



Food and Agriculture
Organization of the
United Nations



IAEA

Atoms for Peace and Development

الوكالة الدولية للطاقة الذرية

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International Atomic Energy Agency

Agence internationale de l'énergie atomique

Международное агентство по атомной энергии

Organismo Internacional de Energía Atómica

Joint FAO/IAEA Centre

of Nuclear Techniques in Food and Agriculture

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In reply please refer to: EVT2103920

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The Secretariats of the Food and Agriculture Organization of the United Nations (FAO) and the International Atomic Energy Agency (IAEA) (hereinafter referred to as the “Sponsoring Organizations”) present their compliments to the Sponsoring Organizations’ member countries and have the honour to draw their attention to the **Training Course on the Use of Rapid Profiling/Fingerprinting Techniques to Determinate Food Origin and Verify Food Authenticity** (hereinafter referred to as “event”) to be held virtually via IAEA NUCLEUS platform and Microsoft Teams, from **22 August 2022 to 2 September 2022**.

The purpose of the event is to enhance the capacity of Member States to respond rapidly to food/feed safety incidents and emergencies affecting humans, animals and trade by following a set of procedures and methods for testing agricultural samples to detect and identify contaminants and put in place effective control measures to protect the public and minimize disruption to trade in agricultural commodities.

The attached Information Sheet provides further details of the event.

The event will be held in English.

Sponsoring Organizations’ member countries are invited to designate one or more participants to represent the Government at this event. Member countries 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 **24 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 Simon Kelly, Joint FAO/IAEA Centre of Nuclear Techniques in Food and Agriculture, Department of Nuclear Sciences and Applications (Email: s.kelly@iaea.org), and to the Administrative Secretary, Ms Malgorzata Rydeng (Email: m.rydeng@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 Sponsoring Organizations take 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 Secretariats of the Sponsoring Organizations avail themselves of this opportunity to renew to the Sponsoring Organizations' member countries the assurances of their highest consideration.



2022-03-17

Enclosures: Information Sheet
Participation Form (Form A)



Training Course on the Use of Rapid Profiling/Fingerprinting Techniques to Determinate Food Origin and Verify Food Authenticity

Virtual Event

22 August 2022 – 2 September 2022

Ref. No.: EVT2103920

Information Sheet

Introduction

Food fraud and adulteration, though driven by economic gain, can also present a significant risk to human health. There have been many examples of this throughout history. In recent times, notable examples include melamine in milk powder, Sudan dyes in chilli powder and methanol in counterfeit spirits. The global occurrence of such incidents may cause negative impacts on international trade, reputational damage to companies or entire food sectors and, at worst, serious illness or fatalities to consumers.

Effective systems to prevent or control such incidents require robust analytical methods to detect adulteration or contamination of foods, and to provide information on their origin. The required methods encompass both sophisticated techniques capable of providing essential information such as the identity and amount of adulterants present or the probable origin of a food product, that allow follow-up actions to deal with the issue, and cost-effective, screening, ‘point of contact’ methods that can be deployed in the field (on the food production line or supply chain) to provide rapid answers regarding the safety or authenticity of food raw materials or products. A combination of these techniques provides member countries with effective measures to protect the public from fraud, mitigate the disruptive impact of emergencies affecting the food supply chain, and minimise disruption to trade in agricultural commodities.

This virtual training course will focus on rapid, bench-top or portable technologies that can be applied when there is a food safety or food fraud incident to detect adulteration or contamination of food, or to

provide information on the geographical/botanical origin of the food commodity to enable effective response and control of the problem. The techniques employed may also be used under normal circumstances as rapid screening tests within national food control systems.

Objectives

The objective of this virtual training course is to enhance the capabilities of laboratory personnel in the application of rapid, untargeted screening methods, enabling member countries to respond to food safety-related incidents and emergencies and to improve their food control systems.

The training will employ recorded lectures, video presentations of laboratory procedures and 'live' online question and answer sessions. Selected applications will be presented to provide the participants with a solid basic to intermediate knowledge of techniques including:

- Fourier transform infrared (FT-IR) and Fourier transform near-infrared (FT-NIR) spectroscopy;
- Benchtop nuclear magnetic resonance (NMR) spectroscopy;
- Ion mobility spectrometry (IMS);
- Multispectral imaging (MSI);
- Spectral data processing and chemometrics to enable interpretation of the data.

Examples of standard operating procedures and method protocols will be provided to course participants, to foster adoption of the demonstrated methods in their own laboratories.

Target Audience

Research and technical personnel from food control or research laboratories in the Sponsoring Organizations' member countries interacting with the Food Safety and Control subprogramme in the field of testing for food authenticity and geographical origin are eligible to apply. Hands-on experience in any of the above-mentioned analytical techniques would be an advantage.

Working Language

English.

Expected Outputs

The expected outcome of the course will be well informed, trained personnel in the application of nuclear and nuclear-related screening technologies for detecting food adulteration and providing information on food origin.

Participation and Registration

This training course will be open for remote self-study access from **22 August to 2 September 2022** via the IAEA NUCLEUS platform. Three ‘live’ online interactive question and answer sessions will be held via Microsoft Teams on **26th August, 2nd and 9th September 2022**.

All persons wishing to participate in the event have to be designated by the Sponsoring Organization’s member countries or should be members of organizations that have been invited to participate.

In order to be designated by the Sponsoring Organizations’ member country, 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 **24 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 to access the course materials.

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.

An online multiple-choice examination will be open following the course. Candidates who successfully complete the virtual training course will receive a certificate.

No registration fee is charged to participants.

IAEA Contacts

Scientific Secretary:

Mr Simon Kelly

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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/EVENT_2103920

Participation Form

Training Course on the Use of Rapid Profiling/Fingerprinting Techniques to Determinate Food Origin and Verify Food Authenticity

Virtual Event

22 August 2022 – 2 September 2022

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Deadline for receipt by IAEA through official channels: 24 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. Further information can be found in the [Data Processing Notice](#) concerning IAEA InTouch+ platform.