Authors and oral contributions ENVIRA 2023

Authors and contributions

Abascal Ruiz Unai

Parallel Session 7A

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

21/09/2023 15:00 th

Abril Hernández José María

Parallel Session 1B

Kinetic reactive transport of radionuclides at the sediment water interface:

18/09/2023 14:00 Numerical model and applications

Abril Hernández José María

PLENARY SESSION V

Progresses on the 210Pb-based dating of recent sediments under varying rates of supply

21/09/2023 8:30 rate

Adler Stephanie

Parallel Session 6B

Technetium-99: what is your environmental abundance?

21/09/2023 11:30

Alegria Natalia

Parallel Session 2B

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

18/09/2023 16:30

Aljber Reem

Parallel Session 2B

The influence of soil characteristics on radon exhalation rate and in ambient

18/09/2023 16:30 air in Kuwait

Arriola Velásquez Ana del Carmen

Parallel Session 8A

21/09/2023 17:00

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

Barba Lobo Alejandro

Parallel Session 6A

A methodology to determine212Pb,212Bi,214Pb and 214Bi in

21/09/2023

11:30

atmospheric aerosols; application to precisely obtain aerosolresidence times and Rn-daughters' equilibrium factors

Behbehani Montaha

Parallel Session 9A

Po loss in Seafood due to Cooking and its dose implications

22/09/2023 11:00

Berge Erik

Parallel Session 4A

19/09/2023 17:00

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

Bezuidenhout Jacques

Parallel Session 4B

19/09/2023 17:00

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

Breier Robert

Parallel Session 4A

19/09/2023 17:00

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

Butscher Daniel

Parallel Session 9A

Influence of Eu(III) and U(VI) on rat and human kidney cells

22/09/2023 11:00

Castaño Casco Elena

Parallel Session 4B

19/09/2023 17:00

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

Cerezo Fernández Agustín

Parallel Session 5A

20/09/2023 11:30

A fast algorithm for real-time monitoring of artificial radioisotopes implemented in the Catalan Environmental Radioactivity Surveillance Network

Chamizo Elena

PLENARY SESSION IV

20/09/2023 8:30

Pushing the limits of the 1 MV Accelerator Mass Spectrometry system at the Centro Nacional de Aceleradoresto analyse 233U and 244Pu

Charmasson Sabine

PLENARY SESSION II

Role played by rivers in the supply of Fukushima Daiichi–Derivedradionuclides in the coastal zone of Japan

19/09/2023 8:30

Cherkinsky Alexander

PLENARY SESSION VI

22/09/2023 8:30

Distribution of carbon isotopes in different soil fractions, including soil CO2 gas on the example of Ultisols, South Carolina, USA.

Chouhan Sohan

Parallel Session 4A

ETMOD (Environmental Tritium MODel): Version 2 Capabilities

19/09/2023 17:00

Christelle Antonelli

Parallel Session 7A

Monitoring of radioactivity along the French Mediterranean coast

21/09/2023 15:00

Collison Angus

Parallel Session 8A

Radioactivity in the Irish coastal environment

21/09/2023 17:00

Corcho Alvarado José A.

Parallel Session 3A

19/09/2023 15:00

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

Corcho Alvarado José A.

Parallel Session 8A

21/09/2023 17:00

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

Cwanek Anna

Parallel Session 5A

20/09/2023

Case study of recent radioactive contamination in the lower atmosphere of Spitsbergen, Svalbard archipelago

da Silva Paulo

16:30

11:30

Parallel Session 2B

18/09/2023

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

De Meutter Pieter

Parallel Session 4A

19/09/2023 17:00

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

de Vismes Ott Anne

Parallel Session 1A

18/09/2023 14:00

Integration of the corrections related to the self-attenuation and true coincidence summing effects in the gama-ray spectrum analysis software Genie2000

Degering Detlev

PLENARY SESSION V

Sub Surface Science - Radionuclide Research in and about the Underground

21/09/2023 8:30

Domingo Thomas

Parallel Session 1A

Enhancing Field-Deployable Detection Technologies for Nuclear Forensics

18/09/2023 14:00

Du Jinzhou

Parallel Session 3B

19/09/2023 15:00

Natural occurring Ra and Rn to address submarine groundwater discharge derived 90Sr at the land-sea interface

