



**ORGANISATION FOR THE PROHIBITION
OF CHEMICAL WEAPONS**

IUPAC Workshop

“Trends in Science and Technology
Relevant to the Chemical Weapons Convention (CWC)”

ADDRESS BY

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“PERSPECTIVES IN THE CONTEXT OF THE THIRD REVIEW CONFERENCE
OF THE CWC”

Spiez, Switzerland

20 February 2012

Excellencies,
Distinguished guests,
Ladies and gentlemen,

It is a great pleasure for me to be here in Spiez to attend the international workshop on “Trends in Science and Technology relevant to the Chemical Weapons Convention” organised by the International Union of Pure and Applied Chemistry. I warmly welcome this important event and would like to thank all those who have contributed to making it possible including the Government of Switzerland.

In 2013, OPCW States Parties will meet for the third time in the framework of a Conference to review the operation of the Convention. The two previous Review Conferences, in 2003 and 2008, met at a time when attention was focussed on the destruction of chemical weapons as declared by possessor States. While this function of the OPCW will continue for some years to come, the long term vision needs to also take into account existing and emerging demands and trends. In this context, the impact of science and technology on the Convention is an obvious subject of interest. This Workshop devoted to the CWC is, therefore, both timely and essential and I commend IUPAC for its initiative.

In only three years from now, the international community will observe the 100th anniversary of the first large scale use of chemical weapons in World War I.

This upcoming landmark calls for a deeper reflection on the real worth of the CWC and the great benefits it has brought to international peace and security.

Having achieved a global ban and having succeeded in making it work, the task before the international community now is to preserve it for eternity. There will be many challenges along the way. Some of these are already evident. The obvious ones are achieving universality for the norm; implementing it effectively in every State Party; responding to the changing nature of the threat which today is greater from unconventional sources resorting to chemical weapons or misusing toxic chemicals rather than inter-state conflict, and, the impact of science and technology on the implementation of the Convention.

The Third Review Conference to be held in 2013 will provide a valuable opportunity to revitalise our efforts to complete unfinished business as well as to adapt the Convention to future needs and challenges.

Eliminating all declared chemical weapons has remained a key goal of the OPCW. It has demanded the lion's share of the resources made available to the Organisation. The international community takes justified satisfaction from the fact that 71 percent of these chemical weapons have already been destroyed. The Organisation will continue to verify the destruction of the remaining stockpiles until the job is done. It will not be long before this remainder is also eliminated.

On the side of industry verification, the OPCW will continue its work to ensure that production and consumption of scheduled chemicals and the operations of other chemical production facilities, as defined by the Convention, remain dedicated for peaceful purposes.

Over the years the Organisation has established a range of programmes under Articles X and XI of the Convention relating to assistance and

protection against chemical weapons and international cooperation for peaceful purposes. We foresee strengthening these programmes and making their impact more efficient.

While we continually monitor and refine our programmes, and aim at improving quality and output, we also continue to strive to keep costs at minimum while Administrative and managerial preoccupations are necessary but should not be allowed to overwhelm the essence of our endeavour. The original idea must not get lost in routine.

That is why your Workshop is so important. The civil society, the scientists and the academics nourish and enrich debate. This intellectual endeavour is selfless. Because it is driven by knowledge and expertise, it provides energy and direction to policy. So, as we head towards the next review Conference, I urge you to once again make your contribution in sensitising, in informing and in advising policy makers on what you see as the challenges ahead. As the OPCW prepares to enter a new phase in its life, these inputs assume critical importance.

The agenda for the Workshop covers key subjects and your deliberations and their results will be keenly awaited. The outcome of the workshop will also be an important resource for the OPCW Scientific Advisory Board (SAB) which will prepare a report on trends in science and technology for the Third Review Conference.

Many of you will be familiar with SAB. In fact its Chairperson and some members are among us today. But for those who are not, and, by way of a general update on its work, the Scientific Advisory Board (SAB) is a statutory body of the OPCW. It is composed of independent experts who

are mandated to assess relevant scientific and technological developments and advise the Director-General on such subjects.

SAB's terms of reference also include: assessing the scientific and technological merit of a present or proposed methodology for use in verification; and, assessing and reporting on emerging technologies and new equipment which could be used in verification activities.

