Science Advice, Science Diplomacy and Science Communication at the Organisation for the Prohibition of Chemical Weapons

The Scientific Advisory Board

The Chemical Weapons Convention is built on a scientific foundation, requiring technical expertise for effective implementation, and scientific literacy for decision making.

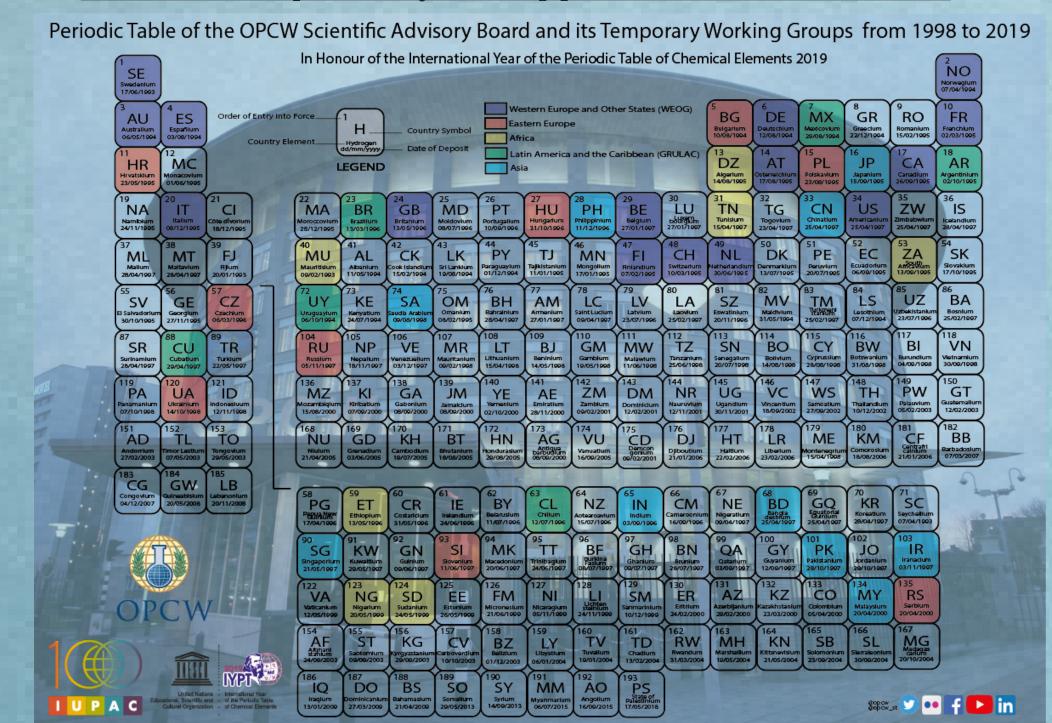
Scientific principles provide the definitions for what is, and what is not a chemical weapon; ensure completeness of declarations; guarantee the robustness of sampling and analysis and other verification methodologies; guide the processes and methods used for inspections, investigations and destruction; inform approaches to assistance and protection; and benefits outreach to scientific communities."

The Scientific Advisory Board (SAB) is a subsidiary body of the OPCW serving as an independent science advisory mechanism to provide advice to inform the work and processes of the OPCW, and to bring scientific literacy into the policymaking process.

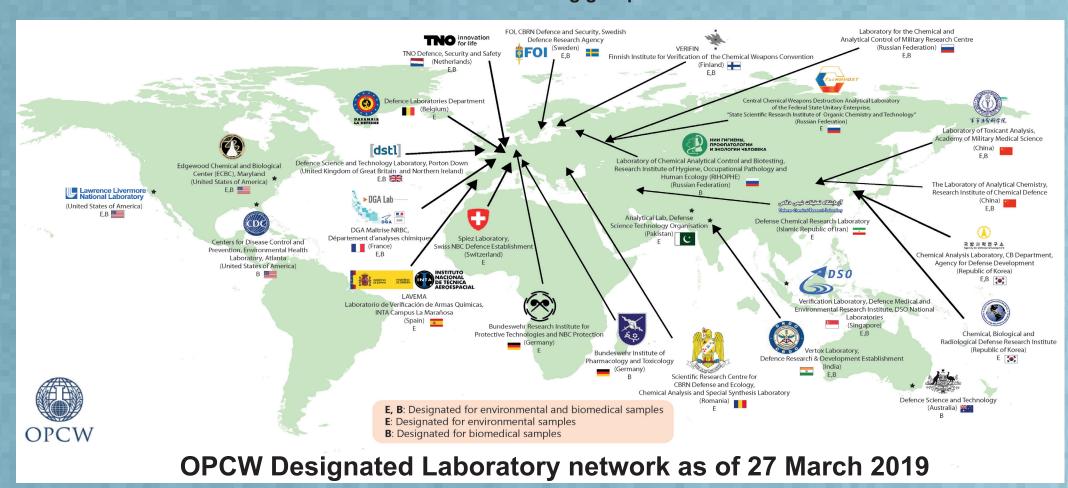
The Scientific Advisory Board at its 28th Session, 11 June 2019