Duffa Céline

Parallel Session 4A

19/09/2023 17:00

Use of modelling results to enhance the radiologicalmonitoring of the French Mediterranean coastal zone

Eriksson Mats

Parallel Session 8A

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

21/09/2023 17:00

Expósito Suárez Víctor Manuel

Parallel Session 6A

21/09/2023 11:30

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

Fávaro Lopes João Marcos

Parallel Session 1A

18/09/2023 14:00

Exploratory Analysis of Gamma Spectrometry and EDXRF Applied to SoilRedistribution Evaluation in Agricultural Areas

Feng Bin

Parallel Session 2A

18/09/2023 16:30

Development and application of a passive monitoring network for mapping 3D profiles of airborne HTO inside anuclear facility

Friedrich Sebastian

Parallel Session 9A

22/09/2023 11:00

Influence of EDTA and EGTA on the Eu(III)/Cm(III) speciation in the human digestive system

Ganzha Christina

Parallel Session 3A

19/09/2023 15:00

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

García León José Luis

Parallel Session 1A

18/09/2023 14:00

Optimization of a liquid scintillation spectrometer Quantulus GCT 6220 for the measurement of environmental levels of tritium in water samples

García-Tenorio Rafael

PLENARY SESSION V

Identification of gaps and challenges in the management of NORM

21/09/2023 8:30

Ghodke Tanhaji

Parallel Session 7B

Standardization of the radiolabelling procedure for C-reactive protein

21/09/2023 15:00

Gueibe Christophe

Parallel Session 6A

21/09/2023 11:30

Unprecedented xenon collection and separation from air on silverexchanged zeolites

Guo Qiuju

Parallel Session 2B

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

18/09/2023 16:30

Gutiérrez Álvarez Isidoro

Parallel Session 4B

19/09/2023 17:00

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

Gwozdz Martina

Parallel Session 6B

21/09/2023 11:30

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

Gwynn Justin

Parallel Session 7A

21/09/2023 15:00

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

Hackenberg Gereon

Parallel Session 5B

Status and development of 90Sr soil measurements at CologneAMS

20/09/2023 11:30

Hain Karin

Parallel Session 5B

20/09/2023 11:30

Extending the set of environmental tracers by the novel anthropogenic signatures 233U/236U and 237Np $\,$

Hasan Md Moudud

Parallel Session 2A

18/09/2023 16:30

A thermoluminescent dosimeter (TLD) method for 137Cs activity concentration profiling

Hinrichs Kimberly

Parallel Session 1A

18/09/2023 14:00

High Sensitivity Measurement of 238Pu in Environmental and Nuclear Forensics Collections by Thermal Ionization Mass Spectrometry

Hirose Katsumi

Parallel Session 7A

21/09/2023 15:00

Chemical implication of partition coefficient of 137Cs between aqueous and suspended and phases in natural water

Hirose Katsumi

PLENARY SESSION II

19/09/2023 8:30

Temporal changes of 137Cs activity concentrations in bottom waters and sediments in the Far Eastern Seas: Partitioning of 137Cs between bottom waters and sediments

Hong Gi Hoon

PLENARY SESSION IV

20/09/2023 8:30

Utilities of environmental radioactivity tracers in assessing coastal carbon sequestration potential

Hosseini Ali

Parallel Session 1B

18/09/2023 14:00

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

Hou Xiaolin

PLENARY SESSION IV

20/09/2023 8:30

Level and distribution of anthropogenic radionuclides in China - interaction of marine and terrestrial environment

Idoeta Hernandorena Raquel

Parallel Session 2A

18/09/2023 16:30

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

Ilie Maria

Parallel Session 1B

A detailed chronology of the sedimentation in the Danube abyssal fan

18/09/2023

14:00

records the major episodes of the late-Holocene Black Sea evolution

Inomata Yayoi

PLENARY SESSION II

19/09/2023 8:30

Evaluating the global scale transport of surface seawater from 1956 to 2021 using 137Cs released in the global ocean

