



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

Organismo Internacional de Energía Atómica

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In reply please refer to: **EVT2104430**

Dial directly to extension: (+43 1) 2600-21 637/28224

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 Advances in Ion Beam Techniques and their Applications** (hereinafter referred to as "event") to be held virtually via Cisco WebEx from **14 to 18 November 2022**.

The purpose of the event is to provide hands-on training to young researchers from Member States on analytical techniques using ion beam accelerators.

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.

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 **21 October 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 Sotirios Charisopoulos, Division of Physical and Chemical Sciences, Department of Nuclear Sciences and Applications (Email: S.Charisopoulos@iaea.org), and to the Administrative Secretary, Ms Rozanna Bojdo (Email: r.bojdo@iaea.org). The Scientific Secretary of the event will liaise with the participants directly concerning further arrangements, as appropriate, once the official designations have been received.

The IAEA takes no responsibility for, and the provider of the virtual meeting services has represented and warranted that the Services shall not contain, and that no end user shall receive from the software used to hold the virtual meeting, any virus, worm, trap door, back door, timer, clock, counter or other limiting routine, instruction or design, or other malicious, illicit or similar unrequested code, including surveillance software or routines which may, or is designed to, permit access by any person, or on its own, to erase, or otherwise harm or modify any data or any system, server, facility or other infrastructure of any end user (collectively, a "Disabling Code").

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.



2022-09-23

Enclosures: Information Sheet

Participation Form (Form A)

Form for Submission of a Paper (Form B)



IAEA

International Atomic Energy Agency

Atoms for Peace and Development

Training Workshop on Advances in Ion Beam Techniques and their Applications

Virtual Event

14 to 18 November 2022

Ref. No.: 2104430

Information Sheet

Introduction

Accelerator based technologies are associated with a broad range of applications having societal and technological impact and can contribute to the economic development of Member States. The utilization of accelerators enhances innovation in a variety of fields such as health, materials research, cultural heritage, environment, energy and natural resources being typical examples. In this context, accelerator applications are one of the thematic areas, where the IAEA supports its Member States in strengthening their capabilities to adopt and benefit from the usage of accelerators.

In response to the training needs of young scientists from developing Member States in utilization of accelerators, the Physics Section, Division of Physical and Chemical Sciences (IAEA), organizes a series of training workshops at the accelerator facilities of the Ruđer Bošković Institute (RBI), Zagreb, Croatia, which also includes training in Ion Beam Analysis (IBA) techniques biannually. IBA techniques is a group of non-destructive nuclear analytical methods applied with low energy electrostatic accelerators. They provide important, often unique information on the elemental and isotopic composition, layer structure, electronic and many other properties of materials in solid or liquid form, with high precision. As such, they are extensively used in materials analysis, environmental monitoring, cultural heritage studies and other investigations of problems of key societal impact and industrial interest.

Objectives

The objective of the forthcoming training workshop is to deepen knowledge and skills in the following scheduled basic IBA techniques:

- Proton-Induced X-ray Emission (PIXE)
- Proton-Induced Gamma-ray Emission (PIGE)
- Rutherford Backscattering Spectroscopy (RBS)
- Elastic Recoil Detection Analysis (ERDA)
- Inelastic Nuclear Reaction Analysis (NRA)
- Single ion techniques: Ion Beam Induced Charge (IBIC) and Scanning Transmission Ion Microscopy (STIM)

Target Audience

This Training workshop is intended for young scientists working or, planning to work for their thesis at accelerator facilities; the goal is to widen their specific knowledges and skills in the standard IBA techniques through lectures, hands-on work on the specific problems and demonstration experiments.

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, 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 **21 October 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 above deadline.

Selected participants will be informed in due course on the procedures to be followed with regard to administrative and technical 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. [Optional – only keep if using the InTouch+ platform for registration] 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 2 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 **21 October 2022**. Authors will be notified of the acceptance of their proposed presentations by **30 October 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 **21 October 2022**.

IAEA Contacts

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Participation Form

(Virtual Meeting) Training Workshop on Advances in Ion Beam Techniques and their Applications

Zagreb, Croatia

14 to 18 November 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: OfficialMail@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, Ms Rozanna Bojdo, (Email: R.Bojdo@iaea.org).

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: 21 October 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	No
Would you prefer to present your paper as a poster?	Yes	No
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. Further information can be found in the [Data Processing Notice](#) concerning IAEA InTouch+ platform.



Form for Submission of a Paper

(Virtual Meeting) Training Workshop on Advances in Ion Beam Techniques and their Applications

Zagreb, Croatia

14 to 18 November 2022

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**Deadline for receipt by IAEA through official channels as per Conference
Announcement: 21 October 2022**

Title of the paper:		
If applicable: Abstract ID in IAEA-INDICO:		
Family name(s) and first name(s) of all author(s): e.g. Smith, John	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: e.g. Smith, John	Mr/Ms:	
Mailing address:		
Tel. (Fax):		
Email:		

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Date:

Signature of main author: