Scientific Advisory Board Briefing to Conference of States Parties

Dr Christopher Timperley (SAB Chair)
and Mr Cheng Tang (SAB Vice-Chair)

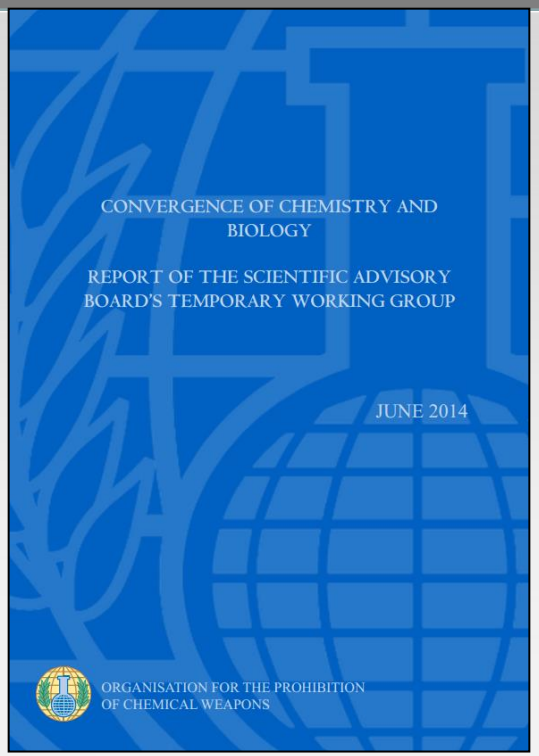
Science and technology in the Convention

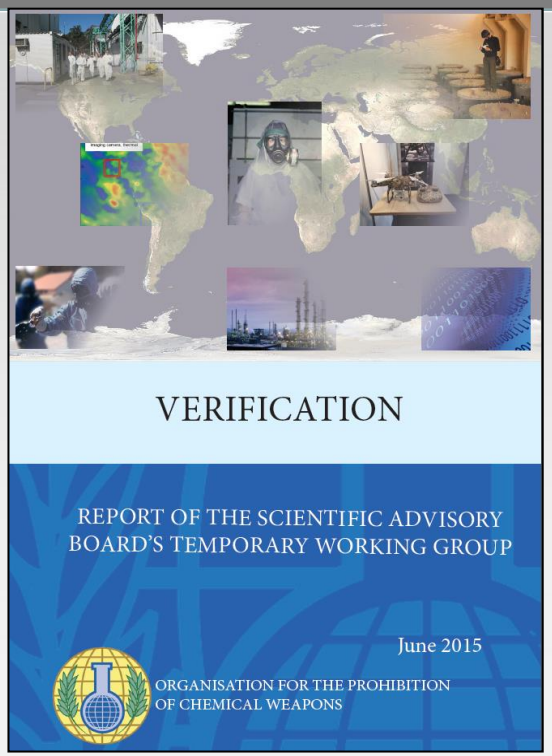
The Conference of States Parties shall:

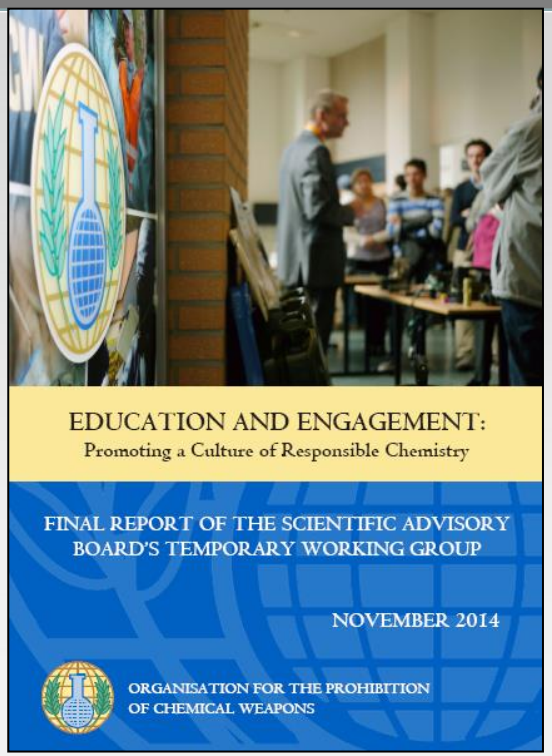
"Review scientific and technological developments that could affect the operation of this Convention and, in this context, direct the Director General to establish a Scientific Advisory Board to enable him, in the performance of his functions, to render specialized advice in areas of science and technology relevant to this Convention, to the Conference, the Executive Council or States Parties."

