



Regional Training Course on Alpha-Particle Spectrometry for determination of natural radionuclides in water samples

Hosted by

International Atomic Energy Agency

through the

Terrestrial Environmental Radiochemistry Laboratory (TERC)

Seibersdorf, Austria

5 to 9 August 2024

Ref. No.: TN-RER7014-2402869

Information Sheet

Purpose

The purpose of the event is to train participants on the application of radioanalytical techniques including alpha-particle spectrometry and Liquid Scintillation counting on determination of natural radionuclides in water samples.

Working Language(s)

The working language(s) of the event will be English.

Deadline for Nominations

Nominations received after **31 May 2024** will not be considered.

Project Background

Public and Environmental Radiation Protection and Environment Monitoring are high priority areas identified in the Europe Regional Profile 2022-2027. The risks for exposure to ionizing radiation in the region depend on several potential radiation hazards: e.g., the presence of nuclear power plants or envisaged construction of new ones, uranium legacy sites, historical nuclear test sites, nuclear waste storage facilities, NORM industry and/or NORM legacy sites, sites with important nuclear contamination and various research, industrial and medical applications involving the use of radionuclides. Many of these potential sources of exposure to ionizing radiation are currently insufficiently characterized and/or monitored for protection of the public and the environment as required by international recommendations and safety standards.

The TC project RER7014 “Improving Environmental Monitoring and Assessment for Radiation Protection in the Region” is aimed at contributing towards the enhancement of regional cooperation in the application of environmental monitoring programmes to improve radiological safety of public and the environment, by efficiently demonstrating radiological protection in the region for different exposure situations. The current project includes a set of activities for enhancing the capacities for planning, implementation, and harmonization of monitoring programmes for different exposure situations, both from the perspective of regulation and application of technology.

Scope and Nature

In accordance with workplan for 2023-2024 under the TC project, the purpose of the event is to address Member States technology specific needs for the strengthening of environmental monitoring programmes in the region, by enhancement and harmonization of radiochemistry expertise between laboratories contributing to regional environmental monitoring by applying radiochemistry techniques in determination of natural radionuclides in water samples.

Expected Output(s):

The participants will be capable of independently performing analysis of natural radionuclides from a water sample by utilizing radioanalytical techniques applied in a radiochemistry laboratory.

Radiation exposure may occur.

NO

Participation

The Regional Training Course on radiochemistry is open to the relevant stakeholders (radiochemistry users) from Member States participating in the TC project RER7014. Due to practical limitations, the number of participants will be limited to a maximum of twelve (12) participants in total.

Participants' Qualifications and Experience

Nominated candidates should be officially designated by counterparts of the TC project RER7014. These representatives from governmental laboratories or support organizations should be performing radiochemistry analysis of radionuclides in environmental Water samples. They must utilize radioanalytical techniques such as alpha-particle spectrometry and/or liquid scintillation counting to support the environmental monitoring program in the country.

Nominated candidates are required to hold at least one year work experience in measurements and analysis of radionuclides in water sample by alpha-particle spectrometry or liquid scintillation counting within a radiochemistry laboratory. Furthermore, experience of instruments calibrations, including basic knowledge of calculation and use relevant correction factors, as well as experience in the use of instruments' analysis software is desirable. Candidates are strongly encouraged to use own laptop during the course.

The Regional Training Course on radiochemistry will be conducted in English language. Thus, candidates should have sufficient English-language proficiency to be able to actively participate in all planned activities.

Application Procedure

Candidates wishing to apply for this event should follow the steps below:

1. Access the InTouch+ home page (<https://intouchplus.iaea.org>) using the candidate's existing Nucleus username and password. If the candidate is not a registered Nucleus user, she/he must create a Nucleus account (<https://websso.iaea.org/IM/UserRegistrationPage.aspx>) before proceeding with the event application process below.
2. On the InTouch + platform, the candidate must:
 - a. Finalize or update her/his personal details, provide sufficient information to establish the required qualifications regarding education, language skills and work experience ('Profile' tab) and upload relevant supporting documents;
 - b. Download and complete the [Designation of Beneficiary and Emergency Contact Form](#), and upload to InTouch+ ('Profile' tab under the personal section) specifying the document name. If already provided, kindly discard this step; and
 - c. Search for the relevant technical cooperation event (**EVT2402869**) under the 'My Eligible Events' tab, answer the mandatory questions and lastly submit the application to the required authority.

NOTE: Completed applications need to be approved by the relevant national authority, i.e. the National Liaison Office, and submitted to the IAEA through the established official channels by the provided designation deadline.

For additional support on how to apply for an event, please refer to the [InTouch+ Help page](#). Any issues or queries related to InTouch+ can be addressed to InTouchPlus.Contact-Point@iaea.org.

Should online application submission not be possible, candidates may download the nomination form for the training course from the [IAEA website](#).

NOTE: A medical certificate signed by a registered medical practitioner dated not more than four months prior to starting date of the event must be submitted by candidates when applying for a) events with a duration exceeding one month, and/or b) all candidates over the age of 65 regardless of the event duration.

Administrative and Financial Arrangements

Nominating authorities will be informed in due course of the names of the candidates who have been selected and will at that time be informed of the procedure to be followed with regard to administrative and financial matters.

Selected participants will receive an allowance from the IAEA sufficient to cover their costs of lodging, daily subsistence and miscellaneous expenses. They will also receive either a round-trip air ticket based on the most direct and economical route between the airport nearest their residence and the airport nearest the duty station through the IAEA's travel agency AX Travel Management, or a travel allowance, or they will be reimbursed travel by car/bus/train in accordance with IAEA rules for non-staff travel.

Disclaimer of Liability

The organizers of the event do not accept liability for the payment of any cost or compensation that may arise from damage to or loss of personal property, or from illness, injury, disability or death of a participant while he/she is travelling to and from or attending the course, and it is clearly understood that each Government, in approving his/her participation, undertakes responsibility for such coverage. Governments would be well advised to take out insurance against these risks.

Note for female participants

Any woman engaged by the IAEA for work or training should notify the IAEA on becoming aware that she is pregnant.

The Board of Governors of the IAEA approved new International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources. The Standards deal specifically with the occupational exposure conditions of female workers by requiring, inter alia, that a female worker should, on becoming aware that she is pregnant, notify her employer in order that her working conditions may be modified, if necessary. This notification shall not be considered a reason to exclude her from work; however, her working conditions, with respect to occupational exposure shall be adapted with a view to ensuring that her embryo or foetus be afforded the same broad level of protection as required for members of the public.

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