDAY, 8 April 2025

09:00–10:30 **A03:**
Advanced Nanomaterials and Composites

Chairpersons: **N. Ramamoorthy, India**
 A. Othman, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
09:00–09:15	654	S. K. Sakata	Brazil	Gamma Irradiation Synthesis of rGO-Ni/NiO Nanocomposites with Supercapacitive Properties
09:15–09:30	197	D. Nguyen	Vietnam	Preparation of Silver-Copper Nano/Diatomite by Irradiation Method in order to Treat the Pathogenic Bacteria for Catfish (<i>Pangasianodon hypophthalmus</i>)
09:30–09:45	462	W. Pasanphan	Thailand	Low-Energy Electron Beam Modification of Electrospun Bioactive Non-Woven Nanofibers from Silk Fibroin Polypeptide and its Blends with Plant Extracts
09:45–10:00	692	M. S. Bogar	Germany	The Role of Electron Beam Irradiation in Tailoring Porous Carbon Fibers for Enhanced Battery and Energy Storage Applications
10:00–10:15	534	L. M. Mota Ferreira	Portugal	Nano-Magnetic Bioadsorbents for REEs Recovery via Gamma Irradiation Assisted by ILs
10:15–10:30	Q&A			
10:30–11:00	Coffee Break			

**09:00–10:30 B03:
Radiation Treatment of Pollutants in Aqueous Effluents**

Chairpersons: **M. Driscoll, USA**
 M. H. Casimiro, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
09:00–09:15	358	S. He	China	Electron Beam Technology for the High Concentrated UDMH Solution Treatment
09:15–09:30	549	K. Kovács	Hungary	-OH Induced Degradation of Trimethoprim in Aqueous Solutions
09:30–09:45	203	S. Borrelly	Brazil	Antibiotics Degradation and Toxicity Removal by Electron Beam Irradiation
09:45–10:00	43	Ö. Kantoglu	Türkiye	Radiation Induced Treatment of Leachate Nanofiltration Concentrate
10:00–10:15	836	B. Han	Republic of Korea	Radiation Technology for Cleaner Environment
10:15–10:30	Q&A			
10:30–11:00	Coffee Break			

**09:00–10:30 C03:
Imaging Technologies and Thin Layer Activation**

Chairpersons: **P. Brisset, ISTR**
 G. Maghella, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
09:00–09:15	143	N. Barrientos Lobos	Chile	Tomographic Imaging of Industrial Water Pipelines: An Application for Detecting Detached Coatings
09:15–09:30	601	W. Kairu	Kenya	Utilizing SRGAN for Enhanced Structural Evaluation of Reinforced Concrete via Gamma Computed Tomography
09:30–09:45	86	F. Ditroi	Hungary	Double Activation for Producing Radioactive Tracers in Friction Parts for Thin Layer Activation (TLA) in Wear Measurement
09:45–10:00	215	T. Bjørnstad	Norway	Unconventional TLA for Tribological Examinations
10:00–10:15	268	J. Biswal	India	Evaluation of Organic Inhibitors for Corrosion Control of Copper Alloy using Thin Layer Activation Method

10:15–10:30	Q&A
10:30–11:00	Coffee Break

**11:00–12:30 A04:
Advanced Polymeric Materials**

Chairpersons: **O. Guven, Türkiye**
 A. Othman, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
11:00–11:15	413	N. Deghiedy	Egypt	Sustainable Gamma Radiation-Assisted Synthesis of Conductive Polyaniline-Silver Nanocomposites: Synergistic Properties and Multifunctional Applications
11:15–11:30	617	M. Q. Tran	Vietnam	Radiation Cross-Linking of Cassava Starch to Use as Absorbents for Removal of Phenol Red from Wastewater
11:30–11:45	364	A. Schulze	Germany	Enhancing the Performance of Polymer Membrane Filters through Electron Beam Surface Engineering
11:45–12:00	105	M. Nasef	Malaysia	Unlocking the Potential of Radiation Grafted Amine-Containing Adsorbents for CO ₂ Capture and Natural Gas Upgrading
12:00–12:15	432	G. Tataru	France	Effect of EB-Radiation on 3D-Printed Materials: The Contrasting Behaviors of Poly(Lactic Acid) Modeled by FDM and Acrylate Networks Produced by SLA
12:15–12:30	Q&A			
12:30–14:00	Lunch Break			
	Side Event 01: Spotlight on the NUTEC Plastics			

**11:00–12:30 B04:
Environmental Monitoring and Protection**

Chairpersons: **B. Han, Republic of Korea**
 M. Pinak, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
11:00–11:15	833	Y. Liu	China	Radiation Technology for Health, Environment and Sustainable

				Development - Good Practices in Asia
11:15–11:30	48	A. Genc	Türkiye	Radiation Assisted Decontamination of Antibiotic-Resistant Microorganisms in Hospital Wastewater Effluent
11:30–11:45	823	L. L. Schaap	Germany	Degradation of Micropollutants in Wastewater by Hybrid Treatment with Low-Energy Electrons and Ozone
11:45–12:00	826	J. Burnett	IAEA	The Terrestrial Environmental Radiochemistry Laboratory
12:00–12:15	832	M. Metian	IAEA	Role of the IAEA Marine Environment Laboratories in Marine Environmental Monitoring and Protection
12:15–12:30	Q&A			
12:30–14:00	Lunch Break Side Event 01: Spotlight on the NUTEC Plastics			

**11:00–12:30 C04:
New Tracers and Methodologies for Mass Flow Monitoring**

Chairpersons: **J. Thereska, ISTR**
H. Affum, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
11:00–11:15	211	K. Fure	Norway	New Water Tracer for Improved Monitoring of Phase Separation and Residence Time Distribution in Industrial Process Equipment during Operation
11:15–11:30	139	P. Brisset	ISTRA	Micro-Leakage Detection on a Steam Generator
11:30–11:45	229	M. El Tokhy	Egypt	Efficient Processing Algorithms of Radiotracer Signals for Optimizing Flow Rate Measurements Based on Residence Time Distribution
11:45–12:00	103	A. Ioannidou	Greece	The Natural Radionuclide ⁷ Be as a Tracer in the Study of Hydrodynamics of Artificial Wetlands
12:00–12:15	387	A. Tejera Cruz	Spain	Tracing Coastal Sediment Dynamics using Natural Radionuclides: Case Studies from Gran Canaria Beaches
12:15–12:30	Q&A			
12:30–14:00	Lunch Break Side Event 01: Spotlight on the NUTEC Plastics			

**16:00–17:30 A05:
Radiation-Modified Natural and Bio-Based Polymer Materials**

Chairpersons: **M. Al-Sheikhly, USA**
 M. H. Casimiro, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
16:00–16:15	485	M. Driscoll	United States of America	The Effect of Ionization Radiation on the Structure of Lignin
16:15–16:30	790	M. Kaci	Algeria	Investigation on the Morphology and Properties of Melt Spun Poly(Lactic Acid)/Cellulose Fibers under Gamma Irradiation
16:30–16:45	809	L. Meszaros	Hungary	Recycling of Waste Tyre Rubber Containing Natural Rubber with the Aid of Ionising Radiation
16:45–17:00	025	E. Khozemy	Egypt	Moringa Extract Loaded on PVA/Chitosan Edible Coatings using Gamma Irradiation to Control the Insect Infestation and Maintain the Quality of Semi-Dry Dates (Siwi cv.) during Storage at Room Temperature
17:00–17:15	24	T. Sangtawesin	Thailand	Gamma and Electron Beam Irradiation: Pioneering Bio-Based Carbon Modifications for Advanced Energy and Environmental Applications
17:15–17:30	Q&A			
18:00–19:30	Side Event 02: Radiation Technology for a Better Home Side Event 03: Enhancing Global Collaboration in NDT for Disaster Recovery Enhancement			

**16:00–17:30 B05:
Applications in Food and Agriculture**

Chairpersons: **S. Pillai, USA**
 C. Blackburn, FAO/IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
16:00–16:15	510	A. Vargas Rivadeneira	Belgium	Versatile Solutions for Phytosanitary Irradiation and Multi-Purpose Applications
16:15–16:30	2	M. Lacroix	Canada	Dual Effect of pH and X-ray Irradiation on Properties of Gelatin/ Trans-Cinnamaldehyde-Based Composite Films for Sustainable Packaging

16:30–16:45		C. Praveen	United States of America	Combining Quantitative Microbial Risk Assessment (QMRA) and eBeam processing to control food safety risk in fresh produce
16:45–17:00	113	S. Mejri	Tunisia	Contribution of Irradiation Technologies to Enhance the Storage Life of Olive Fruits in Tunisia, the World's Second Largest Olive Oil Producer
17:00–17:15	517	B. Saputro	Indonesia	Calibration, Intercomparison and Simulations: Key Factors in Dosimetry for Better Phytosanitary Treatment
17:15–17:30	Q&A			
18:00–19:30	<i>Side Event 02: Radiation Technology for a Better Home</i> <i>Side Event 03: Enhancing Global Collaboration in NDT for Disaster Recovery Enhancement</i>			