Ioannidou Alexandra

Parallel Session 5A

40-years 210Pb and trace elements concentrations at Helsinki, Finland

20/09/2023 11:30

Ješkovský Miroslav

Parallel Session 5B

20/09/2023 11:30

erformance and first analysis using accelerator mass spectrometry in CENTA laboratory, Bratislava

Ji Yanqin

Parallel Session 2A

18/09/2023 16:30

Preparation of polonium-210 and carbon 14 seafood reference material and the labsintercomparison radiochemical analysis

Kaeriyama Hideki

PLENARY SESSION II

19/09/2023 8:30

Radiocaesium derived from the Fukushima Dai-ichi Nuclear Power Station in the ocean interior as subtropical mode water in the North Pacific

Kaizer Jakub

PLENARY SESSION III

19/09/2023 11:30

Recent investigations of anthropogenic radionuclides in seawater of the western North Pacific Ocean

Kakambuka Angeyo Hudson

Parallel Session 4B

19/09/2023 17:00

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

Kehagia Kontstantina

Parallel Session 2B

Radioactivity monitoring in drinking water in Greece

18/09/2023 16:30

Kikawada Yoshikazu

Parallel Session 4B

19/09/2023 17:00

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

Klose Annika

Parallel Session 2A

18/09/2023 16:30

Characterization of Am-241 spiked concrete samples as reference material for an alpha emitter remote sensing system

Kontuľ Ivan

Parallel Session 5A

20/09/2023 11:30

Source apportionment study of total carbon fraction of urban aerosols in Bratislava, Slovakia

Kožar Logar Jasmina

Parallel Session 2A

18/09/2023 16:30

Lessons learned by PT organizer and how can be used by the laboratories in the processes of their improvement

Kožar Logar Jasmina

Parallel Session 8B

21/09/2023 17:00

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

Lachner Johannes

PLENARY SESSION IV

Next generation of isobar suppression at the new 1 MV AMS systemHAMSTER

20/09/2023

8:30

Laissaoui Abdelmourhit

Parallel Session 2B

18/09/2023 16:30

Environmental reconstruction in the Oualidia – Sidi Moussa lagoon complex (western Morocco) using radiometric dating combined with geochemical approaches

Landsberger Sheldon

PLENARY SESSION I

18/09/2023 11:30

Overview of neutron activation analysis for environmental radioactivity measurements radionuclides and other pollutants in acid phosphogypsum leachates

le Roux Rikus

Parallel Session 3B

19/09/2023 15:00

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

Lee Sang-Han

Parallel Session 7A

21/09/2023 15:00

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

Lee Sang-Han

PLENARY SESSION III

19/09/2023 11:30

Temporal variation of Cs-137 in the seawater from the East Sea/Sea of Japan (from the Fukushima nuclear power plant accident to the present)

Lee Zhi Yi Amelia

Parallel Session 2A

18/09/2023 16:30

IAEA-coordinated Research Helps to Improve Quality of Radionuclide Measurements in Arid and Semi-Arid Environments

Li Huiying Li

Parallel Session 3B

19/09/2023 15:00

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

Li_ Hong-Chun

Parallel Session 7B

21/09/2023 15:00

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

Licour Caroline

Parallel Session 8B

21/09/2023 17:00

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

Lind Ole Christian

PLENARY SESSION VI

22/09/2023 8:30

Mean soil contaminant concentration does not provide a conservative indicator of external exposure to wildlife – reindeer in Jotunheimen, Norway as a case study

Liu Chuanlei

Parallel Session 5A

20/09/2023 11:30

Environmental radiation monitoring by using Health Canada's Fixed-Point Surveillance network

Liu Chuanlei

Parallel Session 6A

21/09/2023 11:30

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

Llanes Gamonoso José

Parallel Session 1A

18/09/2023 14:00

A practical and general methodology for efficiency calibration of coaxial Ge detectors by using NORM standards