The 25 members of SAB – from 25 different countries – are eminent scientists from research institutions, universities, chemical industry companies, defence and military organisations with expertise in a discipline relevant to the implementation of the Chemical Weapons Convention. They are appointed for a term of 3 years and may serve for a consecutive second term.

The SAB has met seventeen times since entry into force of the CWC. The Board meets once or twice a year. Given the approach of the Third Review Conference and, as agreed in the 2012 budget, the SAB will meet twice this year, in April and September.

Meanwhile, the SAB has recently established two temporary working groups: one on the convergence of chemistry and biology and the other on education and outreach.

The working group on convergence will consider a subject that is likely to have a major impact on the Convention from a technical standpoint. The temporary working group on education and outreach, on the other hand, will deal with the objective of strengthening the normative aspects of the Convention.

Sampling and analysis being an important feature of the CWC verification regime also figures as a topic that SAB keeps under study. The OPCW conducts sampling and analysis at about nine Schedule 2 inspections each year and is continuously trying to streamline the process. As a result, a novel sample preparation technique has been developed in the OPCW Laboratory. This has cut the duration of on-line sampling and analysis to less than 24 hours. The Laboratory is also exploring fast Gas Chromatography to further shorten the analysis time.

As part of my efforts to elevate the scientific component of our management, the Organisation will be recruiting a science policy adviser, who will assist me in formulating scientific policy advice to the Policy-Making Organs and create more effective liaison with the scientific community.

At a time of rapid change and advances in science and technology, we seek to further strengthen cooperative relations with the global chemical industry, scientific and academic institutions. Over the years, IUPAC has remained an essential and reliable partner for the OPCW. It is my hope that through this cooperation, we will be able to better understand the changes, trends and advances that take place in science and technology, and to bring them to the attention of our Member States.

Distinguished guests,
Ladies and gentlemen,

Science will no doubt be a major focus of attention at the Third Review Conference. Taking the broader perspective, I will briefly touch upon

other key issues that impact the long term effectiveness of the Convention.

As we envisage significant reductions in inspections to verify the destruction of chemical weapons, the size of the OPCW inspectorate will be significantly reduced.

Verification of destruction activities will continue to be a priority in the coming years.

The Russian Federation and the United States as the two largest possessor States are making steady progress towards the complete destruction of their respective stockpiles. Given the large quantities of highly toxic chemicals that need to be destroyed safely, the two countries will miss the final deadline of April this year. Last December, in a decision that reflects both realism and a constructive spirit, the 16th Session of the OPCW Conference of States Parties has taken a decision that will enable both countries to fulfil their obligations while providing more transparency and increased reporting requirements.

The significant progress in destruction of chemical weapons means a reduction in the number of Article IV and V inspections and a consequent adaptation of our human-resources requirements. Internal changes in the Secretariat will be necessary, but must not compromise the integrity and assurance of operational effectiveness, including the continued verification of destruction activities.

While we expect that 99 percent of the existing stockpile will be destroyed within five years from now, some destruction activities will

continue, particularly for old and abandoned chemical weapons. With the potential of chemical warfare agents also being produced in commercial facilities, the Convention will continue to extend the reach of its verification activities to the global chemical industry. The total number of facilities around the world considered relevant for the purposes of the Convention is in the range of 5,000. These are liable to be inspected and indeed those producing chemicals deemed to be of most relevance are regularly inspected by the Secretariat. So far, some 2200 such inspections have been carried out in 80 countries.

Industry verification constitutes a major confidence building measure and does not in any way reflect a measure driven by suspicion. Here, I must once again praise the willing cooperation of the global chemical industry which has contributed significantly to the success of the CWC. We will continue to work on an organisational design for the future that will meet all of our needs and expectations, and one that will be established with the active collaboration and support of our Member States.

The Advisory Panel on future priorities of the OPCW completed its work last year. Reactions to its report have been positive and have been followed up by an informal retreat for Ambassadors which took place in September last year and the recent session of informal consultations held on 2 February. The Advisory Panel's report was well-received by States Parties as strong support was affirmed for our continued work, guided by all the core objectives.

The Secretariat has benefitted from the views that have been expressed concerning future OPCW priorities in the medium to longer term. It has also been recognised that some change is necessary to ensure that the

Organisation is able to respond to new circumstances and contemporary challenges. Such discussions will continue with a hope to achieving a suitable and productive outcome that could be taken forward by the Third Review Conference. I would also encourage the scientific community to provide its inputs to the ongoing debate on the future of the OPCW and the CWC regime.

