ISORD-12 TOKYO

Program Overview

12th International Symposium on Radiation Safety and Detection Technology

June 30-July 4, 2025
Sanjo Hall and Koshiba Hall
The University of Tokyo

Sponsors:
Chiyoda Technol Corporation
Clear Pulse Co., Ltd.
Fuji Electric. Co., Ltd.
China Institute for Radiation Protection
Atomic Energy Society of Japan

Session Layout Overview

TIME	June 30	July 1	July 2	July 3	July 4
Sanjo Hall 9:15-10:45 Koshiba Hall 9:00-10:30		M1 Radiation Shielding **Sanjo Hall (9:15-10:45)** S1 Student I **Koshiba Hall (9:00-10:30)**	M4 Waste Management, Fukushima **Sanjo Hall (9:15-10:45)** S4 Student IV **Koshiba Hall (9:00-10:30)**	G3 Special Lectures (Overview/Status Reports) **Sanjo Hall (9:15-10:45)** S5 Young Scientist Session **Koshiba Hall (9:00-10:30)**	PHITS Tutorial
~11:00		Coffee Break **Sanjo (10:45-11:00)** **Koshiba Hall (10:30-11:00)**	Coffee Break **Sanjo (10:45-11:00)** **Koshiba Hall (10:30-11:00)**	Coffee Break **Sanjo (10:45-11:00)** **Koshiba Hall (10:30-11:00)**	
11:00-12:30		M2 Radiation Protection **Sanjo Hall** S2 Student II **Koshiba Hall**	M5 Imaging, Spectroscopy **Sanjo Hall** M6 Applications, Standard **Koshiba Hall**	G4 Closing Session Award **Sanjo Hall**	
12:30-14:00	Registration	Lunch*			
14:00-15:30	G1 Greetings Plenary I **Sanjo Hall**	M3 Monitoring Inspection System **Sanjo Hall** S3 Student III **Koshiba Hall**	M7 Dosimetry **Sanjo Hall** M8 New development, Misc. **Koshiba Hall**	Site visit to Riken	
15:30-16:00	Break	Coffee break	Coffee break		
16:00-17:30	G2 Plenary II **Sanjo Hall**	P1 Poster Session I **Sanjo Hall & Koshiba Hall**	P2 Poster Session II **Sanjo Hall & Koshiba Hall**		
17:30-18:00	Registration				
18:00-20:00	Reception **Sanjo Hall**	(MSC Dinner)	Conference Dinner **Sanjo Hall**		

*Two restaurants are available on the venue

June 30, 2025

G1 Plenary I
June 30, 14:00-15:30 Sanjo Hall
Session Chair: Hiroyuki Takahashi, The University of Tokyo

Welcome: Hiroyuki Takahashi, The University of Tokyo
Greetings: Yasuhiro Kato, Dean, School of Engineering, The University of Tokyo
Greetings: Hiroshi Nakashima, Chairperson of the division of the radiation technology, Atomic Energy Society of Japan

G1-1 Invited Lecture I:
Prof. Takashi Nakamura, Tohoku University
Historical View of ISORD Conference together with my work
G1-2 Invited Lecture II:
Dr. Liu Qun, President of China Institute for Radiation Protection
China's Practices and Progress in Radioactive Waste Management

G2 Plenary II
June 30, 16:00-17:30 Sanjo Hall
Session Chair: Jong Kyung Kim, Hanyang University

G2-1 Invited Lecture III:
Dr. Miroslav Pinak, International Atomic Energy Agency
Radiation situation after the Fukushima Daiichi Nuclear Accident and IAEA assistance in radiation monitoring and remediation
G2-2 Invited Lecture IV:
Prof. Yeon Soo Yeom, Yonsei University
Evolution of Computational Human Phantoms for Radiation Dosimetry Research
G2-3 Invited Lecture V:
Prof. Shunichi Suzuki, The University of Tokyo
Current status and challenges of large-scale fuel debris retrieval in the decommissioning of Fukushima Daiichi Nuclear Power Plant

Reception
June 30, 18:00-20:00 Sanjo Hall

July 1, 2025

M1 Radiation Shielding

July 1, 9:15-10:45 Sanjo Hall

Session Chair: Tatsuhiko Sato, Japan Atomic Energy Agency

M1-1 New lead-free composite of high transparency for efficient clinical X-ray shielding,
Yuhai ZHANG, University of Jinan

M1-2 Activation analysis capability of the STRAUM and BESNA coupled system for pressurized water reactors
Ao Zhang, Hanyang University

M1-3 Japanese Concrete Composition Standard for shielding calculation
Koichi Okuno, Hazama-Ando Corporation

M1-4 Evaluation of X-ray shielding performance using radiochromic film sandwiched in tissue-equivalent material,
Bilal Muhammad, Hiroshima University

M1-5 Shielding Performance Analysis for Materials with Neutron Activation Analysis for Fusion Facilities
Soobin Lim, Q-Beam Solution

M1-6 An Optimal Plan for Removal of Fuelling Tubesheets to Reduce Radiation Exposure in Decommissioning of CANDU Reactor
Minhye Lee, RADCORE Co., Ltd.