CWC Article VIII, Section B, paragraph 21(h)

The scientific review

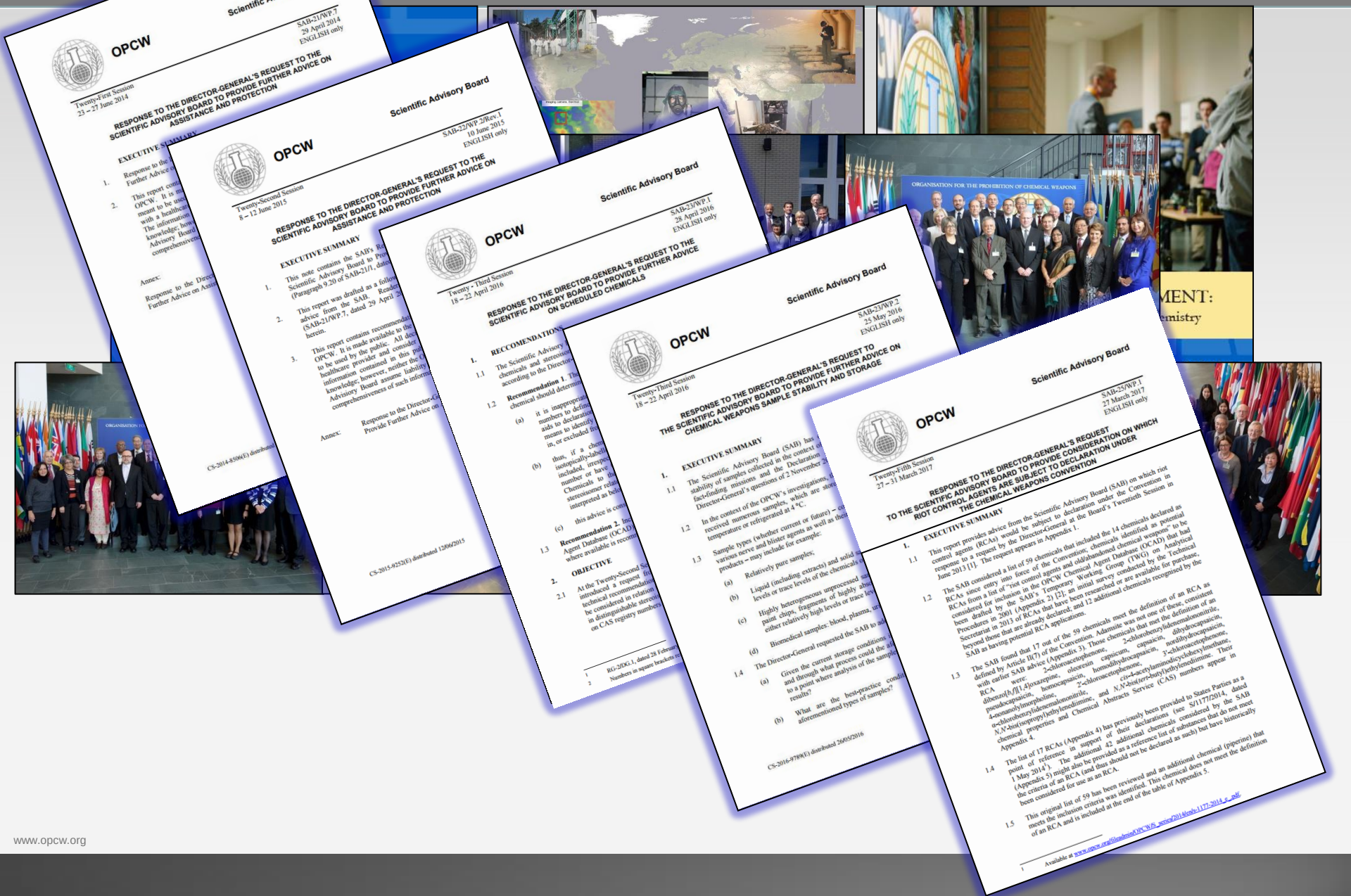






The scientific review

The scientific review



The scientific review

The scientific review

25 events

676 attendees

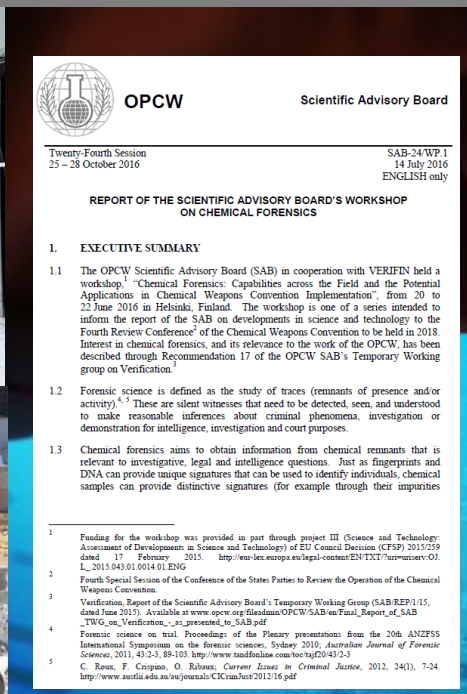
- 256 individuals
- 56 nationalities

405 speakers

- 191 individuals
- 56 nationalities

30 reports

Chemical forensics



OPCW

Scientific Advisory Board

Twenty-Fourth Session
25 – 28 October 2016

SAB-24/WP.1
14 July 2016
ENGLISH only

REPORT OF THE SCIENTIFIC ADVISORY BOARD'S WORKSHOP ON CHEMICAL FORENSICS

1. EXECUTIVE SUMMARY

1.1 The OPCW Scientific Advisory Board (SAB) in cooperation with VERIFIN held a workshop,[1] "Chemical Forensics: Capabilities across the Field and the Potential Applications in Chemical Weapons Convention Implementation", from 20 to 22 June 2016 in Helsinki, Finland. The workshop is one of a series intended to inform the report of the SAB on developments in science and technology to the Fourth Review Conference[2] of the Chemical Weapons Convention to be held in 2018. Interest in chemical forensics, and its relevance to the work of the OPCW, has been described through Recommendation 17 of the OPCW SAB's Temporary Working group on Verification.[3]

1.2 Forensic science is defined as the study of traces (remnants of presence and/or activity).[4, 5] These are silent witnesses that need to be detected, seen, and understood to make reasonable inferences about criminal phenomena, investigation or demonstration for intelligence, investigation and court purposes.