A related matter and one that I believe is of particular relevance to this forum concerns the promotion of ethical norms against the misuse of chemistry. The obligations of the Convention extend through national laws to all citizens of a country including the individual scientist and engineer. Many chemists, academics, scientists, engineers, technicians, however, have little or no exposure during their training and professional life to the ethical norms and regulatory requirements of the CWC. At the same time, advances in the life sciences are creating enormous opportunities. While their potential for benefit is undisputed, these could also be prone to abuse. Education and awareness-raising about the norms and principles enshrined in the CWC are therefore becoming increasingly important. There are significant expectations attached to the role of IUPAC and it is my hope that the Third Review Conference will provide impetus to this endeavour.

Despite the existence and progressive strengthening of clear norms against chemical weapons, criminal or terrorist use of either chemical weapons or the use of toxic chemicals as chemical weapons remains a concern. Especially within the contemporary international security environment, there is a real threat of non-state entities acquiring and using dangerous weapons.

In this area, Article X of the Convention provides for mechanisms designed to assist States Parties particularly by enhancing their preparedness and capabilities to react to a possible attack involving chemical weapons. A coordination mechanism among Member States is envisaged that would mobilise the provision of emergency assistance to the country that has been subjected to a threat of attack or actual attack with chemical weapons.

The development of national preparedness and of mechanisms for emergency assistance in case of such an attack is an essential part of the security assurance that States receive by joining the Convention. Accordingly, the Secretariat has been working extensively in collaboration with our States Parties with a view to ensuring effective emergency response capacity should a need ever arise.

Making the world free from chemical weapons is a demanding task. But we cannot fully reap the fruits of disarmament and non-proliferation without effective domestic implementation of the Convention by all our States Parties.

The Convention sets out a concrete legal framework for disarmament, non-proliferation and deterrence. States must equip themselves to prevent and, if needed, to prosecute any individuals or entities who contemplate the misuse of toxic chemicals for criminal or terrorist purposes. When OPCW Member States fulfil their obligations under the Convention, such measures translate into security enhancement for themselves and for other States Parties.

The OPCW has spared no effort in providing States Parties technical assistance in implementing all aspects of the Convention. And here, I must acknowledge the generous financial contribution of the European Union in support of a range of OPCW activities.

Though the OPCW is not an anti-terrorism agency, the comprehensive prohibition against chemical weapons that it is mandated to promote strengthens our ability to deal with the issue of global terrorism. OPCW's role and contribution in this respect accords entirely with the objectives of the United Nations Security Council's Resolution 1540. The Organisation's role is also clearly recognised in the United Nations Global Counter-Terrorism Strategy adopted by the UN General Assembly.

Our States Parties have shown a particular interest in the aspect of chemical safety and security evident in the success of the OPCW Conference on International Cooperation and Chemical Safety & Security held in September last year. The Conference was a fitting contribution by the Organisation to the commemoration of the International Year of Chemistry. I have established a Task Force on Chemical Safety and Security to review and strengthen, as appropriate, the role of the Organisation in assisting States Parties in these vital areas. Here again this Workshop can make a substantive contribution.

The rate of growth in our membership has been the fastest for any disarmament treaty. Our 188 members represent over 98% of the global population and also 98% of the world's chemical industry.

However, there still remain 8 countries that have not joined the Convention. OPCW policy making organs have stressed that universality will be a priority.

Three states that are not parties to the Convention are located in the sensitive region of the Middle East. A conference to consider the establishment of weapons of mass destruction-free zone in the Middle East is expected to be held in Finland later this year. OPCW has been requested to contribute to this important initiative which we will, and, it is my hope that this effort will facilitate the objective of promoting universal adherence to the Convention.

Both universality and effective national implementation are expected to be topics high on the agenda of the Third Review Conference.

Ladies and Gentlemen,

The success of the CWC has been the result of multilateral negotiations that carefully considered the long term durability of the prohibitions that were established. Science was an important factor in shaping the verification regime of the Convention. But it was negotiated nearly two decades ago. During this period, developments in science and technology have been nothing short of transformational.

These developments require close study for determining their relevance to the purposes of the Convention and in this endeavour there is no partner for the OPCW more relevant than IUPAC.

I am confident that you will use this workshop to advance the objectives of the Convention. I look forward to the outcome of your deliberations and wish you every success.

Thank you for your attention.