S1 Student Session I (Radiation Measurements)

July 1, 9:00-10:30 Koshiba Hall

Session Chair: Tetsuo Iguchi, Nagoya University

S1-1 Design and Application of a Shipborne Underwater Radiation Detector Array for the Monitoring of Seawater Radioactivity
Dajian Liang, Department of Nuclear Science and Technology, Nanjing University of Aeronautics and Astronautics

S1-2 Monte Carlo Simulation of X-ray Fluorescence Computed Tomography Imaging with a Double-Sided Strip HPGe Detector
Qiuli Zhang, Tsinghua University

S1-3 Dosimetric Methods and Tools for Voxel-Level Individualized Radionuclide Therapy Involving SPECT/CT
Junyi Liu, School of Nuclear Science and Technology, University of Science and Technology of China

S1-4 Scintillation Evaluation of Tl+ and Sr2+ Co-doped Cs3Cu2I5 Crystals,
Yusuke Urano, Tohoku University

S1-5 PIN-Structured MAPbBr3 Single Crystals for High-performance Gamma-Ray Spectroscopy Detection,
LIU ZIYI, School of Electronic Science and Engineering, Southeast University

S1-6 Indoor 3D Gamma Radiation Mapping Based on VSLAM and Its Preliminary Application in Digital Systems,
Hui Li, China Institute for Radiation Protection and University of Science and Technology of China

Coffee Break
July 1
Sanjo Hall 10:45-11:00
Koshiba Hall 10:30-11:00

M2 Radiation Protection
July 1, 11:00-12:30 Sanjo Hall
Session Chair: Miroslav Pinak, International Atomic Energy Agency

M2-1 Creation of scattered radiation visualization teaching materials for radiology using 3D printer,
Toshioh Fujibuchi, Kyushu University

M2-2 Accelerated dose estimation system for multi-port BNCT using PHITS and ADVANTG,
Takeo Nishitani, Nagoya University

M2-3 Novel Passive-Adaptive Exoskeleton-Supported Radiation-Protective System with Enhanced Shielding and Reduced Perceived Weight,
Yansong Sun, China Institute for Radiation Protection

M2-4 Development of the SMARP system to support the ALARA practices of occupational radiation protection
Peitao Song, China Institute for Radiation Protection

M2-5 Evaluation of Operational Criteria for Protective Actions against Thyroid Internal Exposure by Radioiodines in Nuclear Emergencies,
Wi-Ho Ha, Korea Atomic Energy Research Institute

M2-6 Simulation Technology of Three-Dimensional Refined Radiation Field in Urban Blocks Considering Different Boundary Layer Characteristics,
Minghua LYU, China Institute for Radiation Protection

S2 Student Session II (Radiation Measurements)
July 1, 11:00-12:30 Koshiba Hall
Session Chair: Shunsuke Kurosawa, Tohoku University

S2-1 Development of a Portable High-Sensitivity Gamma Imaging System Combining Compton and Coded Aperture Imaging Modalities,
Goeun Lee, Department of Nuclear Engineering, Hanyang University

S2-2 Design and Performance Prediction of High-Speed Soil Classification System for Nuclear Decommissioning Using Monte Carlo Simulations,
Taehyeon Eom, Hanyang University

S2-3 First Performance Evaluation of a Low-Momentum Muon Flux Measurement Detector System
Satoko Kamei, Kyushu University

S2-4 Fast neutron irradiation defect evaluation in alpha-quartz simulated by PHITS,
LEI SHI, The University of Tokyo

S2-5 Integrated Real-Time Monitoring of Spot Delivery and Proton Beam Range Using a Multi-Slit Prompt-Gamma Imaging System
SeHyun Jang, Hanyang University

S2-6 Real-Time In Vivo Dose Reconstruction and Visualization in Proton Therapy Using Measured Beam Ranges and Precomputed Monte Carlo Data,
Jaeho Cho, Hanyang University

Lunch Time
July 1, 12:30-14:00

M3 Monitoring/inspection system
July 1, 14:00-15:30 Sanjo Hall
Session Chair: Deng Zhi, Tsinghua University

M3-1 A new gamma spectrometer and real-time data transmission based on websocket protocol,
YUKI Morishita, Collaborative Laboratories for Advanced Decommissioning Science (CLADS), Japan Atomic Energy Agency

M3-2 Technical Status of Airborne Gamma-Ray Spectrometry Using an Uncrewed Aerial Vehicle to the Assessment of Radioactive Cesium Deposition,
Young-Yong Ji, Korea Atomic Energy Research Institute

M3-3 Development of a Compact CdTe-Based Gamma Spectroscopy System with Dual-Side Readout for High-Resolution Gamma Imaging,
Siyao Chang, The University of Tokyo

M3-4 Automatical Radioactive contamination inspecting system for vehicle,
Yusuke Niwa, Mitsubishi Electric-Plant Engineering Corporation

M3-5 Intelligent Device Based on Radiation Detection Chip
Xiao Simin, China Institute of Atomic Energy (Substitute Presenter: Li Shiyao)

M3-6 Method for Obtaining Radiation Source Position from Multiple Viewpoints Using Swarm Robots
Tatsuo Torii, Fukushima University

S3 Student Session III (Radiation Measurements)
July 1, 14:00-15:30 Koshiba Hall
Session Chair: Ikuo Kanno, Kyoto University

S3-1 Remote Thermal Neutron Detection System with Optical Fiber and Neutron Scintillator with Red Emission Wavelength
Chihaya Fujiwara, Tohoku University

S3-2 Analysis of Photon Dose Rate Reduction in i-SMR with Enhanced Radiation Shielding Structures Using ADVANTG and MCNP6,
Hyun chul Roh, Hanyang University

S3-3 Measurement of total charge-changing cross-sections and identification of decay modes in therapeutic carbon beams
Yosuke Iwasaki, Research Institute of Nuclear Engineering, University of Fukui

