





Calibration of High Volume Sampler for  
determination of radioactive elements in  
particulate matter of the air

TOPIC

RADIOMETRICS

1 Margot Vanheukelom

The role of soil weathering on radiocesium (137Cs) soil-plant transfer: a pot trial study with soil toposequences

TOPIC

RADIONUCLIDE TRANSPORT IN THE ENVIRONMENT

2 Edyta Łokas

Isotopic signatures of plutonium in the global cryosphere

TOPIC

RADIONUCLIDE TRANSPORT IN THE ENVIRONMENT

3 José María Abril Hernández

Kinetic reactive transport of radionuclides at the sediment water interface: Numerical model and applications

TOPIC

RADIONUCLIDE TRANSPORT IN THE ENVIRONMENT

4 Maria Ilie

A detailed chronology of the sedimentation in the Danube abyssal fan records the major episodes of the late-Holocene Black Sea evolution

TOPIC

RADIONUCLIDE TRANSPORT IN THE ENVIRONMENT

5 Jixin Qiao

Pioneering tracer application of anthropogenic U-233 and U-236 in the marine environment

TOPIC

RADIONUCLIDE TRANSPORT IN THE ENVIRONMENT

6 Ali Hosseini

Field studies on the influence of environmental factors on I-131 interception and weathering loss in grass

TOPIC

RADIONUCLIDE TRANSPORT IN THE ENVIRONMENT

7 Cheng Xu\_

Phosphorus turnover in the Yangtze estuary and adjacent East China sea using Cosmogenic <sup>32</sup>P and <sup>33</sup>P

TOPIC

RADIONUCLIDE TRANSPORT IN THE ENVIRONMENT

Transport and transformation of  $^{137}\text{Cs}$  from  
freshwater to coastal water

TOPIC

RADIONUCLIDE TRANSPORT IN THE  
ENVIRONMENT

1 Amelia Lee Zhi Yi

IAEA-coordinated Research Helps to Improve Quality of Radionuclide Measurements in Arid and Semi-Arid Environments TOPIC QUALITY ASSURANCE AND QUALITY CONTROL

2 Jasmina Kožar Logar

Lessons learned by PT organizer and how can be used by the laboratories in the processes of their improvement TOPIC QUALITY ASSURANCE AND QUALITY CONTROL

3 Annika Klose

Characterization of Am-241 spiked concrete samples as reference material for an alpha emitter remote sensing system TOPIC QUALITY ASSURANCE AND QUALITY CONTROL

4 Evgeny Taskaev

Development of Voluntary Consensus Standards and Measurement Support for NORM / TENORM Applications TOPIC QUALITY ASSURANCE AND QUALITY CONTROL

5 Yanqin Ji

Preparation of polonium-210 and carbon 14 seafood reference material and the labsintercomparison radiochemical analysis TOPIC QUALITY ASSURANCE AND QUALITY CONTROL

6 Bin Feng

Development and application of a passive monitoring network for mapping 3D profiles of airborne HTO inside anuclear facility TOPIC QUALITY ASSURANCE AND QUALITY CONTROL

7 Md Moudud Hasan

A thermoluminescent dosimeter (TLD) method for 137Cs activity concentration profiling TOPIC QUALITY ASSURANCE AND QUALITY CONTROL

8 Raquel Idoeta Hernandorena

Harmonization of detection limits for radioactivity concentrations in water in D&D situations

TOPIC

QUALITY ASSURANCE AND QUALITY CONTROL

9 Hanan Saleh

Variation of photon absorption and the buildup factors in GSO(Ce) Scintillation Detectors.

