



IAEA

Atoms for Peace
and Development

International Conference on Advancement in Radioactive Waste Management: Innovation for a Sustainable Future

**IAEA Headquarters
Vienna, Austria**

11–15 October 2027

**Organized by the
International Atomic Energy Agency (IAEA)**

**In cooperation with the
World Nuclear Association (WNA)
United Nations Nuclear Young Generation (UN-NYG)**

Announcement and Call for Papers

A. Background

The global push toward decarbonization and the need for greater energy security amid rising demand have led to a renewed focus on expanding nuclear power capacity. In addition to providing low-carbon electricity, nuclear technologies play an integral role in modern society, serving a broad range of applications including medicine, industry, agriculture and research. Examples of these contributions include diagnostic imaging, cancer treatment, food preservation and materials testing.

Like all industrial processes, the use and manufacture of nuclear technologies generate by-products that require careful management. With over 60 years of experience, the nuclear industry has continuously innovated to minimize waste generation, explore opportunities for recycling and reusing materials and develop robust technical solutions for managing radioactive waste. These efforts ensure that any radioactive waste produced is handled responsibly throughout its lifecycle, from generation to disposal.

In this context, the effectiveness of radioactive waste management (RWM) strategies is central to supporting the sustainability of nuclear energy and the peaceful uses of nuclear technologies. Having robust solutions in place to address long-term liabilities is an important component to underpin public acceptance of nuclear technologies and confidence in long-term environmental protection. Ultimately, the long-term viability of nuclear energy depends not only on technological performance but also on ability to manage its by-products responsibly and sustainably.

B. Purpose and Objectives

The purpose of the event is to foster knowledge exchange and collaboration in relation to technologies and practices for the management of radioactive waste — an important aspect of achieving a sustainable, low carbon future. It will showcase innovative strategies, technological advancements and effective solutions in waste management, with an emphasis on pragmatic approaches that drive integrated, cost-effective and sustainable practices. The Conference will place a key focus on the next generation of the workforce, exploring how fresh perspectives and innovative 21st century technologies can contribute to the long-term sustainability of nuclear energy and related fields.

C. Themes and Topics

The IAEA invites the submission of high-quality, well-structured abstracts and papers addressing all aspects of radioactive waste management. Submissions should reflect scientific rigor, practical relevance and innovative approaches that advance the safe, secure and sustainable management of radioactive waste.

Track 1: Effective frameworks for radioactive waste management

- Policy, strategies and approaches for end-point informed management of radioactive waste including disused sealed radioactive sources (DSRS).
- Integration of waste minimization, segregation, treatment, discharge, clearance, recycling, reuse and resource recovery into waste management systems.
- Optimization of material and waste flows through circular economy principles, including secondary waste reduction and sustainable resource utilization.
- Integrated radioactive waste management strategies, practical implementation and lessons learned.
- Approaches for engaging communities and stakeholders.

Track 2: Emerging and challenging radioactive waste streams

- Waste management and disposal solutions of waste arising from SMRs, advanced reactors, fuel cycle facilities and other emerging nuclear technologies.
- Management of challenging waste streams, including waste from spent fuel reprocessing, irradiated graphite, beryllium, tritium-bearing waste, waste from past activities and heterogeneous waste forms.
- Approaches for managing small radioactive waste inventories and DSRS, including regional solutions and shared facilities.

Track 3: Technologies for radioactive waste and DSRS management

- Advanced characterization and monitoring technologies for radioactive waste management.
- Innovative treatment and conditioning technologies, including plasma, vitrification, pyrolysis, advanced incineration and other emerging approaches.
- R&D of durable waste forms, containment matrices and radionuclide immobilization solutions.
- Application of digital tools, artificial intelligence, data analytics and digital twins in operation, process optimization and decision-making.
- Remote handling systems, robotics and autonomous technologies for radioactive waste and DSRS management.

Track 4: Advancing radioactive waste disposal programmes

- Milestones achieved in the development and implementation of radioactive waste disposal facilities.
- Facility development, design, construction, commissioning, and operational experience.
- Practical experience and lessons learned in site selection, site characterization, regulatory processes, and early implementation.

Track 5: Research and development in radioactive waste disposal

- R&D supporting the implementation of radioactive waste disposal solutions for different waste streams.
- Role of underground research laboratories and field-scale experiments in supporting geological disposal programmes.
- Application of R&D outcomes to support design optimization, facility implementation and long-term confidence in disposal solutions.

Track 6: Regulatory considerations in radioactive waste management

- Licensing approaches and regulatory frameworks supporting RWM practices.
- Qualification, validation and demonstration of compliance of RWM technologies.
- Integration of R&D and operational experience into safety case and regulatory decision-making.
- Risk-informed and graded approaches to implementing RWM technologies.
- Regulatory experiences, challenges, and lessons learned.

