



# **Training Course on Conceptual Models for Water Resource Management Using Isotope Hydrology and Hydrochemistry: Part 1**

**Virtual Event**

**11 - 15 May 2026**

**Ref. No.: EVT2503774**

## **Information Sheet**

### **Introduction**

The course is open to 15 to 20 participants. In the selection of nominated participants priority will be given to technical and scientific staff involved in planning and implementing hydro(geo)logical research and/or projects related to water resources assessment and management involving the use of isotope hydrology tools and approaches.

### **Objectives**

The purpose of this course is to provide a comprehensive review of the principles and methodologies for developing and testing conceptual hydrological models using isotope hydrology data, as well as applying these models to address critical water resource management challenges, with a focus on real-world case studies. The training course will include a blend of lectures, group discussions, and case study analyses covering key theoretical and applied topics in hydrogeology, including groundwater flow systems, recharge processes, isotope selection and application, and the interpretation of isotopic and geochemical data. Emphasis will be placed on integrating supporting data such as climate, topography, geology, land use, and surface water–groundwater interactions, as well as on the role of GIS and remote sensing in hydrological conceptualization. Delivered in an online format, the course prioritizes interactive engagement and practical exercises. Participants will be supported in formulating key water resource questions—such as source identification, recharge estimation, contamination sources, and flow path delineation—and in designing appropriate isotope sampling strategies to address these issues. The conceptual model is central to the design, execution, and interpretation of isotope hydrology studies and serves as a critical tool for informed water resources management and policy development. Strengthening skills in conceptual modelling supports more effective decision-making and maximizes the impact of national and regional technical cooperation projects.

## Target Audience

Participants should have a university degree with a technical/scientific profile that attests to their experience with the use of hydrological, hydrogeological or hydrochemical techniques, and/or their involvement in water resources assessment and/or management. They should preferably have a good understanding of water-related/hydrogeological issues. As the course will be conducted in English, participants should have sufficient proficiency to follow lectures and express themselves in this language without difficulty. In the case of countries in which English is not an official or customary language, nominations must be accompanied by a separate certificate attesting to the candidate's proficiency in English. This certificate must be issued by a language school or cultural institution, or by the embassy of a country in which English is spoken.

## Working Language(s)

English

## 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 **27 April 2026**, 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](mailto:InTouchPlus.Contact-Point@iaea.org));
  - 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 **27 April 2026**.

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](mailto: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 the IAEA InTouch+ platform.

In addition to the registration already submitted through the InTouch+ platform, participants have to submit the abstract, together with the Form for Submission of a Paper (Form B), 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 .

## **Expenditures and Grants**

No registration fee is charged to participants.

## **Organization**

### **Scientific Secretary**

#### **Ms Melanie Vital**

Division of Physical and Chemical Sciences  
Department of Nuclear Sciences and Applications  
International Atomic Energy Agency  
Vienna International Centre  
PO Box 100  
1400 VIENNA  
AUSTRIA

Tel.: +43 1 2600 21758

Fax: +43 1 26007

Email: [M.Vital@iaea.org](mailto:M.Vital@iaea.org)

## **Administrative Secretary**

**Ms Corinna Lynn Herden**

Division of Physical and Chemical Sciences  
Department of Nuclear Sciences and Applications  
International Atomic Energy Agency  
Vienna International Centre  
PO Box 100  
1400 VIENNA  
AUSTRIA

Tel.: +43 1 2600

Fax: +43 1 26007

Email: [C.Herden@iaea.org](mailto:C.Herden@iaea.org)

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.