



S/2122/2023  
11 January 2023  
ENGLISH only

**NOTE BY THE TECHNICAL SECRETARIAT**

**INVITATION TO APPLY FOR A COURSE FOR ANALYTICAL CHEMISTS  
FROM LABORATORIES SUPPORTING CUSTOMS SERVICES  
ŁUKASIEWICZ RESEARCH NETWORK  
INSTITUTE OF INDUSTRIAL ORGANIC CHEMISTRY  
WARSAW, POLAND  
22 – 26 MAY 2023**

**Purpose of the course**

1. The Technical Secretariat (hereinafter “the Secretariat”) of the OPCW wishes to inform Member States that it will hold a course on the development of analytical skills for analytical chemists supporting customs services. The course is scheduled to be held at the Institute of Industrial Organic Chemistry (Instytut Przemysłu Organicznego (IPO)) in Warsaw, Poland, from 22 to 26 May 2023. The aim of the course is to assist qualified analytical chemists from laboratories that support, or plan to support, customs services or offices in acquiring further experience and practical knowledge of the analysis of chemicals related to the Chemical Weapons Convention (hereinafter “the Convention”). In addition, the course will facilitate the adoption of good laboratory practices for the implementation of the Convention. The course will accommodate a maximum of 20 participants.

**Content**

2. The training course will include a variety of lectures and laboratory work. The lectures will cover general aspects of the OPCW, the Convention, and the Verification Annex to the Convention. It will also cover the chemical structure and properties of scheduled chemicals, the methods of separation and structure elucidation, and the detection and analysis of scheduled chemicals at various concentration levels. The role of customs service laboratories in promoting chemical safety will also be discussed.
3. Practical laboratory work will include:
  - (a) gas chromatography-mass spectrometry (GC-MS) and analyte identification using the Automated Mass Spectral Deconvolution and Identification System (AMDIS) and the OPCW Central Analytical Database (OCAD);
  - (b) sampling and sample preparation methods for GC-MS analysis;
  - (c) hand-held Fourier transform infrared (FTIR) and Raman spectroscopy for rapid identification; and
  - (d) a visit to a customs laboratory.



### **Sponsorship**

4. The cost of the course and of accommodation for all participants will be covered by the Secretariat. In addition, the Secretariat will pay for international travel, lunch, coffee breaks, and medical and travel insurance for all participants while the course is being conducted, in accordance with OPCW rules. The Secretariat will select the participants based on their qualifications and experience.
5. Participants are requested to obtain any necessary visas, including Schengen Area travel visas, before travelling to Poland. The Secretariat will cover the costs of these visas by reimbursing participants upon production of the original receipts. The original invoices will be delivered by hand to representatives of IPO. The Secretariat will also send information to the selected participants on how to apply for Schengen Area visas.
6. The Secretariat will not pay for medical assistance. Therefore, participants should be fit to travel. All participants taking prescribed medication should arrive with supplies sufficient for the duration of the event.
7. When making travel arrangements for sponsored participants, the Secretariat will seek the most economical options. The Secretariat will purchase tickets and send them to the participants. The participants shall keep the boarding passes that will be delivered by hand to representatives of IPO.

### **Admission requirements**

8. The course is open to those who:
  - (a) have a minimum of a first degree (BSc or equivalent) in chemistry or analytical chemistry from a recognised university or institution, with relevant practical and theoretical experience in analytical chemistry, including the use of GC and GC-MS;
  - (b) are citizens of OPCW Member States; and
  - (c) have at least three years of experience in an analytical laboratory, and currently work in a chemical laboratory providing support or planning to support customs services in their home country.
9. The course will be conducted in English. Candidates must therefore have a good command of both written and spoken English. Any candidate who, upon arrival, is found not to meet this requirement will not be allowed to continue with the course.
10. Participants will be required to sign both a set of terms and conditions for participation in the course and a confidentiality agreement with the OPCW.

### **Application procedure**

11. Interested candidates are invited to submit their applications online through Eventus, the OPCW event management system (<https://apps.opcw.org/eventus>). Applicants must first create an account and then register for the event.

