

**Chemical Weapons at 100:
Paying Tribute through Disarmament**

**Chemical Weapons: From Ypres to Aleppo
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Distinguished guests,
Ladies and gentlemen,

It is an honour to be present with you today at this important colloquium.

Before I begin, I would like to thank the Royal Higher Institute for Defence for hosting this event. It addresses a topical issue that resonates with global efforts to rid the world of chemical weapons – efforts that the Organisation for the Prohibition of Chemical Weapons, or OPCW, has spearheaded.

The title of today's colloquium offers us the chance to discuss not only the evolution of chemical weapons through much of the twentieth century, but it also presents an opportunity to detail the work – and challenges – related to banning them.

I would like to start by setting the scene for our commemorative event today.

A hundred years ago, little more than a hundred kilometres from here, two warring sides were separated by a long front line amid a brutal conflict.

At five o'clock in the evening of 22 April 1915, six hundred canisters filled with chlorine gas were opened along a four-mile section of the front.

They released an oddly coloured cloud that winds carried across the trenches – and a column of French and Algerian soldiers were quickly engulfed by a new weapon of war.

Willi Siebert, a German soldier, witnessed that day's events.

He recounts how the French and Algerian soldiers began to yell and fire their machine guns helplessly into the chemical haze – as the chlorine overcame them.

As the minutes ticked by, the gun fire became more sporadic and eventually stopped.

What Siebert then describes, as he and his colleagues approached the trenches, is a shocking scene of complete annihilation, with bodies of soldiers strewn everywhere. Even the animals had come out of their holes to die, he recalls.

Perhaps most affecting of all was that men had, and I quote 'clawed at their faces, and throats, trying to get breath.'

A century later, this first-hand account places us back in the trenches, where history would record the first large-scale use of chemical weapons in modern warfare.

Siebert's is but one among many such accounts. Many of these accounts are striking for two reasons.

First, they affect us with their gruesome depiction of these ghastly weapons at work, suffocating unwitting victims, their faces seized with fear.

And second, they strike us in an unexpected way – for in many of these accounts, when those behind the attacks come face-to-face with their victims, they are overwhelmed with horror and remorse.

Horror and remorse over the grisly and painful way, in which these weapons poison their target.

I would point you to the example of a prominent German chemist, Otto Hahn, who served in his country's chemical weapons programme.

At one point during the war, Hahn left the lab and ventured to the eastern front to see for himself the weapon's capabilities.

After witnessing a chemical attack against Russian troops, Hahn and his men walked amid the devastation of its aftermath. Upon coming into contact with Russian soldiers who were struggling for breath, Hahn was overcome with emotion.

In a moment of humanity amidst horror, he attempts to save the choking soldiers with respirators. It was then, in that moment, that Hahn recalls that the 'total insanity of war became obvious to us.'

Indeed, the evil of chemical weapons is such that they can immediately inspire grief and compassion for those falling victim to them.

Tragically, that first large-scale use of chlorine gas at Ieper marked the beginning of widespread use of chemical weapons throughout the war.

By the end of World War I, chemical weapons would be used on both sides, including deadlier weapons developed in the course of the conflict – including phosgene, sulfur mustard and hydrogen cyanide.

In all, they caused more than 90,000 deaths and over one million casualties.

Many of those who survived would suffer agonizing, lifelong effects to their health, particularly respiratory dysfunctions.

There is no doubt that the chemical legacy of World War I scarred a generation.

However, at war's end, though many joined a chorus of condemnation against the production and use of chemical weapons, the chemical sins of Ieper would be repeated throughout the 20th century – and extend into the 21st.

We saw a return to their use during the interwar years in brutal colonial wars in Africa and Asia.

And while chemical weapons were not used in warfare during the Second World War, far deadlier nerve agents were discovered and developed throughout the 1930s and 1940s.

During the Cold War, as fears of nuclear war gripped the world's attention, a chemical arms race quietly resulted in the production and stockpiling of massive arsenals of these deadly weapons.

Further horrors of modern chemical warfare would occur during the Iran-Iraq War, where deadly nerve agents were used on soldiers *and* civilians.

Equally troubling, in 1994 and 1995, sarin gas was used during a series of attacks in Japan – killing 20 and injuring thousands.

The sarin attacks in Japan heightened fears about a possible new phase in chemical weapons use – where non-state actors, particularly terrorist groups – could produce and deploy these deadly chemicals.

Ladies and gentlemen,

There is no doubt that the last century has been marked with the dismal and steady drumbeat of chemical weapons use. Time and again, this weapon of mass destruction would be used to maim, injure and kill.

But, encouragingly, as these weapons were developed and refined, efforts to halt their production and limit their use took root.

Unfortunately, as history would record, early attempts at chemical weapons disarmament were largely unsuccessful.

The first attempt to control them, the Hague Convention of 1899, banned the use of poison gases in warfare – though the commitments made by countries to this Convention were not honoured during World War I.

Following the war, a second attempt to stop chemical weapons was made – known as the Geneva Protocol of 1925.

And though this measure banned the use of chemical weapons, it failed to restrict the production or stockpiling of chemical weapons.

In fact, by the 1980s, tens of thousands of metric tonnes of chemical weapons agent – mainly deadly nerve gases such as sarin – had been amassed.