Łokas Edyta

Parallel Session 1B

Isotopic signatures of plutonium in the global cryosphere

18/09/2023 14:00

López Fuentes Antonio Jesús

Parallel Session 3A

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

19/09/2023 15:00

López Fuentes Antonio Jesús

Parallel Session 6B

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

21/09/2023 11:30 ^S

Lopez Gutierrez Jose Maria

Parallel Session 5A

Origin of atmospheric 129I in Southern Spain

20/09/2023 11:30

López Rodríguez Álvaro

Parallel Session 7B

Improving the measurement of 210Po in seawater samples

21/09/2023 15:00

López-Lora Mercedes

11:30

Parallel Session 6B

21/09/2023

Marine radioactivity investigations around a dumping area outside

Gothenburg by Acceleratory Mass Spectrometry

Máduar Marcelo Francis

Parallel Session 9B

Radon exhalation from the soil at the Amazon Tall Tower Observatory site

22/09/2023 11:00

Marchhart Oscar

Parallel Session 5B

20/09/2023 11:30

ALIS - a new isobar suppression setup fortrace analysis of 90Sr at CologneAMS

Martschini Martin

Parallel Session 5B

20/09/2023 11:30

Analysis of 90Sr in environmental samples at the attogram level by accelerator mass spectrometry

Masson Olivier

Parallel Session 6A

21/09/2023 11:30

Uranium and thorium airborne levels around a Yellow-cake_UF4conversion plant: Stack discharge and resuspension contributions

Masson Olivier

PLENARY SESSION IV

20/09/2023 8:30

Change in airborne radioiodine physico-chemical distribution with time:a key issue for dose assessment and contamination of the environment in nuclear emergencies

Maynard Christy

Parallel Session 9A

22/09/2023 11:00

Environmental and Nutritional Chemistry of Wild Harvested Berries vs. Commercial Berries: Depositional and Uptake Chemistry and Human Health Assessment

Mietelski Jerzy-Wojtek

PLENARY SESSION VII

Natural reactor in Oklo - 50 years from discovery

22/09/2023 12:30

Mori Airi

Parallel Session 8B

21/09/2023 17:00

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

Mori Airi

Parallel Session 9A

A New Global Seafood Dose Assessment

22/09/2023

11:00

Mothersill Carmel

PLENARY SESSION VI

22/09/2023 8:30

Development of population level biomarkers for low dose radiation: the importance of non-targeted effects

Nagorny Serge

PLENARY SESSION V

Detector radiopurity and background problems in underground experiments

21/09/2023

8:30

Nakanishi Tomoko M.

PLENARY SESSION I

18/09/2023 11:30

What has been revealed tracing trace radioactive elements after 12 years of Fukushima Nuclear accident

Naregundi Karunakara

Parallel Session 7B

21/09/2023 15:00

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

Nicomedes Silva Ferreira Isabela

Parallel Session 1A

18/09/2023 14:00

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

Pappa Filothei

Parallel Session 8A

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

21/09/2023

17:00

Pérez Moreno Silvia

Parallel Session 7B

21/09/2023 15:00

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

Pham Mai Khanh

PLENARY SESSION V

21/09/2023 8:30

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

Piñero García Francisco

Parallel Session 4B

19/09/2023 17:00

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

Piñero García Francisco

Parallel Session 6A

21/09/2023 11:30

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

Pressyanov Dobromir

Parallel Session 9B

22/09/2023 11:00

Novel approaches for measuring low radon levels in the environment by passive detectors

Qiao Jixin

Parallel Session 1B

18/09/2023 14:00

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

Radakovitch Olivier

Parallel Session 4A

19/09/2023 17:00

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

Radulescu Ileana

Parallel Session 1A

18/09/2023 14:00

Major elements, radioactivity assessment and the dose rate in arable and grazing land from south-eastern part of Romania

Reichardt Ignasi

Parallel Session 9B

22/09/2023 11:00

Weather-dependent detection limits for gamma-ray spectrometry in environmental radioactivity monitoring

Ren Xu

Parallel Session 8A

Sources of organic carbon in sediments from Kongsfjorden, Arctic

21/09/2023 17:00

Reygrobellet Sophie

Parallel Session 8B

21/09/2023 17:00

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

Salas Mar Bernardo

Parallel Session 9B

22/09/2023 11:00

Questioning the increase of population around the Laguna Verde Nuclear Power Plant- Mexico