**16:00–17:30 C05:
Radiotracer Studies for Sediments Dynamics**

Chairpersons: **A. Tejera Cruz, Spain**
G. Maghella, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
16:00–16:15	310	R. Koomans	Netherlands	Integration of Radiometric Fingerprinting and Grain Size Distribution Analysis for Enhanced Understanding of Sediment Dynamics
16:15–16:30	41	J. Bezuidenhout	South Africa	Investigation of the Relationship between Grain Size and the Concentrations Natural Radionuclides in Sediment
16:30–16:45	181	R. Moreira	Brazil	The Use of Natural Isotopes as Tracers for Sediment Transport
16:45–17:00	404	C. Tsampanis	Greece	Development of a Radioactivity Mapping Tool to Study Sediment Dynamics at the Shoreline Enabling Nuclear Techniques
17:00–17:15	560	K. K. Kilel	Kenya	Assessing Sediment Transport Processes using Multivariate Analysis of Natural Radionuclides in Aquatic Environments
17:15–17:30	Q&A			
18:00–19:30	<i>Side Event 02: Radiation Technology for a Better Home</i> <i>Side Event 03: Enhancing Global Collaboration in NDT for Disaster Recovery Enhancement</i>			

WEDNESDAY, 9 April 2025

09:00–10:30 **A06:** Radiation Sterilization and Decontamination

Chairpersons: **A. Miller, Denmark**
C. Horak, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
09:00–09:15	822	M. V. Vogt	Argentina	The State of Radiation Sterilization in Argentina: Challenges and Opportunities
09:15–09:30	726	H. Bagla	India	Study on Ageing Related Deterioration of Polymer Catheters Irradiated with Electron-Beam
09:30–09:45	802	B. Croonenborghs	Belgium	ISO 11137-1; What's New in the 2025 Version?
09:45–10:00	420	L. Fifield	United States of America	Filling Data, Education and Tool Gaps that Impede Transition to E-Beam and X-ray – Progress Update of an International Collaborative Team
10:00–10:15	102	M. Comben	IIA	Industry Collaboration to Enhance the Security and Sustainability of Radiation Processing
10:15–10:30	Q&A			
10:30–11:00	Coffee Break			

09:00–10:30 **B06:** Current Status of EB, Gamma, and X Ray Facilities

Chairpersons: **M. Haji-Saeid, USA**
V. Starovoitova, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
09:00–09:15	297	A. Pierard	Belgium	The Rise of Solid-State Power - A Game Changer in the Accelerator World
09:15–09:30	51	A. Bryazgin	Russia	High-Energy Industrial Electron Accelerators ILU Type
09:30–09:45	821	R. Wiens	Canada	Gamma Sterilization: Sustainable Technology for the Long Term
09:45–10:00	831	C. Balt	South Africa	Gamma Irradiation in South Africa, Past, Present and Future Developments

10:00–10:15	166	W. Peng	China	Optimized Design and Integrated Supply of Product Handling Systems for Irradiation Facilities
10:15–10:30	Q&A			
10:30–11:00	Coffee Break			

**09:00–10:30 C06:
Radiotracer Investigation in Process Industries**

Chairpersons: J-H. Jin, ISTR
H. Affum, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
09:00–09:15	141	J. Thereska	ISTRA	Radioactive Tracers for Diagnosing Industrial and Environmental Processes
09:15–09:30	6	N. Othman	Malaysia	Investigation of Process Flow inside Demineralizer Column of PUSPATI TRIGA Reactor (RTP) using Radiotracer Technique
09:30–09:45	257	G. Appiah	Ghana	Analysis of Residence Time Distribution (RTD) of a Wastewater Treatment Unit at an Oil Refinery using Radioactive Tracer Technique
09:45–10:00	240	R. Alami	Morocco	Measuring Mean Residence Time using Responses Curves to Dirac and Non-Dirac Radiotracer Injection Pulses in a Phosphoric Acid Production Line
10:00–10:15	626	M. Vernal Luna	Chile	Detection and Evaluation of Scale Deposits in Geothermal Pipes using Gamma Pipe Scan: Case Study
10:15–10:30	Q&A			
10:30–11:00	Coffee Break			

**11:00–12:30 A07:
Microbiological Qualification**

Chairpersons: M. Lacroix, Canada
C. Horak, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
11:00–11:15	816	J. Madureira	Portugal	The Role of Extracts from Irradiated Agro-Industrial Byproducts in Microbial Control of Minimally Processed Fresh Food

11:15–11:30	524	P. Gao	China	Study on Effect of Irradiation Sterilization on Tibetan Medicine Shiwei Ruxiang Pill
11:30–11:45	611	Z. Khan	United States of America	Does Exposure to Sub-Lethal Electron Beam Doses Cause Stress-Induced Bacterial Conjugation?
11:45–12:00	444	K. Knez	Germany	Antibacterial Surfaces by Electron Treatment of Polylactide
12:00–12:15	694	R. A. Wach	Poland	Effect of Ionizing Radiation on Physicochemical and Biological Properties of Poly (Trimethylene Carbonate) and Poly (Lactic Acid) Copolymers
12:15–12:30	834	V. Vijewardana	IAEA	Irradiation Technologies for Vaccine Development
12:30–12:45	Q&A			
12:45–14:00	Lunch Break Side Event 04: Radiotracer and Sealed Sources Certification for Industrial Excellence			

**11:00–12:30 B07:
Advancements in Machine Sources**

**Chairpersons: J. Brison, Belgium
 V. Starovoitova, IAEA**

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
11:00–11:15	398	T. R. Edgecock	United Kingdom	Electron Accelerators for the Future
11:15–11:30	133	S. Kutsaev	United States of America	Small Scale Electron Linear Accelerators for Industrial Applications
11:30–11:45	326	L. Delaunay	France	Supplementing Gamma Radiation With E-Beam or X-Ray for Single Use Systems' Sterilization Purpose – A Material Viewpoint
11:45–12:00	83	S. Taskaev	Russia	Accelerator Based Neutron Source VITA for Radiation Technology in Physics, Material Science and Medicine
12:00–12:15	472	Y. Zhang	China	Application Scenarios for the Self-Shielding Electron Accelerator and the Prospect of EB Irradiation Curing
12:15–12:30	Q&A			
12:30–14:00	Lunch Break Side Event 04: Radiotracer and Sealed Sources Certification for Industrial Excellence			

**11:00–12:30 C07:
Sealed Sources and Radiotracer Techniques in Industry**

Chairpersons: **N. Othman, Malaysia**
G. Maghella, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
11:00–11:15	389	P. Baricholo	Zimbabwe	Evaluation of the Mechanical Structure of an Air Liquefaction Distillation Column using Gamma Column Scanning Technique
11:15–11:30	149	H. Mahmoud	Egypt	Capsule Networks for Naphtha Splitter Column Malfunctions Classification Based Gamma Scanning Techniques
11:30–11:45	9	A. S. Mohd Yunos	Malaysia	Verification on Underground Pipe Leakage for Fire Hydrant System using Industrial Radiotracer Tc-99m
11:45–12:00	249	J-H. Jin	ISTRA	Effect of Experimental Parameters on the Uncertainty of Residence Time Distribution Analysis using Radiotracers
12:00–12:15	245	D. Pham Van Bang	Canada	Numerical Study of the Scour Erosion Around a Square-shaped Pile at Different Positions in a Narrow or Wide Channels
12:15–12:30	Q&A			
12:30–14:00	<i>Lunch Break</i> <i>Side Event 04: Radiotracer and Sealed Sources Certification for Industrial Excellence</i>			

**16:00–17:30 A08:
Tissue Engineering & Tissue Banking**

Chairpersons: **R. Wach, Poland**
C. Horak, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
16:00–16:15	757	P. Myint	United Kingdom	The Changing Landscape of Tissue Banking
16:15–16:30	451	P. Bustamante	Argentina	Enhancing Irradiation Capacities for Tissue Engineering and Tissue Banking in Latin America and the Caribbean: The Impact of an IAEA Regional Project
16:30–16:45	409	R. Sanchez	Mexico	Radiosterilized Pig Skin, Silver Nanoparticles and Skin Cells as an Integral Dressing Treatment for Burns:

				Development, Pre-Clinical and Clinical Pilot Study
16:45–17:00	300	M. B. Mathor	Brazil	Morphological Analysis of Micro Computed Tomography (Micro-CT) Images of Human Tendon Tissue Sterilized by Ionizing Radiation
17:00–17:15	152	S. Korraa	Egypt	Immunosuppression by Ionizing Radiation for Promoting Stem Cell Therapy using Expanded in Vitro Bone Marrow Mesenchymal Stem Cells Compared to Differentiated Beta Cell for Regenerating Alloxan Damaged Beta Cells in Rats
17:15–17:30	Q&A			
18:00–19:30	Side Event 05: Collaboration in Action: Advancing Research Through Coordinated Research (CRP)			
	Side Event 06: Peaceful Uses of Machine Based Radiation Technologies			

**16:00–17:30 B08:
Dosimetry and Quality Management**

**Chairpersons: F. Kuntz, France
 V. Starovoitova, IAEA**

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
16:00–16:15	73	S. Eva Pawlak	Argentina	Gammacell-220 Isodose Curves after Reloading with ⁶⁰ Co Sources
16:15–16:30	337	U. Gryczka	Poland	Micrometer Dosimetry for LEEB Irradiation
16:30–16:45	566	A. Miller	Denmark	Process Control at Low Energy E-beam Sterilization
16:45–17:00	600	A. Nasreddine	France	Study of the Impact of the Absorbed Dose Rate on the Response of Alanine Dosimeters
17:00–17:15	655	K. Han	Republic of Korea	Dosimetry Intercomparison Exercise for Gamma and E-Beam using Alanine Pellet Dosimeter
17:15–17:30	Q&A			
18:00–19:30	Side Event 05: Collaboration in Action: Advancing Research Through Coordinated Research (CRP)			
	Side Event 06: Peaceful Uses of Machine Based Radiation Technologies			