S3-4 Natural Radioactivity and Heavy Metal Distribution Around a Malaysian Thermal Power Plant: Environmental Implications
Alissa Nur Yasmin Abd Ghaffar, Nuclear Technology Research Centre, Faculty of Science and Technology, Universiti Kebangsaan Malaysia (UKM), & Institute of Nuclear Energy (INE), Universiti Tenaga Nasional (UNITEN)

S3-5 Real-Time Prediction of Induced Radiation Dose in Particle Accelerators Using LTI System Theory and Monte Carlo Method,
Jiaduo Chen, National Synchrotron Radiation Laboratory, University of Science and Technology of China

Coffee Break
July 1, 15:30-16:00

P1 Poster Session I
July 1, 16:00-18:00 Sanjo Hall and Koshiba Hall

July 2, 2025

M4 Waste management/Fukushima
July 2, 9:15-10:45 Sanjo Hall
Session Chair: Yuki Sato, Japan Atomic Energy Agency

M4-1 Results of the Corroboration of Individual Monitoring within IAEA Review of Safety-Related Aspects of Handling ALPS-Treated Water at Fukushima Daichi NPS.
Rodolfo Cruz Suarez, International Atomic Energy Agency

M4-2 A Proposal of Neutron Detection Method in High Gamma-ray Background for Fuel Debris Search in the TEPCO Fukushima Daiichi Nuclear Power Plant
Ikuo Kanno, Japan Atomic Energy Agency

M4-3 Study on Nuclear Materials Imaging in Fuel Debris Retrieved from The Fukushima Daiichi Nuclear Power Station Using a Neutron Pinhole Camera
Eka Sapta Riyana, JAEA/Collaborative Laboratories for Advanced Decommissioning Science (CLADS)

M4-4 Radiotracer-based assessment of a gas hydrate system for radioactive wastewater treatment
Sung-hee Jung, Korea Atomic Energy Research Institute

M4-5 Feasibility of Rapid Analysis of Radiostrontium in Environmental Water using Sr Sorbents,
Yoshimune Ogata, Aichi Medical University

M4-6 Radioactive emission optimization research and control system design based on dynamic regulation
Jing Kang, CIRP

S4 Student Session IV (Radiation Protection)

July 2, 9:00-10:30 Koshiba Hall

Session Chair: Qiu Rui, Tsinghua University

S4-1 Impact of ICRP145 Reference Mesh Phantoms on Aircrew Dose Assessment,
Ji Won Choi, Department of Radiation Convergence Engineering, Yonsei University

S4-2 Methods of Monte Carlo Modeling of the MEVION Proton Treatment Machine and Real-time Dose Calculations,
Ripeng Wang, School of Nuclear Science and Technology, University of Science and Technology of China

S4-3 A Novel Computational Human Phantom Set Simultaneously Reflecting Anthropometric Type and Posture,
Jaehyo Kim, Department of Nuclear Engineering, Hanyang University

S4-4 Development of a GPU-based Monte Carlo Simulation System for Digital Breast Tomosynthesis Imaging and Dosimetry and Its Application in Radiation Protection,
Yeqi Liu, Department of Engineering Physics, Tsinghua University

S4-5 Design and Implementation of McSEE: A User-Friendly Mesh Phantom-based Monte Carlo Dose Assessment Code
Hyeonil Kim, Department of Nuclear Engineering, Hanyang University

S4-6 Establishing a Monitoring System for Thyroid Dose Measurement in Nuclear Emergencies
Mihei Yuma, National Institutes for Quantum Science and Technology (QST-NIRS)

Coffee Break

July 2

Sanjo Hall 10:45-11:00

Koshiba Hall 10:30-11:00

M5 Imaging/Spectroscopy

July 2, 11:00-12:30 Sanjo Hall

Session Chair: Hideki Tomita, Nagoya University

M5-1 Real-Time Radiation Mapping System Using Portable Devices for Enhanced Security at Public Events
Tohn Takahashi, Japan Atomic Energy Agency

M5-2 Study on Sealant Performance for Reliable Ra-226 Analysis via Gamma Spectrometry
Han Chang Seo, Korea Institute of Nuclear Safety

M5-3 Design and development of a single moderator-based neutron spectrometer
Bowen Sun, CIRP

M5-4 Long-term Online Neutron Beam Monitor for Accelerator-Based Boron Neutron Capture Therapy in a Hospital
MasashiTakada, National Defense Academy of Japan

M5-5 Development and Characterization of a Glass Gas Electron Multiplier for Muon Detection
MOH HAMDAN, The University of Tokyo, The Fukushima Institute for Research, Education and Innovation

M5-6 Study on Impact Response of Material Structures and Aerosol Generation Mechanism Using Smoothed Particle Galerkin Method
Jinjiang CUI, China Institute for Radiation Protection

M6 Applications/ Standard

July 2, 11:00-12:30 Koshiba Hall

Session Chair: Yoshihito Namito, High Energy Accelerator Research Organization

M6-1 Stability analysis of critical structural transportation process based on finite element analysis
Yuheng Ma, China Institute for Radiation Protection

M6-2 HPLC-PDA method for quantitative and qualitative screening of chelates in soil wastes
Hee-Jung Im, Department of Chemistry, Jeju National University

M6-3 Establishment of a low-energy X-ray narrow-spectrum series calibration field based on ISO 4037:2019 standard series
Tomoya Tsuji, Japan Atomic Energy Agency

