

Workshop on the Safety of Experiments for Research Reactors

IAEA Headquarters Vienna, Austria

2 - 6 March 2026

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Information Sheet

Introduction

Research reactors are used for variety of purposes, such as education and training, research and development in nuclear science and engineering, development of technologies including in nuclear energy industry, and irradiation and analytical services. Research reactors are also utilized for the production of radioisotopes for medical, industrial and agricultural applications.

Ensuring safety, including of utilization, is essential for effective and sustainable operation of a research reactor facility. The IAEA Safety Standards Series No. SSR-3, Safety of Research Reactors, require that a programme for research reactor utilization shall be established as part of the management system. This programme should include the aspects of design, safety assessment, fabrication, installation, operation, and decommissioning for the utilization projects. A formal process for categorization of the utilization projects (i.e. the use of research reactor or of an experimental facility or the conduct of an experiment) based on their safety significance is a key element for ensuring safety, and is the basis for defining the approval routes for the utilization projects as well as for the use of a graded approach in application of the IAEA safety requirements. Installation of complex experimental facilities in an existing research reactor, such as cold neutron sources or high pressure and high temperature loops, may involve major modifications of the research reactor itself. In addition, operational safety of experiments needs to be ensured, including with respect to radiological protection, operating procedures, and handling, dismantling, post-irradiation examination and disposal of experimental devices.

IAEA Safety Standards Series No. SSG-24 (Rev. 1), Safety in Utilization and Modification of Research Reactors was published in 2022. It provides guidance to meet the relevant safety requirements established in SSR-3. Feedback from the IAEA activities showed the need to continuously pay attention to safety of utilization projects in research reactors. Inadequate design or improper operation of experimental devices and of conduct of experiments were of the causes of the events reported to the IAEA's Incident Reporting System for Research Reactors (IRSRR). Feedback from IAEA activities also indicated that while the safety guidance on research reactor experiments is generally understood and accepted in the research reactor community, there are challenges in its practical application. In this context, the IAEA is organizing the Workshop on the Safety of Experiments for Research Reactors to be held at its Headquarters in Vienna, Austria, from 2 to 6 March 2026.

Objectives

The objective of the event is to provide participants with practical safety information, based on the IAEA Safety Standards, for the design, fabrication, installation, operation and decommissioning of experiments for research reactors.

The workshop is also aimed at providing the participants with a forum to share experience on the safety of utilization and experiments and in application of the IAEA Safety Standards in this area.

Target Audience

The workshop is intended for managers and individuals responsible for design, safety assessment, fabrication, installation, operation, or decommissioning of research reactor experimental devices or facilities. Individuals from organizations planning new research reactor projects can also participate, as can specialists from regulatory bodies who are responsible for the regulatory supervision of the relevant activities.

Member States are strongly encouraged to identify suitable women participants.

Working Language (s)

English

Topics

The event will consist of presentations given by the IAEA representatives and invited lecturers on the basis of the IAEA Safety Standards, and presentations given by the participants on their national practices and experiences in design, safety assessment, fabrication, installation, operation, and decommissioning of experiments for research reactors.

The topics that are expected to be covered include:

- Application of IAEA Safety Standards on the utilization and modification of research reactors;
- Safety categorization of research reactor experiments;
- Design and safety assessment of specific types of experiments (e.g. material/instrument testing, radioisotope production, neutron activation, beam tube utilization, and training);
- Practices in fabrication and installation of experiments;
- Safety aspects in the operation of experiments;
- Considerations in disassembly, post-irradiation examination, and disposal of experimental devices;
- Lessons learned from events that involve experimental facilities;
- Regulatory supervision for research reactor utilization and modification;
- Use of a graded approach in application of safety requirements on utilization of research reactors;
- Integrated management system for research reactor utilization.

Participants' working groups will be formed to share and discuss experiences, challenges and lessons learned of specific types of research reactor experiments. The working group discussions will also aim at identifying common issues and challenges and possible ways to address them, including Member States' needs regarding IAEA assistance.

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 or invited organization, participants are requested to submit their application via the InTouch+ platform (https://intouchplus.iaea.org) to the competent national authority (Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) or organization for onward transmission to the IAEA by 12 December 2025, following the registration procedure in InTouch+:

- 1. Access the InTouch+ platform (https://intouchplus.iaea.org):
 - Persons with an existing NUCLEUS account can sign in to the platform 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 'Complete Profile' and upload the relevant supporting documents;
 - Search for the relevant event 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 InTouchPlus.Contact-Point@iaea.org);
 - 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 the Participation Form (Form A) and/or the 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 applicable form(s), will automatically be sent to the IAEA through the online platform.

NOTE: The application for financial support should be made, together with the submission of the application, by 12 December 2025.

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>.

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. Further information can be found in the Data Processing Notice concerning IAEA InTouch+ platform.

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, together with the submission of the application, by 12 December 2025.

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.

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.

Organization

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Subsequent correspondence on scientific matters should be sent to the Scientific Secretaries and correspondence on other matters related to the event to the Administrative Secretary.