



IAEA

International Atomic Energy Agency

Atoms for Peace and Development

Technical Meeting on Non-spallation Accelerator-based Production of Neutrons

**Vienna International Centre
Vienna, Austria**

4–7 November 2019

Ref. No.: EVT1701936

Information Sheet

Introduction

The number of research reactors available for neutron beam techniques, such as neutron scattering, radiography, neutron capture therapy, material irradiation, and cross-section measurements, has been declining. Accelerator-based neutron sources that utilize the spallation process are expensive and are therefore usually available only to large countries or international consortia of countries. Nevertheless, neutron sources developed on the basis of lower power accelerators that do not utilize spallation could replace traditional research reactors for some roles. The advent of these accelerators brings new challenges in their optimization for particular applications, e.g. accelerating energy, pulsed/continuous operation, and target material and design. Other considerations include licensing, which may vary by country, and potential gaps in the radiation transport models.

Objectives

The purpose of the event is to bring together experts from various fields interested in the development of non-spallation accelerator-based sources of neutrons and to initiate the production of an International Atomic Energy Agency (IAEA) report covering the current status and outlook for this area of accelerators and their applications.

Expected Outputs

The outputs will include individual papers from the contributors. These will be incorporated into an Agency report covering the topics discussed at the event.

Topics

The event will cover the following topics:

1. An overview of the current situation with respect to research reactors and the reduction in national neutron sources for research and training;
2. Potential applications for accelerator-based neutron sources and the differing demands they place on optimisation;
3. The different accelerator and target technologies that could fill the gaps; and
4. Practical problems, including target design and performance, facility cost estimates, licensing, and safety and security.

Structure

The event will be organized around the topics (listed above) where discussion and action are urgently needed. The agenda will be structured with a balance of invited talks and discussion time sufficient to facilitate reaching conclusions. The event will end with summary talks on each of the topics. In preparation for the event, it is expected that speakers will target their work and their presentations to address the aims of the event. The international organizing committee is responsible for planning the technical programme and documenting the conclusion.

Working Language(s)

English.

Target Audience

About 25 experts from IAEA Member States and international organizations are expected to attend the event. Participants should be actively involved in the topics of the event. Participants will be accepted only if their duly completed Participation Form (Form A) is transmitted to the IAEA through their appropriate governmental authority by **13 August 2019**.

Abstracts

Participants wishing to make a contribution at the event are requested to submit a one-page electronic abstract.

Abstracts should be submitted to C.Monfero@iaea.org by **30 July 2019**. Abstracts should be prepared according to the following instructions:

- 1) Page size: A4 (297mm by 210 mm) — vertical orientation
- 2) Margins 25 mm all around

3) Layout:

Title: single-spaced, 14-point size, Times New Roman Font (TNR), **bold**

Authors: single-spaced, 12-point size, TNR Font

Affiliation: single-spaced, 12-point size, TNR Font, *italic*

Text: 1.5 spaced, 12-point size, TNR Font

Length: one page

Abstracts can be text only or contain figures and graphics. The abstracts must contain the authors' names, affiliation and email address. Acceptable file formats are Microsoft Word (preferred) or PDF. The filename should be in the following format: "lastname.i.n.i.t.i.a.l.s.-acronym of the topic.filetype".

Authors must make sure that the files do not include copyrighted fonts or any other impediments for reproduction. The abstracts will be reviewed and selected by the International Programme Advisory Committee. Authors will be informed of the acceptance of their contributions via email by **26 August 2019**. A Book of Abstracts will be compiled for distribution during the meeting.

Electronic Proceedings

Electronic proceedings of the event, consisting of slides or posters, will be made available to all participants on an open website.

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 **13 August 2019**. 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.

Please note that the IAEA is in a transition phase to manage the entire registration process for all regular programme events electronically through the new InTouch+ (<https://intouchplus.iaea.org>) facility, which is the improved and expanded successor to the InTouch platform that has been used in recent years for the IAEA's technical cooperation events. Through InTouch+, prospective participants will be able to apply for events and submit all required documents online. National authorities will be able to use InTouch+ to review and approve these applications. Interested parties that would like to use this new facility should write to: InTouchPlus.Contact-Point@iaea.org.

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, primarily those from developing countries with low economic resources. Generally, not more than one grant will be awarded to any one country. The grants awarded will be in the form of lump sums usually covering part of the cost of attendance.

Governments wishing to apply for a grant on behalf of one of their specialists should address specific requests to the Scientific Secretary responsible for this meeting to this effect. Governments should ensure that applications for grants are:

- 1) Received by the IAEA by **13 August 2019**;
- 2) Accompanied by a duly completed and signed **Grant Application Form (Form C)**, including the abstract of the paper to be presented; and
- 3) Accompanied by an estimate from an official travel agency of the travel costs.

Applications that do not comply with the conditions mentioned above will not be considered. Awards will be announced by **2 September 2019**.

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.

An official letter of invitation will be issued to all participants. This letter will be needed for the visa application. In case of special requirements, please contact Ms Charisse Monfero (C.Monfero@iaea.org).

Venue

The event will be held in in Room C0437/40, C building, of 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:

<http://www-pub.iaea.org/iaeaevents/GeneralInfo/Guide/VIC>.

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.

Detailed information regarding accommodation and transport in Vienna can be found under the following links:

<http://www-pub.iaea.org/MTCD/Meetings/PDFplus/GuideToVIC.pdf>

<https://www-pub.iaea.org/iaeametings/2018HotelList.pdf>

Deadlines

17 April 2019	Beginning of abstract submission
30 July 2019	Deadline for submission of abstracts according to the instructions above for paper selection
13 August 2019	Submission of the Participation Form (Form A) through the appropriate governmental authority
26 August 2019	Participants will be informed about the acceptance of their papers
2 September 2019	Grant awards
4 November 2019	Meeting begins

International Programme Advisory Committee

The International Programme Advisory Committee comprises the following members:

Thomas GUTBERLET	Germany
Dan BERKOVITS	Israel
Frederick OTT	France
Dong Won LEE	Republic of Korea
Mayir MAMTIMIN	United States of America

IAEA Contacts

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

Participation Form

Technical Meeting on Non-spallation Accelerator-based Production of Neutrons

IAEA Headquarters, Vienna, Austria

4–7 November 2019

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 I.Swainson@iaea.org and to the Administrative Secretary C.Monfero@iaea.org.

Please attach a passport copy or other document of identification (ID).

Participants who are members of an invited organization can submit this form to their organization for subsequent transmission to the IAEA.

Deadline for receipt by IAEA through official channels: 13 August 2019

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:		

Form for Submission of a Paper

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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 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

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Deadline for receipt by IAEA through official channels: 13 August 2019

Family name: (e.g. Smith)	First name(s): (e.g. John)	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** _____