

# **Ninth DEMO Programme Workshop**

# **Hosted by the**Government of Japan

## through the

# Rokkasho Fusion Institute National Institutes for Quantum Science and Technology

Aomori, Japan

10-13 June 2025

Ref. No.: EVT2304132

# **Information Sheet**

## Introduction

The International Atomic Energy Agency (IAEA) fosters international collaboration and coordination to help close the existing gaps in science, technology and safety, and move forward in developing the peaceful use of fusion energy. IAEA's activities in this field cover, among others, plasma physics and fusion energy research, technologies and materials. The main objective of fusion technology development is to deliver a safe, economical and essentially unlimited energy source.

Although ITER is a multinational project, there are no such plans for DEMO and fusion plants. Rather, these concepts are being developed by individual governments, private companies and some public–private joint ventures. Such a diverse development framework can enable fast progress and increased innovation, but it is important to maintain strong international cooperation and government support to ensure that fusion energy can come to fruition. Against this backdrop, the IAEA has established a series of Workshops to facilitate international collaboration on defining and coordinating DEMO and fusion plants development activities.

## **Objectives**

The main objective of the event is to discuss a subset of key DEMO and fusion plants scientific and technological issues with the aim of defining the facilities and development activities that can lead to their resolution. Opportunities to make greater progress through international collaboration will be identified, ideally leading to coordination or joint work where beneficial.

# **Target Audience**

The event is suitable for managers and senior scientists working on fusion energy development. A broad technical understanding of the current issues in fusion energy development is assumed.

# **Working Language**

The working language of the event will be English. All communication and papers must be sent to the IAEA in English. No simultaneous interpretation will be provided.

# **Structure and Topics**

The programme will mainly consist of sessions dedicated to invited and contributed (orals and posters) talks and discussion. A Programme Committee made up of a representative international membership will be responsible for selecting the talks and arranging the technical and discussion sessions, as well as for the overall scientific content of the event.

The sessions will cover the following main topics:

#### Magnets

The role and industrial realization of high temperature superconductors for DEMO and fusion plants, including implications for performance, timelines, and test facilities.

### • Tritium Fuel Cycle

Readiness of sub-systems required for DEMO and fusion plants, addressing tritium inventory concerns (e.g., tracking, mobility, and monitoring), initial supply in a competitive market, and the international landscape of research efforts.

#### Neutronics

Considerations for magnets, tritium breeding performance, volumetric neutron sources and neutronics tool development.

# **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 (<a href="https://intouchplus.iaea.org">https://intouchplus.iaea.org</a>) 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 10 April 2025, following the registration procedure in InTouch+:

- 1. Access the InTouch+ platform (<a href="https://intouchplus.iaea.org">https://intouchplus.iaea.org</a>):
  - 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 10 April 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 <u>Data Processing Notice</u> concerning IAEA InTouch+ platform.

## **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 (oral and poster) are requested to submit an abstract of their work through IAEA-INDICO by **10 April 2025**. The abstract will be reviewed as part of the selection process for presentations. The abstract should be in A4 page format, should extend to no more than 1 page (including figures and tables) and should not exceed 500 words.

Submissions must contain the author's name, email address, country, organization and topic. Authors are encouraged to flag their proposals as an oral or poster presentation. However, the Programme Committee will evaluate all submissions and decide on the final presentation format.

Authors will be notified of the acceptance of their proposed presentations by 30 April 2025.

An electronic copy of the proceedings, consisting of abstracts, presentation slides and posters will be made available to all participants on the IAEA Fusion Portal.

In addition to the registration already submitted through the InTouch+ platform, participants have to submit the abstract to the competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) or organization for onward transmission to the IAEA not later than 10 April 2025.

## **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 10 April 2025.

## Venue

The event will be held in Aomori, Japan. Participants must make their own travel and accommodation arrangements. For more information, please visit the meeting web page <a href="https://conferences.iaea.org/event/385/">https://conferences.iaea.org/event/385/</a>.

## Visas

Participants who require a visa to enter Japan should submit the necessary application as soon as possible to the nearest diplomatic or consular representative of Japan.

# **Key Deadlines and Dates**

10 April 2025 Deadline for submission of abstracts through IAEA-INDICO for contributed talks 10 April 2025 Deadline for submission of application for participation via the InTouch+ platform 30 April 2025 Notification of acceptance of abstracts and of assigned awards 10 June 2025 Event begins 13 June 2025 Event ends

## **Programme Committee**

China Min Xu (Chair) Minyou Ye China Klaus Hesch Germany Francesco Maviglia Italy Nagato Yanagi Japan Yoshiteru Sakamoto

Boris Kuteev Russian Federation

South Korea Keeman Kim

Mohamed Abdou United States of America Philip Ferguson United States of America

Mike Gorley United Kingdom

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## **IAEA Contacts**

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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.

# **Host Organization Contact Point**

#### Mr Yoshiteru Sakamoto

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# **Event Web Page**

Please visit the following IAEA web page regularly for new information regarding this event: <a href="https://conferences.iaea.org/event/385/">https://conferences.iaea.org/event/385/</a>