**16:00–17:30 C08:
NDT Monitoring for Civil Infrastructure**

Chairpersons: **L. Dick, New Zealand**
H. Affum, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
16:00–16:15	39	H. Xargay	Argentina	NDT Monitoring: Acoustic Emission & Machine Learning for Crack Detection in Concrete Structures
16:15–16:30	259	E. Ali	Egypt	Hydraulic Structure Health Monitoring Before and After Rehabilitation with Nondestructive Testing using Artificial Intelligence Technique
16:30–16:45	586	A. Domato	Spain	Structural Study using NDTs for a Military and Temporary Bridge Built in 40s and Actually in Use. Feixa Llarga's Bridge in Barcelona
16:45–17:00	687	S. García	Mexico	An Intelligent Translator for NDT Application in Reinforced Concrete Structures
17:00–17:15	438	D. Foppoli	Italy	Building a Network of NDT-CE Personnel to Counteract Disaster Effects on Both Civil and Cultural Heritage Structures
17:15–17:30	Q&A			
18:00–19:30	<i>Side Event 05: Collaboration in Action: Advancing Research Through Coordinated Research (CRP)</i>			
	<i>Side Event 06: Peaceful Uses of Machine Based Radiation Technologies</i>			

THURSDAY, 10 April 2025

09:00–10:30 **PS02:**
Panel Discussion on Equal Opportunities in Radiation Science and Technology

Moderators: **T. Kokalova-Wheldon**
C. Horak, IAEA

Time	Name	Designating Member State/Organization
09:00–10:30	N. Mokhtar	IAEA Deputy Director General
	HE Mr I. Biggs	Ambassador of Australia
	HE Ms J. E. Villatoro Tario	Ambassador of El Salvador
	N. Othman	Malaysia
	A. Zaouak	Tunisia
	S. E. Fiadey	Ghana
	R. Attia	IAEA
	K. Schaal	IAEA
10:30–11:00	<i>Coffee Break</i>	

11:00–12:30 **PS03:**
Panel Discussion on Education and Training in Radiation Science and Technology

Chairpersons: **A. Safrany, Hungary**
C. Horak, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title
11:00–11:10	479	A. C. Raffo Caiado	United States of America	Advancing International Integration and Strengthening Responsible Peaceful Uses of Nuclear Applications Through Specialized Curriculums
11:10–11:20	800	N. Delerue	France	Challenging Students to Propose Innovative Solutions for the Environnement using Particle Accelerators
11:20–11:30	811	X. Perrette	France	Skills as the Cornerstone for Nuclear Science, Technologies and Applications Development. France Experience and Commitments.

11:30–11:40	835	M. B. Mishar	IAEA	Engaging Youth Through Innovative Learning Strategies in Nuclear Science Education TC Project
11:40–11:50	827	G. R. De Neumayr	IAEA	Training Opportunities at the Nuclear Sciences and Applications Laboratories: Enhancing Access to Capacity-Building
11:50–12:00	830	M. H Casimiro	IAEA	IAEA E-Learning Courses on Applications of Ionizing Radiation: Exploring Science & Technology
12:00–12:30	<i>Panel Discussion</i>			
12:30–14:00	<i>Lunch Break</i>			
	<i>Side Event 07: Empowering the Next Generation: The Impact of Mentoring</i>			

**14:00–15:30 A11:
Preservation of Cultural Heritage**

Chairpersons: **K. Marusic, Croatia**
 M. H. Casimiro, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
14:00–14:15	226	I. Moise	Romania	Low Temperature Irradiation for Disinfestation of Paper Documents
14:15–14:30	262	D. Chmielewska-Śmietanko	Poland	Electron Beam Irradiation for Preservation of Old Prints
14:30–14:45	44	E. Ergun	Türkiye	Gamma Irradiation for Treatment of Historical Carpets - A Study of Natural Dyes
14:45–15:00	315	P. A. Vasquez	Brazil	First Brazilian Successful Case of Consolidation by Ionizing Radiation of a Polychrome Wood Sculpture– Research and Application
15:00–15:15	81	S. Masic	Serbia	The Use of Radiation Technology for the Protection of the Archeological Site of Vinča from the Neolithic Age
15:15–15:30	<i>Q&A</i>			
15:30–16:00	<i>Coffee Break</i>			

**14:00–15:30 B11:
Advanced Radiation-Assisted Polymer Recycling**

Chairpersons: **K. Harre, Germany**
 A. Othman, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
14:00–14:15	588	J. Madrid	Philippines	Enhancing Mechanical Properties of Recycled Plastics Through Electron Beam Treatment
14:15–14:30	460	N. A. Sasongko	Indonesia	Radiation-Induced Enhancements in Multilayer Plastics Recycling and Compostable Polymers: Environmental Impacts and Benefits
14:30–14:45	593	R. Zeumer	Germany	Life Cycle Assessment for Thermoplastic Elastomers Based on Electron Beam-Assisted Recycling of Polyolefin and Rubber Waste
14:45–15:00	390	M. C. Cingolani	Argentina	Impact of Ionizing Radiation on Recycled Polymer-Based Composite Materials
15:00–15:15	285	A. Zaouak	Tunisia	A New Kind of Concrete using Irradiated Plastic Waste: A Solution for Reducing Greenhouse Gas Emissions
15:15–15:30	Q&A			
15:30–16:00	Coffee Break			

14:00–15:30 C11:
Flow Modelling: RTD & CFD

Chairpersons: **O. Potier, France**
H. Affum, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
14:00–14:15	411	J. C. G. Laurent	France	Numerical Residence Time Distribution: Comparison of Computational Fluid Dynamics and Smoothed Particles Hydrodynamics Frameworks
14:15–14:30	659	J. Luis-Gómez	Spain	Hydrodynamic and Biological Modelling of Constructed Wetland through CFD Simulations
14:30–14:45	706	C. Dagadu	Ghana	Review of Residence Time Distribution Simulation Parameters of Stirred Tanks
14:45–15:00	419	Y. Bouaichaoui	Algeria	CFD Modeling of Residence Time Distribution (RTD) using Radioisotope and Chemical Tracer
15:00–15:15	547	T. M. Aljuwaya	Saudi Arabia	Innovative Design of Gamma-Ray Densitometry (GRD) Technique for Multiphase Flow Systems

15:15–15:30 Q&A

15:30–16:00 Coffee Break

16:00–17:30 A12:
Computational Tools for Radiation Processing

Chairpersons: M. Jonsson, Sweden
V. Starovoitova, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
16:00–16:15	407	R. Schwarz	United States of America	PUFFIn – A simple Dose Distribution Simulation Software Tool for Gamma, X-Ray, and Ebeam Irradiation Processes
16:15–16:30	673	M. Al-Sheikhly	United States of America	Developing of Machine Learning Models for the Optimization of Radiation Synthesis
16:30–16:45	-	E. Mazzoli	Italy	Bridging Economics and Circularity: An Innovative Tool for Sustainable Plastic Recycling Assessment
16:45–17:00	797	K. Halagan	Poland	The Creative Aspects of Irradiation in the Example of Polymerization and Crosslinking by Computer Experiment
17:15–17:30	Q&A			
18:00–19:30	<i>Side Event 08: Radiation-based technology for Preservation of Cultural Heritage Objects</i> <i>Side Event 09: Tools for Radiation Technology Users</i>			

16:00–17:30 B12:
Emerging Applications in Radiation Processing

Chairpersons: D. Chmielewska-Śmietanko, Poland
M. H. Casimiro, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
16:00–16:15	172	J. Kim	Republic of Korea	Design Study of a High-Current q/A=1/2 K100 Compact Cyclotron for the Production of Radiotracers for Industry
16:15–16:30	825	A. A. Basfar	Saudi Arabia	Emerging Applications of EB/Xray/Gamma in Asia
16:30–16:45	574	I. Danko	Kazakhstan	Establishment of a Production Facility for Radiation-Crosslinked Hydrogel Dressings

16:45–17:00	537	R. Ludorfne Homlok	Hungary	Radiation Processing and Salt Concentration: Emerging Approach for Modifying Staphylococcus Aureus Resistance
17:00–17:15	340	M. Majer	Croatia	High Dose Rate Irradiations at the 60Co Gamma Irradiation Facility – Experimental and Monte Carlo Simulation Results
17:15–17:30	Q&A			
18:00–19:30	<i>Side Event 08: Radiation-based technology for Preservation of Cultural Heritage Objects</i> <i>Side Event 09: Tools for Radiation Technology Users</i>			

**16:00–17:30 C12:
Diagnostic Methods for Cultural Heritage**

Chairpersons: **R. Alami, Morocco**
G. Maghella, IAEA

Time	Paper No.	Name	Designating Member State/Organization	Title of Paper
16:00–16:15	362	L. Aliverti	Italy	Non-Destructive Testing Applied to the Safeguarding and Conservation of Wooden Roofs of Italian Historic Architecture
16:15–16:30	670	K. Kurnianto	Indonesia	Development of Fluoroscopic Dual-Energy CT as a Non-Destructive Tool Identify Indicators for Fossilized Bone
17:00–17:15	628	G. Totani	Italy	NDT Testing and Ground/ Foundation Investigations for Design the Reinforcement Works of a Historical Building in L'Aquila (Italy)
16:45–17:00	228	D. Ghiga	Romania	HBIM Applied for Historical Building using NDT and 3D Modeling Techniques
16:30–16:45	631	C. Salameh	Lebanon	Advanced Non-Destructive Diagnostic Approaches for the Conservation of Sursock Palace Post-August 4th Explosion-Lebanon
17:15–17:30	Q&A			
18:00–19:30	<i>Side Event 08: Radiation-based technology for Preservation of Cultural Heritage Objects</i> <i>Side Event 09: Tools for Radiation Technology Users</i>			

