



Atoms for Peace and Development

الوكالة الدولية للطاقة الذرية

国际原子能机构

International Atomic Energy Agency

Agence internationale de l'énergie atomique

Международное агентство по атомной энергии

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The Secretariat of the International Atomic Energy Agency (IAEA) presents its compliments to the IAEA's Member States and has the honour to draw their attention to the **Training Workshop on Neutron Activation Analysis: Quality Assurance and Quality Control in Proficiency Testing** (hereinafter referred to as "event") to be held in Delft, Netherlands, from **22 to 26 August 2022**.

The purpose of the event is to provide the participants with training in neutron activation analysis, focusing on the improvement of proficiency testing through enhanced quality assurance and quality control processes.

The attached Information Sheet provides further details of the event.

The event will be held in English.

Member States are invited to designate one or more participants to represent the Government at this event. Member States are strongly encouraged to identify suitable women 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 at the time of designating the participants using the attached Grant Application Form (Form C).

It should be noted that compensation is not payable by the IAEA for any damage to or loss of personal property. The IAEA also does not provide health insurance coverage for participants in IAEA events. Arrangements for private insurance coverage on an individual basis should therefore be made. The IAEA will, however, provide insurance coverage for accidents and illnesses that clearly result from any work performed for the IAEA.

Designations should be submitted to the IAEA through the competent national authority (Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) not later than **17 June 2022** using the attached Participation Form (Form A). Completed and authorized Participation Forms should be sent either by email to: Official.Mail@iaea.org or by fax to: +43 1 26007 (no hard copies needed). Copies should be sent by email to the Scientific Secretary of the event, Mr Nuno Pessoa Barradas, Division of Physical and Chemical Sciences, Department of Nuclear Sciences and Applications (Email: N.Pessoa-Barradas@iaea.org), and to the Administrative Secretary, Mr Rubén Gómez Zaragoza (Email: R.Gomez-Zaragoza@iaea.org). The Scientific Secretary of the event will liaise with the participants directly concerning further arrangements, including travel details, as appropriate, once the official designations have been received.

The Secretariat of the International Atomic Energy Agency avails itself of this opportunity to renew to the IAEA's Member States the assurances of its highest consideration.



2022-04-08

Enclosures: Information Sheet
 Participation Form (Form A)
 Form for Submission of a Paper (Form B)
 Grant Application Form (Form C)



IAEA

International Atomic Energy Agency

Atoms for Peace and Development

Training Workshop on Neutron Activation Analysis: Quality Assurance and Quality Control in Proficiency Testing

Hosted by the
Government of the Netherlands

through the
Reactor Institute Delft of the Delft University of Technology

Delft, Netherlands

22–26 August 2022

Ref. No.: EVT2104195

Information Sheet

Introduction

Neutron activation analysis (NAA) is the most common technique in research reactors worldwide. It is available in 50 countries, in about half of the operating research reactors, according to the IAEA Research Reactor Database (nucleus.iaea.org/RRDB). Whereas the markets for NAA laboratories may have been identified, an underestimated problem remains the quality assurance and quality control (QA/QC), which limits tremendously the commercial routine application of this powerful technique. The IAEA promotes for many years the enhancement of the quality of NAA analytical services by providing training in quality assurance and quality control and, via its analytical quality control services, by the development and provision of reference materials, organizing intercomparison exercises and facilitating participation in such exercises since 2010. Since 2019, the exercises have been held annually, and since 2020 they have included also other nuclear-related analytical techniques.

From 2010 until 2017, the participants analysed and identified sources of errors in follow-up feedback workshops, where methodologies for their elimination through improved quality assurance and quality

control were presented. It was observed that this strategy led to rapid improvement of the analytical performance of many NAA laboratories. At the same time, other laboratories could not reach sustained improvements, and root cause analysis showed that this was often due to inappropriate QA/QC practices. To address this problem, the IAEA developed extensive guidance on QA/QC practice in its e-learning course on NAA, and drafted a Technical Reports Series publication “Practical Guide to Quality Assurance and Quality Control in Neutron Activation Analysis”

Objectives

The purpose of the event is to provide the participants with training in neutron activation analysis, focusing on improvement of proficiency testing through enhanced quality assurance and quality control processes.

Target Audience

The event is intended for NAA research reactor laboratories, including practitioners of NAA involved in experimental work, in service analysis, process and performance optimization or QA/QC of NAA laboratories, as well as managers of NAA laboratories.

Topics

The event will include presentations by IAEA staff and other experts on the subject matter, with subsequent practical exercises and discussions. Some limited time will be allocated for the workshop participants to present their scientific background and function in the institutes and laboratories, in particular reporting on their existing experience, lessons learned, challenges and future developments in the subject matter. The event will address the following topics:

- QA/QC in in the daily routine of NAA:
 - Sample handling and test portion preparation
 - Calibration
 - Irradiation procedure
 - Decay
 - Measurement
 - Review of requests for analysis
 - Laboratory management
- QA/QC and proficiency testing
- The IAEA e-learning course on NAA

Working Language(s)

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.

