



Food and Agriculture  
Organization of the  
United Nations



IAEA

*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

**Joint FAO/IAEA Centre**

of Nuclear Techniques in Food and Agriculture

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

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

Email: [Official.Mail@iaea.org](mailto:Official.Mail@iaea.org) • Internet: <http://www.iaea.org>

In reply please refer to: **EVT2103919**

Dial directly to extension: (+43 1) 2600-28326

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 States and have the honour to draw their attention to the **Training Course on Analytical Methods to Detect and Control Organic Contaminants in Food** (hereinafter referred to as "event") to be held virtually via Microsoft Teams, from **16 May 2022 to 27 May 2022**.

The purpose of the event is to strengthen Member States' capabilities for the detection and control of food contaminants to increase their resilience to food/feed safety incidents and emergencies, safeguard consumer health and minimize disruption to trade in food commodities.

The attached Information Sheet provides further details of the event.

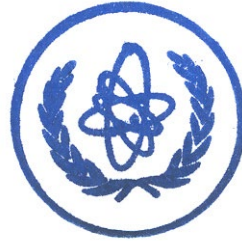
The event will be held in English.

Sponsoring Organizations' 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 **12 March 2022** using the attached Participation Form (Form A). Completed and authorized Participation Forms should be sent either by email to: [Official.Mail@iaea.org](mailto: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](mailto:s.kelly@iaea.org)), and to the Administrative Secretary, Ms Kyoko Narikawa (Email: [k.narikawa@iaea.org](mailto:k.narikawa@iaea.org)). The Scientific Secretary of the event will liaise with the participants directly concerning further arrangements 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 States the assurances of their highest consideration.



2022-02-04

Enclosures: Information Sheet

Participation Form (Form A)



# **Training Course on Analytical Methods to Detect and Control Organic Contaminants in Food**

**Virtual Event**

**16 May 2022–27 May 2022**

**Ref. No.: EVT2103919**

## **Information Sheet**

### **Introduction**

The control of unwanted chemicals in food, such as residues of pesticides or veterinary drugs used in food production, or natural contaminants such as mycotoxins, remains an area of high importance to Member States. Adequate monitoring and surveillance procedures must be in place to enable rapid and effective response to food safety incidents and emergencies. To be effective, a food control system must include the ability to apply targeted monitoring using validated, quality-controlled analytical laboratory methods to detect, quantify and confirm the presence of contaminants in food products. The scientific data generated enables decision makers to apply risk-based controls to protect consumer health, facilitate trade and respond effectively to food safety incidents and emergencies.

A variety of analytical techniques can be applied to test food commodities for contaminants. These include both nuclear-related and non-nuclear physico-chemical techniques. Amongst the most useful and widely applied techniques are those employing liquid- or gas-chromatography with detection by triple-quadrupole mass spectrometry. These techniques provide the sensitivity, precision, and the capability for confirmation of identity of a target analyte necessary for food control. Expertise in the principles of the instrumentation and practical application of the analytical methods is a prerequisite for the generation of reliable results and data.

This training course will strengthen the capabilities in Member States to apply chromatographic-mass spectrometric techniques to help in the routine control of food safety and to respond to food safety related incidents or emergencies by providing data on the presence and levels of targeted contaminants in food commodities.

## Objectives

The objective of this training course is to strengthen Member States' surveillance and research laboratory capacities in using chromatography - mass spectrometry techniques to detect, quantify and confirm the presence of organic chemicals such as pesticides and veterinary drug residues in foods. This capability is necessary both for routine control of agrochemical residues and chemical contaminants in food, and for response to food safety incidents and emergencies, when detection and identification of the cause is a major priority.

The course is intended to provide the underlying principles, and practical training in the analysis of food samples for the detection and control of food contaminants. The two-week programme will consist of recorded lectures, video presentations of practical laboratory operations and 'live' online question and answer sessions to cover the following topics:

- The application of gas- and liquid chromatography with tandem mass spectrometric detection for the control of food residues and contaminants using multiple analyte methods;
- Principles of the use of stable isotope-labelled internal standards to improve method performance;
- Sample preparation and treatment;
- Optimization of instrumental analysis;
- Data treatment;
- Laboratory quality control procedures to produce reliable data.

## Target Audience

IAEA Member States interacting with the Food and Environmental Protection subprogramme in the field of food contaminant control are eligible for application.

This course is open for participants who have basic experience in the operation of chromatography instruments with mass spectrometric detection for the control of food contaminants and residues.

## Working Language(s)

English.

## Expected Outputs

The expected outcome of the course will be well informed, trained personnel in the appropriate use of nuclear-related technology applied to the control of contaminants and residues in foods.

## 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 **12 March 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 with regard to accessing the online training.

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.

# IAEA Contacts

## Scientific Secretaries:

### Mr Simon KELLY

Laboratory Head

Joint FAO/IAEA Centre of Nuclear Techniques in Food and Agriculture

Department of Nuclear Sciences and Applications

International Atomic Energy Agency

Vienna International Centre

PO Box 100

1400 VIENNA

AUSTRIA

Tel.: +43 2600 28326

Fax: +43 1 26007

Email: [S.Kelly@iaea.org](mailto:S.Kelly@iaea.org)

### Ms Britt Maestroni

Training officer

Joint FAO/IAEA Centre of Nuclear Techniques in Food and Agriculture

Department of Nuclear Sciences and Applications

International Atomic Energy Agency

Vienna International Centre

PO Box 100

1400 VIENNA

AUSTRIA

Tel.: +43 1 2600 28398

Fax: +43 1 26007

Email: [B.Maestroni@iaea.org](mailto:B.Maestroni@iaea.org)

## Administrative Secretary:

### Ms Kyoko Narikawa

Joint FAO/IAEA Centre of Nuclear Techniques in Food and Agriculture

Department of Nuclear Sciences and Applications

International Atomic Energy Agency

Vienna International Centre

PO Box 100

1400 VIENNA

AUSTRIA

Tel.: +43 1 2600 26061

Fax: +43 1 26007

Email: [K.Narikawa@iaea.org](mailto:K.Narikawa@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.





# Participation Form

## Training Course on Analytical Methods to Detect and Control Organic Contaminants in Food

**Joint Centre's FAO/IAEA Agriculture and Biotechnology Laboratories in Seibersdorf, Austria, 16 May 2022–27 May 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](mailto: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 [s.kelly@iaea.org](mailto:s.kelly@iaea.org), and to the Administrative Secretary [k.narikawa@iaea.org](mailto:k.narikawa@iaea.org).

**Deadline for receipt by IAEA through official channels: 12 March 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: I plan to attend virtually:                                      Yes <input type="checkbox"/> No <input type="checkbox"/>		

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.