

Second International Conference on Accelerators for Research and Sustainable Development

IAEA Headquarters Vienna, Austria

22-26 June 2026

Organized by the
International Atomic Energy Agency (IAEA)

Announcement and Call for Papers

A. Background

The International Atomic Energy Agency (IAEA) is organizing the Second International Conference on Accelerators for Research and Development. The first Conference in the series was conducted in 2022 and addressed many important needs in our high-tech oriented society, where particle accelerators have become indispensable. The second Conference aims to build on the success of the first one, striving to surpass it while reinforcing the series' significance in driving innovation, fostering collaboration, and advancing societal benefits through accelerator technologies and further alignment with the United Nations Sustainable Development Goals (UN SDGs) and major IAEA flagship initiatives.

Tens of thousands of particle accelerators operating worldwide today are dedicated machines used for commercial applications, either in the medical (radiotherapy treatments) or industrial sectors (materials modification); while a few hundred accelerators are used for scientific research. The knowledge and technological spin-offs gained from these research accelerators drive the development of commercial applications and supports the research and development needs of a diverse range of fields, including fundamental and applied science. The main demand from researchers is for high quality X-ray, neutron, and ion beams to engage in cutting-edge research in energy, food and agriculture, environment, biology, medicine, forensics, cultural heritage, materials science, and many other areas. Accelerators also play a key role in capacity building, provide education and training both in academia and industry, contributing to the solution of problems of modern society and to increased competitiveness of local economies. Numerous innovations and accomplishments in the field of accelerator-based development and applications have been already acknowledged, however it is now time to take a comprehensive look at their socioeconomic impact, assess their sustainability and ability to meet future challenges.

The IAEA has been implementing programmatic activities that provide interested Member States with platforms to collaborate in various research fields to create new knowledge and exchange information on new trends and applications in accelerator-based nuclear science and technology. The IAEA implements programmes with direct relevance to use of particle accelerators such as Nuclear Science, Radioisotope Production and Radiation Technology, Human Health and Environment. In addition, direct support and assistance to the Member States in accelerator-based research and applications is also provided through the IAEA Technical Cooperation Programme. The particle accelerators also successfully contribute to the United Nations Sustainable Development Goals 2, 3, 6, 7, 9, 12, 13, and 17^{1} .

B. Purpose and Objectives

The purpose of the event is to provide an international forum for discussing accelerator applications in research and industry, to present cutting-edge scientific results and developments in accelerator technology, to foster an exchange of information on best practices in accelerator facility utilization and management, and to showcase how achievements and experience in the field of accelerator technologies contribute to sustainable development. The event will explore a wide range of accelerators of various particles (electrons, protons and ions) and sizes, from tabletop devices to equipment in small laboratories and large international facilities. In addition to different accelerator types, discussions will cover various accelerator facilities, including compact and large-scale spallation neutron sources, free electron lasers, synchrotrons, and electron-based irradiation centres and other advanced infrastructure.

Special emphasis will be given to accelerator applications that have large societal impact and promote economic development, in areas such as human health, environmental monitoring, cultural heritage, food safety and security, energy sector, forensics and nuclear security. The conference will provide a unique global opportunity to achieve the following specific objectives, namely it will:

¹https://sdgs.un.org/goals

Disseminate:

- new knowledge produced through accelerator-based research in a wide spectrum of scientific areas and their applications;
- best practices in establishing and operating particle accelerator facilities and ensuring their effective and sustainable operation;

Review:

- key developments in particle accelerator technologies, both established and emerging ones, and their role in enhancing innovations;
- national, regional and global initiatives for implementing proven accelerator applications that lead to socio-economic benefits and strengthen capacity building in Member States; and

Serve:

- as a composite platform through which academia and industry can foster new initiatives for ensuring the success of accelerator applications in addressing the emerging challenges in multiple disciplines; and
- as a bridge to enhance existing and to establish new collaborations among scientists and institutions from Member States aiming at benefiting from accelerator technologies to face challenges in a series of problems of modern society.