FRIDAY, 11 April 2025

**09:00–10:10 PS04:
Flagship Initiatives, Success Stories & Future Perspectives**

**Chairpersons: L. Shen, China
H. Affum, IAEA**

Time	Paper No.	Name	Designating Member State/Organization	Title
09:00–09:50	806	U. Gohs	Germany	Radiation Assisted Recycling of Plastic Waste - A Journey from Vision to Laboratory Prototypes
	837	A. Kovács	Hungary	Outstanding Results and Impacts of the Regional Project in Europe
	579	C. Belinco	Argentina	NDT Civil Structures Capabilities Development in the Latin America and the Caribbean Region with IAEA Support
	100	R. Baharin	Malaysia	Improvement of Dosimetry Systems in Radiation Processing Facilities in the Asia Pacific Region
		S. Al Hilali	UNIDO	Circular solutions for plastic pollution prevention and management
09:50–10:10	<i>Panel Discussion</i>			
10:10–10:30	<i>Coffee Break</i>			

**10:30–12:00 Closing Session:
Awards, Sessions Summary, Conference Highlights & Closing Plenary**

**Chairpersons: C. Horak, IAEA
H. Affum, IAEA**

Time	Name	Designating Member State/Organization	Title
10:30–10:45	T. Kokalova-Wheldon	IAEA	Awarding Winners of Young Professional Awards
10:45–11:30	O. Guven	Türkiye	Review of Stream A
	T. R. Edgecock	United Kingdom	Review of Stream B
	T. Bjørnstad	Norway	Review of Stream C
11:30–11:50	P. Ulanski	Poland	Conference Highlights
11:50–12:00	T. Kokalova-Wheldon	IAEA	Closing Remarks

Poster Presentations

Tuesday, 8 April 2025

**14:00–15:30 P01:
Poster Session 1**

M02 / Poster Area

Poster Board No.	Paper No.	Name	Designating Member State/Organization	Title of Paper
1	22	A. Maneewong	Thailand	An Experience of Electron Beam (EB) Irradiated Gemstones in Thailand
2	23	A. M. Mansour	Egypt	Optimization of Physicochemical Properties of Carboxymethyl Chitosan/Polyvinyl Alcohol/Curcumin Edible Antimicrobial Films for Food Packaging Application
3	768	S. Masic	Serbia	Conservation of Leather Cultural Heritage Objects by Gamma Irradiation
4	42	A. Ali	Egypt	Phytosanitary Irradiation Treatment of Sitotroga Cerealella Olivier (Lepidoptera – Glechiidae) and Assessment of its Effect on Physicochemical and Microbiological Quality of Wheat Flour and Toast Bread
5	46	M. Gökalp	Türkiye	Monte Carlo Based Dose Calculation of Fluidic Stream for Wastewater Treatment
6	47	G. Gundogdu	Türkiye	Validation Process of a Newly Established Shutter and Conveyor System Adapted to the Electron Beam Facility Initially Designed for Flue Gas Treatments
7	50	K. Y. Kantoglu	Türkiye	Mutation Breeding Studies in Türkiye
8	53	M. Bagherzadeh	Iran	Gamma Radiation-Assisted Synthesis of Metal Nanoparticles in MNSR Research Reactor for Catalytic Applications
9	67	G. Adil Mahmoud	Egypt	Adsorption of Strontium Ions from Aqueous Solutions using Radiation Synthesized Starch /2-Hydroxyethylmethacrylate/ Bismuth Nanocomposite
10	69	R. Katoch	India	A Comparative Investigation on Radiated and Non-Radiated Chitosan on Productivity, Digestibility and Defense Responses in Festuca Arundinacea
11	71	V. Golosov	Russia	Similarities and Differences in the ¹³⁷ Cs Accumulation on Floodplains of Rivers in Zones of Radioactive Contamination: Chernobyl and Fukushima
12	84	A. Cruz	Brazil	Implementation of Alanine Postal Dosimetry Audit Service for Radiotherapy
13	85	V. Asfora	Brazil	Nuclear Science Museum: A Tool to Support Science Teaching

14	92	M. Heidarieh	Iran	The Possible Effects of Iranian Propolis on Potassium Dichromate Reabsorption with Different Tissues in Redfish (<i>Carassius Auratus</i>)
15	94	T. M. Ting	Malaysia	Radiation Techniques for Converting Plastic Waste into Feedstock Oil and Functional Additives
16	97	W. Yang	China	Latest Advancements in Radiation Therapy Technology: A Novel Image-Guided Gamma Ray Radiotherapy System
17	104	S. Selambakkannu	Malaysia	Radiant Remediation: Harnessing Irradiated Soil Compost for Microplastics Degradation
18	106	M. Gurbanov	Azerbaijan	Study of Pyrolysis of Pre-Irradiated Plastic Wastes by Thermogravimetric, IR and GC Methods
19	107	T. Puspitasari	Indonesia	Development of Compatibilizers Generated from PE/PP Recycled by Using Radiation Processing to be Used for Wood Plastics Composite (WPC)
20	108	S. A. Ismail	Egypt	Radiation-Induced Synthesis of Polysaccharide-Based Hydrogels for Efficient Removal of Toxic Dyes from Simulated Solution
21	109	Y. Sun	Poland	Investigation on Degradation Mechanism of Sulfamethoxazole in Aqueous Solution under Electron Beam Irradiation Based on Numerical Simulation
22	117	J. Lee	Republic of Korea	Application of Irradiation Processing to Manufacture Pork Liver Paste for the Companion Dog
23	124	V. Puripunyanich	Thailand	Effects of Electron Beam Irradiation on the Germination of 23 Thai Rice Cultivars
24	127	F. Nurlidar	Indonesia	Effect of Gamma-Irradiation on Ultra-High Molecular Weight Polyethylene Plates Irradiated in Air and Vacuum Conditions
25	129	I. Vukoje	Serbia	Physicochemical Properties of Nano-Ag/PNiPAAm Hydrogel Nanocomposites: Nanospheres vs. Nanoprisms
26	132	M. Kraiem	Tunisia	Pre-Feasibility Study for a Public-Private Partnership Project of a Large-Scale Irradiation Facility in Tunisia
27	134	M. Shalaby	Egypt	Gamma-Irradiation Induced Synthesis of Ag-Decorated Mg ₂ Si: Ion Beam Analysis Investigation for Enhanced Thermoelectric Performance
28	145	M. A. Etoom	Jordan	The Impact of Gamma Irradiation on the Chemical, Morphological, and Mechanical Properties of Polystyrene Used in Petri Dishes at Various Exposure Time
29	146	M. Rajib	Bangladesh	Development of Horizontal Flow Constructed Wetlands for Radiotracer Application
30	147	H. Albazzaz	Kuwait	Applications of Gamma Ray Densitometer Coupled with App Graphical User Interface

31	150	H. Mahmoud	Egypt	Performance Evaluation of Multi-Channel Data Acquisition System for Industrial Radioisotopes Applications
32	153	S. Korraa	Egypt	Growth of Amnion Cells and Vero Cells over Electro-Spun Polycaprolactone Nanoscaffolds
33	159	M. Ghobashy	Egypt	Radiation Synthesis of Advanced Hydrogel-Based Acrylic Acid Derivatives with Highly Mechanical Strength for Use as a Replacement of Cartilage
34	163	M. Grasselli	Argentina	Modification of Albumin in Nanoparticles Prepared by Gamma Irradiation under Reductive Conditions
35	171	R. Coulon	BIPM	The International Bureau of Weights and Measures Commitment on Establishing International References for Activity Measurement
36	180	S. Borrely	Brazil	Electron Beam Technology as a Potential Treatment for Surfactants in Water: Degradation and Detoxification LAS
37	182	A. Slivin	Russia	Applied Stations, Beam Transfer Lines and Radiation Science Research at the NICA Accelerator Complex
38	183	K. Marusic	Croatia	Optimizing Polymer Coatings for Implants and Drug Delivery: Gamma vs. E-Beam Irradiation
39	190	K. Hemvichian	Thailand	Turning Recycled HDPE Pellets Made from Discarded Fishing Nets into Composites with Neutron Shielding Properties
40	199	M. A. J. Mariscotti	Argentina	About Safety in the Application of Gamma Rays to the Inspection of Concrete Structures
41	201	J. Jiménez-Becerril	Mexico	Radiocatalysis in the Treatment of Emerging Contaminants
42	202	H. Palza	Chile	Effect of Gamma Irradiation on the Mechanical Properties of Polyethylene Filled with Different Reinforcement Agents
43	208	T. Jurkin	Croatia	Gamma Irradiation Synthesis of Magnetic Nanoparticles with Promising Properties for Magnetic Hyperthermia Applications
44	210	A. Coulibaly	Mali	Regulatory Considerations for Implementing the First Industrial Accelerator in Mali for Mines Samples Analysis: Photonassay Device 'Type PA1408X' of Chrysos Corporation
45	216	Z. Khalilov	Azerbaijan	Utilization of Industrial Gamma Facility in Azerbaijan
46	218	N. S. Mohd Dom	Malaysia	The Effects of Gamma-Irradiation on Shelf Life and Microbial Reduction of Fresh Chili (<i>Capsicum Annuum</i>)
47	220	H. Ithnin	Malaysia	PHITS Simulation for Gamma-Ray Laminography of Distillation Columns
48	221	I. Tartaro Bujak	Croatia	Physico-Chemical Properties of BNC and BNC-Diatomite Blends in Combination with Low Doses of γ -Irradiation