M6-4 Simulation study of a muon radiography system with a three-layer tracker for structural integrity assessment,
Seongyeon Lee, Yonsei University

M6-5 Implementation of Phase Shifting Techniques to Attain 1mm Spatial Resolution in Radiation Detectors,
Shuwei Zhao, University of Tokyo

M6-6 Development of a diamond pixel detector for UED and UEM applications,
Deng Zhi, Tsinghua University

Lunch Time
July 2, 12:30-14:00

M7 Dosimetry
July 2, 14:00-15:30 Sanjo Hall
Session Chair: Hee-Seock Lee, Pohang Accelerator Laboratory

M7-1 New OSL Reader Installation and Performance Test at Pohang Accelerator Laboratory
UkJae Lee, Pohang Accelerator Laboratory

M7-2 External exposure dosimetry of terrestrial animals in uranium mining areas
Shaofei Cao, China Institute for Radiation Protection

M7-3 Dosimetric Evaluation of a Flexible Perovskite-Based Detector toward In-Vivo Dosimetry under kV and MV Beams
Ju Yeol Shin, Paprica Lab. Co., Ltd.

M7-4 Research on 3D High Resolution Dose Measurement Technology Based on Scintillation Detection and Its Application in Radiotherapy
Hua LI, China Institute for Radiation Protection

M7-5 A Study on Enhancing the Reliability of Radiation Monitoring in Nuclear Power Plants Using the Alanine/ESR System
KITAEK HAN, Korean Association for Radiation Application

M7-6 Framework of Risk Assessment for Workers in The Maritime Transport of Radioactive Waste
Yoo-Kyoung Shim, Hanyang University

M8 Misc. New development
July 2, 14:00-15:30 Koshiba Hall
Session Chair: Kenichi Watanabe, Kyushu University

M8-1 New Features Implemented in PHITS Versions 3.34 and 3.35
TATSUHIKO SATO, Japan Atomic Energy Agency

M8-2 Utilization and Performance of Thermal Neutrons Based on Hybrid-Low Power Research Reactor (H-LPRR)
Kyung O Kim, Korea Atomic Energy Research Institute

M8-3 Preliminary Experimental Validation of Microwave ASHing Process for Radioactive Biological Wastes
GAO CHAO, China Institute for Radiation Protection

M8-4 Automation of the Monte-Carlo simulation with an Artificial Intelligence Agent
Byoungil Jeon, Korea Atomic Energy Research Institute

M8-5 Current Status and Regulatory Challenges of Radiation-Using Institutions in Korea
Sang Hyun Park, Korea Institute of Nuclear Safety

Coffee Break

July 2, 15:30-16:00

P2 Poster Session II
July 2, 16:00-18:00 Sanjo Hall and Koshiba Hall

Conference Dinner
July 2, 18:00-20:00 Restaurants at Sanjo Hall

July 3, 2025

G3 Overview/Status Reports (Special Lectures)
July 3, 9:15-10:45 Sanjo Hall
Session Chair: Hiroshi Nakashima, Hokkaido University

G3-1 Detection of gamma-ray photons by lead halide perovskite single crystals,
XIN WANG, Department of electronics, Southeast University

G3-2 Advancing Radiation Protection: IAEA Approach Towards Stakeholder Engagement in the Decision on Adoption of ICRU/ICRP Report 95,
Rodolfo Cruz Suarez, International Atomic Energy Agency

G3-3 Recent Progress in Radiation Safety Research of the High Temperature Gas-cooled Reactor
Feng Xie, Tsinghua University

G3-4 Overview of Shielding Design and Dose Control Strategies at NanoTerasu,
Masayuki Hagiwara, National Institutes for Quantum Science and Technology (QST)

G3-5 An Overview of Recent Educational and Research Activities at the Isotope Science Center, the University of Tokyo
Nobuyoshi Akimitsu, Isotope Science Center, the University of Tokyo

G3-6 Fostering Global Nuclear Science Education: New Platforms of INSTA and INSO,
Takeshi IIMOTO, The University of Tokyo

Coffee Break
July 3
Sanjo Hall 10:45-11:00
Koshiba Hall 10:30-11:00

G4 Award & Closing
July 3, 11:00-12:00 Sanjo Hall
Session Chair: Hiroyuki Takahashi, The University of Tokyo

Best Poster Award:
Young Scientist Award:
Final Remarks: Liu Qun, Kenichi Watanabe, Hiroyuki Takahashi

Invitation to ISORD-13: SYED ASRAF FAHLAWI WAFA S M GHAZI

Site Visit
Riken Nishina Center Accelerator Facility (Wako City, Saitama Prefecture)
July 3, 14:00-15:30 (Bus leaves at 13:00 from Sanjo Hall)

