



Regional Workshop on Industrial Applications of Radiotracer and Sealed Sources Techniques

Hosted by

The Government of Türkiye

Through the

Istanbul Technical University Energy Institute

Istanbul, Türkiye

17 – 22 November 2025

Ref. No.: ME-RER1023- EVT2504167

Information Sheet

Purpose

The purpose of this workshop is to discuss and share experience including challenges and successes on radiotracer techniques and their industrial applications, and explore means to enhance the adoption of radiotracer and sealed source techniques in industry.

Working Language

The working language of the event will be English.

Deadline for Nominations

Nominations received after **12 September 2025** will not be considered.

Project Background

Radiotracers and nucleonic systems have been applied to investigate industrial installations and processes for protection and sustainable management of natural resources and ecosystems. To advance these techniques, the project aims to support the Member States to develop specific action plans to promote, implement and evaluate these techniques by allowing the technology and knowledge to be transferred among the participating Member States (MSs). The project

also contributes to one of the four priority thematic areas, "Isotope and Radiation Technology Applications, Environment Monitoring and Preservation" which included environmental and industrial applications in the IAEA TC, Europe Regional Profile 2018–2021, promoting the cooperation with other partners in harmonizing their actions with the European Union (EU)'s strategy, plan and actions.

Scope and Nature

This 6-day workshop and final meeting will combine expert lectures with a hands-on practical demonstration at a wastewater treatment plant (WWTP). The program is designed to deepen participants' understanding of radiotracer techniques and their industrial applications, with a particular focus on wastewater treatment processes.

Key activities will include:

- Comprehensive overview of radiotracer techniques used in industrial settings, with emphasis on applications in WWTPs.
- Introduction to wastewater treatment operations, including key parameters and functioning of Continuous Stirred Tank Reactor (CSTR) systems.
- On-site practical demonstration of radiotracer application in a WWTP unit.
- Analysis and group discussion of results obtained during the demonstration.
- Presentation of technical achievements and outcomes of the current TC project at both national and regional levels.
- Technical dialogue aimed at assessing regional needs and identifying future opportunities for support through Technical Cooperation (TC) projects.

Participation

The event is open to the national project counterparts participating in the RER 1023 project. Each Member State may submit a maximum of 2 nominations. The workshop is open to 25 participants.

Participant's Qualification and Experience

The participants must be from nuclear institutions engaged in radiotracer and sealed source applications. Participants should be the designated counterparts of the regional project RER 1023 and/or actively engaged in the industrial application of radiotracer or sealed source applications regional project activities at the national level. They are expected to have at least basic knowledge on radioisotope applications in industry and environment. A minimum qualification equivalent to a Higher National Diploma in fields such as chemical engineering, environmental engineering, petroleum engineering, nuclear engineering, physics, nuclear sciences, or applied mathematics is required. As this training course will be conducted in English, participants must be proficient in English language.

Occupational Exposure to Radiation

This event **will involve occupational** exposure to radiation.

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. Search for the relevant technical cooperation event (EVT2504167) 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 American Express, or a travel grant, 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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