49	233	R. le Roux	South Africa	An Airborne Platform for the Surveying of Natural Radionuclides in Geological and Environmental Applications
50	244	M. Boadu	Ghana	Strategies to Build an Inclusive Participation and Involvement of Women for Their Professional Career Growth and Advancement: A Case for the Ghana Atomic Energy Commission
51	252	T. G. Angeles	Philippines	Comparison of Gamma and Electron Beam Irradiation for the Increased Production of D-Mannose from Spent Coconut Kernel
52	253	T. Özdemir	Türkiye	Ionizing Radiation Effects on Natural Rubber and Silicone Rubber Used in Medical Devices and Applications
53	255	H. Solomon	Philippines	Validation of the Installation and Operational Qualification of the 2.5 MeV Electron Beam Irradiation Facility of the DOST-Philippine Nuclear Research Institute
54	263	J. A. Luna	Philippines	X-Ray Radiation-Induced Surface Modification of Polypropylene via RAFT-Mediated Graft Polymerization Glycidyl Methacrylate
55	265	F. C. K. Ocloo	Ghana	Comparative Effects of Gamma Rays, Low Energy Electron Beam and High Energy Electron Beam on Microbial Quality of Cloves (<i>Syzygium Aromaticum</i>)
56	318	N. Rahman	Bangladesh	Preparation of a Radiation Grafted Proton Exchange Membrane from ETFE Film for Fuel Cell
57	341	H. Spasevska	North Macedonia	Monitoring Program for Detection of Irradiated Food as a Tool for Raising Consumers' Awareness and Promoting Trading
58	360	S. S. Kyaw	Myanmar	Fabrication of Wood Plastic Composite from Sawdust and Recycled Polymer Wastes: Gamma Irradiation Effect
59	396	M. Rzepna	Poland	Recycling of Cross-Linked Material from Cable Industry by Ionizing Radiation
60	421	M. V. Vogt	Argentina	Technical Cooperation: Contributions of the IAEA in Latin America and the Caribbean for the Recycling of Synthetic and Natural Polymers
61	463	S. Zarei	Iran	Shunt Impedance Measurement of a 6 MeV Standing Wave E-Linac
62	488	S. Pillai	United States of America	Enhancing Methane Production from Municipal Sewage Waste through Electron Beam Technology

Poster Board No.	Paper No.	Name	Designating Member State/Organization	Title of Paper
63	56	B. Aydin	Türkiye	Development of AMP-PAN Based Composite for Cesium Speciation in Aqueous Media
64	241	H. Li	China	Electron Beam Grafting of Modifiable Ionic Liquid Adsorbents and Their Adsorption of Uranyl Ions
65	376	Ö. Kirkayak	Türkiye	Enhancing Hydrophilicity and Hydrophobicity of Polyethylene Hollow Fiber Membranes through Electron Beam Modification
66	378	C. D. Rajapaksha Pathirana	Sri Lanka	Gamma Radiation Induced Synthesis and Stabilization of Silver Nanoparticles: With Special Reference to Textile Applications
67	385	H. Y. Song	Republic of Korea	Gamma Irradiation-Induced Structural Modification of Flavonoids: Enhancing Physiological Activity and Water Solubility for Novel Drug Discovery
68	417	B. Alex Worldlight	Cameroon	The Effect of Composition and Ionizing Radiation on Starch-PVA-Alginate and starch-PVA-alginate-crystalline nanocellulose Films
69	16	R. R. C. Moubakou Diahou	Republic of the Congo	Assessment of Radioactivity, Potentially Toxic Elements and Human Health Risks in the Most Consumed Staple Food in the Republic of Congo
70	192	A. L. Yunus	Indonesia	Synergistic Effects of γ -Irradiation and Zeolite Catalyst for Improving Pyrolysis Process of Polypropylene
71	251	B. J. Barba	Philippines	Synthesis of Carrageenan Plant Growth Promoter Using Low Energy Electron Beam
72	311	S. E. Fiadey	Ghana	Impact of High Energy Electron Beam Irradiation on Mycotoxin Levels of African Nutmeg (<i>Monodora Myristica</i>) Powder
73	395	B. Borda	Argentina	Modification of Recycled Plastics for Application in Composite Materials by Electron Beam
74	482	B. Ondieki	Kenya	The Significance of Education Training and Certification in Radiation Science and Technology
75	500	R. Pires	Portugal	Boosting Bioactive Compounds in <i>Chlorella Sorokiniana</i> : The Role of Gamma Radiation
76	167	D. Ungureanu	Romania	Comprehensive Analysis of Lithic Materials and Mortars for the Conservation of the Holy Archangels Michael and Gabriel Church
77	299	X. Sanchez	Panama	Radiotracer and Natural Radioactivity Methodology and Technologies Applied in Panama
78	343	A. Esquivel	Panama	Soil Redistribution Studies within the Panama Canal Watershed Using FRN and CSSI Methodologies

79*	178	K. Marusic	Croatia	Radiation Crosslinking of Stearic Acid Monolayers on Vaterite: Towards Effective Drug Delivery Systems
80*	449	L. Cortella	France	Fabrics Color Behavior Under Irradiation at Biocidal Doses
81*	198	D. Nguyen	Vietnam	Recycling Plastic Waste from Lobster Cage Nets by Gamma Co-60 Method
82*	475	G. Dawod	Egypt	Enhancing Constructed Wetlands Design and Operations with Radiotracer Technology for Sustainable Wastewater Treatment

*: Normal Session Poster

Poster Board No.	Paper No.	Name	Designating Member State/Organization	Title of Paper
1	37	A. M. Mansour	Egypt	γ -Irradiation Synthesis of Cellulose Acetate/ Acrylic Acid Functionalized Zinc Oxide Nanocomposite for Decontamination of Dye Pollutants from Wastewater
2	118	J. Lee	Republic of Korea	Fleshfingered Citron (Citri Sarcodactylis Fructus) Treated by 30 kGy-Gamma Irradiation Regulates Lipid Metabolism and Promotes Fat Browning in 3T3-L1 Adipocytes
3	164	M. Grasselli	Argentina	X-Ray and Gamma Irradiation to Prepare Biohybrid Albumin/Gold Nanoparticles
4	177	K. Marusic	Croatia	Performance Enhancement of Patinated Bronze Coated with Polymer Nanocoatings
5	254	S. Borrelly	Brazil	Toxicity Reduction in Pharmaceutical Compound Mixtures Using Electron Beam Irradiation
6	282	Q. Nguyen	Vietnam	Application of Stable Water Isotopes Deuterium and Oxygen-18 and Artificial Tracers to Study Water Flooding in Oil Reservoir
7	284	A. Zaouak	Tunisia	Radiation-Induced Grafting of Styrene onto Polyvinylfluoride (PVF) Films: Impact of Grafting Conditions on Grafted Film Properties
8	290	C. E. Emong	Uganda	Radiation Safety of Industrial Radiography Facilities in Uganda
9	291	M. Z. Hasan	Bangladesh	Disinfection and Preservation of Archived Newspapers by Radiation Processing Technologies
10	293	T. Smoliński	Poland	A Leak Detection Displacement Technique Using Radioactive Tracers for Industrial Applications
11	303	J. Yang	China	Research and Application of S-Band High Power Travelling Wave Accelerating Tubes
12	305	E. Ioannidou	Greece	Utilizing Atmospheric Aerosols and Pb-210 as Tracers for Atmospheric Pollution
13	316	M. F Mortuza	Bangladesh	Quality Management in Radiation Dosimetry and Radiation Processing for Low and High Dose Irradiation
14	321	M. Constantin	Romania	Nitrofurantoin and Furazolidone Degradation Using Low Irradiation Doses Combined with Microbial Antibiotic Decomposition
15	323	F. Zorila	Romania	Microorganisms Metabolic Behavior and Surviving Rate Variation Induced by Different Conditions of Irradiation

