



Regional Workshop on Training in Neutron Imaging

Hosted by

The International Atomic Energy Agency
IAEA Headquarters
Vienna, Austria

28 August to 1 September 2023

Ref. No.: TN-RER1022-2301882

Information Sheet

Purpose

The purpose of this event is to introduce the new draft of the IAEA e-learning course on advanced neutron imaging and finalize it for pilot use and further dissemination among the IAEA Member States.

Working Language(s)

The working language(s) of the event will be English.

Deadline for Nominations

Nominations received after 28 April 2023 will not be considered.

Project Background

Enhancement of low and medium power research reactor (RR) utilization is often pursued by increasing use of nuclear techniques, such as neutron imaging (NI), which is the second neutron-based technique most commonly present in RRs with 66 out of 222 operational RRs reporting its availability in the IAEA Research Reactor Data Base. With further NI facilities at spallation sources, it is a technique that can be implemented even at a low power research reactor. It has great potential for further methodical improvements and wider practical applications in research and industrial utilization.

Unfortunately, it has been observed that the retirement and/or departure of experienced staff often results in gaps in knowledge of methodological principles and metrological aspects of the techniques employed, both within the remaining team and for the new staff. In this regard, the IAEA developed, through project RER1016, a dedicated e-learning course for neutron imaging, on-line since 2020 and with users from over 70 Member States. The course covers the basic and fundamental aspects of neutron imaging. The participants of a workshop held in 2023 recommended expanding this e-learning course with advanced aspects of the technique, as well as providing hands-on exercises.

The IAEA therefore started to develop an e-learning course on Advanced Neutron Imaging, including the most recent developments and hands-on exercises through Python scripts. The pilot course is now developed.

Scope and Nature

The event is a workshop on how to use the pilot IAEA e-learning course on Advanced Neutron Imaging. The workshop format will consist of presentations given by the main authors of the course, external experts as well as by the participants and the IAEA staff, subsequent discussions on the topics of course, practical exercises, self-assessment tests and discussions of the e-learning course in general.

Participation

The workshop is open to 20 participants from the Member States participating in the RER1022 project.

Participants' Qualifications and Experience

Candidates should have experience in neutron imaging. Priority will be given to the candidates from Member States that have or plan to install a neutron imaging facility.

Application Procedure

Candidates wishing to apply for this event should follow the steps below:

1. Access the InTouch+ home page (<https://intouchplus.iaea.org>) using the candidate's existing Nucleus username and password. If the candidate is not a registered Nucleus user, she/he must create a Nucleus account (<https://websso.iaea.org/IM/UserRegistrationPage.aspx>) before proceeding with the event application process below.
2. On the InTouch + platform, the candidate must:
 - a. Finalize or update her/his personal details, provide sufficient information to establish the required qualifications regarding education, language skills and work experience ('Profile' tab) and upload relevant supporting documents;
 - b. Download and complete the [Designation of Beneficiary and Emergency Contact Form](#), and upload to InTouch+ ('Profile' tab under the personal section) specifying the document name. If already provided, kindly discard this step; and
 - c. Search for the relevant technical cooperation event (EVT2301882) under the 'My Eligible Events' tab, answer the mandatory questions and lastly submit the application to the required authority.

NOTE: Completed applications need to be approved by the relevant national authority, i.e. the National Liaison Office, and submitted to the IAEA through the established official channels by the provided designation deadline.

For additional support on how to apply for an event, please refer to the [InTouch+ Help page](#). Any issues or queries related to InTouch+ can be addressed to InTouchPlus.Contact-Point@iaea.org.

Should online application submission not be possible, candidates may download the nomination form for the training course from the [IAEA website](#).

NOTE: A medical certificate signed by a registered medical practitioner dated not more than four months prior to starting date of the event must be submitted by candidates when applying for a) events with a duration exceeding one month, and/or b) all candidates over the age of 65 regardless of the event duration.

Administrative and Financial Arrangements

Nominating authorities will be informed in due course of the names of the candidates who have been selected, and will at that time be informed of the procedure to be followed with regard to administrative and financial matters.

Selected participants will receive an allowance from the IAEA sufficient to cover their costs of lodging, daily subsistence and miscellaneous expenses. They will also receive either a round-trip air ticket based on the most direct and economical route between the airport nearest their residence and the airport nearest the duty station through the IAEA's travel agency AX Travel Management, or a travel allowance, or they will be reimbursed travel by car/bus/train in accordance with IAEA rules for non-staff travel.

Disclaimer of Liability

The organizers of the event do not accept liability for the payment of any cost or compensation that may arise from damage to or loss of personal property, or from illness, injury, disability or death of a participant while he/she is travelling to and from or attending the course, and it is clearly understood that each Government, in approving his/her participation, undertakes responsibility for such coverage. Governments would be well advised to take out insurance against these risks.

Note for female participants

Any woman engaged by the IAEA for work or training should notify the IAEA on becoming aware that she is pregnant.

The Board of Governors of the IAEA approved new International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources. The Standards deal specifically with the occupational exposure conditions of female workers by requiring, inter alia, that a female worker should, on becoming aware that she is pregnant, notify her employer in order that her working conditions may be modified, if necessary. This notification shall not be considered a reason to exclude her from work; however, her working conditions, with respect to occupational exposure shall be adapted with a view to ensuring that her embryo or foetus be afforded the same broad level of protection as required for members of the public.

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