



IAEA

International Atomic Energy Agency
Atoms for Peace and Development

Training Workshop on Techniques and Technologies for Characterization to Support Environmental Remediation

IAEA Headquarters, Vienna, Austria

4 - 8 August 2025

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Information Sheet

Introduction

Contaminated sites and areas requiring environmental improvement exist across the world. Critical to ensuring their remediation and reuse is the ability to characterize the site before, during and after site works.

Characterization of contaminated land is a multi-disciplinary task which requires a range of expertise and technical backgrounds. Characterization requires systematic planning, the use of in situ technologies and physical sample collection with laboratory analyses, and data verification, analysis and visualization.

Before starting a characterization project (or a monitoring programme), it is essential to build an understanding of the potential contaminant sources, the receptors that maybe at risk and the migration pathways. This conceptual site model underpins the development of the characterization plan and all other tasks associated with the management, including monitoring and remediation, of the radioactively contaminated land.

In general characterization is an iterative process based on systematic planning; data maybe collected at different times and through different methods which are then combined to produce the overall status a site. For example, in situ survey techniques provide the opportunity to gain real-time information on the spatial distribution of radioactive contaminants and inform sample collection. Geo-statistics can then be used to integrate and evaluate the data sets to support further characterization, for use in safety assessment, to support waste management decisions and / or to inform remedial design.

This training workshop is part of an ongoing series of activities organised by the International Atomic Energy Agency's (IAEA's) Decommissioning and Environmental Remediation Section to support Member States in the characterization of radioactively contaminated land.

Objectives

The workshop aims to increase the knowledge and skills of new and early career professionals, scientists, and technicians by focusing on the essential steps involved in the characterization of land impacted by radioactive contaminants.

The workshop will also enable Member States to share good practices and experiences related to approaches used for the characterization of radioactively contaminated land, while providing valuable networking opportunities to foster peer support and collaboration.

Target Audience

This introductory training workshop is designed for individuals involved in the radiological characterization, monitoring and remediation of radioactively contaminated land. The course is particularly applicable to early career practitioners, scientists and technicians carrying out radiological characterization and groundwater monitoring activities and trainees pursuing a career within the field of radioactively contaminated land management.

Working Language

English.

Topics

This workshop is designed to provide overarching knowledge of the key technical aspects regarding the planning and implementing characterization of radioactively contaminated land. This workshop will comprise lectures and tutorial exercises.

The following topics will be included in the programme:

- Creating and using a conceptual site model;
- Systematic planning for environmental characterization;
- Use of radiological survey techniques;
- Intrusive site investigation techniques;
- Data management and verification; and
- Data analysis and visualisation.

Participation and Registration

All persons wishing to participate in the event have to be designated by an IAEA Member State or should be members of organizations that have been invited to attend.

In order to be designated by an IAEA Member State or invited organization, participants are requested to submit their application via the InTouch+ platform (<https://intouchplus.iaea.org>) to the competent national authority (Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) or organization for onward transmission to the IAEA by **30 May 2025**, following the registration procedure in InTouch+:

1. Access the InTouch+ platform (<https://intouchplus.iaea.org>):
 - Persons with an existing NUCLEUS account can sign in to the platform with their username and password;
 - Persons without an existing NUCLEUS account can register [here](#).
2. Once signed in, prospective participants can use the InTouch+ platform to:
 - Complete or update their personal details under ‘Complete Profile’ and upload the relevant supporting documents;
 - Search for the relevant event under the ‘My Eligible Events’ tab;
 - Select the Member State or invited organization they want to represent from the drop-down menu entitled ‘Designating Authority’ (if an invited organization is not listed, please contact InTouchPlus.Contact-Point@iaea.org);
 - If applicable, indicate whether financial support is requested and complete the relevant information (this is not applicable to participants from invited organizations);
 - Based on the data input, the InTouch+ platform will automatically generate the Participation Form (Form A) and/or the Grant Application Form (Form C);
 - Submit their application.

Once submitted through the InTouch+ platform, the application, together with the auto-generated form(s), will be transmitted automatically to the required authority for approval. If approved, the application, together with the applicable form(s), will automatically be sent to the IAEA through the online platform.

NOTE: The application for financial support should be made, together with the submission of the application, by **30 May 2025**.

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

Selected participants will be informed in due course on the procedures to be followed with regard to administrative and financial matters.

Participants are hereby informed that the personal data they submit will be processed in line with the [Agency’s Personal Data and Privacy Policy](#) and is collected solely for the purpose(s) of reviewing and assessing the application and to complete logistical arrangements where required. The IAEA may also use the contact details of Applicants to inform them of the IAEA’s scientific and technical publications, or the latest employment opportunities and current open vacancies at the IAEA. These secondary purposes are consistent with the IAEA’s mandate. Further information can be found in the [Data Processing Notice](#) concerning IAEA InTouch+ platform.

Expenditures and Grants

No registration fee is charged to participants.

The IAEA is generally not in a position to bear the travel and other costs of participants in the event. The IAEA has, however, limited funds at its disposal to help meet the cost of attendance of certain participants. Upon specific request, such assistance may be offered to normally one participant per country, provided that, in the IAEA's view, the participant will make an important contribution to the event.