The SAB was established in accordance with the Chemical Weapons Convention to enable the Director-General to render specialized advice in areas of science and technology relevant to the Convention, its State Parties, the Conference of States Parties, and the Executive Council. For the basis of the SAB in the Chemical Weapons Convention, see Article VIII Paragraph 21 (h).

Scientific Diplomacy in Support of the Convention



From 1998-2019 the members of the SAB and its working groups have come from 44 different State Parties



imary of the First Meeting of the cientific Advisory Board's Tempo-

ry Working Group on Investigative

eport of the Scientific Advisory Board ts Twenty-Seventh Session

ort of the Twenty-Seventh Session of the

Report of the Scientific Advisory Board on

of the States Parties to Review the Operatio

to Provide Advice on New Types of Nerve Agents

ummary of the Second Meeting of the

Scientific Advisory Board's Temporary

Working Group on Investigative Science

entific Advisory Board

C-4/DG.1, dated 30 April 2018)

SAB~28/WP.1, dated 3 July 2018)

Reports of the SAB in 2018

cience and Technology

OPCW OPCW

The SAB reports to the Director-General, who provides responses and views on its work and recommendations. States Parties receive the reports and the responses through the Director-General.

Find out more: SAB

Reports and other documents

The SAB is made up of 25 experts

from OPCW Member States.

Members serve in their personal

capacity (not as representatives

of their respective States Parties)

for up to two consecutive three-

year terms. The SAB chair and

Scientists from more than 40

States Parties have served on the

SAB and/or its working groups

since its first Session in 1998.

Upholding core values of the

Convention, international coop-

eration and science for peace, the

SAB exemplifies the value of sci-

International scientific collabo-

ration to support the implemen-

tation of the Chemical Weapons

Convention is further exampli

fied by the network of Designat

Learn more about the
Designated Laboratory

ence diplomacy

ed Laboratories.

• Network

vice-chair are elected annually.



Science Communication and Engagement

OPCW actively promotes scientific literacy for policymaking and treaty implementation. This requires productive discourse between scientific experts and diplomats from OPCW's State Parties.



To ensure effectiveness, the work of the

SAB must be visible; SAB reports and in-

formative materials must be easily acces-

sible to stakeholders; and the promotion

of scientific literacy must be interactive

Mobile apps, mobile device retrievable

documents and augmented reality pro-

vide useful tools with a great degree of

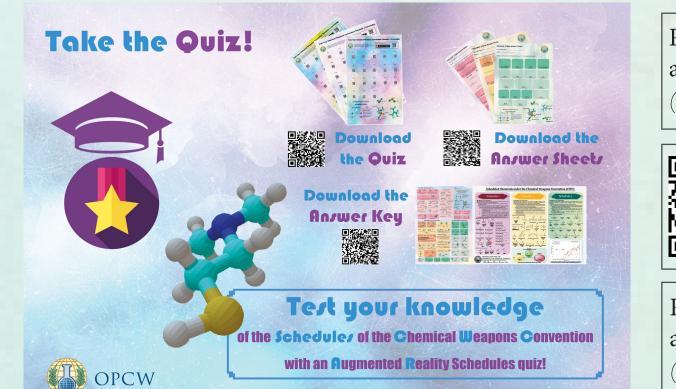
flexibility to aid in communication and

dissemination of information.

and engaging.

The SAB regularly briefs States Parties on its work and the OPCW's Science for Diplomats initiative provides a forum for interactive engagement with diplomats involved in the implementation of the Chemical Weapons Convention.