16	327	I. Fabijanikj Sandeva	North Macedonia	Applying luminescence Methods for Detection of Irradiated Wheat
17	331	M. Ene	Romania	Gamma Irradiation Disinfection of Damaged Paper: Influence of Dose Rate on Radioresistance of Some Molds
18	333	F. Zorila	Romania	Advanced Treatment of Wastewaters: Integrating Gamma Radiation and Bioremediation for Persistent Organic Pollutant Degradation
19	342	R. Holstein	Germany	New Approach for the Qualification of NDT-Operators in the Field of Civil Engineering
20	345	O. Trindade	Angola	Gamma Scan in Oil Distillation Columns: Comparison of the Results Obtained from Scanning a Prototype Oil Distillation Column with Results Obtained in Real Columns
21	351	J. Madureira	Portugal	Ionizing Radiation as a Tool to Valorize Food and Agro-Industrial Wastes
22	355	K. Harre	Germany	Enhancing Microplastic Detection with Electron Beam Technology
23	359	M. Min Htwe	Myanmar	Quality Management Practice for Radiation Processing in Myanmar using Alanine-EPR Dosimetry System
24	371	N. Stas	Syria	Studying of the Mechanical Resistance of Reinforcement Concrete by Using Ultrasonic Waves
25	372	S. Rattan	India	Impact of Radiation Parameters on the Physicochemical and Electrochemical Properties of Vinyl Imidazole-Grafted ETFE
26	375	Z. Knezevic	Croatia	An Overview of Activities at the Co-60 Gamma Irradiation Facility at the Ruđer Bošković Institute
27	381	H. Sghaier	Tunisia	Advocacy for Establishing a Center of Excellence for the Development of Irradiated Veterinary Vaccines in Africa
28	386	P. Baricholo	Zimbabwe	Assessing the Use of UAV Assisted Gamma Column Scanning: A Futuristic Perspective
29	391	J. I. Garrido	Argentina	Use of Gamma Irradiation as a Pretreatment in Brewer's Spent Grain (BSG) Protein Extraction
30	392	A. Larrandart	Argentina	Gamma Radiation as a Tool to Reduce Emerging Organic Pollutants in Sewage Effluents
31	393	A. Larrandart	Argentina	Effect of Ions on the Gamma Radiation-Induced Degradation of Different Emerging Organic Pollutants in Water
32	405	A. G. Chmielewski	Poland	Synergy between IAEA and EU Programs on Accelerators Applications
33	406	Y. Dalto	Argentina	Radiotolerance in the Developmental of <i>Diatraea saccharalis</i>
34	408	J. Fuentes	Chile	Implementing Chile's First Human Tissue Processing Facility under Clean Room Standards: Enhancing Tissue Quality and Safety for Chilean Patients

35	410	P. Bustamante	Argentina	Principal Component Analysis as a Crucial Strategy for the Development of Hydrogel Dressings with Gamma Radiation
36	412	S. Jebri	Tunisia	Shelf Life Extension and Quality Improvement of Ground Beef Through Plant Extracts and E-Beam Technology
37	414	A. Francesca Napoli	Italy	GPR Investigation on the Masonry Supporting Giotto's Mural Painting, Bardi Chapel, Santa Croce Basilica at Florence, Italy
38	418	C. Barrenechea	Argentina	Determination of Sublethal Doses in Deteriorating Insects of Cultural Heritage: Breeding, Damage, and Behavior
39	422	A. Raad	Argentina	Gamma Irradiation: Sensory Shelf Life for Fine Cut Salamin (Argentinian Dry Fermented Sausage)
40	423	M. V. Vogt	Argentina	Transformation and Mitigation of Toxicity of Pharmaceutical Pollutants with Ionizing Radiation
41	425	N. Dourado	Brazil	Automated Irradiation System for the Production of Gaseous Radioisotopes in a Research Nuclear Reactor
42	430	R. Kocia	Poland	Detection of Irradiated Food
43	434	N. Ciávaro	Argentina	Enhancing ABS Swabs Production: Proven Resistance to Radiation
44	435	M. Mazzei	Argentina	Mitigation of Emerging Organic Pollutants Using Ionizing Radiation: Ecotoxicological Analysis
45	437	I.V. Moise	Romania	Impact of Gamma Irradiation Sterilization on the Biochemical Stability and Biocompatibility of Collagen-Based Wet Medical Devices
46	440	F. K. Quashie	Ghana	Radiotracer Investigation in a Continuous Stirred Tank Reactor (CSTR) Treating Food Waste
47	441	S. Laprida	Argentina	NDT-CE in an Icon of Popular Culture: The Boca Juniors Stadium
48	442	N. A. Shukri	Malaysia	Irradiation-Assisted Catalytic Conversion of Fructose to 5-Hydroxymethylfurfural using Sulfonated Bamboo Biochar
49	443	S. Hussein	Malaysia	Establishing a Qualification and Certification Scheme for NDT-CE in Malaysia
50	454	M. Rapado Paneque	Cuba	Contribution on Synthesis and Characterization of pH- and Temperature-Responsive Poly(2-Hydroxyethyl Methacrylate-co-Acrylamide) Hydrogels by Gamma Photon Irradiation: Doxorubicin Release
51	455	N. Mat Jali	Malaysia	Electron Beam-Induced Crosslinking of Polyethylene for Advanced High-Voltage Cable Insulation
52	464	S. Zarei	Iran	Pre-Installation of an Accelerating Tube for an Electrostatic Accelerator

53	477	I. Amri	Tunisia	Microbiological Quality of Green Leafy Vegetables and Effect of Electron Beam Irradiation on the Survival of Escherichia coli O157:H7 and Salmonella spp. in Rocket During Refrigerated Storage
54	481	M. P. Hlaing	Myanmar	Radiotracer Measurement in Water Flow Pipe Line System
55	484	M. Cingolani	Argentina	Application of Electron Beam Radiation in Natural Polymer Transformation: A Comprehensive Training Program under RLA1029
56	489	Z. Zhang	China	Thermal Stress Analysis and Structural Optimization of Electron Guns for Electron Beam Irradiation Processing
57	492	Y. J. LEE	Republic of Korea	Experience with Cobalt Gamma Radiation Processing Facilities and Dose Distribution Calculations
58	494	A. Pandey	India	Nanocrystalline CaSO ₄ : Eu for Thermoluminescence Dosimetry of Gamma Rays and Carbon Ion Beams
59	506	P. Santos	Portugal	Radiation Effect on Poly(lactic Acid) 3D-Printed Alloplastic Medical Implants for Customized Tissue Repair
60	578	R. Outayad	Morocco	Contribution to the Study of Various Structural Configurations on the UTR Pilot Unit Using Neutron Backscattering Technique Compared with OpenMC Simulation
61	633	A. Kovács	Hungary	Calibration Verification and Dosimetry Intercomparison Exercise in the Frame of the RER1021: Enhancing the Use of Radiation Technologies in Industry and Environment, 2020–2023
62	676	A. Sagatova	Slovakia	Reduction of the Toxicity of the PCB-Contaminated Environment Using Radiation Technology

**14:00–15:30 P02:
Poster Session 2**

M0E/ Poster Area

Poster Board No.	Paper No.	Name	Designating Member State/Organization	Title of Paper
63	447	Y. Qi	Germany	Influence of Low-Energy Electron Treatment on the Crystallization Behavior and Thermal Properties of Poly(lactic Acid)
64	480	E. McDaniel	United States of America	Optimization of Alpha Cellulose and N-Cellulose Solubility in Sodium Hydroxide

65	647	B. D'Orsi	Italy	Characterization of Different Composition Artworks Treated by Ionizing Radiation (ENEA, Italy)
66	722	S. Shaikh	India	Bulk Formation of Zwitterionic Microgel with Additives by Gamma Radiation for Large-Scale Application in Self-Healing Cement
67	764	K. Pietrucha	Poland	A New Method for Synthesizing Polyvinylpyrrolidone (PVP) Nanogels Initiated by UV Light
68	776	M. Olejniczak	Poland	Sonochemical Synthesis of Antibacterial PEGDA Hydrogels for Biomedical Applications as a Complementary Method to the Radiation Technique
69	824	A. Dion	France	A General Approach for the Kinetic Modeling of Gaseous Radiolysis: A Starting Point Toward CO ₂ Conversion into Molecules of Interest
70	511	I. McGrath	United States of America	Metabolically Active Yet Non-Viable State of <i>Listeria monocytogenes</i> After Exposure to Sub-Lethal Electron Beam Doses
71	518	A. Lindau	Germany	Electron-Induced Sorting of Mixed Polyolefin Waste
72	592	A. Krleski	North Macedonia	Thermoluminescence Study: Effect of Nutritional Supplements in Salts on Thermoluminescent Characteristics
73	620	N. Ludwig	France	NV Center Doping of Laboratory Diamonds by Electron Beam
74	640	P. Lertsarawut	Thailand	Reducing Energy in Super Water-Absorbent Production by Remodeling Hydrogels into Microbeads for Water Reservoirs in Agricultural Soil
75	645	D. Turkel Agacik	United States of America	Efficiency of Electron Beam Irradiation for Wastewater Treatment
76	669	L. Lech Nissen	Denmark	Monte Carlo Simulations of Electrostatic Field Effects on Dose Distributions: A Predictive Framework
77	380	C. G. Bonaglia	Italy	Application of Non-Destructive Testing in the Preservation of Cultural Heritage Buildings
78	562	C. T. Nguyen	Vietnam	Studying and Developing a New Computed Tomography Method for Investigating Distillation Columns
79	649	E. Taghavi moghaddam	Iran	A Trade-Off Between Quality and Speed in Neutron Tomography by Multi-Objective Optimization
80*	394	M. V. Vogt	Argentina	Optimization of the Synthesis of Acrylamide-Grafted-Polypropylene-Non-Woven Fabric Using Electron Beam Induced Irradiation

81*	374	I. I. Mumuni	Ghana	Assessment of Shielding Properties of Concrete Slabs Using Gamma Computed Tomography
82*	842	J. Chaillot	France	Diagnostic Methods for Cultural Heritage