The application for financial support should be made, together with the submission of the application, by **30 May 2025**.

Venue

The event will be held at the Vienna International Centre (VIC), where the IAEA's Headquarters are located. Participants must make their own travel and accommodation arrangements.

General information on the VIC and other practical details, such as a list of hotels offering a reduced rate for IAEA participants, are listed on the following IAEA web page:

www.iaea.org/events.

Participants are advised to arrive at Checkpoint 1/Gate 1 of the VIC one hour before the start of the event on the first day in order to allow for timely registration. Participants will need to present an official photo identification document in order to be admitted to the VIC premises.

Visas

Participants who require a visa to enter Austria should submit the necessary application to the nearest diplomatic or consular representative of Austria at least four weeks before they travel to Austria. Since Austria is a Schengen State, persons requiring a visa will have to apply for a Schengen visa. In States where Austria has no diplomatic mission, visas can be obtained from the consular authority of a Schengen Partner State representing Austria in the country in question.

Additional Requirements

Participants should submit with their official designation a personal abstract.

The number of spaces on the training workshop is limited, therefore the personal abstract will be used to select participants.

If you do not provide a personal abstract your nomination cannot be considered.

In your personal abstract, please explain why you are an ideal candidate for this training workshop. Be specific about:

- *Why you should be selected:* Explain how this workshop aligns with your current work.
- *Career Impact:* Describe how participating will benefit your personal career growth and development.
- *Organisational contribution:* Highlight how your participation will also bring value to your organisation.

This personal abstract is a critical part of the application and will help us assess your alignment with the workshop objectives. Be concise, clear, and specific.

Your personal abstract should be no longer than 400 words.

Do not submit proposals for technical papers, this is a training workshop not a technical meeting.

Prior to attending the workshop, participants must complete the IAEA e-learning modules on [fundamental of environmental remediation](#) and [planning for environmental remediation](#).

Participants are expected to familiarize themselves with the following IAEA publications and resources before attending the workshop:

- [Introduction to In Situ Techniques for Radiological Characterization of Sites](#)
- [Remediation Strategy and Process for Areas Affected by Past Activities or Events](#), IAEA Safety Standard Series No. GSG-15, IAEA, Vienna (2022). (Note, this Safety Standard replaces Remediation Process for Areas Affected by Past Activities and Accidents, IAEA Safety Standards Series No. WS-G-3.1, 2007).
- [Guidelines on Soil and Vegetation Sampling for Radiological Monitoring](#), Technical Reports Series No. 486, IAEA, Vienna (2019).
- [In Situ Analytical Characterization of Contaminated Sites Using Nuclear Spectrometry Techniques: Review of Methodologies and Measurements](#), IAEA Analytical Quality in Nuclear Applications Series No. 49, IAEA, Vienna (2017).
- [Guidelines for Radioelement Mapping using Gamma Ray Spectrometry Data](#), IAEA-TECDOC-1363, IAEA, Vienna (2003).

To enable full participants within the workshop exercises, participants are requested to bring to the workshop a laptop with the following specification:

Supported operating systems

- PC Intel/AMD;
- Windows 10 64-bit and RedHat 7 Enterprise (or higher) 64-bit.

Minimum system requirements:

- Intel 64-bit compatible processor;
- 4 Gb system memory (16 Gb is recommended);
- NVIDIA and AMD/ATI graphic cards with the most recent drivers are recommended for using the 3D Viewer;
- Monitor capable of 1440x900 pixels.

Prior to the workshop participants will be provided with a link to download software and documents that will be used during the workshop to teach data verification, analysis and visualisation techniques.

IAEA Contacts

Scientific Secretaries:

Ms Kim Baines

Division of Nuclear Fuel Cycle and Waste Technology
Department of Nuclear Energy
International Atomic Energy Agency
Vienna International Centre
PO Box 100
1400 VIENNA
AUSTRIA

Tel.: +43 1 2600 22783

Fax: +43 1 26007

Email: K.Baines@iaea.org

Ms Gloria Kwong

Division of Nuclear Fuel Cycle and Waste Technology
Department of Nuclear Energy
International Atomic Energy Agency
Vienna International Centre
PO Box 100
1400 VIENNA
AUSTRIA

Tel.: +43 1 2600 22812

Fax: +43 1 26007

Email: G.Kwong@iaea.org

Administrative Secretary:

Mr Jovan Catovic

Division of Nuclear Fuel Cycle and Waste Technology
Department of Nuclear Energy
International Atomic Energy Agency
Vienna International Centre
PO Box 100
1400 VIENNA
AUSTRIA

Tel.: +43 1 2600 22754

Fax: +43 1 26007

Email: J.Catovic@iaea.org

Subsequent correspondence on scientific matters should be sent to the Scientific Secretary/Secretaries and correspondence on other matters related to the event to the Administrative Secretary.

Event Web Page

Please visit the following IAEA web page regularly for new information regarding this event:
www.iaea.org/events/EVT2404134