

# **Interregional Training Course on Environmental Remediation Design and Implementation**

#### Hosted by

Government of China

through the

East China University of Technology

27 November to 1 December 2023

Ref. No.: TN-INT2020-2301297

#### **Information Sheet**

# **Purpose**

The purpose of the event is to train the participants on the different components of the design and implementation of environmental remediation projects (D&ER). Particular emphasis will be given to the remediation of former sites in which Uranium In-Situ Recovery (ISR) Processes have been deployed.

# **Working Language(s)**

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

#### **Deadline for Nominations**

Nominations received after 25 September 2023 will not be considered.

#### **Project Background**

This Interregional Project INT2020 is developed with the aim of capacity building in Member States to facilitate the implementation of remediation and decommissioning progress by providing a series of articulated training events that will lead participants to acquire a more solid and integrated view of the different elements that are necessary to progress with D&ER Projects. Instead of organising training events covering a diverse set of ad-hoc topics, this project is because it arranges a series of articulated training modules that will gradually contribute to the consolidation of necessary skills in order to contribute to the planning, management, implementation and oversight of D&ER Projects. As D&ER is a multidisciplinary process, a holistic approach will be pursued, and individual aspects will be considered from multiple angles. This project is expected to increase progress in planning and delivery of D&ER projects by providing practical skills and enhancing the understanding of all drivers and constraints from a holistic approach, with the full suite of stakeholders and disciplines. This training programme will be imbued with a sense of realism. To this end, the training programme will draw from a wide range of case studies, anecdotal evidence, and personal experience. The project will entail a collaborative approach by utilizing innovative training mechanisms such as integrated web-based tools (e-learning and webinars.)

# **Expected Outputs**

The expected output of this interregional training course is to have an increased number of qualified individuals and organisations engaged in environmental remediation activities, along with improved frameworks and plans for implementation of such projects.

## **Participation**

The interregional training course is intended for participants with diverse backgrounds and professions, including policymakers, regulators, operators, and contractors. The expected participation of trainees from different countries, backgrounds and jobs will allow them to network, share their experiences, and help one another to understand and solve problems in creative ways.

The course is open to 30 participants from Member States of the TC project INT2020: Algeria, Angola, Argentina, Armenia, Azerbaijan, Bangladesh, Belarus, Brazil, Bulgaria, Chile, China, Croatia, Cuba, Czech Republic, Egypt, Estonia, Georgia, Greece, Hungary, Indonesia, Islamic Republic of Iran, Iraq, Jamaica, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Latvia, Libya, Lithuania, Malawi, Malaysia, Mexico, Republic of Moldova, Mongolia, Morocco, Mozambique, Namibia, Niger, North Macedonia, Pakistan, Peru, Philippines, Poland, Romania, Russian Federation, Saudi Arabia, Serbia, Slovakia, Slovenia, South Africa, Tajikistan, Thailand, Tunisia, Türkiye, Uganda, Ukraine, United Arab Emirates, United Republic of Tanzania, Uzbekistan, Bolivarian Republic of Venezuela, Viet Nam and Zambia.

# **Scope and Nature**

This training course will focus on environmental remediation design and implementation for facilities and sites with radioactive contamination caused by former In-Situ Recovery (ISR) activities, and will touch upon the different components of the design and implementation of environmental remediation projects considering the development of conceptual site models, modelling of the main processes in charge of contaminant transport in the environment, environmental remediation technology evaluation, selection and optimization, remediation monitoring and site closure and institutional controls.

The course is oriented toward high-level decision makers, project planners, managers, implementers, and individuals that aim to work in the above positions/capacities, who currently or future involve their national project or activities related to environmental remediation. The format of the training course will consist of the following: a mix of lectures and interactive sessions; daily assignments to be completed independently by participants, delivery of a final assignment. Topics covered in the course will include: Conceptual site model definition, Purpose and use of CSM, CSM development, Conceptual site model components, Updating a conceptual site model; Overview of environmental modelling, objectives and methods, Source term modelling, Fate and transport modelling, remedial action goals and performance parameters, connection with end state and future use, selection treatability properties of radionuclides, waste management considerations, cost considerations, groundwater vs soil remediation technologies, roles of remediation monitoring program components, Design of Remediation remediation monitoring, Monitoring Plan. remediation monitoring activities, performance monitoring, trends/significant results, long-term monitoring considerations, definition of "closure, demonstrating compliance with closure requirements (final status survey), Institutional controls, long-term & performance monitoring, record keeping, Financial Requirements, long-term Stewardship

## Participants' Qualifications and Experience

Participants in the training events will need to (1) have advanced competency in the course language (English) (2) be currently employed with regulator, industry, university/educational program, or other organization with involvement in D&ER activities (3) have a formal university education in an appropriate field (including engineering, science, law, business, and social science) or adequate level of experience in a "relevant" field. For attending this module (or any other module of the project) candidates will need to complete designated eLearning module(s). Only candidates that can prove that they have successfully completed the e-Learning module will have their applications further examined. For those who have achieved this stage the next step will be to attend a webinar prior to attending Face to Face (FTF) training. The webinar will task each participant with an assignment that need to be delivered during the training period.

# **Application Procedure**

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

- 1. Access the InTouch+ home page (<a href="https://intouchplus.iaea.org">https://intouchplus.iaea.org</a>) 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 (<a href="https://websso.iaea.org/IM/UserRegistrationPage.aspx">https://websso.iaea.org/IM/UserRegistrationPage.aspx</a>) 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 <u>Designation of Beneficiary and Emergency Contact Form</u>, 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 (EVT2301297) 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 <u>InTouch+ Help page</u>. Any issues or queries related to InTouch+ can be addressed to <u>InTouchPlus.Contact-Point@iaea.org</u>.

Should online application submission not be possible, candidates may download the nomination form for the training course from the <u>IAEA website</u>.

**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 be informed at that time of the procedure to be followed regarding 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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