TOPIC

QUALITY ASSURANCE AND QUALITY CONTROL

1 Mathilde Zebracki

Investigating the geogenic origin of atypical U characteristics– elevated U content, low (234U/238U) activity ratio – of groundwater in Beauce Limestone Aquifer System, France

TOPIC

NATURAL RADIONUCLIDES

2 Kontstantina Kehagia

Radioactivity monitoring in drinking water in Greece

TOPIC

NATURAL RADIONUCLIDES

3 Qiuju Guo

Long-term and continuous field measurements of radon in atmosphere, soil and water

TOPIC

NATURAL RADIONUCLIDES

4 Mohammad Alem Sultani

Investigation of boundary layer height evolution and its implication for air pollution monitoring: a long-term study based on radon in Bratislava, Slovakia

TOPIC

NATURAL RADIONUCLIDES

5 Natalia Alegria

Radon behaviour due to “Galerna” in Bilbao (Northern of Spain)

TOPIC

NATURAL RADIONUCLIDES

6 Natália Taveira

Natural radioactive anomalies in the central area of Belo Horizonte, Brazil

TOPIC

NATURAL RADIONUCLIDES

7 Paulo da Silva

Assessment of 238U and 226Ra activity concentration along the Amazon Tall Tower Observatory site

TOPIC

NATURAL RADIONUCLIDES



8	Reem Aljber				
	The influence of soil characteristics on radon exhalation rate and in ambient air in Kuwait	TOPIC		NATURAL RADIONUCLIDES	
9	Abdelmourhit Laissaoui				
	Environmental reconstruction in the Oualidia – Sidi Moussa lagoon complex (western Morocco) using radiometric dating combined with geochemical approaches	TOPIC		NATURAL RADIONUCLIDES	
02010100	19/09/2023	8:30	11:00	<b>PLENARY SESSION II</b>	
CHAIRPERSONS	Tomoko M. Nakanishi			Pavel Povinec	
1	Katsumi Hirose				
	Temporal changes of <sup>137</sup> Cs activity concentrations in bottom waters and sediments in the Far Eastern Seas: Partitioning of <sup>137</sup> Cs between bottom waters and sediments	TOPIC		M. AOYAMA MEMORIAL SESSION	
2	Yayoi Inomata				
	Evaluating the global scale transport of surface seawater from 1956 to 2021 using <sup>137</sup> Cs released in the global ocean	TOPIC		M. AOYAMA MEMORIAL SESSION	
3	Daisuke Tsumune				
	Ocean simulations for assessing the impact of <sup>137</sup> Cs derived from the Fukushima Daiichi Nuclear Power Plant accident	TOPIC		M. AOYAMA MEMORIAL SESSION	
4	Hideki Kaeriyama				
	Radiocaesium derived from the Fukushima Daiichi Nuclear Power Station in the ocean interior as subtropical mode water in the North Pacific	TOPIC		M. AOYAMA MEMORIAL SESSION	
5	Sabine Charmasson				
	Role played by rivers in the supply of Fukushima Daiichi–Derived radionuclides in the coastal zone of Japan	TOPIC		M. AOYAMA MEMORIAL SESSION	



1 Asako Shimada

Local Surface and Vertical Distribution and Isotope Ratios for Radiocesium

TOPIC

FUKUSHIMA, CHERNOBYL AND TG

2 Hirofumi Tsukada

Transfer of <sup>137</sup>Cs and <sup>90</sup>Sr from soil to potato: Interpretation of association from global fallout in Aomori to accidental released in Fukushima and Chornobyl

TOPIC

FUKUSHIMA, CHERNOBYL AND TG

3 Tobias Weissenborn

How to measure the bioavailability from individual "Hot Particles"

TOPIC

FUKUSHIMA, CHERNOBYL AND TG

4 Christina Ganzha

Skeletal disorders in juvenile fish from the radiation contaminated lakes within the Chornobyl Exclusion Zone

TOPIC

FUKUSHIMA, CHERNOBYL AND TG

5 Lyubov Timonova

Contamination of STS soil with tritium

TOPIC

FUKUSHIMA, CHERNOBYL AND TG

6 José A. Corcho Alvarado

Residual radionuclide concentrations at the Bokak and Bikar Atolls, Northern Marshall Islands

TOPIC

FUKUSHIMA, CHERNOBYL AND TG

7 Antonio Jesús López Fuentes

Characterization of natural and anthropogenic radionuclides in sediment cores from the Black Sea by high resolution gamma spectrometry

TOPIC

FUKUSHIMA, CHERNOBYL AND TG

1 Christos Tsabaris

Progress on radioactivity tools for the deep ocean TOPIC RADIOANALYTICS

2 Georgios Siltzovalis

Characterization of novel instruments for  
radioactivity monitoring in oceanic environments TOPIC RADIOANALYTICS