12. Each application must be endorsed digitally on the Eventus platform by the nominee's respective National Authority. Only nominations endorsed by the National Authority or Permanent Representation of the candidate's country to the OPCW will be considered. Nominees must include in their curricula vitae, in terms of their practical and work experience, the analytical techniques with which they have experience as well as a list of major items of analytical equipment in their laboratories.
13. Female candidates are strongly encouraged to apply.
14. All applications must be received by the Secretariat **no later than 3 March 2023**. Additional information may be obtained from the International Cooperation Branch of the International Cooperation and Assistance Division. The contact persons are: Mr Massimo de Rienzo, Senior Programme Officer (Tel: +31 (0) 70 416 3458) and Ms Julia Gonzalez, Senior Project Assistant (Tel: +31 (0) 70 416 3239). They can also be contacted by email at [icb.events@opcw.org](mailto:icb.events@opcw.org).

Annex:           Provisional Programme

## Annex

**COURSE FOR ANALYTICAL CHEMISTS FROM LABORATORIES  
SUPPORTING CUSTOMS SERVICES  
IPO, WARSAW, POLAND  
22 – 26 MAY 2023  
PROVISIONAL PROGRAMME**

Time	Activity
<b><i>Sunday, 21 May 2023</i></b>	
Arrival of participants	
<b><i>Day 1 – Monday, 22 May 2023</i></b>	
09:00 – 09:15	Registration
09:15 – 09:45	Welcome address
09:45 – 10:00	<i>Coffee/tea break</i>
10:00 – 10:30	Safety briefing
10:30 – 11:30	Introduction to the OPCW and the Convention and its Verification Annex
11:30 – 13:00	Scheduled chemicals and their chemistry
13:00 – 14:00	<i>Lunch</i>
14:00 – 14:30	Analysis strategy
14:30 – 15:00	Element-specific detectors
15:00 – 15:15	<i>Coffee/tea break</i>
15:15 – 16:00	Sampling collection: handling toxic chemicals, chain of custody, and security
16:00 – 16:30	Sample preparation
16:30 – 17:00	Tour of the laboratory
<b><i>Day 2 – Tuesday, 23 May 2023</i></b>	
09:00 – 18:00	Visit to a customs laboratory
<b><i>Day 3 – Wednesday, 24 May 2023</i></b>	
09:00 – 09:30	Retention indices
09:30 – 10:00	AMDIS and NIST <sup>1</sup>
10:00 – 10:30	OCAD
10:30 – 10:45	<i>Coffee/tea break</i>
10:45 – 12:00	Practical uses of AMDIS and the OCAD for analyte identification
12:00 – 13:00	<i>Lunch</i>
13:00 – 17:00	Practical session: working with and troubleshooting GC-MS instruments
<b><i>Day 4 – Thursday, 25 May 2023</i></b>	
09:00 – 10:00	Hand-held instruments: FTIR spectroscopy, Raman spectroscopy, and LC-MS <sup>2</sup>
10:00 – 10:15	<i>Coffee/tea break</i>
10:15 – 12:00	Practical session: working with hand-held instruments
12:00 – 13:00	<i>Lunch</i>
13:00 – 15:00	Portable GC-MS instruments: possibilities and limitations
15:00 – 15:15	<i>Coffee/tea break</i>
15:15 – 17:00	Discussion of analysis instruments: portable vs laboratory-based instruments

<sup>1</sup> NIST = National Institute of Standards and Technology of the United States Department of Commerce.

<sup>2</sup> LC-MS = liquid chromatography–mass spectrometry.

<b><i>Day 5 – Friday, 26 May 2023</i></b>	
09:00 – 10:00	Role of customs in supporting the Convention
10:00 – 10:15	<i>Coffee/tea break</i>
10:15 – 11:15	The role of analytical chemistry, specifically sampling and analysis, in the support of both customs and the Convention
11:15 – 13:00	Group work: How do we proceed from here?
13:00 – 14:00	<i>Lunch</i>
14:00 – 15:30	Evaluation and knowledge transfer session: <ul style="list-style-type: none"> <li>– Discussion</li> <li>– Lessons learned and suggestions</li> <li>– Wrap-up of the training course</li> </ul>
15:30 – 16:00	<i>Coffee/tea break</i>
16:00 – 17:00	Closing ceremony
<b><i>Saturday, 27 May 2023</i></b>	
Departure of participants	