



Regional Training Course on Strategies and Design of Microplastics Monitoring Programs

Hosted by

The Government of Montenegro

through the

University of Montenegro

Dobrota, Montenegro

28 September to 9 October 2026

Ref. No.: TN-RER7016-2603091

Information Sheet

Purpose

The purpose of the event is to train the participants on harmonized sampling methods, sample handling and processing, analytical procedures, and reporting requirements, in order to generate comparable, high-quality data for the monitoring of microplastics (0.3-5mm) in beach sand and sea surface water as well as to promote regional standardization of methodologies and exchange of knowledge among participating countries.

Working Language(s)

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

Deadline for Nominations

Nominations received after 28 June 2026 will not be considered.

Project Background

A survey analysis was conducted under project RER7015 on plastic pollution monitoring within the framework of Nuclear Technology for Controlling Plastic Pollution (NUTEC Plastics), IAEA's flagship initiative to address the global challenge of plastic pollution. The survey revealed that Member State (MSs) are not sufficiently aware of the comparative advantage of nuclear technology applications in monitoring microplastic pollution and clearly showed that MSs needed support in terms of education and training to strengthen their human resources and physical infrastructure for microplastic monitoring. Besides supporting MSs in developing competencies in microplastic monitoring, the project will strengthen participating MSs capabilities in the use of nuclear technologies for monitoring sediment pollution. The project anticipates hands-on training on advanced nuclear techniques for the analysis of contaminants, especially microplastics, in different environmental matrices, data evaluation, joint field training courses, proficiency tests, workshops, participation at international conferences, outreach activities, and online data management. One of the project objectives is to compare and assess environmental responses to pollution and climate change processes in different geographical locations and different environmental compartments (rivers, lakes, seas, soil, water, groundwater, and biota) to obtain a more complete understanding of ecosystems' adaptation and to propose mitigation measures. The project will strengthen and scale up the development of reliable and cost-effective techniques to assess the spatial and temporal abundance, and type of microplastics to better understand their origin, transport mechanisms, fate, and impact. This includes the establishment of harmonized, standardized protocols to identify microplastics in environmental samples, analytical techniques in line with best practices, and state-of-the-art science, and training for scientists and technicians in their use. The capacity building for the implementation of innovative nuclear techniques for microplastics monitoring will be supported. The project further aims to address freshwater environment in addition to marine environments and will be more comprehensive than RER7015.

Scope and Nature

This regional training course is designed to provide participants with comprehensive knowledge and practical skills for the harmonized monitoring of microplastics (0.3–5 mm) in beach sand and sea surface water. The course will cover the full monitoring workflow, including sampling design, field collection methods, sample handling and storage, laboratory processing, analytical identification and quantification procedures, quality assurance and quality control (QA/QC), data management, and reporting requirements.

The training will combine lectures, technical discussions, demonstrations, and hands-on practical exercises to ensure that participants gain both theoretical understanding and operational experience. Emphasis will be placed on the use of standardized and comparable methodologies that support regional cooperation and the generation of reliable datasets.

The course is regional in nature and aims to foster collaboration, knowledge exchange, and networking among participating institutions, while strengthening national capacities to implement consistent monitoring programmes and contribute to evidence-based environmental management and policy development.

Learning Objectives:

To acquire knowledge and skills in:

- 1) Protocols for the collection, separation, identification and counting of microplastics between 0.3 and 5 mm in size.
- 2) Criteria for setting up laboratories for the analysis of microplastics.
- 3) Analysis of polymers using ATR-FTIR (sample preparation, calibration and use of spectral libraries).
- 4) Quality assurance and quality control in microplastics analysis.
- 5) Reporting of results and integration to regional databases.
- 6) Strategy for the design of microplastic monitoring programs in coastal areas linked to Level 3 supplementary data for the reporting of SDG 14.1.1 b indicators.

Participation

The training course is being organized for Europe region and the countries participating in the RER7016 project include that will be implementing a microplastics monitoring program in their country's coastal and marine environments.

Each Member State participating in project RER7016 that meets the established conditions may nominate:

One (1) candidate for the entire two-week course.

or

Two (2) candidates, distributed as follows: one candidate for the first week and another for the second week.

This allows countries to choose the option that best suits their needs and ensures effective participation in the course.

Participants' Qualifications and Experience

This course is intended for technical specialists associated with project RER7016 who hold at least a bachelor's degree or equivalent in marine biology, biology, chemistry, environmental sciences, or a related field, and who have demonstrated practical experience in coastal and marine sampling as well as the analysis of environmental samples.

Previous experience in microplastics analysis and/or FTIR techniques would be considered an asset. In addition, it is highly desirable that participants have a background in chemistry and basic knowledge of infrared spectroscopy.

These qualifications and relevant experience should be clearly described in detail in the nomination forms.

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 (EVT2603091) 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.

IAEA Contacts

Programme Management Officer (responsible for substantive matters):

Ms Sibel Unlu
Division for Europe
Department of Technical Cooperation
International Atomic Energy Agency
Vienna International Centre
PO Box 100
1400 VIENNA
AUSTRIA
Tel.: +43 1 2600 25981
Fax: +43 1 26007
Email: S.Unlu@iaea.org

Administrative Contact (responsible for administrative matters):

Ms Oleksandra Shypilova
Division for Europe
Department of Technical Cooperation
International Atomic Energy Agency
Vienna International Centre
PO Box 100
1400 VIENNA
AUSTRIA
Tel.: +43 1 2600 21480
Fax: +43 1 26007
Email: O.Shypilova@iaea.org