Track 7: International collaboration, capacity building, and knowledge sharing

- International initiatives supporting radioactive waste management programmes.
- Knowledge transfer, workforce development and succession planning.
- Regional cooperation, shared approaches and multinational solutions to addressing common challenges.
- Networks, partnerships and collaborative projects that support innovation, implementation and safety.

D. Structure

The conference will consist of an opening plenary session, topic-specific technical sessions, panel discussions, side events and exhibitions. The opening session will include opening statements delivered by the Conference President and the IAEA. Panel discussions will bring together invited speakers and experts to explore key strategic and technical issues in radioactive waste management.

Dedicated parallel sessions will be organized around the thematic tracks identified in Section C, providing opportunities for technical exchange, discussion of emerging challenges and presentation of innovative solutions. Depending on the number of abstracts received, a series of flash talks, along with the standard poster session, will be organized.

The conference invites young professionals in the field of radioactive waste management to submit abstracts and actively participate in the main conference programme. In addition, interested participants are encouraged to take part in the Young Professionals Programme which will include a contest and a networking component, enabling junior professionals to meet senior experts in an informal setting. Details, including information on how to register and participate, eligibility, and terms and conditions, will be posted on the conference webpage in due time.

The closing session will include a summary of the main conclusions of the conference, delivered by the Conference President(s), followed by closing remarks from the IAEA.

E. Expected Outcomes

The conference is anticipated to benefit relevant organizations and stakeholders within IAEA Member States and the international community by promoting knowledge of current good practices and emerging trends in radioactive waste management. It supports the strengthening of national approaches in alignment with international standards, and wider adoption of innovative technologies and approaches to improve the effectiveness and efficiency of waste management practices.

This event aims to foster collaboration, knowledge-sharing, and networking among industry professionals, regulators, researchers, and policymakers, while facilitating the exchange of practical experiences and lessons learned. This will support effective implementation, help address common challenges in radioactive waste management, and enhance future planning and decision-making.

It is expected that the conference will raise public awareness and encourage engagement on issues related to radioactive waste management, emphasizing the importance of transparency, effective communication and informed participation in decision-making processes.

F. Target Audience

The conference is intended for technical and scientific experts, policy makers, high-level officials from waste management organizations, regulators, operators of nuclear facilities and individuals working in all areas of radioactive waste management. The conference is also intended to attract non-governmental organizations and academic institutions. The IAEA welcomes and encourages the participation of women, young professionals and individuals from developing countries.

G. Call for Papers

Contributions on the topics listed in Section C are welcome as oral or poster presentations. All submissions, apart from invited papers, must present original work, which has not been published elsewhere.

G.1. Submission of Extended Abstracts

Extended abstracts (approximately 400 to 500 words on one or a maximum of two A4 pages, may contain any charts, graphs, figures and references) should give enough information on the content of the proposed paper to enable the Programme Committee to evaluate it. Anyone wishing to present at the conference must submit an extended abstract in electronic format using the conference's file submission system ([IAEA-INDICO](#)), which is accessible from the conference web page (see Section Q). The extended abstract can be submitted through this system until **1 February 2027**. Specifications for the layout will be available on IAEA-INDICO. The system for electronic submission of extended abstracts, IAEA-INDICO, is the sole mechanism for submission of contributed extended abstracts. Authors are encouraged to submit extended abstracts as early as possible. The IAEA will not accept submissions via email.

In addition, authors must register online using the InTouch+ platform (see Section H). The online registration together with the auto-generated Participation Form (Form A) and Form for Submission of a Paper (Form B) must reach the IAEA no later than **1 February 2027**.

IMPORTANT: The Programme Committee will consider uploaded extended abstracts only if these two forms have been received by the IAEA through the established official channels (see Section H).

G.2. Acceptance of Extended Abstracts

The Secretariat reserves the right to exclude extended abstracts that do not comply with its technical or scientific quality standards and that do not apply to one of the topics listed in Section C.

Authors will be informed by **15 March 2027** as to whether their submission has been accepted, either orally or as a poster, for presentation at the conference.

G.3 Submission of Full Papers

Authors of accepted extended abstracts will be requested to submit a full paper in Word format, of about **4 to 8** pages in length. A compilation of full papers (in electronic format) will be made available to participants at registration.

Full papers must also be submitted through the [IAEA-INDICO](#) file submission system in Word format. Submitting the paper in the indicated electronic format is mandatory. Specifications for the layout and electronic format of the contributed papers and for the preparation of posters will be made available on IAEA-INDICO.

