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S/2266/2024  
8 March 2024  
ENGLISH only

**NOTE BY THE TECHNICAL SECRETARIAT****CALL FOR NOMINATIONS FOR A COURSE FOR ANALYTICAL CHEMISTS  
FROM LABORATORIES SUPPORTING CUSTOMS SERVICES  
OPCW CENTRE FOR CHEMISTRY AND TECHNOLOGY  
NOOTDORP, THE NETHERLANDS, 15 – 18 OCTOBER 2024****PURPOSE OF THE COURSE**

1. The Technical Secretariat of the OPCW (the Secretariat) wishes to inform Member States that it will hold a course on the development of analytical skills for analytical chemists from laboratories supporting customs services. The course is scheduled to be held at the OPCW Centre for Chemistry and Technology in Nootdorp, the Netherlands, from 15 to 18 October 2024. 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 relevant to the Chemical Weapons Convention (the Convention). In addition, the course will facilitate the adoption of good laboratory practices for the implementation of the Convention.

**COURSE 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 the Dutch 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. 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.
6. Participants are requested to obtain any necessary visas, including Schengen Area travel visas, before travelling to the Netherlands. The Secretariat will cover the costs of these visas by reimbursing participants upon production of the original receipts to representatives of the Secretariat.
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. Participants must keep the boarding passes and hand them to the Secretariat representatives.

## **ADMISSION REQUIREMENTS**

8. It is important to reiterate that the analytical skills development courses offered by the OPCW are aimed at building the analytical capacities for chemicals relevant to the Convention.
9. The course is open to those who:
  - (a) are citizens of OPCW Member States whose economies are developing or in transition;
  - (b) 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, specifically the use of GC and GC-MS; 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.
10. 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.
11. Member States and their National Authorities are strongly encouraged to support and endorse applications by suitable female candidates for the course.

## APPLICATION PROCEDURE

12. Interested candidates are invited to submit their applications online via Eventus, the OPCW event management system (<https://apps.opcw.org/eventus>). Applicants must first create an account and then register for the event.
13. Each application must be endorsed digitally on the Eventus platform by the nominee's respective National Authority or Permanent Representation. Only nominations endorsed by the National Authority or Permanent Representation of the candidate's country to the OPCW will be considered, and only selected candidates will be notified by the Secretariat. Nominees must attach their curriculum vitae with a detailed explanation of their work experience and the analytical techniques they are familiar with.
14. All applications must be received by the Secretariat **no later than 15 April 2024**. Additional information may be obtained from the International Cooperation Branch of the International Cooperation and Assistance Division ([icb.events@opcw.org](mailto:icb.events@opcw.org)).

Annex:           Provisional Programme

**Annex**

**COURSE FOR ANALYTICAL CHEMISTS  
FROM LABORATORIES SUPPORTING CUSTOMS SERVICES  
OPCW CENTRE FOR CHEMISTRY AND TECHNOLOGY  
NOOTDORP, THE NETHERLANDS  
15 – 18 OCTOBER 2024**

**PROVISIONAL PROGRAMME**

<b>Time</b>	<b>Agenda</b>
<b><i>Day 1: 15 October 2024</i></b>	
09:30 – 13:00  (11:00 – 11:15 <i>coffee break</i> )	<ul style="list-style-type: none"> <li>• Opening session: Welcome addresses and group photo</li> <li>• Introduction to the OPCW, the Chemical Weapons Convention, and its Verification Annex</li> <li>• Overview of International Cooperation Branch capacity-building programmes</li> <li>• Introduction to the OPCW Centre for Chemistry and Technology (ChemTech Centre)</li> <li>• Tour of the ChemTech Centre</li> </ul>
13:00 – 13:45	<i>Lunch</i>
13:45 – 16:30  (15:00 – 15:15 <i>coffee break</i> )	<ul style="list-style-type: none"> <li>• Designated laboratories and proficiency testing</li> <li>• Introduction to scheduled chemicals and their chemistry</li> <li>• Analysis strategy</li> <li>• Element-specific gas chromatography (GC) detectors</li> <li>• Use of gas chromatography-mass spectrometry (GC-MS), quality checks, and contamination control</li> </ul>
<b><i>Day 2: 16 October 2024</i></b>	
09:30 – 13:00  (11:00 – 11:15 <i>coffee break</i> )	<ul style="list-style-type: none"> <li>• Sample collection</li> <li>• Handling of toxic samples, chain of custody, and security</li> <li>• Sample preparation: <ul style="list-style-type: none"> <li>✓ Solid phase extraction</li> <li>✓ Hydrocarbon clean-up</li> </ul> </li> <li>• Laboratory practical session: sample clean-up and analysis by GC-MS before and after clean-up</li> </ul>
13:00 – 13:45	<i>Lunch</i>
13:45 – 16:30  (15:00 – 15:15 <i>coffee break</i> )	<ul style="list-style-type: none"> <li>• Derivatisation</li> <li>• Laboratory practical session: sample derivatisation and analysis by GC-MS</li> </ul>
<b><i>Day 3: 17 October 2024</i></b>	
09:30 – 16:30	Visit to the Dutch Customs laboratory in Amsterdam

<b>Time</b>	<b>Agenda</b>
<b><i>Day 4: 18 October 2024</i></b>	
09:30 – 13:00  (11:00 – 11:15 <i>coffee break</i> )	<ul style="list-style-type: none"><li>• Retention indices</li><li>• The Automated Mass Spectral Deconvolution and Identification System (AMDIS) and the National Institute of Standards and Technology (NIST)</li><li>• The OPCW Central Analytical Database (OCAD)</li><li>• Practical exercise with AMDIS/OCAD</li></ul>
13:00 – 13:45	<i>Lunch</i>
13:45 – 16:30  (15:00 – 15:15 <i>coffee break</i> )	<ul style="list-style-type: none"><li>• Introduction to hand-held devices for chemical warfare agent detection</li><li>• Discussion: Analysis strategies and unknowns</li><li>• Evaluation session, collection of questionnaires, and discussion</li><li>• Handing out of certificates</li></ul>