

International Conference on Fast Reactors and Related Fuel Cycles (FR26): From Innovation to Implementation

Beijing, People's Republic of China

18–21 May 2026
Organized by the
International Atomic Energy Agency (IAEA)

Hosted by

The Government of People's Republic of China

Through
The China Institute of Atomic Energy (CIAE)

Announcement and Call for Papers

A. Background

The International Atomic Energy Agency (IAEA) once again brings together the fast reactor and related fuel cycles communities by organizing the International Conference on Fast Reactors and Related Fuel Cycles: Sustainable Clean Energy for the Future (FR26). The FR26 Conference will be hosted by the People's Republic of China via the China Institute for Atomic Energy (CIAE) in Beijing. This conference is a follow-up of the previous successful IAEA Conferences in Kyoto (2009), Paris (2013), Yekaterinburg (2017), and in Vienna (2022). The last Conference, FR22, was attended by almost 473 participants from 30 countries and four international organizations, delivering 198 oral and 63 poster presentations on different fields of fast reactor and related fuel cycle technologies.

Fast neutron reactors and related fuel cycles are widely recognized as key to the long-term sustainability of nuclear power. Unlike conventional thermal reactors, fast reactors can use fuel much more efficiently. In a fully closed fuel cycle, they can extract 60–70 times more energy from uranium and significantly reduce high-level radioactive waste.

Many countries are actively developing fast reactor technologies, including innovative reactor designs and advanced small modular reactors. These technologies use a variety of coolants such as sodium, lead, lead-bismuth eutectic, gas, molten salt. Several demonstration projects—both small and large—are in various stages of study, design, construction and operation. National and international efforts are also focused on developing suitable fuels and fuel cycles for these advanced systems.

At FR26, a "Young Generation Event" will be organised to engage young generation in innovative fast neutron systems development. It will be a great opportunity for young academicians and professionals to participate and present their ideas and to have a forum of discussion for potential synergisms and collaborations.

B. Purpose and Objectives

The purpose of the event is to serve as a platform for global collaboration and knowledge exchange in the field of fast reactor and advanced fuel cycle technologies. Key objectives of the conference include i) identifying strategic and technical options proposed by countries, organizations and private companies; ii) promoting sustainable development of safe, secure, and economically viable fast reactor system technologies; iii) identifying and addressing critical technical challenges and knowledge gaps in relation to the industrial deployment of fast reactors and related fuel cycles. The conference goal will also be engaging young scientists and engineers to promote innovation, diversity including gender equality and future leadership in the development of innovative fast reactor concepts and related fuel cycles

C. Themes and Topics

The conference programme will include plenary and parallel sessions, poster sessions, panel discussions and a Young Generation Event.

The IAEA welcomes high quality contributions that fall under the umbrella of the nine topics listed below:

Track 1: Innovative Fast Reactor Designs

Advanced fast reactor concepts, including core, systems, and components design, small modular fast reactors, and deployment strategies aligned with future energy systems.

Track 2: Fast Reactor Safety and Licensing

Safety approaches, analysis methods, passive systems, severe accident behaviour, 3S (Safety, Security, Safeguards), safety requirements and the regulatory framework for fast neutron reactors.

Track 3: Fuel Cycle Technologies and Sustainability

Fuel cycle strategies and their impacts on waste minimization, hydro and pyro processes and associated waste streams, infrastructures, enablers (e.g., transportation).,

Track 4: Fast Reactor Fuels and Materials

Fuel and structural materials, coolant chemistry and related technologies

Track 5: Test Facilities and Experiments

Experimental infrastructure and test facilities, including component tests, and integral experiments

Track 6: Modelling and Simulation

Computational methods, multi-physics tools, validation and verification, and the use of AI and machine learning.

Track 7: Economics, Integrated Systems, and Non-Electric Applications

Economic assessments, integration with other energy systems, non-electric uses (e.g. hydrogen production and desalination).

Track 8: Commissioning, Operation, and Decommissioning

Practical experience in starting up, operation, maintenance, and decommissioning of fast reactors, including instrumentation and control technologies, in-service inspections, and management of waste streams.

Track 9: Public Engagement, Knowledge Management, and Education and Training

Approaches and experiences for building public support, stakeholder engagement, knowledge preservation, and training to support long-term development.

D. Expected Outcomes

The FR26 Conference will provide an updated overview of global fast reactor and fuel cycle programmes, share strategic and technical insights, and strengthen international collaboration. It will help identify key R&D priorities and challenges for industrial deployment, while promoting safe, sustainable, and proliferation-resistant technologies. The event will also support capacity building by engaging young professionals and will guide future IAEA activities in this field. Key findings will be documented in the online conference proceedings.

E. Target Audience

The meeting is open to all Member States involved or interested in the research, development, and innovations in the field of fast reactor designs and associated fuel cycles, including government organizations (policymakers, analysts, regulators and R&D agencies) and industry stakeholders (vendors, engineering companies, plant operators and technology developers).

F. 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.

F.1. Submission of Abstracts

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 abstract in electronic format using the conference's file submission system (IAEA-INDICO), which is accessible from the conference web page (see Section O). The abstract can be submitted through this system until **15 October 2025**. Specifications for the layout will be available on IAEA-INDICO. The system for electronic submission of abstracts, IAEA-INDICO, is the sole mechanism for submission of contributed abstracts. Authors are encouraged to submit 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 G). 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 15 January 2026.

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

F.2. Acceptance of Abstracts

The Secretariat reserves the right to exclude 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 December 2025 as to whether their submission has been accepted, either orally or as a poster, for presentation at the conference.

Accepted contributions will also be reproduced in an unedited electronic compilation of abstracts which will be made available to all registered participants of the conference.

F.3 Submission of Full Papers

Authors of accepted 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 <u>IAEA-INDICO</u> 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 February 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 **30 April 2026**. The deadline for revised papers to be submitted through IAEA-INDICO is **15 May 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 will be made available to read online.

G.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. The list of invited organizations is available on the event web page (see Section P).

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 (EVT2406876) 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 N).

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.

H.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 G . Participants should ensure that applications for grants are submitted by 15 January 2026.

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**.

I. Distribution of Documents

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

J. 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 FR26@iaea.org by 15 January 2026.

K. Working Language

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

L. Venue and Accommodation

The conference will be held at the China National Convention Center, Beijing, China. Detailed information on accommodation and other relevant matters will be sent to all designated participants approximately three months before the conference. This information will also be made available on the conference web page.

M. Visas

Designated participants who require a visa to enter China should submit the necessary application to the nearest diplomatic or consular representative of China as soon as possible. Further advice and instructions will be made available on the IAEA web page for the conference (see Section P).

N. Key Deadlines and Dates

Submission of abstracts through IAEA-INDICO	15 October 2025
Submission of Form B (together with Form A) through the InTouch+ platform	15 January 2026
Submission of Form C (together with Form A) through the InTouch+ platform	15 January 2026
Notification of acceptance of abstracts for oral or poster presentation	15 December 2025
Electronic submission of full papers through IAEA-INDICO	15 February 2026
Notification of review of full papers	30 April 2026
Deadline for submission of revised full papers submitted through IAEA-INDICO	15 May 2026
Submission of Form A only (no paper submission, no grant request) through the InTouch+ platform	15 January 2026

O. Conference Secretariat

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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.

P. Conference Web Page

Please visit the IAEA conference website regularly for new information regarding this conference.