July 4, 2025

PHITS Tutorial
By Dr. Tatsuhiko Sato and Dr. Seiki Ohnishi

July 4, 9:00-18:00 Room 85, Faculty of Engineering Building #8

Poster Session I 16:00 - 18:00, July 1		
P1a - Sanjo Hall		
Presentation ID	**Name**	**Presentation Title**
P1a-01	HONGYEON LEE	PCA/ICA-Based Signal Analysis and Classification Method for Simultaneous Identification of H-3 and Gamma Radionuclides Using a Liquid Scintillation Counter
P1a-02	HONGYEON LEE	AutoEncoder Framework for Gamma Signal Reconstruction and Gamma-Induced Neutron Artifact Suppression
P1a-03	Youlhun Seoung	Evaluation of a Clinical Protocol for Optimizing Radiation Dose and Exposure Index in Digital Radiographic Examinations Based on DICOM Header Analysis
P1a-04	Youlhun Seoung	Optimization of Gaussian Low-pass Filter's Standard Deviation in Unsharp Masking for Clinical Digital Chest X-ray Images Using PSNR and SSIM Analysis
P1a-05	Byoung-Jik Kim	Methodological Study on Radiation Contamination Survey Using AI and Simulation
P1a-06	Jang-Lyul KIM	Comparison of Current Using ANSI/HPS N13.11-1993 in Korea and ANSI/HPS N13.11-2022 for Personal Dosimetry Performance Criteria for Testing
P1a-07	Michael Discher	Evaluating SMD resistors in electronic devices as accident dosimeters using the red thermoluminescence method
P1a-08	Sanghwa Shin	Evaluation of the radioactivation impact according to the impurity content of the reactor main structure
P1a-09	SANGHUN SHIN	Operational Plan for a Drone-Based Aerial Radiation Monitoring System under Normal and Emergency Conditions
P1a-10	Taichi Matsumura	Evaluation of Cs activity Concentration in the Shield Plug Gap at Unit 2 of Fukushima Daiichi Nuclear Power Plant by Simulation Analysis
P1a-11	Kenta SUGIHARA	Thulium-production cross sections via the natLu(p,X) reactions
P1a-12	JAEYEONG JANG	A Peak Shift Correction Method for SiPM Sensors Affected by Temperature in Sensor Networks

P1a-13	Kuri Sato	Uncertainty, decision threshold and detection limit of 3H determination using a liquid scintillation counter
P1a-14	Hailan Yang	Determination of Carbon-14 content in environmental soil samples in China
P1a-15	Chen GUO	Experimental Study on the Sampling Efficiency of Tritium in Airborne Effluents from HWR
P1a-16	Feng Zhang	Research on Solid Phase Extraction Discs for Rapid Analysis of Strontium-90
P1a-17	Kaite Lu	Research on the Analytical Method for Thorium-230 in Water Based on Alpha Spectrometry
P1a-18	Siwon Song	Computational studies of trapping efficiency in plastic scintillation optical fibers to enhance energy resolution in gamma ray spectroscopy
P1a-19	li bao	Analysis of 55Fe in Liquid Effluent from NPP
P1a-20	Juhee Kang	Comparison of displayed and measured Dose-Area Product (DAP) values in dental diagnostic radiation equipment
P1a-21	Sy Minh Tuan Hoang	Assessing Toxic Heavy Metal Contamination in Domestic Water via Neutron Activation Analysis: A Case Study in Urban Vietnam
P1a-22	JinHyoung Bai	Current Status of the Development of an Integrated Radiation Safety Management System for Nuclear Power Plants Using Digital Convergence Technology
P1a-23	DONGHEE HAN	Experimental Evaluation and Visualization of Scattered X-ray with Compact MiniPIX Timepix3 CdTe Sensor in Diagnostic Radiology
P1a-24	Xuyuan Ma	The Impact of Using Participant Consensus Values as Assigned Values on Performance Evaluation
P1a-25	Hyung Woo Nam	Development of a Mobile Radiobioassay Laboratory to estimate the internal dose of radiation workers in Korea
P1a-26	Cheol-Ha Baek	Design of a DOI Detector Comprising a Quai-Block Scintillator and a Dual-Ended Readout Photosensor with MLPE
P1a-27	Hyunil Kim	Performance Evaluation of Anti-Radiation Terrorism Portal Monitors

P1a-28	Miyuki Sasaki	Development of a radiation detector for contamination discrimination mounted on unmanned aerial vehicles for emergency response
P1a-29	Sunghwan Kim	High Dose Rate Dependence of Photo-polymerized Plastic scintillator for Proton Beams
P1a-30	HUANG Jianwei	Application of the Sequential Bayesian Method for Radionuclide Identification under Motion
P1a-31	Hiroshi Matsumura	Development and International Release of the 2024 Manual for Activation Assessment in Accelerator Decommissioning
P1a-32	Xiaoyu Shi	γ-Ray Radiation Field Reconstruction in Unknown Environments Using a Quadruped Robot
P1a-33	Suhyoung LEE	Surface Radioactive Contamination Monitoring and Sampling Method for Large Areas Using a Wet Mop Robot Cleaner
P1a-34	Youngkuk Jang	Annual Performance Inspection of the Criticality Accident Alarm System
P1a-35	Kyoung Won Jang	Characterization of a Fiber-Optic Gamma Probe for Integration with Electrosurgical Units
P1a-36	SeongJae Cheon	Development of an Automated Sample Analysis System for Verifying Self-Disposal Suitability of Radioactive Waste
P1a-37	Wenjing Gong	Study on estimation method of dose coefficient of Marine organisms based on voxel model
P1a-38	Feifei Wu	Optimization of Airborne Effluent Emission Limits for Nuclear Facilities Based on MIDACO Algorithm
P1a-39	ZHIXIANG YU	Study of the radiation effects of radioactive residues in soil at a decommissioning site
P1a-40	Wang Ying	Development of Wide Energy X/γ Radiation Field Online Monitoring Device
P1a-41	Yunpeng Wang	Design of Thyroid/Lung Counter and Monte Carlo Simulation Study on Detection Efficiency