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Poster Board No.	Paper No.	Name	Designating Member State/Organization	Title of Paper
1	119	J. Lee	Republic of Korea	Autologous NK Cell Culture Medium Gamma-Irradiated with 10 kGy Promotes Wound Healing by Inhibiting Heat Stress-Induced Skin Cell Death and Enhancing Proliferation Through Activation of the PI3K/Akt Signaling Pathway
2	120	J. Lee	Republic of Korea	Gamma-Irradiated Eucommia Ulmoides Extract Protects Skin Cells by Regulating Nrf2 and NF- κ B Signals to Enhance Antioxidant and Anti-Inflammatory Activities
3	476	L. M. Mota Ferreira	Portugal	Study of Side-effects on Cellulose Based Materials Induced by MeV Proton Irradiation
4	502	K. Rodolfo	Angola	Enhancing Industrial Performance and Troubleshooting Capabilities: Angola's Journey with IAEA and Moroccan Support
5	508	L. Ribba	Argentina	Enhancing TPS Composites through Ionizing Radiation for Valorizing Yerba Mate Production Waste
6	513	B. Azmi	Indonesia	Gamma-Ray Scanning Technique to Evaluate the Performance of Absorber Column on Offshores Natural Gas Production, Indonesia
7	519	A. Ghilardi	France	Assessing the Risk of Incorporating a Radioactive Source into Rhinoceros Horns Using the Monte Carlo Calculation Code RayXpert® to Combat Poaching as Part of the Rhisotope Project
8	521	S. H. Jo	Republic of Korea	Field Application Study of an Electron Beam Treatment System for the Reduction of NO _x and SO ₂ in Flue Gas Emitted from a Waste Incineration Plant
9	523	R. N. Darie-Nita	Romania	Effect of Gamma Irradiation on the Sustainable Use of Recycled Pre-Consumed Polypropylene-Based Medical Waste
10	535	M. Walo	Poland	Functionalization of Food Packaging Films by Radiation-Induced Grafting
11	539	L. Mejri	Tunisia	Investigating Subsurface Flow Constructed Wetlands using Electrical Resistivity Tomography (Case study: Chorfech Constructed Wetland)
12	541	O. Roubinek	Poland	Investigation of Using Radiotracers for RTD Determination in CSTR with Aeration for Poly(3-Hydroxybutyrate) Production

13	542	H. Chouchane	Tunisia	Joint Multi-Optimization of Radiation Treatment of Plant Materials for Enhancing Bioethanol Production
14	543	A. Palm	United States of America	Investigation of Electron Beam Calibration Using Depth-Dose Channel Ratio Methodology
15	544	H. Xargay	Argentina	Post-Earthquake Structural Damage Assessment and Disaster Response in Ecuador: Insights from NDT-CE and International Technical Cooperation Mission
16	546	O. M. Rojas Carrillo	Costa Rica	Enhancement of Interfacial Interaction Between Pineapple Leaf Fibers and Polypropylene Resins Assisted by Ionizing Radiation
17	552	J. Thangaraj	United States of America	Next-Generation Superconducting Electron Accelerators: A High-Efficiency and High-Power Tool for Radiation Science and Industrial Applications
18	559	A. R. Han	Republic of Korea	Gamma Irradiation on Silybin: Enhancement of Tyrosinase Inhibitory Activity Through Structural Modification
19	561	K. Nasr Ep Kachroudi	Tunisia	Gamma Irradiation-Induced Degradation of Sulfadimethoxine in Aqueous Solution: Kinetics, Influence of Additives, and Degradation Pathway
20	573	A. Ben Mansour Ep Zayani	Tunisia	Receptor Binding Assay for Saxitoxin Detection and Electron Beam Technology for Its Degradation
21	577	J. Scifo	Italy	Gamma Radiation Effects on the Physicochemical Properties of Organic Fruits
22	581	R. Outayad	Morocco	Use of the Neutron Backscattering Technique for Humidity Analysis in the Cardboard Recycling Industry: Experimental Study
23	584	A. C. Delgado Vieira	Brazil	Degradation of Chlorinated Organic and Pyrethroid Pesticides Induced by Gamma Irradiation in Cultural Heritage
24	587	M. H. Trabelsi	Tunisia	Electrical Pollutions and Perturbations in an Electron Accelerator Facility
25	590	R. Centofanti	Italy	The Italian Certification of Non-Destructive Testing Personnel in Civil Engineering
26	596	A. Domato	Spain	The Use of Non-Destructive Techniques to Detect the Presence of Cracks in Gargoyles of the Monastery of Santos Creus in Tarragona (Catalonia)
27	597	A. Hassan	Sudan	The Role of the IAEA in Enhancing Nuclear Education in Sudan
28	599	Y. Liu	China	Application of High-Power Electron Linear Accelerator in the Medical Supplies Industry
29	607	Z. Toko	Angola	Implementation of Radiation Safety Measures for Sealed and Unsealed Sources at the National Centre for Scientific Research (CNIC)

30	608	P. Santos	Portugal	Dutch Papers Irradiated with Gamma Rays in 1993: Comparison of Their Condition After 30 Years of Natural and Artificial Ageing
31	613	H. Adnan	Malaysia	Empowering School Educators with Comprehensive Radiation Science and Technology Knowledge
32	623	M. Vernal	Chile	Gamma Scan for a Triethylene Glycol (TEG) Natural Gas Dehydration Column: Indirect Detection of Failure Mechanisms on the Bed
33	625	B. Amro	Jordan	Characterization of the ^{252}Cf Neutron Source at the Jordanian Neutron Calibration Laboratory Using Gamma-Ray Spectroscopy
34	630	K. Mesbah	Morocco	Advancements in Certification Standards and Training for Non-Destructive Testing (NDT) in Civil Engineering: A Review
35	634	A. Kovács	Hungary	Dosimetry Procedures Under Specific Irradiation Conditions in EB Radiation Processing
36	636	A. Embriaco	Italy	TLD Dosimetry Calibration at CALLIOPE Gamma Irradiation Facility
37	646	R. Carcione	Italy	Investigation of the Effects of Gamma Radiation on Solid Polybutadiene (PB)-Based Propellants for Space Applications
38	648	F. C. Nascimento	Brazil	Treatment of Effluent from Industrial, Automotive, and Refinish Paints by Electron Beam Irradiation
39	650	C. J. Chagas	Brazil	Dating of the Pandeiros River Floodplain
40	651	N. Kamarudin	Malaysia	Disinfection of Rare Books Using Gamma Irradiation: A Success Story
41	653	D. Tulasi	Ghana	Monitoring Sediment Processes in Coastal Systems of Ghana Using Natural Radionuclides as Tracers
42	665	J. Fuentes	Chile	Tissue Bank Activity in Chile: A Journey of More Than Two Decades
43	666	C. Praveen	United States of America	Electron Beam and X-Ray as Viable Alternatives to Co-60 Gamma Radiation for Microbial Inactivation and Immune Stimulation
44	677	K. Gonçalves	Brazil	The Use of Irradiation for Production of Oligochitosan Conjugated with Oxide Graphene
45	678	P. Ragan	Slovakia	Determination of the Angular Distribution of the Muon Flux Using Plastic Scintillator Spectrum Deconvolution
46	680	E. Pereira da Fonseca	Brazil	Radiation Technology Applied to Food
47	698	S. Esseyin	Nigeria	Application of Radiation Using Gamma Irradiation Facility for Food and Agriculture Processing in Nigeria

48	703	N. A. Masenwat	Malaysia	A Comprehensive Guide to Civil Structure Diagnostic and Integrity Assessment with Case Studies
49	708	D. Milicevic	Serbia	Favorable Influence of Aqueous Media on Gamma Irradiated PP
50	709	Z. Rogić Miladinović	Serbia	Efficient Copper Ion Removal from Wastewater Using Copolymeric Hydrogels Based on NIPAM, OEGMA, and Acids Synthesized via Gamma Radiation
51	710	E. Suljovrujic	Serbia	Radiation Sterilization of Medical Devices Based on Polypropylene - The Influence of Fabrication and Irradiation Conditions on Final Product Properties
52	714	M. Krstić	Serbia	Smart Ag/P(HEMA/IA) Nanocomposite Hydrogels for Wound Dressing Obtained by Different Radiation Approaches
53	716	L. Malinga	South Africa	Application of Sterile Insect Technique for the Management of Eldana saccharina in South Africa: Two Decades of Research
54	725	R. Cabral de Azevedo	Brazil	New Tendencies and Technologies on Tomography Applied to the Petroleum Industry: A Comparative Analysis
55	728	S. Galovic	Serbia	Dielectric Properties of XLPE Obtained by High-Energy Irradiation in Different Media
56	741	S. Rouif	France	The Effects of Different Radiation Sterilization Modalities on Some Polyolefins for Healthcare Applications
57	746	M. L. Nagai	Brazil	Application of Ionizing Radiation for the Decontamination of Glass Photographic Negatives: A Study on the Preservation of Cultural Heritage
58	753	D. W. Shao	Tanzania	Applications and Challenges of Radiation Science and Technology in the United Republic of Tanzania from the Late 1940s to Early 2020s
59	758	P. Vasquez	Brazil	Traditional Methods and Gamma Ionization Technique for Disinfection of Cultural Heritage Objects: Acceptance by the Conservators Community
60	765	S. Ebrahim	Kuwait	Detection of Malfunctions in Distillation Column Using Gamma Ray Techniques Joined with GUI at MATLAB
61	483	S. OZMEN	Türkiye	Sediment Dynamics Evaluation with KATERINA II in Patara Beach Antalya/Türkiye
62	782	N. Cetinkaya	Türkiye	Application of Irradiation Technology in Türkiye