1.3 Chemical forensics aims to obtain information from chemical remnants that is relevant to investigative, legal and intelligence questions. Just as fingerprints and DNA can provide unique signatures that can be used to identify individuals, chemical samples can provide distinctive signatures (for example through their impurities

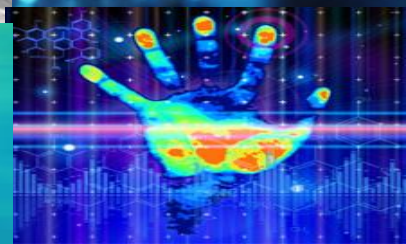
1 Funding for the workshop was provided in part through project III (Science and Technology: Assessment of Developments in Science and Technology) of EU Council Decision (CFSP) 2015/259 dated 17 February 2015. http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2015.043.01.0014.01.ENG

2 Fourth Special Session of the Conference of the States Parties to Review the Operation of the Chemical Weapons Convention.

3 Verification, Report of the Scientific Advisory Board's Temporary Working Group (SAB/REP/1/15, dated June 2015). Available at www.opcw.org/fileadmin/OPCW/SAB/en/Final_Report_of_SAB_TWG_on_Verification_-_as_presented_to_SAB.pdf

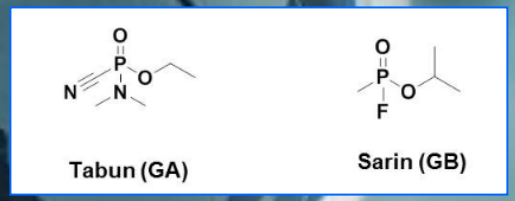
4 Forensic science on trial. Proceedings of the Plenary presentations from the 20th ANZFSS International Symposium on the forensic sciences, Sydney 2010; *Australian Journal of Forensic Sciences*, 2011, 43:2-3, 89-103. http://www.tandfonline.com/toc/tajf20/43/2-3

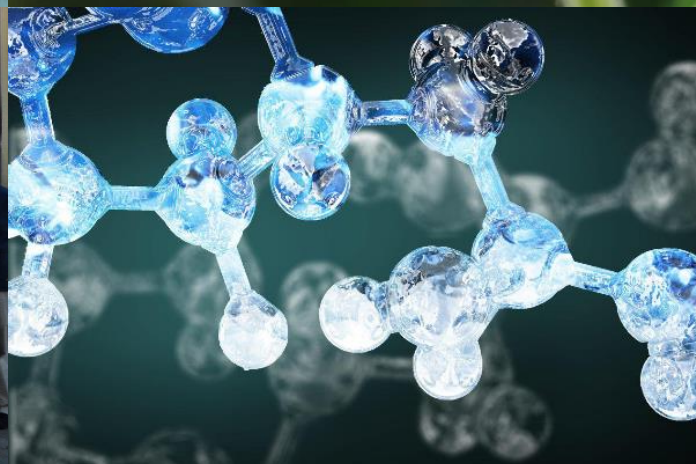
5 C. Roux, F. Crispino, O. Ribaux; *Current Issues in Criminal Justice*, 2012, 24(1), 7-24. http://www.austlii.edu.au/au/journals/CICrimJust/2012/16.pdf