3 Rikus le Roux

The efficiency and spatial characterization of an  
Underwater Gamma-Ray Detection System  
(DUGS) for aquatic sediment TOPIC RADIOANALYTICS

4 Jinzhou Du

Natural occurring Ra and Rn to address  
submarine groundwater discharge derived  $^{90}\text{Sr}$   
at the land-sea interface TOPIC SGD

5 Huiying Li Li

Radium-derived water mixing and submarine  
groundwater discharge (SGD) as sources of  
carbon and nutrients in the Beibu Gulf, South  
China Sea TOPIC SGD

6 Xilong Wang

Radium and Radon isotopes as tracer study on  
submarine groundwater discharge and its  
associated nutrient/carbon fluxes along the coast  
regions of China: a synthesis TOPIC SGD

1 Robert Breier

Numerical simulation of particle fluxes and production of cosmogenic nuclide in the Earth's atmosphere.

TOPIC

MODELLING

2 Pieter De Meutter

On the use of 3D adjoint atmospheric transport modelling to simulate lower tropospheric concentration variations of cosmogenic radionuclides

TOPIC

MODELLING

3 Céline Duffa

Use of modelling results to enhance the radiological monitoring of the French Mediterranean coastal zone

TOPIC

MODELLING

4 Olivier Radakovitch

Modelling of dissolved <sup>137</sup>Cs transport along a river-sea continuum and desorption at the estuary

TOPIC

MODELLING

5 Erik Berge

A comparison of dry deposition parametrization schemes in atmospheric radionuclide prediction models. Application to the Chernobyl case.

TOPIC

MODELLING

6 Sohan Chouhan

ETMOD (Environmental Tritium MODEL): Version 2 Capabilities

TOPIC

MODELLING

7 Magne Simonsen

Radionuclide and contaminant transport modeling in estuaries and fjords

TOPIC

MODELLING

02020202

19/09/2023

17:00

18:45

Parallel Session 4B

CHAIRPERSONS Uğur Görgün

José María López-Gutiérrez

1 Isidoro Gutiérrez Álvarez

Use of FLEXPART-WRF to investigate radon transport events associated with the impact of a NORM repository

TOPIC NORM

2 Francisco Javier Soto Cruz

Characterization and valorization diagnosis of generated NORM wastes in the decontamination process of phosphogypsum leachate

TOPIC NORM

3 Yoshikazu Kikawada

Effects on local atmospheric environment of volcanic ash from Sakurajima volcano, inferred from atmospheric deposition of 40K at Kagoshima City, Japan

TOPIC NATURAL RADIONUCLIDES

4 Elena Castaño Casco

Development of a robust methodology to obtain the radon exhalation rate in different materials

TOPIC NATURAL RADIONUCLIDES

5 Francisco Piñero García

Biodistribution of naturally occurring radionuclides in European perch (*Perca fluviatilis*) from Swedish lakes

TOPIC NORM

6 Jacques Bezuidenhout

Investigating naturally occurring radionuclides in sediment by characterizing the catchment basin geology of rivers in South Africa

TOPIC NORM

7 Hudson Kakambuka Angeyo

Levels and Dispersion Characteristics of Geothermally Emitted Radioactivity in a Kenyan Endorheic Complex

TOPIC NATURAL RADIONUCLIDES







1	Karin Hain		
	Extending the set of environmental tracers by the novel anthropogenic signatures $^{233}\text{U}/^{236}\text{U}$ and $^{237}\text{Np}$	TOPIC	ACCELERATOR MASS SPECTROMETRY
2	Martin Martschini		
	Analysis of $^{90}\text{Sr}$ in environmental samples at the attogram level by accelerator mass spectrometry	TOPIC	ACCELERATOR MASS SPECTROMETRY
3	Stephan Winkler		
	Exploring the lowest levels of environmental $^{90}\text{Sr}/\text{Sr}$ compared to $^{236}\text{U}/\text{U}$ in carbonates and seawater using a new, highly sensitive Accelerator Mass Spectrometry technique	TOPIC	ACCELERATOR MASS SPECTROMETRY
4	Oscar Marchhart		
	ALIS - a new isobar suppression setup for trace analysis of $^{90}\text{Sr}$ at CologneAMS	TOPIC	ACCELERATOR MASS SPECTROMETRY
5	Miroslav Jeřkovský		
	Performance and first analysis using accelerator mass spectrometry in CENTA laboratory, Bratislava	TOPIC	ACCELERATOR MASS SPECTROMETRY
6	Gereon Hackenberg		
	Status and development of $^{90}\text{Sr}$ soil measurements at CologneAMS	TOPIC	ACCELERATOR MASS SPECTROMETRY

