



**IAEA**

International Atomic Energy Agency  
*Atoms for Peace and Development*

# **Technical Meeting on the High Temperature Processing of Radioactive Waste**

**IAEA Headquarters, Vienna, Austria**  
and virtual participation via Cisco Webex

**17–21 July 2023**

**Ref. No.: EVT2205603**

## **Information Sheet**

### **Introduction**

The International Atomic Energy Agency (IAEA) promotes the safe and peaceful uses of nuclear energy including the management of radioactive waste according to nationally and internationally agreed principles and standards with safe disposal as endpoint for all waste types.

A wide variety of low- and intermediate-level (LILW) streams require conditioning in order to meet the Waste Acceptance Criteria (WAC) for disposal. In this regard, processing of waste streams into stable waste forms for storage/disposal is a critical aspect of the management of nuclear waste arises. Although technologies are available for processing the majority of waste streams, there remain some waste streams for which either a suitable technology does not exist or cannot be accessed (for a number of reasons – cost, lack of technical capability, small volume, unknown characteristics). Considering the high overall costs for developing new individual treatment/conditioning processes to immobilize this waste into suitable waste forms for geological disposal, the benefits offered by thermal treatment technologies under development may be able to assist in processing these waste types. Modular or shared/international thermal facilities would facilitate processing small volume of waste as encountered in many Members States

The IAEA recognizes that thermal technologies have an important role and as such the Waste Technology Section (WTS) at the IAEA has initiated the International Predisposal Network (IPN) platform to share waste management information (including thermal processing technologies) from publications (predisposal handbooks), Co-ordinated Research Programs (CRP), Case studies, fellowship training and Wiki articles among its members. To support Member States in the management of radioactive waste, the

IAEA is organising a dedicated Technical Meeting on the High Temperature Processing of Radioactive Waste Arises during operation and decommissioning of Nuclear Facilities.

## **Objectives**

The purpose of the event is to share experiences, lessons learned and innovations in the high temperature processing of radioactive waste.

## **Target Audience**

The event is targeted at representatives with a current or future programme or project regarding high temperature processing of radioactive waste for disposal. In order to maximize the exchange of information, individuals attending should be from all Member States with nuclear facilities, NPPs, waste management facilities, regulatory body, research facilities or from non-governmental or international organizations that represent such programmes regionally or worldwide.

## **Working Language(s)**

English.

## **Expected Outputs**

The expected outcome from the meeting will be a documented summary of effective high temperature treatment methods of solid radioactive waste and key factors influencing the selection of thermal technologies. Discussion will also include future mechanisms of sharing of knowledge on the identified subject matter.

## **Topics**

The meeting will feature Member State representative reporting on the best international practices and approaches to enhancing technical capabilities regarding high temperature treatment of solid radioactive waste.

The topics will be aligned to emphasise:

- Process description, applicable waste type, feed preparation, expected final product, advantages, limitations and operational experience of following thermal treatment processes:
  - Incineration.
  - Metal melting.
  - Plasma.
  - Pyrolysis and stream reforming.
  - Vitrification.
- Conditioning methods and waste package designs for resulting products of thermal treatment processes.

## 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, participants are requested to send the **Participation Form (Form A)** to their competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) for onward transmission to the IAEA by **30 May 2023**. Participants who are members of an organization invited to attend are requested to send the **Participation Form (Form A)** through their organization to the IAEA by the above deadline.

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.

Participants are hereby informed that this event will be recorded for the purpose of continuing collaboration beyond the event, in line with the Agency's Personal Data and Privacy Policy. For any questions relating to the recording, you may contact the event organizer.

## Papers and Presentations

The IAEA encourages participants to give presentations on the work of their respective institutions that falls under the topics listed above.

Participants who wish to give presentations are requested to submit the presentations electronically to Mr Willie Meyer, the Scientific Secretary of the event (see contact details below), not later than **30 May 2023**. Authors will be notified of the acceptance of their proposed presentations by **15 June 2023**.

In addition, participants have to submit the **Participation Form (Form A)** and the attached **Form for Submission of a Paper (Form B)** to their competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) or their organization for onward transmission to the IAEA not later than **30 May 2023**.

## 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 using the **Grant Application Form (Form C)**, which has to be stamped, signed and submitted by the competent national authority to the IAEA together with the **Participation Form (Form A)** by **30 May 2023**.

## 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](http://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 Information**

The Agency will setup a SharePoint site for the project; due to potential sensitivities, the site will be closed and access will be granted only by request to the Scientific Secretary. The SharePoint site will serve as the document repository for all documents. For online participants the Agency will facilitate a WebEx platform.

## **IAEA Contacts**

### **Scientific Secretary:**

#### **Mr Willie Meyer**

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### **Administrative Secretary:**

#### **Ms Marina Tolstenkova**

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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/evt2205603](http://www.iaea.org/events/evt2205603)