Medical countermeasures and emergency response

SGDSN
SECRÉTARIAT GÉNÉRAL DE LA DÉFENSE ET DE LA SÉCURITÉ NATIONALE





Innovative technologies for chemical security

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INTERNATIONAL WORKSHOP ON INNOVATIVE TECHNOLOGIES FOR CHEMICAL SECURITY

Science for Peace

#ScienceforPeace

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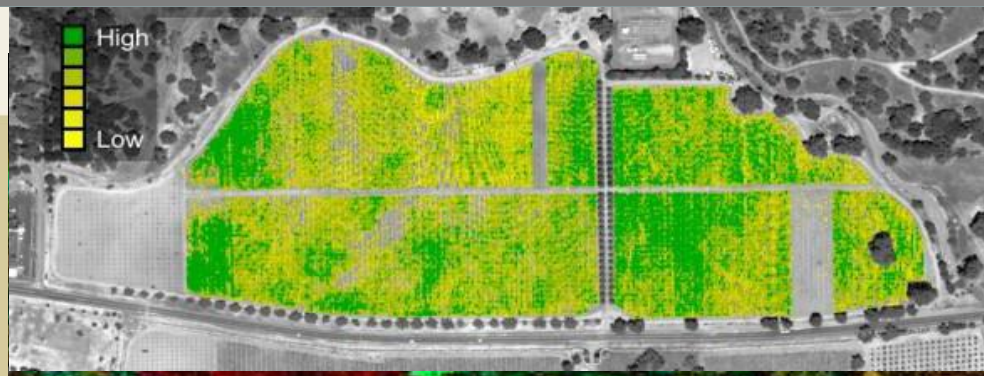
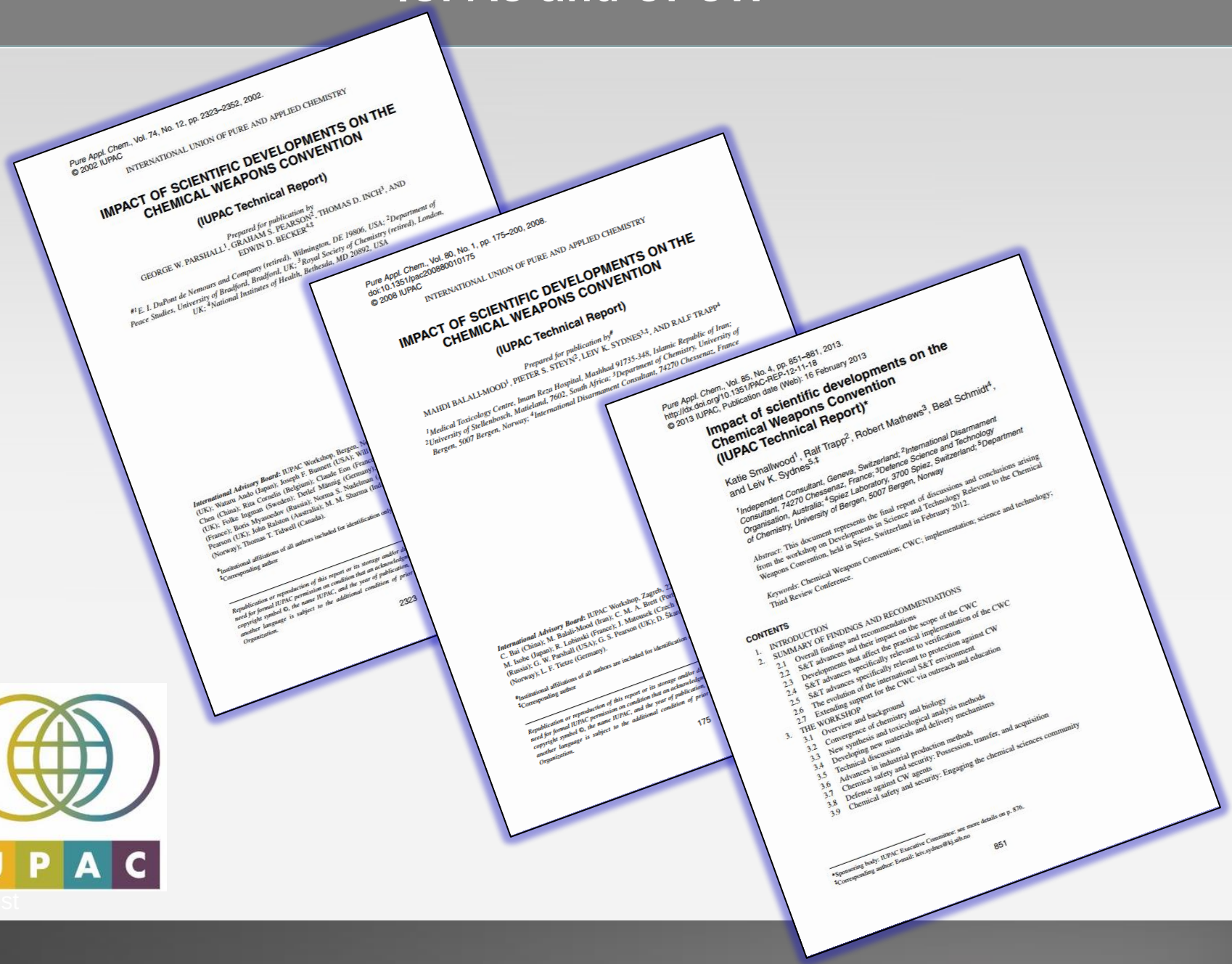


