



OPCW

Technical Secretariat

International Cooperation and Assistance Division

S/695/2008

5 June 2008

ENGLISH only

NOTE BY THE TECHNICAL SECRETARIAT

**COURSE ON THE ANALYSIS OF CHEMICALS RELATED TO
THE CHEMICAL WEAPONS CONVENTION IN THE FRAMEWORK OF
OPCW PROFICIENCY TESTING
HELSINKI, FINLAND
8 – 26 SEPTEMBER 2008**

1. On behalf of the Finnish Institute for Verification of the Chemical Weapons Convention (VERIFIN) and the Organisation for the Prohibition of Chemical Weapons (OPCW), the Director-General wishes to invite applications from representatives of laboratories in Member States to attend a course on the analysis of chemicals related to the Chemical Weapons Convention (hereinafter “the Convention”), and on how the results of these analyses are reported during OPCW proficiency testing; the course will be held at VERIFIN, the University of Helsinki, Finland, from 8 to 26 September 2008.
2. The course will be organised by VERIFIN with the support of the OPCW. It is intended both for laboratories that are active or plan to become active in the analysis of chemicals related to the Convention, and for those that are participating or intend to participate in OPCW proficiency testing.
3. The goal of the course is to improve participants’ practical skills in analysing chemicals related to the Convention using gas chromatography (GC) and gas chromatography-mass spectrometry (GC-MS). Participants will first be given an introduction on the chemicals related to the Convention, on how to prepare relevant samples, and on the theoretical aspects of GC and GC-MS. Following the theoretical introduction, they will then prepare samples and use GC and GC-MS equipment to analyse those samples (thus enabling them to acquire practical hands-on experience). A discussion will then take place on how to interpret the mass spectra that have emerged as a result of the analyses. The participants will also familiarise themselves with how to maintain these instruments in a manner that ensures a high standard of performance. Finally, they will be instructed on how to report these results during OPCW proficiency tests. The skills provided by the course may be utilised in analysing different types of environmental samples containing various types of chemicals.



4. The course will consist of the following elements:
 - (a) the preparation of environmental samples;
 - (b) novel sample-preparation methods;
 - (c) the properties of Convention-related chemicals;
 - (d) an introduction to GC and GC-MS equipment;
 - (e) the interpretation of mass spectra;
 - (f) hands-on exercises on sample preparation;
 - (g) hands-on use of GC and GC-MS equipment;
 - (h) hands-on exercises in quality assurance and the maintenance of instruments;
and
 - (i) reporting results during OPCW proficiency tests.
5. The course will accommodate a maximum of eight participants from Member States whose economies are developing. The Technical Secretariat (hereinafter “the Secretariat”) will select participants in consultation with VERIFIN, and will notify the successful candidates, who will then receive an official invitation to participate from VERIFIN.
6. For all participants, the Secretariat will cover the costs of international travel, medical insurance, and visas, and will provide a terminal allowance, as well as a daily allowance to cover accommodation, meals, and incidental expenses. When making international-travel arrangements, the Secretariat will seek the most economical options. It will purchase tickets and send either the tickets themselves or prepaid-ticket advice to participants. The Secretariat will not cover expenses unrelated to the meeting or that result from unauthorised changes to travel arrangements.
7. VERIFIN will reserve reasonably priced hotel rooms in Helsinki for all participants. Participants will meet the cost of this accommodation from the aforementioned daily allowance. VERIFIN will send information on the hotel together with the invitation. Immediately upon receiving the official invitation, participants who wish to arrange their own accommodation should indicate this to the contact person at VERIFIN, Mr Vesa Häkkinen, whose details are given in paragraph 11 below.
8. Participants are requested to obtain any necessary visas before travelling to Finland. As noted above, the Secretariat will cover the costs of visas. It will reimburse participants upon production of original receipts. Information on applying for Schengen visas will be provided to participants once they have been selected.
9. The workshop and exercise will be conducted in English, and no interpretation services of any kind will be provided. Participants are therefore expected to have a good written and oral command of English.

10. Applicants from laboratories in Member States whose economies are developing are invited to complete the form that is annexed hereto, making sure to provide all the information it requests, including contact details. The completed form, together with a detailed curriculum vitae and a recommendation from the National Authority or the Permanent Representation of the applicant's country, should either be posted to the Director, International Cooperation and Assistance Division, OPCW, Johan de Wittlaan 32, 2517 JR The Hague, the Netherlands, or faxed to +31 (0)70 416 3279. All applications must be received by the Secretariat **no later than 4 July 2008**.
11. Additional information about application and sponsorship procedures may be obtained from the OPCW by writing to the address given above, by sending an e-mail message to IntCoopBr@opcw.org, (with "Helsinki Course, 8 to 26 September 2008" in the subject line), or by telephoning Mr Bimal N. Patel, International Cooperation Branch at +31 (0)70 416 3822. Additional information on the course itself can also be found on the VERIFIN website, www.verifin.helsinki.fi. Any questions about the content of the course or about local arrangements may be addressed to Mr Vesa Häkkinen at VERIFIN by sending an e-mail message to: vesa.hakkinen@helsinki.fi (preferable method of contact) or by sending a fax to +358 9 191 50437.