Learn more about the Science for Diplomats Initiative

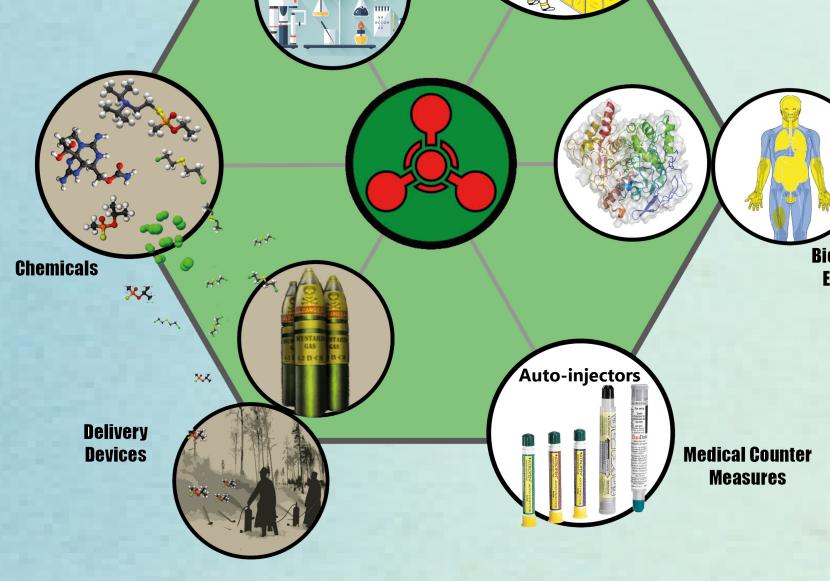








Science of the Chemical Weapons Convention **Destruction Decontamination**





Infographics and science and technology reference materials available online.



A periodic table of State Parties #IYPT2019



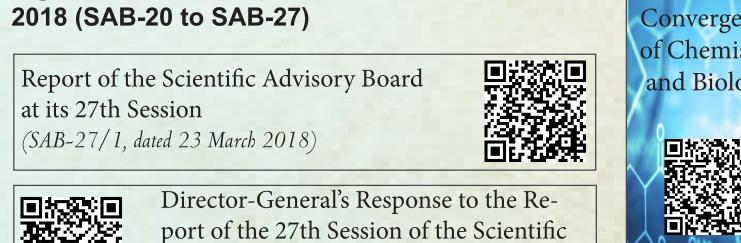
Scientific Review for the Fourth Review Conference of the Chemical Weapons Convention

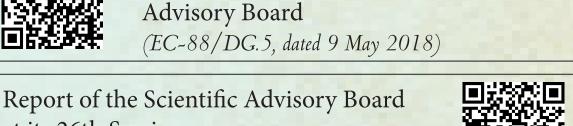
The Scientific Advisory Board serves as an independent body that assesses and reports to the Director-General on developments in scientific and technological fields relevant to the Convention. Recognising where technological change both benefits and challenges the implementation of the Convention is an important and continual aspect of this work (in particular for verification purposes).

To ensure the OPCW keeps pace with scientific and technological change, the SAB submits a substantive report on developments in science and technology which includes recommendations for the operation of the Convention to each 5-yearly Review Conference of the Chemical Weapons Convention. The most recent Review Conference (RC-4) was held 21 – 30 November 2018.

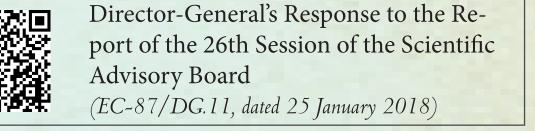
The SAB took inputs for its report to RC-4 from previous considerations to the first three Review Conferences, participation scientific conferences and meetings, review of scientific and patent literature, and a variety of new sources highlighted below (see A-D).

A. The deliberations of the SAB during its eight regular sessions held from June 2013 to March

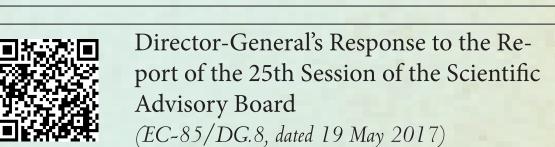




at its 26th Session (SAB-26/1, dated 20 October 2017)



Report of the Scientific Advisory Board at its 25th Session (SAB-25/1, dated 31 March 2017)



Report of the Scientific Advisory Board at its 24th Session (SAB-24/1, dated 28 October 2016)

Director-General's Response to the Report of the 24th Session of the Scientific Advisory Board (EC-84/DG.9, dated 18 January 2017)

Report of the Scientific Advisory Board at its 23rd Session (SAB-23/1, dated 22 April 2016)



Director-General's Response to the Report of the 23rd Session of the Scientific Advisory Board (EC-82/DG.13, dated 7 June 2016)

Report of the Scientific Advisory Board at its 22nd Session (SAB-22/1, dated 21 July 2015)



Director-General's Response to the Report of the 22nd Session of the Scientific Advisory Board (EC-80/DG.7, dated 28 August 2015)