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04010100

21/09/2023

8:30

11:00

**PLENARY SESSION V**

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CHAIRPERSONS Sheldon Landsberger

Jerzy-Wojtek Mietelski

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1 Rafael García-Tenorio

Identification of gaps and challenges in the management of NORM TOPIC

2 Detlev Degering

Sub Surface Science - Radionuclide Research in and about the Underground TOPIC

3 Serge Nagorny

Detector radiopurity and background problems in underground experiments TOPIC

4 Mai Khanh Pham

Accreditation of the IAEA's Environmental Laboratories for reference material production and updates on IAEA proficiency test exercises TOPIC

5 José María Abril Hernández

Progresses on the  $^{210}\text{Pb}$ -based dating of recent sediments under varying rates of supply TOPIC

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04020101 21/09/2023 11:30 13:00

**Parallel Session 6A**

CHAIRPERSONS Miroslav Hýža

Alexandra Ioannidou

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1 Olivier Masson

Uranium and thorium airborne levels around a Yellow-cake\_UF4 conversion plant: Stack discharge and resuspension contributions

TOPIC ATMOSPHERE

2 Francisco Piñero García

Impact of extreme Saharan dust intrusion on radioactive aerosols in southeast Spain

TOPIC ATMOSPHERE

3 Christophe Gueibe

Unprecedented xenon collection and separation from air on silver-exchanged zeolites

TOPIC ATMOSPHERE

4 Víctor Manuel Expósito Suárez

Evaluation of the content of natural and artificial radionuclides deposited in Spain by the Saharan dust intrusion in March 2022

TOPIC ATMOSPHERE

5 Alejandro Barba Lobo

A methodology to determine  $^{212}\text{Pb}$ ,  $^{212}\text{Bi}$ ,  $^{214}\text{Pb}$  and  $^{214}\text{Bi}$  in atmospheric aerosols; application to precisely

TOPIC ATMOSPHERE

6 Chuanlei Liu

Outdoor Rn-222 dose rate monitoring in Canada's arctic: seasonal variations, long-term trends and implications of climate change impact

TOPIC ATMOSPHERE

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04020102

21/09/2023

11:30

13:00

Parallel Session 6B

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CHAIRPERSONS Miroslav Jeřkovský

Johannes Lachner

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1 Andreas Wiederin

Isobar analysis in the actinide range for the characterization of a prospective Np spike material

TOPIC

ACCELERATOR MASS SPECTROMETRY

2 Stephanie Adler

Technetium-99: what is your environmental abundance?

TOPIC

ACCELERATOR MASS SPECTROMETRY

3 Darío Sánchez Jiménez

Exploring the limits of Accelerator Mass Spectrometry in nuclear waste characterisation

TOPIC

ACCELERATOR MASS SPECTROMETRY

4 Antonio Jesús López Fuentes

Measurement of the <sup>239</sup>Pu, <sup>240</sup>Pu and <sup>236</sup>U in sediments from the Black Sea using the 1 MV AMS system at CNA

TOPIC

ACCELERATOR MASS SPECTROMETRY

5 Mercedes López-Lora

Marine radioactivity investigations around a dumping area outside Gothenburg by Acceleratory Mass Spectrometry

TOPIC

ACCELERATOR MASS SPECTROMETRY

6 Martina Gwozdz

A dynamic and automated dilution setup for a quantitative characterization of activated graphite material

TOPIC

ACCELERATOR MASS SPECTROMETRY

1 Katsumi Hirose

Chemical implication of partition coefficient of  $^{137}\text{Cs}$  between aqueous and suspended and phases in natural water

TOPIC

MARINE ENVIRONMENT

2 Sang-Han Lee

The distribution characteristics of Pu mass ratio in the marine environment around the Korean Peninsula

TOPIC

MARINE ENVIRONMENT

3 Justin Gwynn

The effects of climate change on sources of radionuclides to and within the marine environment.

