



# **Regional Workshop on Wastewater and Sludge Treatment by Radiation Technologies**

**Hosted by**

The Government of Slovakia

**through the**

Slovak University of Technology of Bratislava; Faculty of Electrical Engineering and Information Technology

Trencin, Slovakia

**26 to 28 May 2020**

**Ref. No.:** ME-RER1021-2001315

## **Information Sheet**

### **Purpose**

The purpose of the event is to discuss theoretical background on the subject and share practical experiences on radiation technologies, based on gamma and electron beam irradiation used for wastewater and sludge treatment when both chemical and biological contamination of water and sludge are considered.

### **Working Language**

The working language of the event will be English.

## **Deadline for Nominations**

Nominations received after **20 March 2020** will not be considered.

## **Project Background**

Radiation processing exists in many European and Central Asian countries mainly for the sterilization of medical products and the production of advanced polymer materials. The planned further expansion of the European Union will result in increased trade, requiring strictly controlled radiation technologies through standardized quality control methods and procedures. EU and national authorities introduced new standards and regulations related to health, food, industry, and further development in radiation processing. The regional project activities have been carried out to support improvement of and establishment of radiation processing technologies in industrial Gamma and Electron Beam facilities, and this project activity focus on supporting safe and efficient operation of radiation processing in environmental applications.

## **Expected Outputs**

An increased knowledge of Gamma and Electron Beam (EB) irradiation facility staff in application of their radiation technology to wastewater treatment, aiming at technology optimization in radiation type and dose applied, and at technological advantages in comparison with other ones.

## **Scope and Nature**

The workshop will consist of presentations with respect to wastewater treatment at Gamma and EB irradiation facilities; aimed at technology optimization and advantages specification as well as introduction of new ideas in technology dissemination. Reviews on the utilization of radiation technologies for wastewater treatment will be given from the participants. During the workshop, a visit to the EB facility established in Slovakia in 2012 will be organized to share the experiences, challenges and successful achievements in Slovakia.

# Participation

The meeting is open up to maximum 25 participants from Member States participating in the regional TC project RER1021. Each Member States is invited to nominate one or more participants who must match the profile described.

## Participants' Qualifications and Experience

The participants should be technical specialists, technicians or leaders/managers of a) operating industrial irradiation facilities, or b) institutions planning to establish new irradiation facilities.

## 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 (EVT2001315) 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 meeting 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

Programme Management Officer

Ms Tomoko Furusawa  
Division for Europe  
Department of Technical Cooperation  
International Atomic Energy Agency  
Vienna International Centre  
PO Box 100  
1400 VIENNA  
AUSTRIA  
Tel.: +43 1 2600 22992  
Email: [T.Furusawa@iaea.org](mailto:T.Furusawa@iaea.org)

Administrative Contact

Ms Maide Bardhi  
Division for Europe  
Department of Technical Cooperation  
International Atomic Energy Agency  
Vienna International Centre  
PO Box 100  
1400 VIENNA  
AUSTRIA  
Tel.: +43 1 2600 24467  
Email: [M.Bardhi@iaea.org](mailto:M.Bardhi@iaea.org)