Poster Board No.	Paper No.	Name	Designating Member State/Organization	Title of Paper
63	783	W. Stern	United States of America	Assessment of the Experiences of Researchers and Blood Bank Operators with Using X-ray Irradiators
64	798	S. Fares	Algeria	Enhancement of Thermal and Mechanical Properties of E-Waste ABS by E-Beam Irradiation
65	799	S. Ladjouzi	Algeria	γ -Radiation Synthesis and luminescence of Eu ³⁺ Ions in Nanocomposite Hydrogels Based on Poly (Vinyl-Alcohol) and ZrO ₂ NPs
66	814	R. Homlok	Hungary	Effects of Ionizing Radiation on the Physical and Mechanical Properties of Polylactic Acid: The Presence of Moisture
67	306	A. Serban	Romania	Inhibition of cross-linking for radiation sterilization of collagen gels
68	225	A. Hassan	Egypt	Radiation Fabrication of Hyaluronate/Polyvinyl Alcohol Scaffolds for Regeneration: In-vitro and In-vivo Evaluation
69	609	H. Mahmoud	Egypt	Development of Radiometric System of Black Sand Tracing Based on Gamma Spectroscopy
70	540	E. Niederleithinger	Germany	Condition monitoring for lifetime extension of interim storage facilities
71	227	D. Emarah	Egypt	Using Artificial Neural Networks and Non-Destructive Tests to Predict the Compressive Strength of Geopolymer Concrete
72	267	J. Biswal	India	Preparation of radioactive microspheres for particle tracking experiments using different methodologies
73	683	M. Fülöp	Slovakia	Uninterrupted Control of Smuggling in Iron Ore Rains with a Neutron Scanner
74	735	B. Rurarz	Poland	Radiation Technique as Means for the Synthesis of New Biopolymer-Based Nanocarriers for Nanoradiotherapy
75	453	K. Njau	Tanzania	Enhancing Constructed Wetlands Design and Operations with Radiotracer Technology for Sustainable Wastewater Treatment
76	754	S. Alshehri	Saudi Arabia	Advancing Landmine Detection: Investigating the Capability of backscatter X-Ray Imaging for Buried Landmines
77	115	A. Mejri	Tunisia	Gamma Irradiation Technology Supports the Preservation of Tunisian Cultural Heritage

78	231	G. Appiah	Ghana	Performance Assessment of a Crude Oil Distillation Unit Using Gamma Column Scanning Technique in Ghana
79	424	M. V. Vogt	Argentina	Degradation and Reduction of Toxicity of Individual and Mixed Emerging Organic Pollutants
80	369	D. Khalil	Egypt	Studying the Effects of Gamma Radiation for Disinfection Purposes of Cellulosic Cultural Heritage: Innovative Measurements on a Pharaonic Object Belonging to the First Dynasty
81	515	B. Saputro	Indonesia	Lithium Fluoride Photofluorescent Film Dosimeter: New Investigations for Phytosanitary Irradiation Application
82	353	T. Krayem	Syria	Evaluating and Repairing Earthquake Damage in Aleppo: The Role of Non-Destructive Testing

E-poster

Tuesday 8 April 14:00-15:30

M02 / e-Poster / Screen 1

No.	Paper No.	Name	Designating Member State	Title of Paper	Time Slot
1	227	D. Emarah	Egypt	Using Artificial Neural Networks and Non-Destructive Tests to Predict the Compressive Strength of Geopolymer Concrete	14:00-14:45
2	246	S. Nabukalu	Uganda	Application of Radiation and Technology in Environmental Studies in Uganda	14:45-15:30

M02 / e-Poster / Screen 2

No.	Paper No.	Name	Designating Member State	Title of Paper	Time Slot
1	277	A. L. Villavicencio	Brazil	Determination of Lethal Doses of Gamma Radiation for Pupa of <i>Plutella Xylostella</i> (Linnaeus, 1758) (Lepidoptera: Plutellidae) Diamondback Moth for Phytosanitary Treatment	14:00-14:45
2	278	A. L. Villavicencio	Brazil	Irradiation Processing Impact on Microbiological Quality of <i>Hermetia Illucens</i> Larvae Meal Contaminated with Different Pathogens	14:45-15:30

M02 / e-Poster / Screen 1

No.	Paper No.	Name	Designating Member State	Title of Paper	Time Slot
1	264	J. Biswal	India	RTD Studies on HiGee for Improving Its Hydrodynamics and Design Validation Using Radiotracer	14:00-14:20
2	618	J. Biswal	India	Evaluation of Vacuum Distillation Column Performance Using Radiotracers	14:20-14:45
3	580	C. Belinco	Argentina	Specialist International Group (SIG) on NDT in Civil Engineering (NDT-CE) at ICNDT (International Committee for NDT)	14:45-15:30

M02 / e-Poster / Screen 2

No.	Paper No.	Name	Designating Member State	Title of Paper	Time Slot
1	635	M. Ciavaro	Argentina	ARG1029 Advanced Training in Radiation Processing: Electron beam Applications in Polymer Modification, Sterilization, and Functional Material Synthesis	14:00-14:45
2	738	U. Ganjigatte	India	Effects of Doping- Rare Earth and High Energy Irradiation on Silicon Carbide in Nuclear and Advanced Application	14:45-15:30

IAEA PUBLICATIONS RELATED TO THE SUBJECT OF THE EVENT

IAEA-Training Course Series No.86 (2024)	Guidelines on Training Syllabi in Non-destructive Testing for Civil Engineering (NDT-CE)
IAEA Radiation Technology Series No. 7 (2023)	Specific Considerations and Guidance for the Establishment of Ionizing Radiation Facilities
TECDOC Series – 2008 (2022)	Development of Electron Beam and X Ray Applications for Food Irradiation
TECDOC Series - 1925 (2020)	Industrial Applications of Sealed Radioactive Sources
Non-serial Publications (2022)	Artificial Intelligence for Accelerating Nuclear Applications, Science and Technology
TECDOC Series - 2012 (2022)	Muon Imaging
TECDOC Series - 1931 (2020)	An Introduction to Practical Industrial Tomography Techniques for Non-destructive Testing (NDT)
TECDOC Series - 1897 (2020)	Radiotracer Technologies for Wear, Erosion and Corrosion Measurement
TECDOC Series – 1855 (2018)	Radiation Treatment of Wastewater for Reuse with Particular Focus on Wastewaters Containing Organic Pollutants
Training Course Series No. 67(2018)	Training Guidelines in Non-destructive Testing Techniques
IAEA Radiation Technology Series No. 6 (2017)	Uses of Ionizing Radiation for Tangible Cultural Heritage Conservation
Non-serial Publications (2016)	The Radiation Chemistry of Polysaccharides
IAEA Radiation Technology Reports No. 5 (2015)	Nanoscale Radiation Engineering of Advanced Materials for Potential Biomedical Application
TECDOC Series – 1764 (2015)	Radiation Curing of Composites for Enhancing Their Features and Utility in Health Care and Industry
Training Course Series No. 59 (2014)	Radiotracer and Sealed Source Applications in Sediment Transport Studies
TECDOC Series - 628/Rev.3 (2014)	Training Guidelines in Non-destructive Testing Techniques

TECDOC Series – 1745 (2014)	Radiation Processed Materials in Products from Polymers for Agricultural Applications
IAEA Radiation Technology Series No. 5 (2013)	Radiotracer Generators for Industrial Applications
IAEA Radiation Technology Reports No. 2 (2013)	Design, Development and Optimization of a Low Cost System for Digital Industrial Radiology
IAEA Radiation Technology Series No. 3 (2012)	Application of Radiotracer Techniques for Interwell Studies
IAEA Radiation Technology Reports No. 3 (2012)	Development of Novel Adsorbents and Membranes by Radiation Induced Grafting for Selective Separation in Environmental and Industrial Applications
IAEA Radiation Technology Series No. 2 (2011)	Nuclear Techniques for Cultural Heritage Research
IAEA Radiation Technology Series No. 1 (2011)	Use of Mathematical Modelling in Electron Beam Processing: A Guidebook
Training Course Series No. 49 (2011)	Radiotracer Applications in Wastewater Treatment Plants
Training Course Series No. 45 (2010)	Non-Destructive Testing: Sample Questions for Conduct of Examinations at Levels 1 and 2
Training Course Series No. 38 (2009)	Leak Detection in Heat Exchangers and Underground Pipelines Using Radiotracers
TECDOC Series – 1617 (2009)	Controlling of Degradation Effects in Radiation Processing of Polymers
Non-serial Publications (2008)	Trends in Radiation Sterilization of Health Care Products
TECDOC Series – 1589 (2008)	Industrial Process Gamma Tomography
	Good Practices in Disinfection of Cultural Heritage Artefacts and Archives Using Ionizing Radiation
	Guidelines for Integrating Electron Beam Technology into Plastic Waste Recycling

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26 – 30 May 2025, Vienna, Austria

International Conference on Advances in Radiation Oncology (ICARO 4) (CN-331)

2 – 5 June 2025, Vienna, Austria

30th IAEA Fusion Energy Conference (CN-336)

13 – 18 October 2025, Chengdu, China

International Conference on Resilience of Nuclear Installations against External Events from Safety Perspective – Focus on Climate Change (CN-337)

20 – 24 October 2025, Vienna, Austria

International Conference on Nuclear and Radiological Emergencies: Building the Future in an Evolving World (CN-338)

1 – 4 December 2025, Riyadh, Saudi Arabia

International Conference on Radiation Protection in Medicine: X Ray Vision (CN-339)

8 – 12 December 2025, Vienna, Austria

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