The IAEA reserves the right to exclude papers that do not comply with its quality standards and those that do not apply to one of the topics outlined in Section C above and those that do not meet the expectations based on the information in the abstract.

The deadline for electronic submission of the full papers as Word files is **15 May 2027**. The IAEA will not accept papers submitted after the deadline.

The IAEA will notify authors of its completed review process of the full papers by **30 August 2027**. The deadline for revised papers to be submitted through IAEA-INDICO is **30 September 2027**.

IMPORTANT: The system for electronic submission of papers, IAEA-INDICO, is the sole mechanism for submission of contributed papers. Authors are encouraged to submit papers as early as possible. The IAEA will not accept submissions via email.

G.4 Proceedings

Following the conference, the IAEA will publish a summary report. The proceedings will be made available to read online.

H.Participation and Registration

All persons wishing to participate in the event must be designated by an IAEA Member State or should be a member of an organization that has been invited to attend.

Registration through the InTouch+ platform:

1. Access the InTouch+ platform (<https://intouchplus.iaea.org>):
 - Persons with an existing NUCLEUS account can [sign in here](#) 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 ‘Basic Profile’ (if no financial support is requested) or under ‘Complete Profile’ (if financial support is requested) and upload the relevant supporting documents;
 - Search for the relevant event (**EVT2502518**) 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 Conference.Contact-Point@iaea.org);
 - If applicable, indicate whether a paper is being submitted and complete the relevant information;
 - 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 Participation Form (Form A), Form for Submission of a Paper (Form B) and/or 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 form(s) will automatically be sent to the IAEA through the online platform.

NOTE: Should prospective participants wish to submit a paper or request financial support, the application needs to be submitted by the specified deadlines (see section O).

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.

If it is not possible to submit the application through the InTouch+ platform, prospective participants are requested to contact the IAEA's Conference Services Section via email: Conference.Contact-Point@iaea.org.

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. Further information can be found in the [Data Processing Notice](#) concerning IAEA InTouch+ platform.

I. 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 conference. The IAEA has, however, limited funds at its disposal to help cover 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 conference.

If participants wish to apply for a grant, they should submit applications to the IAEA using the InTouch+ platform through their competent national authority (see Section H). Participants should ensure that applications for grants are submitted by **27 March 2027**.

Applications must be accompanied by Participation Form (Form A) and Grant Application Form (Form C) which are autogenerated in the InTouch+ platform.

Applications that do not comply with the above conditions cannot be considered.

Approved grants will be issued in the form of a lump sum payment that usually covers **only part of the cost of attendance**.

J. Distribution of Documents

A preliminary and final programme will be made available on the conference web page (see Section Q) prior to the start of the conference. The electronic compilation of extended abstracts will be accessible free of charge to participants registered for the conference.

K. Exhibitions

A limited amount of space will be available for commercial vendors' displays/exhibits during the conference. Interested parties should contact the Scientific Secretariat by email RWM2027@iaea.org by **30 May 2027**.

L. Working Language

The working language of the conference will be English. All communications must be sent to the IAEA in English.

M. Venue and Accommodation

The conference will be held at the Vienna International Centre (VIC), where the IAEA's Headquarters are located. 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.

Participants must make their own travel and accommodation arrangements. Hotels offering a reduced rate for participants are listed on <https://www.iaea.org/events>. Please note that the IAEA is not in a position to assist participants with hotel bookings, nor can the IAEA assume responsibility for paying fees for cancellations, re-bookings and no-shows.

N. Visas

Participants who require a visa to enter Austria should submit the necessary application to the nearest diplomatic or consular representative of Austria as early as three months but not later than 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.

For more information, please see the Austria Visa Information document available on <https://www.iaea.org/events>.

O. Key Deadlines and Dates

Submission of extended abstracts through IAEA-INDICO	1 February 2027
Submission of Form B (together with Form A) through the InTouch+ platform	1 February 2027
Notification of acceptance of extended abstracts for oral or poster presentation	15 March 2027

Submission of Form C (together with Form A) through the InTouch+ platform	27 March 2027
Electronic submission of full papers through IAEA-INDICO	15 May 2027
Notification of review of full papers	30 August 2027
Deadline for submission of revised full papers submitted through IAEA-INDICO	30 September 2027
Submission of Form A only (no paper submission, no grant request) through the InTouch+ platform	5 October 2027

P. Conference Secretariat

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Subsequent correspondence on scientific matters should be sent to the Scientific Secretary and correspondence on administrative matters to the IAEA's Conference Services Section.

Q.Conference Web Page

Please visit the IAEA conference [web page](#) regularly for new information regarding this conference.