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National Liaison Officers /

National Coordinators

2022-03-14

Subject: Regional Training Course on *In-Situ* Characterization of Contaminated Sites with Practical Field Applications, Pecs, Hungary, from 12 to 23 September 2022

Dear National Liaison Officer / National Coordinator,

I am pleased to inform you that the International Atomic Energy Agency (IAEA) is organizing the above event under the IAEA technical cooperation project RER7014, "Improving Environmental Monitoring and Assessment for Radiation Protection in the Region".

The purpose of the event is to train participants on the most frequently applied *in-situ* radioanalytical methods and techniques which are used for the radiological characterization and remediation of radioactively contaminated land and objects, including data collection, visualization, and data interpretation.

The attached Information Sheet provides further details, including technical and administrative aspects of the event. Selection of participants will be in accordance with IAEA procedures. Member States are strongly encouraged to identify suitable women participants.

The IAEA will provide non-local participants with a round-trip air ticket based on the most direct and economical route between the airport nearest the participant's residence and Pecs. Travel details will be agreed with the participants upon receipt of their official nomination. Participants will also receive an allowance from the IAEA sufficient to cover their costs of lodging, daily subsistence and miscellaneous expenses for the duration of the event in line with IAEA rules and procedures.

**Occupational Exposure to Radiation:** This activity may involve occupational exposure to radiation. Therefore, persons nominated are required to duly complete and return the attached Occupational Exposure History (OEH) form. The IAEA will provide participants in due course with a dosimeter to monitor their occupational exposure during this event.

We would appreciate receiving your country's nominations by **8 April 2022** through the IAEA's InTouch+ platform (<https://Intouchplus.iaea.org>). Should this not be possible, applicants may download

the Nomination Form for the course from the [IAEA's webpage](#). Completed forms must be endorsed by the relevant government authority and may be sent to the IAEA, preferably by email to Official Mail - IAEA Mail address [Official.Mail@iaea.org](mailto:Official.Mail@iaea.org), with copy to Ms Carmina Elizabeth Jimenez Velasco [C.Jimenez@iaea.org](mailto:C.Jimenez@iaea.org). Please be advised that late nominations or replacements of participants after the closing date for nominations will not be accepted.

We look forward to receiving your early response.

Yours sincerely,



Carmina Elizabeth Jimenez Velasco  
Programme Management Officer  
Division for Europe  
Department of Technical Cooperation

Enclosures: Information Sheet  
OEH Form



# **Regional Training Course on *In-Situ* Characterization of Contaminated Sites with Practical Field Applications**

**Hosted by**

**The Government of Hungary**

**through the**

**National Food Chain Safety Office, Food Chain Safety Laboratory Directorate  
and Radioanalytical Reference Laboratory**

**Pecs, Hungary**

**12 to 23 September 2022**

**Ref. No.: TN-RER7014-2202084**

## **Information Sheet**

### **Purpose**

The purpose of the event is to train participants on the most frequently applied *in-situ* radioanalytical methods and techniques which are used for the radiological characterization and remediation of radioactively contaminated land and objects, including data collection, visualization, and data interpretation.

### **Working Language(s)**

The working language of the event will be **English**.

### **Deadline for Nominations**

Nominations received after **8 April 2022** will not be considered.



# Project Background

The IAEA TC project RER7014 “Improving Environmental Monitoring and Assessment for Radiation Protection in the Region” aims to contribute to enhancing regional cooperation in environmental monitoring and improving radiological safety of public and the environment by efficiently demonstrating radiological protection in the region for different exposure situations.

Characterization of contaminated land is a complex task requiring a range of expertise and technical backgrounds. It can include the use of in field instrumentation, sampling strategies and techniques, laboratory analysis and data assessment and visualization.

An appropriate understanding of the potential contaminant sources, the receptors that may be at risk and the pathways by which contaminants can be transported are essential in planning the characterization work. The conceptual site model underpins the development of the characterization strategy and all other tasks associated with the management of the radioactively contaminated land.

*In-situ* survey techniques provide the opportunity to gain real-time information on the spatial distribution of radioactive contaminants and inform sample collection. Geostatistics can then be used to integrate and evaluate the data sets to support further characterization, for use in safety assessment, to underpin waste management decisions and/or to inform remedial design planning.

This Regional Training Course is designed to provide hands-on training on the most frequently applied *in-situ* methods and techniques for data collection and data visualization for characterization of radioactively contaminated land.

## Scope and Nature

The Regional Training Course aims to address the use of *in-situ* radioanalytical techniques which can be applied for both existing and emergency exposure situations, particularly the identification and inventory assessment of gamma ray emitting radionuclides, determination of the extent of site contamination, estimation of surface contamination of objects and dose-rate measurements.

The following topics will be included in the programme:

- I. Site characterization planning and conceptual site model;
- II. Familiarisation, selection and use of *in-situ* equipment for radiological survey;
- III. Field applications of *in-situ* radioanalytical techniques applied both in existing and emergency exposure situations (e.g. *in-situ* gamma-ray spectrometry, surface surveys using backpack systems, exploration using Unmanned Aerial Vehicles (UAV), different objects measurements, gamma dose-rate measurements, equipment calibration and control measurements, data evaluation), identification and inventory assessment of gamma-ray emitting radionuclides, determination of the extent of site contamination;
- IV. Designing and implementing soil and vegetation sampling plans;
- V. Data visualisation, spatial analysis and mapping using geostatistical techniques;
- VI. Sharing of good practices and case studies for the characterization of radioactively contaminated land.

## Participation

The Regional Training Course is open to maximum two (2) participants from each of the participating Member States of the TC Project RER7014 :

### Additional Requirements:

Due to practical limitations, the number of participants will be limited to a maximum of forty (40).

Selected participants should be able to bring a laptop to the workshop, which allows installation of software and run either Microsoft Windows 8/8.1/10 or RedHat Enterprise Linux 6 or higher in order to take part in the training.

Selected participants are required to attend in advance the IAEA e-Learning course on “Introduction to in-situ techniques for radiological characterization of sites”, available on the IAEA Learning Management System and accessible at: <https://elearning.iaea.org/m2/enrol/index.php?id=593>.

## Participants’ Qualifications and Experience

Nominated candidates should be technical staff from operating organizations, technical support organizations and others, carrying out radiological characterization activities for remediation of radioactively contaminated land and/or for implementing environmental radioactivity monitoring programmes in relation to existing or emergency exposure situations. The regional workshop will be conducted in English language. Thus, candidates should have sufficient English-language proficiency to be able to actively participate in all planned activities. Interpretation in Russian language will be only provided for specific group exercises, where necessary, but a full interpretation of all lectures and activities will not be provided.

## Occupational Exposure to Radiation

This event may involve occupational exposure to radiation. **Therefore, candidates are required to duly complete and return the Occupational Exposure History (OEH) form upon applying for the event.** The IAEA will provide selected participants in due course with a dosimeter to monitor their occupational exposure during this event.

## 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 (EVT2202084) 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](mailto: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.

## **IAEA Contacts**

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