TOPIC

MARINE ENVIRONMENT

4 Antonelli Christelle

Monitoring of radioactivity along the French Mediterranean coast

TOPIC

MARINE ENVIRONMENT

5 Unai Abascal Ruiz

Transport and accumulation of artificial radionuclides in a marine core from the Celtic Sea

TOPIC

MARINE ENVIRONMENT

1 Daniel Zapata Garcia

Fast radiochemistry for the measurement of airborne radioactivity in emergency situations TOPIC RADIOANALYTICS

2 Álvaro López Rodríguez

Improving the measurement of <sup>210</sup>Po in seawater samples TOPIC RADIOANALYTICS

3 Silvia Pérez Moreno

Development of a process for removal of natural radionuclides and other pollutants in acid phosphogypsum leachates TOPIC RADIOANALYTICS

4 Hong-Chun Li\_

Monitoring heavy metal pollution by using sediment collector along a river catchment: Ker-Ya River in north western Taiwan TOPIC RADIOANALYTICS

5 Tanhaji Ghodke

Standardization of the radiolabelling procedure for C-reactive protein TOPIC RADIOANALYTICS

6 Karunakara Naregundi

Tube combustion and liquid scintillation counting based Carbon-14 determination method for quantifying the natural and synthetic components in caffeine TOPIC RADIOANALYTICS

1 Mats Eriksson

On the use of time-markers in 210Pb sediment dating model validation TOPIC MARINE SEDIMENTS

2 Angus Collison

Radioactivity in the Irish coastal environment TOPIC MARINE SEDIMENTS

3 Ana del Carmen Arriola Velásquez

Tracing sediment dynamics in El Confital bay (Spain): natural radionuclides distribution and their relationships with sediment characteristics TOPIC MARINE SEDIMENTS

4 Filothei Pappa

Temporal investigation of radionuclides and metals in Gera Gulf, Lesvos, Greece TOPIC MARINE SEDIMENTS

5 Yihong Xu

Plutonium isotopes dating for the recent sediments in shallow lakes in Eastern China TOPIC MARINE SEDIMENTS

6 Xu Ren

Sources of organic carbon in sediments from Kongsfjorden, Arctic TOPIC MARINE SEDIMENTS

7 José A. Corcho Alvarado

Plutonium isotopes as tracers of sediment transport processes in the southern Gulf of Mexico TOPIC MARINE SEDIMENTS

04020302

21/09/2023

17:00

18:45

Parallel Session 8B

CHAIRPERSONS

Raquel Idoeta Hernandorena

Yutaka Tateda

1

Airi Mori

Seafood ingestion dose following the Fukushima accident using probabilistic and deterministic approaches

TOPIC

RADIONUCLIDES IN BIOTA

2

Caroline Licour

Assessment of radio cesium and natural radionuclides in mosses and study of their distribution in a mountainous region in Central Portugal using GIS.

TOPIC

RADIONUCLIDES IN BIOTA

3

Sophie Reygrobellet

Dose rates to reference organisms due to regional radionuclide background levels in France

TOPIC

RADIONUCLIDES IN BIOTA

4

Michał Saniewski

Distribution of anthropogenic radionuclides in King George Island (South Shetland Archipelago, Antarctic Peninsula)

TOPIC

RADIONUCLIDES IN BIOTA

5

Jalal Sharib

Soil erosion and sedimentation rate using Cesium-137 in the Sembrong catchment

TOPIC

RADIONUCLIDES IN BIOTA

6

Jasmina Kožar Logar

Removal of the radioactive micropollutants from environmental water by the activated carbon from alternative sources

TOPIC

RADIONUCLIDES IN BIOTA

7

Margot Vanheukelom

Predicting radiocesium soil-plant transfer on a global scale: a meta-analysis study

TOPIC

RADIONUCLIDES IN BIOTA







