It is a great pleasure for me to address you on the occasion of this event to celebrate the thirtieth anniversary of the CWC's signature in Paris in 1993. I wish to thank the co-organizers, Professor Friedrich, Professor Schmidt and my friend Paul Walker for inviting me to speak about the achievements of the OPCW and the future challenges.

The OPCW is very dear to me. I served as Director General for eight years, the longest, the most demanding but at the same time the most rewarding position in my diplomatic career. During these years, the Organization was able to meet several challenges and to adapt itself to the new circumstances.

When I joined the OPCW in July 2010, consultations on the deadline for the destruction of declared stockpiles of CWs and production facilities were underway. The deadline of ten plus five years foreseen by the CWC would be over in 2012 and there was no legal basis to extend it. Lengthy and sometimes fierce debates had finally resulted in a Conference of States Parties (CSP) decision which enabled the major possessor states to continue their destruction activities with some additional transparency measures.

Another issue that was addressed by member states was not unrelated. Some countries were arguing that after the stockpiles of CWs were destroyed, the OPCW Secretariat could be downsized and a limited number of staff could run routine activities such as industrial inspections and capacity building. I thought that as Director General I could take an initiative on this matter, while the deadline issue was handled by member countries at an open-ended Working Group.

I set up an Advisory Panel chaired by Ambassador Rolf Ekeus from Sweden and composed of diplomats and experts who already worked on the CWC related issues. I asked them to prepare a report about the future of the OPCW. They met three times in The Hague. I received the Panel's report in July 2011 which I shared with States Parties. The report concluded that "the OPCW should remain the global repository of knowledge and expertise in the field of chemical weapons" and the priority of the Organization in the future should be "the prevention of re-emergence of CWs". Following the publication of the report I encouraged the member countries to actively participate in informal discussions, in retreats to address different aspects of the CWC regime and ways to keep the OPCW capable, apt to meet future challenges. I believe that the report as well as the series of informal consultations helped enhance the sense of ownership of the Organization by States Parties. There was no more discussion of down sizing

The political will among member countries for keeping the OPCW strong and capable was invigorated by the OPCW-UN joint mission in Syria. After the sarin attack in Ghouta, on 21 August 2013, which resulted in the death of over 1400 people in a few hours, we were holding our breath for a possible military operation against the Syrian regime held responsible for the use of CWs, by the United States and some other western countries. This didn't happen. The US and Russian delegations negotiated a framework document in Geneva according to which the Syrian Government would accept the elimination of its CW program under international verification and join the OPCW as a member. This document became the basis of the decision adopted by the OPCW Executive Council on 27 September 2013 and the UN Security Council Resolution 2118 endorsing it on the same day. As to the implementation of the decisions, I argued that the OPCW should take the lead, with the logistical and security coordination support to be provided by the UN. Since Syria had become a member of the OPCW, our organization should assume the responsibility of such a mission as had happened in the past for other possessor states. The UN wanted to lead the mission with the support of the OPCW. In the end the then UN Secretary General Ban ki Moon proposed to run it

jointly, which I accepted. We appointed together a Special Coordinator who would report to both of us.

The OPCW-UN joint mission was strongly supported by the OPCW membership. More than thirty countries and the European Union contributed to the trust fund established for that purpose and many of them provided in-kind support, such as maritime transportation or protection. The most toxic chemicals were neutralized on an American military cargo ship -Cape Rey- with the presence of the OPCW inspectors. The OPCW staff deployed to Syria were all volunteers. After the civil war began in Syria in March 2011, we thought that the OPCW could be called upon at a certain stage since we knew that this country possessed large stocks of CWs. We sent our inspectors to training programs with a view to preparing them for deployment in a conflict zone. When we asked for volunteers in September 2013, sixty of them were ready to go. This was more than we needed. Foresight paid off.

The engagement by member states, the professionalism of the OPCW staff as well as the UN support made the Syria mission a tremendous success. In less than a year all declared CWs and production facilities were destroyed under the verification of the OPCW. However, gaps, inconsistencies and discrepancies continued to exist on the Syrian declaration. The efforts by the OPCW's Declaration Assessment Team (DAT) and two rounds of consultations in The Hague, between the OPCW delegation that I led and the Syrian delegation headed by Faysal Mekdad, the current Foreign Minister produced limited progress. Based on the findings of DAT, myself and later my successor reported on several occasions that the Syrian declaration was not complete and accurate. This situation has not changed since then.

