

# Technical Meeting on Irradiation Applications using Ion Beam Accelerators for Socioeconomic Development

IAEA Headquarters, Vienna, Austria

26 – 29 August 2025

Ref. No.: EVT2404220

#### **Information Sheet**

#### Introduction

Due to their unique analytical capabilities, ion beam accelerators are particularly suitable—and in some cases, irreplaceable—tools for applications with high socio-economic impact. The development of materials of significant technological interest has been decisively advanced through various ion beam irradiation techniques. As demand grows for stronger and more advanced materials, a wide variety of ion beams are increasingly used to modify material properties. A prominent example of this is ion implantation.

Ion implantation has diverse applications, spanning nearly all fields of modern technology—from the production of semiconductors for industrial purposes (e.g., microchips) to the modification of materials used in spacecraft construction. There is a steadily increasing demand for implanters capable of producing components for specialized telescopes and image sensors. Groundbreaking research, such as the investigation of planetary grain erosion, also benefits from this advanced technique.

These developments have sparked extensive discussions about the compelling applications of ion implantation and their contribution to the socio-economic development of IAEA member states. To evaluate this potential and further disseminate the benefits of these irradiation applications, a Technical Meeting has been proposed, with a focus on ion implantation techniques using primarily but not exclusively MeV ion beams and their role in supporting economic growth.

# **Objectives**

The purpose of the event is to document success stories of ion implantation R&D programs that have led to industrial applications, and to identify gaps, niche areas, and recent developments in the potential utilization of MeV ion implanters for socio-economic benefit.

## **Target Audience**

The event is intended for scientists working mainly at MeV accelerator facilities engaged in ion implantation activities with industrial relevance, as well as researchers who use ion implanters as key tools in emerging scientific fields.

# Working Language(s)

English.

# **Expected Outputs**

Meeting report, including conclusions and recommendations.

# **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 June 30, 2025. 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. The selection of the participants will be based solely on the quality of the abstracts of their work to be presented during the Technical Meeting (see also Additional Requirements, below).

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.

# **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 two pages (including figures and tables) and should not exceed 800 words. It should be sent electronically to Mr. Sotirios Charisopoulos, the Scientific Secretary of the event (see contact details below), not later than **June 30, 2025**. Authors will be notified of the acceptance of their proposed presentations by **July 9, 2025**.

In addition, participants have to submit 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 **June 30, 2025**.

## **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 be stamped, signed and submitted by the competent national authority to the IAEA together with the **Participation Form (Form A)** by **June 30, 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.

#### 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.

## **Additional Requirements**

It is expected that participants will present activities of their organizations relevant to the topic of the event. This will be the main criterion for the selection of the participants. Therefore, participants are expected to submit together with their Participation Form (Form A) also a Form for Submission of a Paper (Form B) and an abstract directly to the scientific secretary by June 30, 2025.

#### **Deadlines**

30 June 2025	Submission of abstracts according to the instructions given above for paper selection
30 June 2025	Nomination and application for Grant (Forms A, B and if applicable C) from national authorities
9 July 2025	IAEA acceptance of contribution informed by email
9 July 2025	Invitation letters/Grant awards
26 August 2025	Meeting begins

#### **IAEA Contacts**

#### **Scientific Secretary:**

#### Mr Sotirios CHARISOPOULOS

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 21637 Fax: +43 1 26007

Email: S.Charisopoulos@iaea.org

#### **Administrative Secretary:**

#### Mr Ruben GOMEZ ZARAGOZA

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

Tel.: +43 1 2600 21656 Fax: +43 1 26007

Email: R.Gomez-Zaragoza@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.

# **Event Web Page**

Please visit the following IAEA web page regularly for new information regarding this event:

www.iaea.org/events/EVT2404220

#### **Enclosures:**

- Participation Form (Form A)
- Form for Submission of a Paper (Form B)
- Grant Application Form (Form C)



# **Participation Form**

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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, Mr Sotirios Charisopoulos, Division of Physical and Chemical Sciences, Department of Nuclear Sciences and Applications (Email: S.Charisopoulos@iaea.org) and to the Administrative Secretary, Mr Ruben Gomez Zaragoza, (Email: R.Gomez-Zaragoza@iaea.org).

#### Deadline for receipt by IAEA through official channels: 30 June 2025

		T		,
Family name(s): (same as in	ı passport)	First name(s): (same	e as in passport)	Mr/Ms
Institution:				
Full address:				
Tel. (Fax):				
Email:				
Nationality:	Representing follo invited organization	owing Member State/ron:	non-Member State/ei	ntity or
Do you intend to submit a p Title:	paper?	Yes 🗌	No 🗌	

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# 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(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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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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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	

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3. Description	of work performed over the last three years:
4. Institute's/N	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 \_\_\_\_\_