IUPAC and OPCW



Pure Appl. Chem., Vol. 74, No. 12, pp. 2323–2352, 2002.
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IMPACT OF SCIENTIFIC DEVELOPMENTS ON THE CHEMICAL WEAPONS CONVENTION

(IUPAC Technical Report)

Prepared for publication by

GEORGE W. PARSHALL[1], GRAHAM S. PEARSON[2], THOMAS D. INCH[3], AND EDWIN D. BECKER[4,‡]

[1]E. I. DuPont de Nemours and Company (retired), Wilmington, DE 19806, USA; [2]Department of Peace Studies, University of Bradford, Bradford, UK; [3]Royal Society of Chemistry (retired), London, UK; [4]National Institutes of Health, Bethesda, MD 20892, USA

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IMPACT OF SCIENTIFIC DEVELOPMENTS ON THE CHEMICAL WEAPONS CONVENTION

(IUPAC Technical Report)

Prepared for publication by

MAHDI BALALI-MOOD[1], PIETER S. STEYN[2], LEIV K. SYDNES[3,‡], AND RALF TRAPP[4]

[1]Medical Toxicology Centre, Imam Reza Hospital, Mashhad 91735-348, Islamic Republic of Iran; [2]University of Stellenbosch, Matieland, 7602, South Africa; [3]Department of Chemistry, University of Bergen, 5007 Bergen, Norway; [4]International Disarmament Consultant, 74270 Chessenaz, France

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Impact of scientific developments on the Chemical Weapons Convention (IUPAC Technical Report)*

Katie Smallwood[1], Ralf Trapp[2], Robert Mathews[3], Beat Schmidt[4], and Leiv K. Sydnes[5,‡]

[1]Independent Consultant, Geneva, Switzerland; [2]International Disarmament Consultant, 74270 Chessenaz, France; [3]Defence Science and Technology Organisation, Australia; [4]Spiez Laboratory, 3700 Spiez, Switzerland; [5]Department of Chemistry, University of Bergen, 5007 Bergen, Norway

Abstract: This document represents the final report of discussions and conclusions arising from the workshop on Developments in Science and Technology Relevant to the Chemical Weapons Convention, held in Spiez, Switzerland in February 2012.

Keywords: Chemical Weapons Convention; CWC; implementation; science and technology; Third Review Conference.

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*Sponsoring body: IUPAC Executive Committee; see more details on p. 876.
‡Corresponding author: E-mail: leiv.sydnes@kj.uib.no