Poster Session I 16:00 - 18:00, July 1		
P1b - Koshiba Hall		
Presentation ID	**Name**	**Presentation Title**
P1b-01	Wei Xu	A Portable Low Level Waste Incineration System of China Institute for Radiation Protection
P1b-02	Xiaoyu Zhao	The motion planning of nuclear emergency manipulator with the radiation damaged joint
P1b-03	Xiaomiao CHI	EXPERIMENTAL TESTING AND SIMULATION ANALYSIS OF RADIATION SHIELDING PERFORMANCE OF 90SR-90Y RADIATION SOURCES USING DIFFERENT MATERIALS
P1b-04	Junhyeok Kim	Preliminary Scenario-Based Radiation Source Term Assessment for Dose Evaluation for Workers in Auxiliary Building during Severe Accidents
P1b-05	Peidong Zhang	3D feature extraction of transport container based on multi-view depth map fusion and subpixel edge detection guidance
P1b-06	Eun-Jae LEE	Design and Shielding Characteristics of Disposal Truck for LILW Disposal Facility in Korea
P1b-07	Fujun Yang	Study on hematopoietic effect of drugs and pulsed electromagnetic field in mice after ionizing radiation injury
P1b-08	Shiyao Li	Research on Ultra-Long Lifespan Maintenance-Free Radiation Monitoring Technology
P1b-09	Lixiao Guo	Research on the characteristics of graphite dust production and particle size in the HTR-PM reactor, considering the impact on reactor safety and the challenges of dust management.
P1b-10	Hyoeun LEE	Introducing Radiation Target Level for the Shielding Design of a Nuclear-Powered Container Ship
P1b-11	Ye Cai	Research on The Performance of Deep Space Radiation Shielding Materials Based on Geant4 Simulation
P1b-12	Dung Thi Tran	Investigation of shielding efficiency of BaSO4 nanoparticle in PVC matrix for X-ray diagnostic: a Monte Carlo Simulation stud

P1b-13	Ju Young Kim	Assessment of Spatial Dose Rates in Work Area around the Reactor Vessel during Overhaul Period of PWR Nuclear Power Plant
P1b-14	Geon Woo Son	Analysis of Site Remediation Actions by Media after Decommissioning of Nuclear Power Plant
P1b-15	DaeHo Lee	Validation of Spatial Interpolation-Based Dose Assessment Algorithm Based on Dose Rate Measurements
P1b-16	Jae Chang Kim	Selection of Optimal Shielding Materials for 2.45 MeV Neutron Shielding
P1b-17	haoran chu	Development of Mobile Radioactive Incineration Ash Cement Solidification Device
P1b-18	SONG WANGGI	Introduction of a ventilation system for gaseous radioactive material leak prevention in isotope production facilities
P1b-19	Sangrok Kim	Ac-225 Synthetic Laboratory Shielding Design using PHITS
P1b-20	Qi Lv	A New Underwater Internal Inspection Method for Nuclear Fuel Assembly with High Radiation Resitance
P1b-21	Masahiro Sakamoto	Numerical Analysis of Radioactivity Limit A1 and A2 Value Ratios for Off-site Transportation of Small-amount of Fuel Debris Retrieved from the Fukushima Daiichi Nuclear Power Station
P1b-22	Xu Han	The Influence of Anions in the Disposal Environment on the Mineral Phase Composition of Cemented Waste Form
P1b-23	SangHeon Lee	A Study on the Simulation-Based Evaluation of a Pancake GM Tube-Based Radiation Detector for Performance Verification
P1b-24	So Yeon Min	Evaluation of Tritium Analysis in Water using Different Liquid Scintillation Counter Techniques and Cocktails
P1b-25	song yang	Application of Visual Recognition in Automatic Opening of Radioactive Waste Drums
P1b-26	Si cheng Chang	Preparation and Denitration Performance Study of SCR Catalysts for Nuclear Applications
P1b-27	Minyoung Lee	Derivation of X-ray Spectra for the NIST Moderate Beam Using MCNP Simulation

P1b-28	HeeSoo Kim	Analysis and disposal of radioactive waste due to upgrade of KSTAR device
P1b-29	Kai Luo	The research on scenario development for the after closure safety case of the low and intermediate level near surface radioactive solid waste disposal site
P1b-30	Yafeng Ren	Recent advances in carbon materials based on solar derived evaporation and adsorption for radioactive wastewater treatment
P1b-31	Min Lei	Separation of lanthanide actinium in LiF-NaF-KF (46.5:11.5:42 mol%) molten salt system
P1b-32	BAI JuYing	Influence of Different Heat Flux Boundary Conditions on Thermal Design of Radioactive Source Transport Containers
P1b-33	Joo Hyung Kim	Radionuclide Characteristic-Based Analysis of Gaseous Effluent Algorithms in PWR-GALE for SMR Applications
P1b-34	Sung Hyun Cho	Validation and Verification of the Updated AMORES 5.0 Code
P1b-35	Seungnam Lee	Estimation of Weapon-Grade Plutonium Production in North Korea’s Experimental Light Water Reactor Using ORIGEN and Serpent
P1b-36	Wei Liu	Impact of irradiation and thermal aging on the properties of GMZ bentonite
P1b-37	Muhammad Hafiz bin Kamaruddin	Advanced THz Security Screening: Development and Evaluation for Stand-Off Detection of Concealed Weapons and Contraband
P1b-38	ELI SYAFIQAH AZIMAN	Unlocking Scandium from Coal Ash: A Low-Radioactivity Opportunity for Malaysia
P1b-39	Minjung Kim	A Domain-Specific Korean Dataset for Radiation Safety : Chi-Square-Based Sentence Selection for Fine-Tuning KoBERT

