



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

Vienna International Centre, PO Box 100, 1400 Vienna, Austria

Phone: (+43 1) 2600 • Fax: (+43 1) 26007

Email: Official.Mail@iaea.org • Internet: <https://www.iaea.org>

In reply please refer to: EVT2104114

Dial directly to extension: (+43 1) 2600-24666

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 **Advanced Training Course on Characterization, Dating and Data Interpretation of Natural Heritage Materials and Objects with Accelerator-Based and Complementary Analytical Techniques** (hereinafter referred to as "event") to be held virtually via Microsoft Teams from **17 to 21 October 2022**.

The purpose of the event is to provide knowledge transfer and discuss best practices regarding the use of nuclear analytical techniques for the characterization, dating and data interpretation of natural heritage materials and objects.

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.

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 **29 July 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 Secretaries of the event, Ms Léna Bassel (Email: L.Bassel@iaea.org) and Ms Aliz Simon (Email: Aliz.Simon@iaea.org), both of the Division of Physical and Chemical Sciences, Department of Nuclear Sciences and Applications, and to the Administrative Secretary, Ms Marion Linter (Email: M.Linter@iaea.org). The Scientific Secretaries 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.



2022-05-20

Enclosures: Information Sheet
 Participation Form (Form A)



IAEA

International Atomic Energy Agency

Atoms for Peace and Development

Advanced Training Course on Characterization, Dating and Data Interpretation of Natural Heritage Materials and Objects with Accelerator- Based and Complementary Analytical Techniques

Virtual Event

17–21 October 2022

Ref. No.: EVT2104114

Information Sheet

Introduction

The IAEA has, among its mandates, the promotion and transfer of knowledge towards the analysis of heritage materials using nuclear-based analytical techniques. In-depth characterization of heritage materials is of great importance for conservation issues and is a way to better understand the past when it comes to archaeological sites and artefacts. Going back to the natural and geologic raw materials used to make the artefact, or composing natural heritage is therefore essential. Analytical techniques based on intense radiation sources such as synchrotron radiation and ion beams are becoming widely used for characterizing a wide range of natural raw materials including sedimentary rocks, minerals, pigments, wood, bones, organics, etc. These techniques contribute to give insight on their structure, composition, age, provenance and circulation of the materials, which are valuable information regarding the history of the artefact or the site.

Objectives

The overall objective of this Training Course is to provide advanced training and enable information exchange for assessing characterization, dating and data interpretation of heritage materials, focusing on the natural raw materials. The main objective of the event is to contribute to the enhancement of

scientific-technological knowledge in the area of characterization and data interpretation of natural heritage materials with accelerator-based analytical techniques and share good practices for their safe analysis.

Target Audience

The event is intended for PhD students, postdoctoral and early-stage researchers as well as more experienced material scientists, accelerator-scientists, archaeologists, curators, conservators, and conservation scientists actively involved in the field of characterisation, dating and data interpretation of natural heritage materials and objects with accelerator-based and complementary analytical techniques.

Working Language

The official language of the training is English.

Structure

The training course will be held as a virtual event via Microsoft Teams.

The event will be structured around lectures by experts devoted to the topics mentioned below, followed by Questions and Answers discussion time. A dedicated session to exchange ideas, share experiences and express recommendations will be organized. Four hours per day are expected between 2-6 p.m. (Vienna time zone, UTC +1). It is expected that the meeting will start at 2 p.m. on 17 October 2022 and finish by 6 p.m. on 21 October 2022 (Vienna time zone, UTC +1).

Topics

The key topics of the workshop are:

- Application of accelerator science and technology for characterization of natural heritage materials: case studies;
- Dating natural heritage materials using accelerator-based and complementary dating techniques;
- Recent advances and methodologies development of characterization and dating of natural heritage materials, open science;
- Access to research infrastructure and modalities;

- Introduction to radiation-induced damage, key aspects and share best practices towards safe analysis of cultural and natural heritage materials.

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 **29 July 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.

A questionnaire is part of the selection process and will be sent to participants upon receipt of the endorsed forms. 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.

Expenditures and Financial support

No registration fee will be charged to participants attending the training.

Key Deadlines and Dates

Nomination deadline: 29 July 2022	Deadline for submission of Participation Form (Form A) through the official channels.
Beginning of September	Letter of invitations are sent to the accepted participants by the IAEA.
End of September	Information on the training agenda, platform and remote connections are sent to the meeting participants
17 October 2022	Training begins
21 October 2022	Training ends

IAEA Contacts

Scientific Secretaries:

<p>Ms Léna Bassel Heritage Science Specialist</p> <p>International Atomic Energy Agency Division of Physical and Chemical Sciences Vienna International Centre, P.O. Box 100, A1400 Vienna, Austria</p> <p>Tel.: +43 1 2600 24666 Email: L.Bassel@iaea.org</p>	<p>Ms Aliz Simon Accelerator Specialist</p> <p>International Atomic Energy Agency Division of Physical and Chemical Sciences Vienna International Centre, P.O. Box 100, A1400 Vienna, Austria</p> <p>Tel.: +43 1 2600 21706 Email: Aliz.Simon@iaea.org</p>
--	--

Administrative Secretary:

Ms Marion Linter

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 25119

Fax: +43 1 26007

Email: M.Linter@iaea.org

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.

Training Web Pages

Participants are encouraged to visit the following web pages regularly for new information regarding this event:

<https://www.iaea.org/events/evt2104114>

[Accelerators4Heritage \(iaea.org\)](#)

Participation Form

Advanced Training Course on Characterization, Dating and Data Interpretation of Natural Heritage Materials and Objects with Accelerator-Based and Complementary Analytical Techniques

Virtual Event

17–21 October 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 Secretaries L.Bassel@iaea.org; Aliz.Simon@iaea.org and to the Administrative Secretary M.Linter@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: 29 July 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.