The breakthrough in the ban on chemical weapons came towards the end of the Cold War, when the superpowers cooperated to negotiate a far-reaching and comprehensive agreement – the Chemical Weapons Convention.

Ladies and gentlemen,

It can be safely said that the Chemical Weapons Convention is the most comprehensive – and successful – disarmament and non-proliferation treaty in history.

Not only does the Convention ban an entire class of weapons – but it does so in an unbiased manner. There are no exceptions that allow some states to possess chemical weapons while others cannot.

The Convention requires that all countries possessing chemical weapons must declare and destroy their stockpiles. And all member countries must enact national legislation to ensure chemistry is used only for peaceful purposes within their jurisdictions.

Under its terms, all 190 members of the treaty – representing 98% of the world’s population – share the same obligations and receive the same benefits.

Most importantly, the Convention’s provisions are embedded in a strict international verification – as implemented by the OPCW.

Less than two decades from the Convention’s entry into force in 1997, the OPCW has verified the destruction of 87% of all declared chemical weapons. We are now poised for complete destruction of remaining stocks within the next decade.

This will be a disarmament achievement unparalleled in history.

Our inspectors are constantly engaged across the globe – working to inspect industrial facilities to ensure they produce chemicals exclusively for peaceful use. Since 1997, our inspectors have conducted 2,500 inspections in more than 87 countries.

Should any concerns arise about the completeness of a country’s chemical weapons declarations and if a state has suspicions of another member’s compliance with the Convention, a short-notice inspection what is termed a ‘challenge inspection’ can be activated – though there must be solid and credible grounds for such suspicions.

Members of the Convention are also required to provide assistance to one another in the event that they come under attack from chemical weapons.

And to harness and promote peaceful applications of chemistry, the OPCW facilitates knowledge exchange and international cooperation among its members.

We work in partnership with international organisations, industry and relevant associations to promote peaceful chemistry in all professional pursuits.

And in terms of developing best practices, we are encouraging the development of ethical guidelines for chemical professionals – an initiative that is gathering momentum among some of our member states.

As I have mentioned, a key interest of the OPCW is the promotion of the benevolent uses of chemistry – while ensuring international action to thwart any malevolent use.

This goes directly to the dual-use nature of chemicals and the science behind them.

A clear example of this dual-use can be found in my earlier mention of chlorine gas use in World War I. We can all widely recognize chlorine as a beneficial chemical utilized in numerous consumer and industrial applications.

Chlorine is used across the globe to purify water and is a vital factor in raising a population's standard of living in remote parts of the world.

Yet when misused, this chemical can choke and even kill.

Today, as we recall Ieper, and as we trace our achievements in chemical disarmament – the recent use of chlorine in the Middle East indicates that we must keep our guard – even as we consider the extraordinary success we have recorded in Syria.

The confirmed use of chemical weapons in August 2013 in the midst of the Syrian civil war triggered an extraordinary and unprecedented series of events.

In quick succession, Syria signed on to the Chemical Weapons Convention in September 2013, and the OPCW Executive Council charted the course for a fast-tracked plan to eliminate Syria's chemical programme.

Amid intense time pressure, our inspectors reviewed disclosures made by the Syrian government, put together timelines for inspectors and – with our UN partners – devised plans for complicated logistics.

The mission to rid Syria of its chemical weapons stocks stretched us to our operational limits – and reaffirmed the dedication and resolve of our staff and partners.

The mission would call for removal of all chemical weapons and eventual destruction of all production facilities in Syria.

The most lethal of these stocks were neutralized at sea aboard a US vessel – and additional chemicals were transferred to facilities for destruction in Finland, the UK and US.

And critical to our success – no fewer than 35 countries participated in this mission – and supported it with significant in-kind and financial contributions.

Much of this work was done in hazardous conditions within extremely tight deadlines.

Our results speak for themselves:

Within less than a year, we were able to report that all declared chemical weapons slated for destruction abroad were removed from Syrian territory.

Ninety-eight percent of these weapons have been destroyed, including all sulfur mustard and nerve agent precursors.

The international community was able to forge an exceptional disarmament agreement that produced tangible results – in a remarkably short period of time.

And in testimony to how far our chemical disarmament efforts have come, I must note that many of the countries that unleashed chemical weapons against one another on the battlefields in Belgium – have now come together to eradicate Syria's chemical weapons programme.

Even though the difficult political and security situation continues unabated in Syria, we were able to notch an important progress towards creating a world free of chemical weapons – a milestone that we aim to achieve, as I have mentioned, well within the next decade.

Certainly, the OPCW's disarmament efforts and success in Syria has brought greater scrutiny and enhanced our international profile – and the organisation's receipt of the 2013 Nobel Peace Prize has only strengthened our resolve towards achieving our aims.

Ladies and gentlemen,

A century on from Ieper, our gains are clear: the world is safer now than it has ever been from the threat of chemical weapons.

But while it is important to honour those who perished or were scarred by chemical weapons – our tribute will be meaningful only if we could translate the words into action.

To rightly honour those who have fallen, we must complete the deed of disarmament and prevent any return of these barbarous weapons.

Thank you.