Report of the Scientific Advisory Board at its 21st Session (SAB-21/1, dated 27 June 2014)



Director-General's Response to the Report of the 21st Session of the Scientific Advisory Board (EC-77/DG.10, dated 5 September 2014)

Report of the Scientific Advisory Board at its 20th Session (SAB-20/1, dated 14 June 2013)



Director-General's Response to the Report of the 20th Session of the Scientific Advisory Board (EC-74/DG.1, dated 24 July 2013)

B. Findings from four Temporary Working Groups





Working Together For a World Free of Chemical Weapon

Temporary Working Group on Investigative Science and Technology

C. Intersessional responses to requests for advice

from the Director-General (2013 to 2017)

Medical countermeasures and

longer term treatment for vic-

tims of chemical agent exposure

the Chemical Weapons Convention

DG response RC-4/DG.2 1 June 2018

Read the Executive

Summary of Rec-

RC-4/DG.1

30 April 2018

D. A series of workshops, co-organised by external partners and kindly funded by the European Union

A European Union Funded Project

Chemical Warfare Agents: Toxicity, Emergency Respons and Medical Countermeasure Paris, France. 26 - 27 September 2016 SAB-24/WP.2, dated 14 October 2016,

■ SGDSN **Innovative Technologies for Chemical Security** SAB-26/WP.1, dated 21 July 2017,

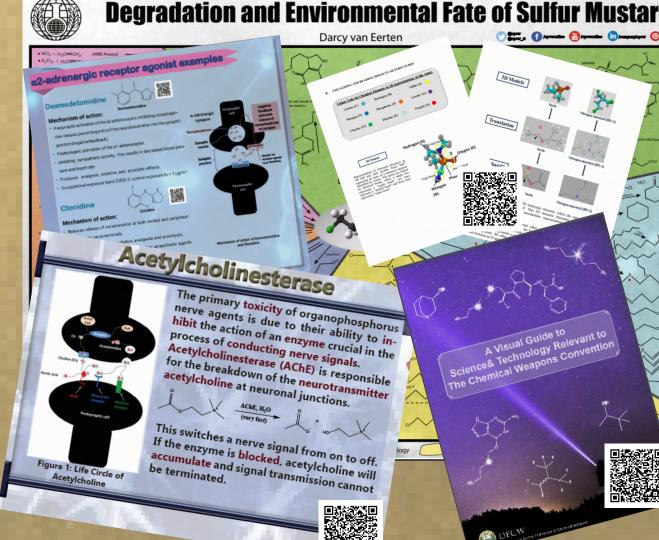
Zagreb, Croatia. 3 - 5 October 2017 SAB-26/WP.2, dated 19 October 2017 Zagreb IIII III

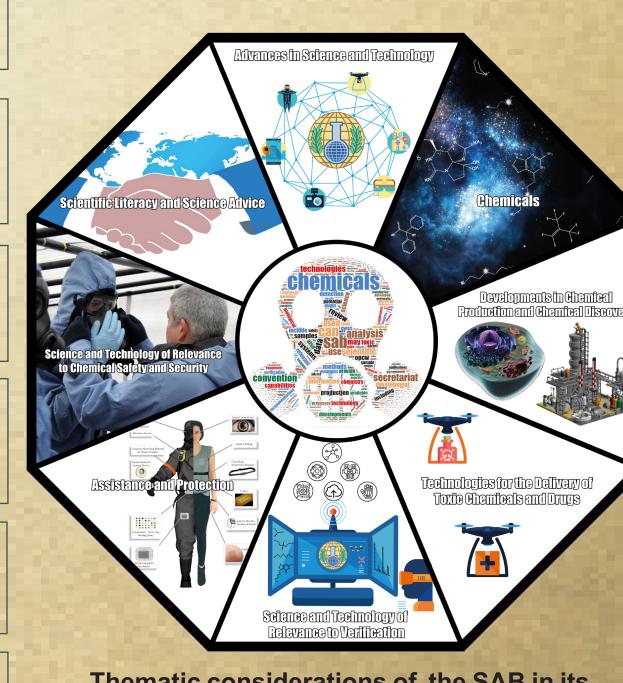
In the RC-4 Review Process, the SAB held 27 meetings and workshops with 747 Attendees (289 individuals from 58 State Parties) and 453 Speakers

(201 individuals from 58 State Parties) were published 33 Reports

Examples of infographics and reference materials to accompany SAB advice.

Degradation and Environmental Fate of Sulfur Mustard





Thematic considerations of the SAB in its report to the Fourth Review Conference



Isotopically labeled

and stereoisomers of

Scheduled chemicals

