

**TWENTY-NINTH SESSION OF THE CONFERENCE OF THE STATES  
PARTIES**

**STATEMENT BY MR GÜNTER POVODEN, CHAIRPERSON OF THE OPCW  
SCIENTIFIC ADVISORY BOARD**

**27 November 2024**

Mr. Chairman,  
Director-General,  
Excellencies,  
Distinguished Delegates,  
Ladies and Gentlemen,

It is a pleasure to present the work of the Scientific Advisory Board to the Conference of the States Parties.

The Chemical Weapons Convention is the only disarmament convention with a scientific advisory mechanism embedded in its provisions. According to Article VIII of the Chemical Weapons Convention, the Scientific Advisory Board, or SAB, enables the Director-General, in the performance of his functions, to render specialised advice to the Conference, Executive Council or States Parties in areas of science and technology relevant to the Convention.

The Board consists of 25 members, appointed by the Director-General. I am the current Chair tenuring out this year having served the SAB for the last six years, which was a real honor and a pleasure and therefore, I would like to take this occasion to thank His Excellency Director General Ambassador Fernando Arias for his outstanding support. In addition, I would like to thank the Secretary of the SAB Dr Peter Hotchkiss, and his team, specifically mentioning Dr Sarah Clapham, Ms Ernesa Ademagic and all motivated interns for their great work. Without them, the SAB could not perform as it does. I would like to express my thanks to those States Parties who have supported and funded the work of the SAB, with a special thank you to the European Union.

It is a great pleasure to introduce the current Vice Chair Prof Dr Imee Su Martinez from the Philippines as the New Chair for 2025 and Professor Elisa Orth from Brazil as the new Vice Chair. Having two women from the Global South at the forefront is reflecting the regional and gender balance of the SAB.

I welcome the newly appointed SAB Members for 2025, which are

- Dr Allison Astuya Villalón of Chile
- Dr Raja Subramaniam of Malaysia
- Prof Keunhong Jeong of the Republic of Korea
- Prof Sermet Sezigen of Türkiye, University of Health Sciences

Apart from myself, we have three more departing SAB members leaving at the end of the year 2024. They are

- Former Vice-Chair Prof Andrea Leisewitz of Chile;
- Prof Mostafa Ghanei of the Islamic Republic of Iran;
- and Mr Wilford Jwalshik of Nigeria

I thank you all for your great support and camaraderie.

I would like to attract your attention to the products of the SAB, which have accumulated over the last years to a very valuable knowledge base concerning science and technology relevant to the Convention. You find on the OPCW webpage reports of each SAB Session, reports for the Review Conferences and outputs of seminars, workshops, meetings, and the following Temporary Working Groups:

- Convergence of chemistry & biology
- Education and outreach
- Verification
- Investigative science & technology and
- Analysis of biotoxins

In addition, you find ad-hoc advice to the Director-General for instance regarding riot control agents.

Individual SAB members also contribute outside of the regular SAB meetings, participating in the Review Committee for Scientific Projects and other activities to support the International Cooperation and Assistance Division, supporting other OPCW scientific projects, such as the AI Research Challenge, engaging with industry and other relevant stakeholders, as well as participating in scientific conferences and workshops, gathering and processing information relevant for the SAB and the OPCW.

Please allow me also my personal point of view: The SAB is strengthening the trust in science for States Parties and Civil Society. Therefore, impartiality and bringing in the personal and independent expertise of each SAB member is so important.

This impartiality and independence is reflected in the Codes of Conduct of the SAB, where I quote:

*“SAB members perform their official duties and arrange their private affairs in such a manner that public confidence and trust in the integrity, objectivity, and impartiality of the members are conserved and enhanced.”*

*“SAB members act in good faith for the best interest of the scientific advisory process.”*

To update you regarding the last SAB Session: The Scientific Advisory Board met for its Thirty-Eighth Session from the 27<sup>th</sup> to the 31<sup>st</sup> of May 2024, receiving briefings from external speakers on topics including: persistent nerve agents, CBRN defence innovations, machine learning, unmanned aerial vehicles (UAVs), metal-organic frameworks (MOFs), and laboratory automation.

A very important outcome of this meeting was a recommendation for the Director General to establish a Temporary Working Group on Artificial Intelligence.

We currently have an ongoing Temporary Working Group on Chemical Forensics which started its mandate in January 2024. So far, we have had three meetings, two of them in-person. I am happy to report that the TWG on chemical forensics, under the leadership of Dr Anne Bossée, is progressing very well.

It is a great pleasure that the Director General approved the SAB proposal to establish a new TWG on AI, beginning its work next year. The Terms of Reference for this Working Group are in an advanced status and the selection process for experts is being finalised.

The SAB has been dealing with AI already for quite some time, addressing this topic already in its Report of the Scientific Advisory Board on Developments in Science and Technology for the Fourth Special Session of The Conference of The States Parties to Review the Operation of the Chemical Weapons Convention, with further advice and recommendations in its report for the 5<sup>th</sup> Review Conference. In preparation for this latest report, the SAB held a workshop on AI-assisted chemistry in close cooperation with IUPAC (International Union of Pure and Applied Chemistry) that took place in June 2022. This workshop provided insight into current and future applications of AI in chemistry by addressing topics such as utility in synthetic design, reaction conditions and optimisation, agricultural chemistry, drug discovery, the potential impact of AI on the chemical industry, and potential implications for IUPAC and the OPCW. The year 2024 has been already a quite intensive year with several highly appreciated events such as:

- The AI experts meeting hosted by the Director-General at the OPCW in April 2024
- The AI and Weapons of Mass Destruction Symposium in Berlin, held in Germany at the German Federal Foreign Office in June 2024 and
- The Global Conference on the role of AI in advancing the implementation of the CWC, organised by the Kingdom of Morocco in close cooperation with OPCW in October 2024.

I would also like to highlight the AI Research Challenge, where 4 research institutes from different regions have been selected to be funded with 65.000 Euro each.

Based on all information gathered on AI, the questions to be answered in the TWG on AI will be defined in the Terms of References, covering topics such as synthesis planning, automated and remote synthesis and production of chemicals, data curation, protection, and reliability, property prediction of chemicals which includes toxicity, spectral prediction, data generation and, data and sensor fusion for augmented detection and analysis.

The TWG will also be considering the “dark” side of AI, looking into a potential misuse related to the Chemical Weapons Convention.

Finally, let me outline the way ahead for the Scientific Advisory Board. SAB members contribute to research projects, publications, and conferences giving feedback to the SAB.

The Technical Secretariat provides permanent support, including background research and scientific publications, in close cooperation with SAB members. The SAB continues to monitor advances in science and technology, hear from pre-eminent experts on recent developments, participate in and lead conferences and workshops and will also start preparing the SAB report for the Sixth Review Conference.

I want to highlight that many SAB activities require voluntary contributions. Therefore, I thank all SAB members for their excellent work and engagement. As I have mentioned, they all act in their individual capacity as independent experts. Referring to the term “consensus” we have heard various times during this Conference: Noting that all reports of the SAB have been produced by consensus, I am proud and honored that I had the opportunity to chair this flagship body of the OPCW.

I thank you for your attention and wish you all a successful conference. I request that this statement be an official document of the 29<sup>th</sup> CSP, posted on Catalyst and the OPCW's public website.