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, participants are requested to send the **Participation Form (Form A)** to their competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) for onward transmission to the IAEA by **17 June 2022**. Participants who are members of an organization invited to attend are requested to send the **Participation Form (Form A)** through their organization to the IAEA by the above deadline.

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. Further information can be found in the [Data Processing Notice](#) 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 are requested to submit an abstract of their work. 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. It should be sent electronically to Mr Nuno Pessoa Barradas, the Scientific Secretary of the event (see contact details below), not later than **17 June 2022**. Authors will be notified of the acceptance of their proposed presentations by **8 July 2022**.

In addition, participants have to submit the abstract together with the **Participation Form (Form A)** and the attached **Form for Submission of a Paper (Form B)** to their competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) or their organization for onward transmission to the IAEA not later than **17 June 2022**.

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 using the **Grant Application Form (Form C)** which has to bear an official stamp, signed and submitted by the competent national authority to the IAEA together with the **Participation Form (Form A)** by **17 June 2022**.

Visas

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

Key Deadlines and Dates

17 June 2022	Submission of the Participation Form (Form A), the Form for Submission of a Paper (Form B) and the Grant Application Form (Form C) (if applicable) through the official channels
8 July 2022	Notification of the acceptance of proposed presentations Official notification of assigned grants through an invitation letter to be sent via email
22 August 2022	Event begins
26 August 2022	Event ends

IAEA Contacts

Scientific Secretary:

Mr Nuno Pessoa Barradas

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1400 VIENNA
AUSTRIA

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Email: N.Pessoa-Barradas@iaea.org

Administrative Secretary:

Mr Rubén Gómez Zaragoza

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Department of Nuclear Sciences and Applications
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PO Box 100
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AUSTRIA

Tel.: +43 1 2600 26393

Fax: +43 1 26007

Email: R.Gomez-Zaragoza@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.

Participation Form

Training Workshop on Neutron Activation Analysis: Quality Assurance and Quality Control in Proficiency Testing

Delft, Netherlands

22–26 August 2022

To be completed by the participant and sent to the competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA, or National Atomic Energy Authority) of his/her country for subsequent transmission to the International Atomic Energy Agency (IAEA) either by email to: Official.Mail@iaea.org or by fax to: +43 1 26007 (no hard copies needed). Please also send a copy by email to the Scientific Secretary N.Pessoa-Barradas@iaea.org and to the Administrative Secretary R.Gomez-Zaragoza@iaea.org.

Deadline for receipt by IAEA through official channels: 17 June 2022

Family name(s): (same as in passport)	First name(s): (same as in passport)	Mr/Ms
Institution:		
Full address:		
Tel. (Fax):		
Email:		
Nationality:	Representing following Member State/non-Member State/entity or invited organization:	
If/as applicable: Do you intend to submit a paper? Yes <input type="checkbox"/> No <input type="checkbox"/> Would you prefer to present your paper as a poster? Yes <input type="checkbox"/> No <input type="checkbox"/> Title:		

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.

Form for Submission of a Paper

Training Workshop on Neutron Activation Analysis: Quality Assurance and Quality Control in Proficiency Testing

Delft, Netherlands

22–26 August 2022

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Deadline for receipt by IAEA through official channels: 17 June 2022

Title of the paper:		
If applicable: Abstract ID in IAEA-INDICO:		
Family name(s) and first name(s) of all author(s) (same as in passport(s)):	Scientific establishment(s) in which the work has been carried out	City/Country
1.		
2.		
3.		
Family name(s) and first name(s) of author presenting the paper (same as in passport):	Mr/Ms:	
Mailing address:		
Tel. (Fax):		
Email:		

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Furthermore, I herewith declare:

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- that any permissions and rights to publish required for third-party content, including but not limited to figures and tables, have been obtained, that all published material is correctly referenced; and
- that the material submitted to the IAEA does not contain any libellous or other unlawful statements and does not contain any materials that violate any personal or proprietary rights of any person or entity.

Date:

Signature of main author:

Grant Application Form

Training Workshop on Neutron Activation Analysis: Quality Assurance and Quality Control in Proficiency Testing

Delft, Netherlands

22–26 August 2022

To be completed by the applicant and sent to the competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA, or National Atomic Energy Authority) of his/her country for subsequent transmission to the International Atomic Energy Agency (IAEA) either by email to: Official.Mail@iaea.org or by fax to: +43 1 26007 (no hard copies needed). Please also send a copy by email to the Scientific Secretary N.Pessoa-Barradas@iaea.org and to the Administrative Secretary R.Gomez-Zaragoza@iaea.org.

Deadline for receipt by IAEA through official channels: 17 June 2022

Family name(s): (same as in passport)	First name(s): (same as in passport)	Mr/Ms:
Mailing address:	Tel.:	
	Fax:	
	Email:	
Date of birth (yy/mm/dd):	Nationality:	

1. Education (post-secondary):

Name and place of institution	Field of study	Diploma or Degree	Years attended from to	

2. Recent employment record (starting with your present post):

Name and place of employer/ organization	Title of your position	Type of work	Years worked from to	

3. Description of work performed over the last three years:

4. Institute's/Member State's programme in field of event:

Date: **Signature of applicant:** _____

Date: **Name, signature and stamp of Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority** _____