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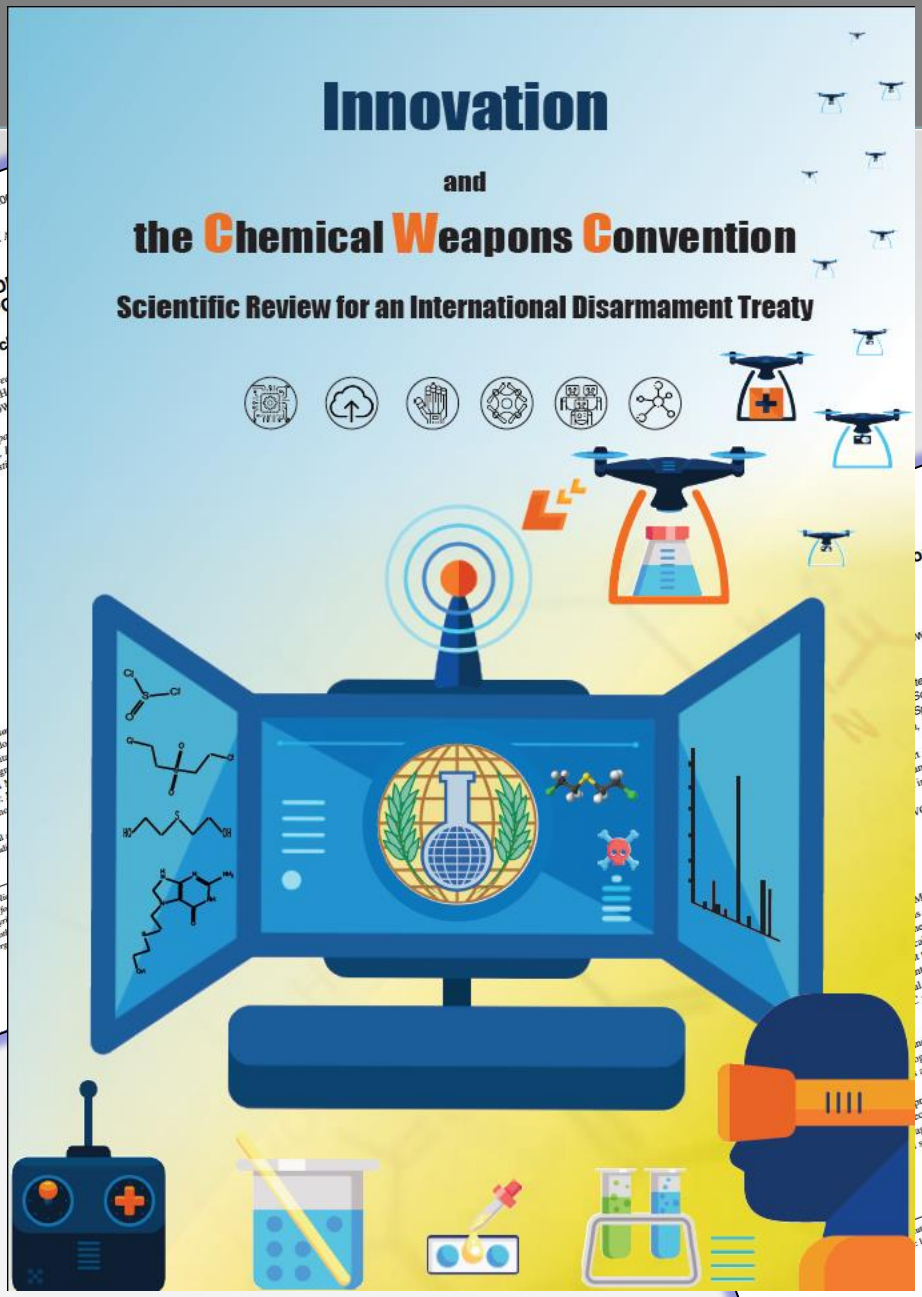

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Trends in chemical production

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OPCW Scientific Advisory Board Briefing to States Parties

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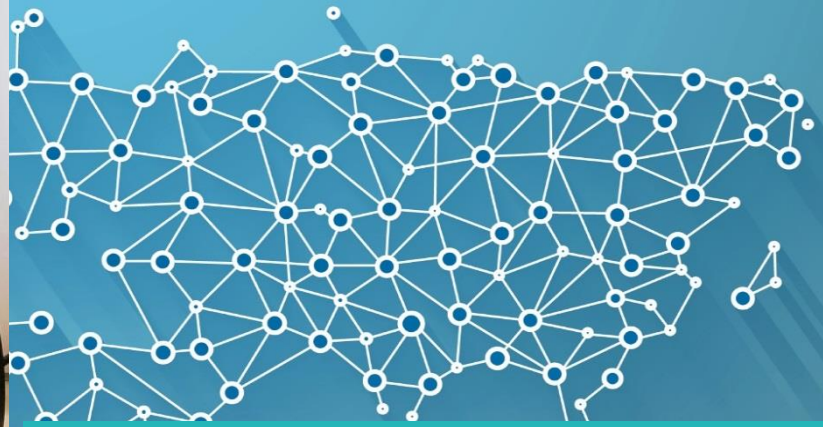
1997-2017 OPCW 20 YEARS

