



Technical Meeting on the Water Chemistry of Water-Water Energetic Reactors

IAEA Headquarters, Vienna, Austria
and virtual participation via Microsoft Teams

26–29 August 2025

Ref. No.: EVT2404665

Information Sheet

Introduction

The safe operation of water-water energetic reactors (WWER) requires among others an appropriate and effective water chemistry programme. The main goals of a water chemistry programme are to contribute to the reactivity management, to minimize all forms of corrosion, to preserve the integrity of the fuel and, to reduce the build-up of radioactive material enabling. On the long-term perspective, excellence in water chemistry prevents unplanned and earlier-than-expected replacements of major plant components and, therefore, contributes to the control of operational expenses within the defined overall plant business plan. It is also an element of a Plant Life-cycle Management (PLiM) programme and a key ingredient to achieve safe and cost-effective operation of existing plants that had transitioned to Long-Term Operation (LTO).

Whereas water chemistry guidelines for Western-design pressurized water reactors (PWR) are widely accessible via international organizations and primary water chemistry for pressurized heavy water reactors (PHWR) has been recently addressed by the IAEA, Member States have suggested that a technical description of water chemistry-related systems and outlines of water chemistry guidelines for WWERs could be captured in an IAEA technical document, recognizing the efforts for developing such a document made 2006–2008.

Objectives

The purpose of the event is to further collect owner/operator data relevant to a draft publication provisionally entitled *Water Chemistry of Water-Water Energetic Reactors*; to gather comments from Member States on the draft publication; and to modify the draft publication accordingly.

Target Audience

Station chemists and experts from WWER nuclear power plants, owner-operator organizations, and technical support organisations with other reactor technologies interested in the water chemistry of WWERs from all around the world.

Working Language(s)

English.

Expected Outputs

- Revised draft IAEA TECDOC publication on *Water Chemistry of Water-Water Energetic Reactors* that incorporates technical information, written comments, and suggested technical conclusions raised by the Member States beforehand.

Topics

Typical topics of interest for the event are as follows:

- Primary system: Design characteristics of water chemistry-related systems for WWERs 440 MW_e, 1000 MW_e and 1200 MW_e. Material concepts. Characteristics of all purification subsystems. Rationale for chemistry control measures (mitigation of general corrosion and SCC, management of impurities, minimization of radiation fields). Approach for commissioning, shutdowns and startups. Typical specifications (pH management, boric acid-potassium coordination) – some of the fuel related aspects are already captured in an existing IAEA document.
- Secondary systems: Design characteristics of water chemistry-related systems for WWERs 440 MW_e, 1000 MW_e and 1200 MW_e. Material concepts. Characteristics of the purification subsystem. Rationale for chemistry control measures (mitigation of FAC and SCC, optimization of SG heat transfer, management of impurities). Approach for commissioning, shutdowns, outage preservation, and startups. Typical specifications (pH management, dosing of alkalizing agents, use of film-forming substances).

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.

- For designation through the InTouch+ online registration portal:

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 **16 May 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 **16 May 2025**.

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.

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.

Papers and Presentations

The IAEA encourages participants to share in written the technical information required for the draft publication at least two months before the event, and comments and suggested technical conclusions related to the draft publication at least two weeks before the event.

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.

- For designation through the InTouch+ online registration portal:

The application for financial support should be made, together with the submission of the application, by **16 May 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.

The virtual component of the event will be held via Microsoft Teams for a limited number of participants.

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.

IAEA Contacts

Scientific Secretary

Mr Laurent Bourdonneau

Division of Nuclear Power
Department of Nuclear Energy
International Atomic Energy Agency
Vienna International Centre
PO Box 100
1400 VIENNA
AUSTRIA

Tel.: +43 1 2600 22864

Fax: +43 1 26007

Email: L.Bourdonneau@iaea.org

Administrative Secretary

Ms Inessa Kovalenko

Division of Nuclear Power
Department of Nuclear Energy
International Atomic Energy Agency
Vienna International Centre
PO Box 100
1400 VIENNA
AUSTRIA

Tel.: +43 1 2600 22801

Fax: +43 1 26007

Email: I.Kovalenko@iaea.org

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