Salbu Brit

PLENARY SESSION I

Challenges associated with source term and particle releases

18/09/2023 11:30

Saleh Hanan

Parallel Session 2A

18/09/2023 16:30

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

Sánchez Jiménez Darío

Parallel Session 6B

Exploring the limits of Accelerator Mass Spectrometry in nuclear waste characterisation

21/09/2023 11:30

Saniewski Michał

Parallel Session 8B

21/09/2023 17:00

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

Sharib Jalal

Parallel Session 8B

21/09/2023 17:00

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

Shimada Asako

Parallel Session 3A

Local Surface and Vertical Distribution and Isotope Ratios for Radiocesium

19/09/2023 15:00

Siltzovalis Georgios

Parallel Session 3B

19/09/2023 15:00

Characterization of novel instruments for radioactivity monitoring in oceanic environments

Simonsen Magne

Parallel Session 4A

Radionuclide and contaminant transport modeling inestuaries and fjords

19/09/2023 17:00

Soto Cruz Francisco Javier

Parallel Session 4B

19/09/2023 17:00

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

Steinhauser Georg

PLENARY SESSION VI

Current state of Zaporizhzhia NPP and other nuclear risks in Ukraine

22/09/2023 8:30

Sultani Mohammad Alem

Parallel Session 2B

18/09/2023 16:30

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

Takahashi Laura

Parallel Session 9B

The influence of social and environmental factors on radiometric studies

22/09/2023 11:00

Taskaev Evgeny

Parallel Session 2A

18/09/2023 16:30

Development of Voluntary Consensus Standards and Measurement Support for NORM / TENORM Applications

Tateda Yutaka

PLENARY SESSION III

19/09/2023 11:30

Non-destructive -spectrometry of ultra-low background level for small size sampleenabled clarification of specific radio-caesium transfer along food chain off Fukushima after 2011

Taveira Natália

Parallel Session 2B

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

18/09/2023 16:30

Teien Hans-Christian

Parallel Session 1B

Transport and transformation of 137Cs from freshwater to coastal water

18/09/2023 14:00

Timonova Lyubov

Parallel Session 3A

Contamination of STS soil with tritium

19/09/2023 15:00

Tsabaris Christos

Parallel Session 3B

Progress on radioactivity tools for the deep ocean

19/09/2023 15:00

Tsukada Hirofumi

Parallel Session 3A

19/09/2023 15:00

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

Chornobyl

Tsumune Daisuke

PLENARY SESSION II

19/09/2023 8:30

Ocean simulations for assessing the impact of 137Cs derived from the Fukushima Daiichi Nuclear Power Plant accident

Uğur Görgün Aysun

Parallel Session 9A

22/09/2023 11:00

Radiological Risk of Polonium ingestion and Inhalation: Need for Reassessment

Vanheukelom Margot

Parallel Session 1B

18/09/2023 14:00

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

Vanheukelom Margot

Parallel Session 8B

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

21/09/2023 17:00

Wang Xilong

Parallel Session 3B

19/09/2023 15:00

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

Weissenborn Tobias

Parallel Session 3A

How to measure the bioavailability from individual "Hot Particles"

19/09/2023 15:00

Wiederin Andreas

Parallel Session 6B

21/09/2023 11:30

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

Winkler Stephan

Parallel Session 5B

20/09/2023 11:30

Exploring the lowest levels of environmental 90Sr/Sr compared to 236U/U in carbonates and seawater using a new, highly sensitive Accelerator Mass Spectrometry technique

Xu Yihong

Parallel Session 8A

21/09/2023 17:00

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

Xu_ Cheng

Parallel Session 1B

18/09/2023 14:00

Phosphorus turnover in the Yangtze estuary and adjacent East China sea usingCosmogenic 32P and 33P

Yoschenko Vasyl

PLENARY SESSION III

Radiocesium dynamics in typical Fukushima forests

19/09/2023 11:30

Zapata Garcia Daniel

Parallel Session 7B

21/09/2023 15:00

Fast radiochemistry for the measurement of airborne radioactivity in emergency situations

Zebracki Mathilde

Parallel Session 2B

18/09/2023 16:30

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