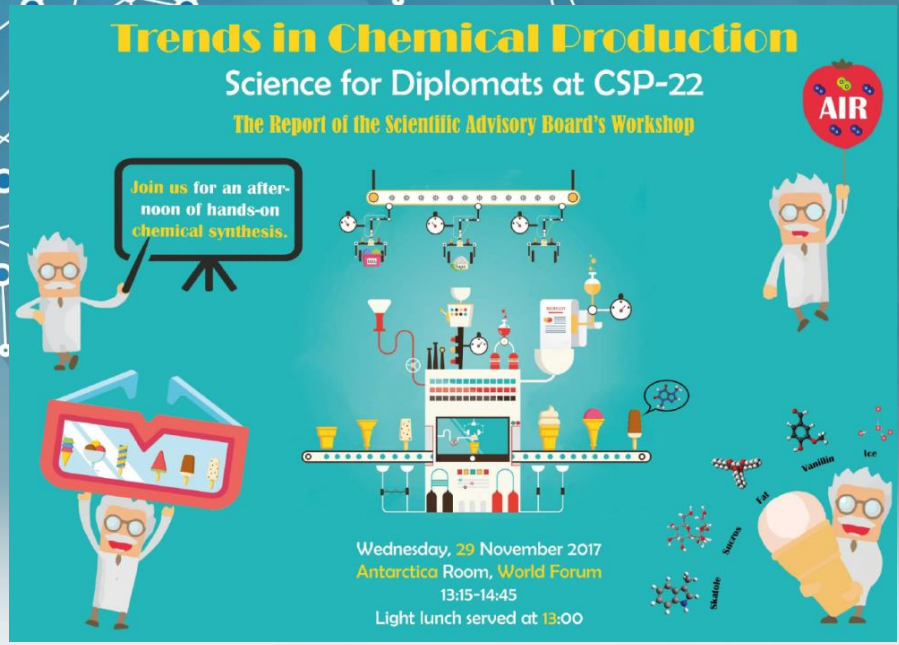
Thursday, 19 October 2017

Ieper Room | 13:30-15:00

Light lunch served at 13:00

OPCW Scientific Advisory Board Briefing to States Parties





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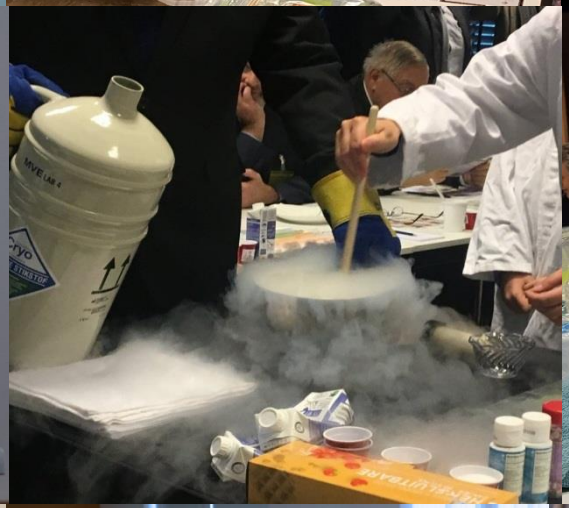
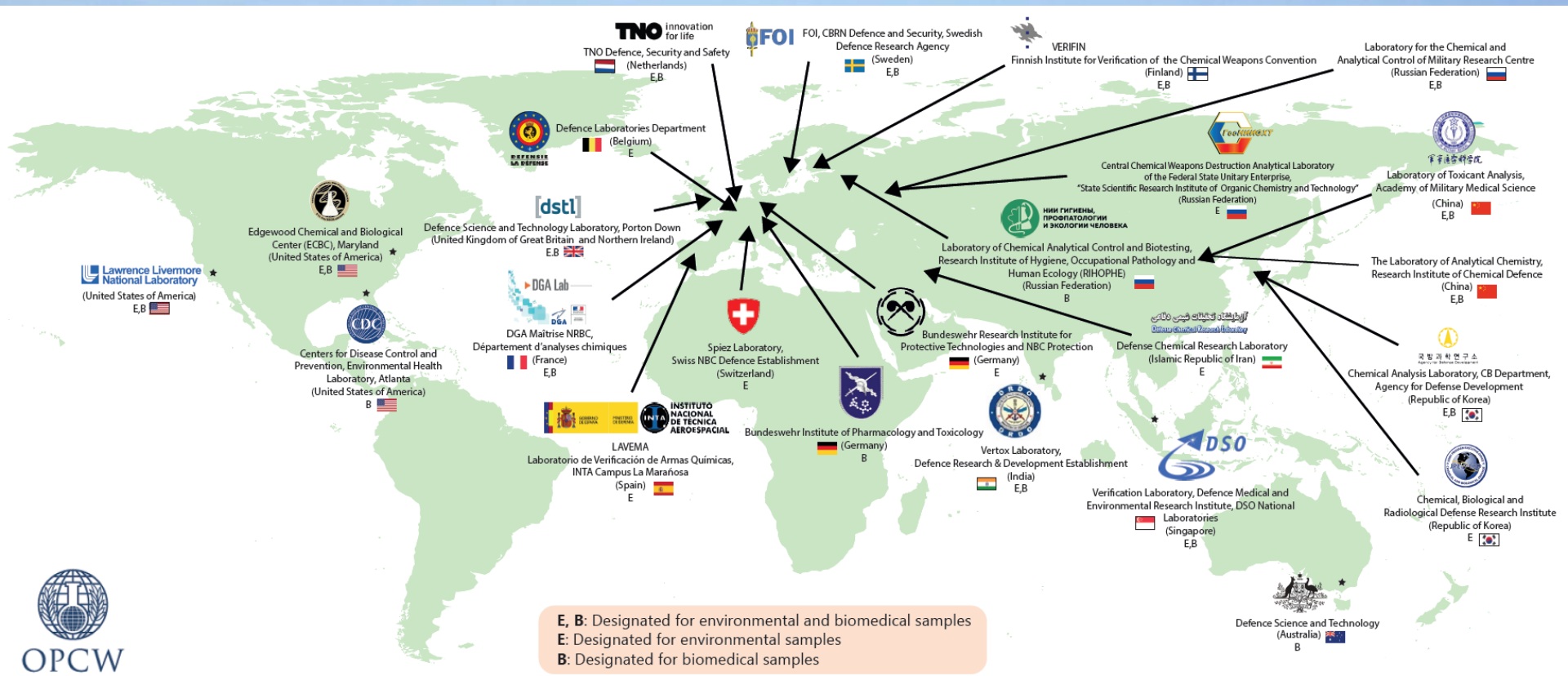
A Visual Guide to