Poster Session II 16:00 - 18:00, July 2		
P2a - Sanjo Hall		
Presentation ID	**Name**	**Presentation Title**
P2a-01	Joonhyuk LEE	Development of a Coded-Aperture Based Three-dimensional Handheld Gamma-Ray Imager for Radioactive Waste Drum Evaluation
P2a-02	Joonhyuk LEE	Coded-Aperture Based 3D Radioactive Contamination Mapping System Mounted on a UGV
P2a-03	Jia Chen	Research Progress on Materials for Tritium-Containing Wastewater Treatment
P2a-04	MINSEO SONG	Ambient dose equivalent rate mapping using an unmanned aerial system
P2a-05	SEUNGHO LEE	Performance Comparison Based on Coded-Aperture Mask Materials
P2a-06	Wonku Kim	Gain Shift Compensation in Gamma Spectra Using an Enhanced Count Reallocation Method
P2a-07	Hyunbin Yun	Deep Learning-Based Pile-Up Correction Using Trapezoidal Shaping and Derivative Peak Detection Method for Gamma Spectroscopy
P2a-08	Juwan Kang	Development of an AI algorithm for verifying spent fuel inventory in CANDU reactor
P2a-09	Jae Hyung Park	Performance evaluation of LaBr3:Ce and CeBr3 scintillators for low-energy X-ray detection
P2a-10	Tsubasa Shigyo	Development of β-ray emitting activation detector for ultra-long-term DT neutron irradiation
P2a-11	JeongWoo Lee	Assessment of Gross Beta Radioactivity in Precipitation in Southern Gyeonggi Province
P2a-12	Jiyao Cui	A Bayesian-based Spectral Analysis Approach for Low-level Radioactivity Counting

P2a-13	Xin Wan	Research on the Radiation Detector Performance and Point Defects of CdZnTe Epitaxial Single Crystals grown by CSS Method
P2a-14	Jangguen Park	Feasibility Study of On-site Production of Short-lived Radiotracers Using a D-D Portable Neutron Generator
P2a-15	Qingbo Du	Development of Radiation-Resistant γ Dose Rate Meter Based on Silicon Carbide Material
P2a-16	Soheil Aghabaklooei	Experimental investigation of a novel approach for rapid and safe annealing of radiophotoluminescence glasses (FD-7)
P2a-17	Seunghyeon Kim	Feasibility study of a Crack Detection System Based on Cherenkov Radiation Measurements
P2a-18	Hyeong Gu Kang	Performance Evaluation of Gd2O3-loaded 3D-Printed Plastic Scintillators
P2a-19	Sangjun Lee	Estimation of 2D Radionuclide Localization Using a Cherenkov-Based Sensor with Machine Learning
P2a-20	Han Cheol Yang	Feasibility Study of a 3D-Printed Skin Imitation Layer for Real-Time Assessment of Local Skin Dose
P2a-21	Junehyung Bernaski	Performance Evaluation of a Neutron Generator in a Confined Experimental Setup
P2a-22	Gyuhyeon SIM	Enhanced Differential Die-Away (DDA) Simulations by Incorporating Realistic Neutron Generator Characteristics
P2a-23	WANG PENG	Development of Neutron Spectrum Estimation in a Neutron Field Via (n,α) and (n,p) Reactions Using Multiple Converters
P2a-24	Young Ho Roh	Improving Radionuclide Inventory Predictions: A Comparative Analysis of Scale Factor and Machine Learning
P2a-25	Sehwan Seol	Development of a cadmium-free differential die-away analysis system
P2a-26	Zhiji Pan	Design of an active tissue-equivalent neutron personal dosimeter
P2a-27	-	-

P2a-28	Fan YANG	Enhancing Robotic Tactile Sensing: A Silicon Piezoresistive Sensor for Pressure Sensing in Radiation Field
P2a-29	Sotaro Miyao	Development of Long-Term PET Imaging using Te-118
P2a-30	Katsuhiro DOBASHI	Construction of TES-based MIR detection system for Surface and Interface Science
P2a-31	Mao Liang	Development and Application of Clearance Measurement Devices for Very Low-Level Radioactive Waste in Nuclear Power Plants
P2a-32	Eunjoong Lee	Development of data analysis and visualization program for radiation surveys: Fukushima data evaluation
P2a-33	Erika Takayama	Development of analytical systems for radiocarbon and tritium activity based on cavity ring-down laser spectroscopy
P2a-34	Minghao Dong	Mixed Reality-Guided Localization of Environmental Radiation Sources with a GAGG Compton Camera
P2a-35	Yuya Oshima	Detector Response Evaluation of Optical-Fiber-Based Neutron Detectors Using a Spherically Shaped Li Glass Scintillator
P2a-36	Tatsuro Oda	Test of a Fast Neutron Detector Using an Organic Glass Scintillator at the Pulsed Neutron Source of J-PARC
P2a-37	jing zhang	Rapid Measurement Technology for Biological Samples of 225Ac Radiopharmaceuticals
P2a-38	Yipin Zhang	The key technology research of measuring 129I in environmental samples based on accelerator mass spectrometry.
P2a-39	Sawako Futagi	Development of beta-particle radiation fields with reduced mean energy using 85Kr source and tissue-equivalent filter
P2a-40	YoungMoon Goh	Fit Function Modeling for Bragg Curves of Heavy Ion Beams
P2a-41	Kenichi Terashima	Applicability Study of Bubble Detector for Neutron Detection in High Gamma-ray field for the Decommissioning of Fukushima Daiichi Nuclear Power Station