Annexes (English only):

- Annex 1: Draft programme
Annex 2: Application form

Annex 1

**COURSE ON THE ANALYSIS OF CHEMICALS RELATED TO
THE CHEMICAL WEAPONS CONVENTION IN THE FRAMEWORK OF
OPCW PROFICIENCY TESTING**

8 – 26 SEPTEMBER 2008

HELSINKI, FINLAND

DRAFT PROGRAMME

Time	Activity
<i>Monday, 8 September 2008</i>	
Morning	Registration and administration Introduction to the analysis of chemicals related to the Convention Course overview
Afternoon	Methods for conducting an analysis Convention-related chemicals and their properties
<i>Tuesday, 9 September 2008</i>	
Morning	Sample preparation; GC and GC-MS screening
Afternoon	Using GC-EI/MS ¹ and GC-CI/MS ² Reporting requirements in regard to proficiency testing
<i>Wednesday, 10 September 2008</i>	
Morning	Maintaining GC equipment (hands-on session)
Afternoon	GC software, operation, and quality-control testing (hands-on session)
<i>Thursday, 11 September 2008</i>	
Morning	GC-MS software; tuning and calibrating the equipment (hands-on session)
Afternoon	GC-MS operation and quality-control testing (hands-on session)
<i>Friday, 12 September 2008</i>	
Morning	Sample preparation (hands-on session)
Afternoon	GC screening of prepared samples (hands-on session)
<i>Monday, 15 September 2008</i>	
Morning	GC-MS analysis of prepared samples (hands-on session)
Afternoon	The interpretation of GC-MS results
<i>Tuesday, 16 September 2008</i>	
Morning	Sample preparation (hands-on session)
Afternoon	GC screening of prepared samples (hands-on session)
<i>Wednesday, 17 September 2008</i>	
Morning	GC-MS analysis of prepared samples (hands-on session)
Afternoon	The interpretation of GC-MS results
<i>Thursday, 18 September 2008</i>	
Morning	Novel sample-preparation methods
Afternoon	Sample cleaning with silica cartridges (hands-on session)
<i>Friday, 19 September 2008</i>	
Morning	GC-MS analysis of cleaned samples (hands-on session)
Afternoon	The interpretation of GC-MS results
<i>Monday, 22 September 2008</i>	

¹ Gas chromatography-electron impact/mass spectrometry.

² Gas-chromatography-chemical ionisation/mass spectrometry.

Morning	Acquisition of reference data using GC and GC-MS (hands-on session)
Afternoon	Basic maintenance of GC-MS equipment (hands-on session)
<i>Tuesday, 23 September 2008</i>	
Morning	The interpretation of mass spectra
Afternoon	Discussion of results and proficiency-test reporting
<i>Wednesday, 24 September</i>	
Morning	Compiling data sheets for reporting results during proficiency testing (hands-on session)
Afternoon	Compiling data sheets for reporting results during proficiency testing (hands-on session), continued
<i>Thursday, 25 September</i>	
Morning	Compiling reports (hands-on session/using OPCW reporting forms)
Afternoon	Compiling reports (hands-on session/using OPCW reporting forms), continued
<i>Friday, 26 September 2008</i>	
Morning	Presentation of reports
Afternoon	Close of the course
<i>Saturday, 27 September 2008</i>	
Departure of participants	

Annex 2

**COURSE ON THE ANALYSIS OF CHEMICALS RELATED TO THE CHEMICAL
WEAPONS CONVENTION IN THE FRAMEWORK OF
OPCW PROFICIENCY TESTING
HELSINKI, FINLAND
8 – 26 SEPTEMBER 2008**

APPLICATION FORM

Applicants should submit the completed form, along with a detailed curriculum vitae and a recommendation from the National Authority or the Permanent Representation of their State Party to the OPCW, by 4 July 2008 to:

The Director, International Cooperation and Assistance Division, OPCW
Johan de Wittlaan 32, 2517 JR The Hague, the Netherlands
Fax: + 31 (0)70 416 3279; e-mail: IntCoopBr@opcw.org.
All materials must be received **no later than 4 July 2008**.

Please type or use BLOCK LETTERS.

1.	Family name ³	
2.	First name(s)	
3.	Date of birth	Day Month Year
4.	Citizenship	
5.	Gender*	Male <input type="checkbox"/> Female <input type="checkbox"/>
6.	Passport number	
7.	Date of issue	Day Month Year
8.	Expiry date	Day Month Year
9.	Place of issue	
10.	Areas of expertise	
11.	Employer	
12.	Contact address (Please do not give a post-office box number.)	Street
		Number Post code
		City
		Country
13.	E-mail address	
14.	Telephone numbers, including country and city codes	Home
		Work
		Mobile
15.	Fax numbers,	Home

³ The family name and the first name should appear precisely as they are spelled in the passport.
* For this and all like items below, please tick the appropriate box.

	including country and city codes	Work
16.	Have you previously participated in an exercise of this kind?	Yes <input type="checkbox"/> No <input type="checkbox"/> If so, when and where?
17.	Do you wish to be sponsored by the OPCW?	Yes <input type="checkbox"/> No <input type="checkbox"/>
18.	Do you need VERIFIN's assistance in finding accommodation?	Yes <input type="checkbox"/> No <input type="checkbox"/>
19.	Please briefly describe your practical and work experience, making sure to mention the analytical techniques you are familiar with, and referring to your curriculum vitae as necessary.	
20.	Please list the major items of analytical equipment in your laboratory.	

Signature: _____

Date: _____