DANGER



Designated laboratory network



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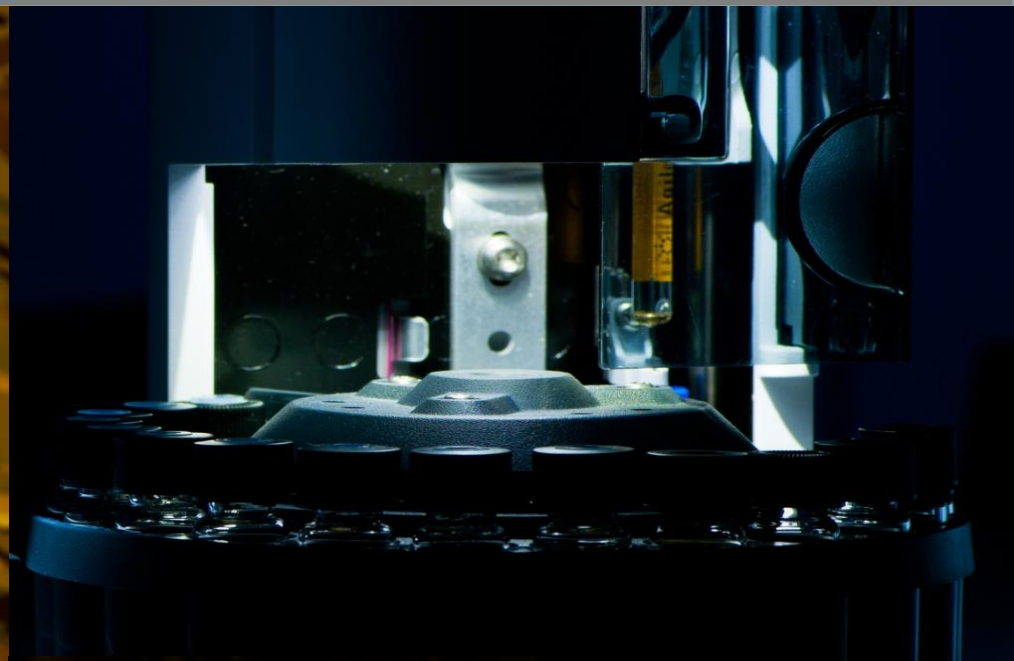

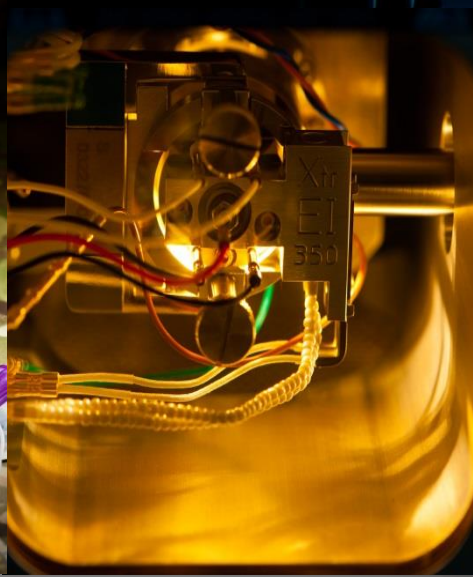

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November 2018 : a time to review

November 2018 : a time to review

SAB Report:

Overview of scientific and technological changes during review period

Advice on relevant and emerging areas of science and technology

Recommendations for moving forward

Thank you for your attention