C. Themes and Topics

The IAEA welcomes contributions in all fields of accelerator technology, accelerator-based research and applications. The scope of the conference is meant to cover, but is not limited to, the following topical areas, under two main themes/tracks:

- A. Accelerator technology innovation and best practices in sustainable facility management:
 - Novel accelerator technologies (including compact accelerators)
 - Facility infrastructure (including diagnostics and instrumentation, data acquisition systems, etc.)
 - Establishment of new facilities, strategic planning and sustainable facility operation
 - Sharing best practices on open science approaches and data management
 - User programmes and regional/interregional networking
 - Knowledge management and capacity building
- B. Cutting-edge methods, scientific results, case studies and success stories demonstrating technical advancement and socioeconomic impact:
 - Environmental applications (including geosciences and climate change)
 - Food safety, security and nutrition
 - Medical applications
 - Biology, radiobiology, biophysics
 - Cultural and natural heritage
 - Engineering and energy applications
 - Space applications
 - · Materials research
 - Forensics and security applications
 - Nuclear data and modelling
 - AI, machine learning and software development
 - · Radioactive ion beams
 - Nuclear astrophysics

• Particle physics

D. Structure

The conference will consist of plenary sessions on topics under the two main themes outlined in Section C. The programme will feature invited keynote speakers from academia and industry, giving oral presentations and participating in panel discussions and roundtable sessions. Several poster sessions will be organized to allow ample time for discussion and interaction. In addition, participants will have an opportunity to interact with conference exhibitors and participate in technical tour(s). A closing roundtable session will review the main conclusions drawn in the plenary sessions and will summarize recommendations for the future development of accelerator technologies, science and applications.

E. Expected Outcomes

The conference will strengthen contacts and foster cooperation among accelerator science and applications researchers, accelerator manufacturers, accelerator facility managers and operators and the coordinators of academic programmes in the accelerator sciences, leading to a comprehensive review of the status of accelerator sciences in industry and academia. The conference is expected to generate ideas that will form the basis of future IAEA programmes in the area of accelerator technologies and applications. An overall outcome of the conference is a deeper understanding of the potential socioeconomic benefits that accelerators can bring to society.

F. Target Audience

This conference will focus on applications of accelerator science and technology, which is a multidisciplinary area covering many branches including accelerator and nuclear physics, materials science, biology, engineering and industrial applications. Accordingly, the target audience for this conference comprises, but is not limited to:

- research scientists and end-users engaged in accelerator-based research and applications;
- accelerator facility managers, operators and users;
- industry and other stakeholders involved in development of accelerator technologies and associated instrumentation;
- policy makers, regulators, and members of relevant intergovernmental and non-governmental organisations (IGOs and NGOs).

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 Synopses

Synopses (approximately 500 to 600 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 a synopsis in electronic format using the conference's file submission system (IAEA-INDICO), which is accessible from the conference web page (see Section Q). The synopses can be submitted through this system from 1 July 2025 until 31 October 2025. Specifications for the layout will be available on IAEA-INDICO. The system for electronic submission of synopses, IAEA-INDICO, is the sole mechanism for submission of contributed synopses. Authors are encouraged to submit synopses 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 **31 October 2025**.

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

G.2. Acceptance of Synopses

The Secretariat reserves the right to exclude synopses 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 **31 January 2026** as to whether their submission has been accepted, either orally or as a poster, for presentation at the conference. Accepted synopses will also be reproduced in an unedited electronic compilation of synopses which will be made available to all registered participants of the conference.

G.3 Submission of Full Papers

Authors of accepted synopses will be requested to submit a full paper in Word format, of about **5 to 10** pages in length, through the <u>IAEA-INDICO</u> file submission system. Specifications for the layout and electronic format of the contributed papers will be made available on IAEA-INDICO.

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

The deadline for electronic submission of the full papers as Word files is **22 June 2026**. 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 **31 October 2026**. If needed, revised papers will have to be submitted through IAEA-INDICO by **30 November 2026**.

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, including full papers, will be made available 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 <u>sign in here</u> 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 (EVT2501009) 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 <u>InTouch+ Help</u> page. Any other issues or queries related to InTouch+ can be sent to <u>InTouchPlus.Contact-Point@iaea.org</u>.

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 <u>Agency's Personal Data and Privacy Policy</u> 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 <u>Data Processing Notice</u> 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 **31 October 2025**.

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 synopses 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 AccConf2026@iaea.org by 31 October 2025.

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 synopses through IAEA-INDICO	31 October 2025
Submission of Form B (together with Form A) through the InTouch+ platform	31 October 2025
Submission of Form C (together with Form A) through the InTouch+ platform	31 October 2025
Notification of acceptance of synopses for oral or poster presentation	31 January 2026
Submission of Form A only (no paper submission, no grant request) through the InTouch+ platform	14 June 2026
Electronic submission of full papers through IAEA-INDICO	22 June 2026
Notification of review of full papers	31 October 2026
Deadline for submission of revised full papers submitted through IAEA-INDICO	30 November 2026

P. Conference Secretariat

General Postal Address and Contact Details of the IAEA:

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

Q.Conference Web Page

Please visit the IAEA conference website regularly for new information regarding this conference and be part of the conversation using #Accelerators2026 on social media.