Poster Session II 16:00 - 18:00, July 2		
P2b - Koshiba Hall		
Presentation ID	**Name**	**Presentation Title**
P2b-01	Munehiko Kowatari	Applicability of small glass dosemeters to simultaneous measurement of area and individual monitoring in X-ray fields for radiation protection and emergency
P2b-02	Munehiko Kowatari	Study on the applicability of a CdZnTe spectrometer to the establishment of an 241Am secondary radiation standards
P2b-03	Nanami Nakao	Verification of radiation protection measures five days after the Fukushima Daiichi Nuclear Power Plant accident
P2b-04	Nanami Nakao	Establishing “1F Decommissioning Ethnography System” to systematize knowledge
P2b-05	Youngmo Ku	Assessment of Combustion Air Dilution and Conditional Clearance of C-14–Contaminated Animal Carcasses in Korea
P2b-06	Seung Je Lee	Preliminary Revision of Organ Absorbed Dose Based on Actual Exposure Scenarios for Korean Radiation Worker Study
P2b-07	Meitong Wei	Assessing the Kerma Approximation for BNCT Dose Calculations in Comparison with the Analog Monte Carlo Method
P2b-08	Yumi Lee	A Preliminary Study on Rapid Patient Skin Dose Calculation for Interventional Radiology
P2b-09	Suhyeom Kim	Incorporation of Coronary Arteries into ICRP Mesh-type Reference Computational Phantoms for Improved Cardiovascular Dose Assessment
P2b-10	HAN CHANG HEE	Derivation of Korean ALARA Evaluation Parameters According to Scenarios
P2b-11	Gaeun Oh	Environmental Impact Assessment of Off-site Exposure from NORM Waste Disposal in the Chungcheong Region, Korea
P2b-12	Seung Beom Yoo	Internal Radiation Dose Assessment for Workers in the Glaze Manufacturing Industry

P2b-13	Soyoung Koh	Radiological Protection of Military Personnel in Urban Scenarios: Simulation-Based Assessment and Operational Relevance
P2b-14	Dong Gyu Lee	Derivation of Ingestion Dose Conversion Factors for Different Nuclides and Ingestion Pathways Reflecting Korea Characteristics.
P2b-15	SangHeon Lee	A Study on the radiological impact assessment according to Clearance scenario for RI waste
P2b-16	Honghui Li	Research on safety assessment in a conceptual and planning stage of high-level radioactive waste Beishan preliminary repository
P2b-17	Bongseok Kim	Review of Implementation Strategies of Protective Actions in PAZ and UPZ
P2b-18	Sejong Lee	The Evaluation of Radiation Emergency Exercise on Radiation Emergency Medical Preparedness and Response of Nuclear Facilities in South Korea
P2b-19	Seongjae Jang	The Safety Regulation Service of Nuclear Facilities on Radiation Emergency Medical Preparedness and Response in South Korea
P2b-20	Jongheon Kim	Procedure for the Assessment and Confirmation of Radiation Dose for “the Person with Abnormal Dosimeter Reading Results” in the Republic of Korea
P2b-21	Hirokuni Yamanishi	Development of Three-layer instrument for neutron dose evaluation
P2b-22	Sy Minh Tuan Hoang	Harnessing 10 MeV Electron Beam Irradiation for Sustainable Treatment of Textile Wastewater: Synergistic Efficiency and Scalability
P2b-23	Kazuki Iwaoka	A study on estimation of activity concentration of natural resources using AI techniques
P2b-24	chen deyi	Similarity law of particles dispersion in atmospheric boundary layer between scaled-down model and full-scale model
P2b-25	Masayuki Naito	Recent Developments in Internal Dose Monitoring at QST
P2b-26	Jonghun Jang	Exploratory Review of Risk Assessment Practices for Large-Scale Research Accelerator Facilities
P2b-27	Bilal Muhammad	Evaluation of X-ray shielding performance using radiochromic film sandwiched in tissue-equivalent material

P2b-28	HAFIZA BINTI SHAHROM	Radiological Safety Assessment of Cement-Based Building Materials in Malaysia: Gamma Spectrometry and Risk Analysis of NORMs
P2b-29	Han Yuan	The effects of uranium stress on physiological indicators, soil microorganisms, and enzyme activity of Sorghum sudanense (Piper) Stapf
P2b-30	Yu Song	A review of research on the application of data assimilation in the atmospheric dispersion of radionuclides
P2b-31	Xuanhe Wang	Real-time Monte Carlo Dose Calculation through a lightweight denoising Network in photon radiotherapy
P2b-32	Zirui Ye	Speeding Up Linac Source Monte Carlo Simulation for Photon Radiotherapy Dose Verification Using an Analytical Transport Model
P2b-33	Junik Cho	Preliminary Study for Dose Assessment of i-SMR Based on Conventional NPPs Work Data
P2b-34	Seung Beom Goh	Feasibility Analysis of Applying 3D-Printed Plastic Scintillator Dose Conversion Coefficients to a Local Exposure Dose Assessment System
P2b-35	Shuaiwei Zhao	Research on Key Factors Influencing Public Acceptance of Nuclear Decommissioning Projects
P2b-36	Shin-Dong Lee	Exposure Scenario of Dry Storage Worker for Spent Nuclear Fuel Using Concrete Cask at Interim Storage Facility
P2b-37	Hee-Jung Im	Distribution of radioactive isotopes in groundwater