The OPCW had played a significant role in investigating the allegations of use of CWs in Syria. In March 2013 the UN Secretary General called me and asked whether the OPCW would be able to support the UNSGM that he was intending to activate in order to investigate an incident reported by the Syrian Government. My response was affirmative. I didn't need to take it to the member countries since the relationship agreement with the UN made the OPCW support for such missions mandatory. I later informed the membership about the UN request and my response. However, the Syrian submission for the UNSGM was followed by two more requests for investigation by France and the United Kingdom. The Secretary General instructed the team to investigate all three allegations. The team headed by a Swedish scientist was composed of nine inspectors from the OPCW and three experts from the WHO. They were all volunteers. After a few months of negotiations between the UNODA and the Syrian authorities the mission was finally able to deploy to Damascus in August 2013. While they were preparing to visit the sites of the reported incidents, the Ghouta attack occurred on 21 August. Secretary General instructed the team to investigate the Ghouta incident first. In spite of a sniper attack at the buffer zone and the loss of an armored vehicle the team was able to reach Ghouta in a second attempt and collect environmental and biomedical samples. The CWC procedures were followed. The samples were split at the OPCW laboratory in The Hague and sent to two designated laboratories. The analyses proved the use of sarin. The results corroborated each other.

The allegations of use of CWs in Syria continued after it had become a member of the OPCW. We could not remain indifferent to such reports. Normally, the challenge inspection mechanism should have been invoked but no member country was willing to do it. As Director General I had no authority to activate the mechanism. Following consultations with some States Parties in Spring 2014 I decided to develop a new mechanism in order to establish the facts surrounding the allegations of use. We called it the Fact Finding Mission (FFM). We drafted a Terms of Reference that we shared with Syria. The Syrian authorities initially dragged their feet before giving access to the OPCW team in May. We put a firewall between the joint mission and the FFM, upon the request

of the UN. While the team was preparing in Damascus to go to the site of an incident, a new chemical attack was reported. On 27 May, early in the morning, the FFM team on its way to Kafr Zeta came under attack at the buffer zone, between the government held territory and the opposition-controlled area. An armored vehicle was destroyed by a remotely exploded roadside bomb and this was followed by an ambush. Fortunately, the team members survived the attack with minor injuries. Both the government and the opposition groups denied any responsibility. I had to call back the team to The Hague. There were two options: to suspend the investigations or to pursue them from outside the Syrian territory. We chose the latter. We deployed the FFM to neighboring countries to Syria from where they had the possibility to contact the victims of CWs, the health personnel who treated them and the eye witnesses. The FFM teams interviewed them, collected biomedical and environmental samples and drew conclusions as a result of meticulous examinations. The FFM investigated more than seventy allegations and established the use of CWs in twenty instances. The FFM mandate was limited to determine the use and did not get into attribution.

The FFM did not produce the desired effect, namely halting the chemical attacks through deterrence. However, I believe that it had some impact on the users and the situation could have been much worse if this mechanism was not established. The task of identification of perpetrators was later given by the UN Security Council to the OPCW-UN Joint Investigative Mechanism (JIM) In August 2015. Russia voted in favor of this resolution. This came as a surprise to many of us, including Syrians. However, the Russian position radically changed a few months later, after it became militarily involved in Syria.

JIM submitted its reports to the UN Security Council and shared them with the OPCW. The reports established that the Syrian armed forces were responsible of the use of CWs in three cases and the ISIS in one case. Russia raised doubts about the findings of the FFM and JIM. They developed false narratives about incidents, sometimes contradicting each other. They questioned the impartiality and objectivity of the OPCW staff. They lobbied with other member states to gain support. The Russian disinformation campaign had a limited success but the proceedings at the OPCW had become increasingly politicized and tense.

JIM's mandate was not extended by the UNSC because of the Russian veto at the end of 2017. The FFM was continuing to work on the determination of use of CWs but a gap emerged in regard to the attribution.

In January 2018, France launched the International Partnership against Impunity. The French initiative, though welcomed by many could not be a substitute for an attribution mechanism. Several options, including the UNSG mechanism were considered. The UN Secretary General was reluctant to initiate it. In my public statements I suggested that the OPCW Secretariat could do the job if the Director General was given a mandate.

The Salisbury incident in March 2018 triggered a turning point for the OPCW, and the CWC regime. The use of Novichok in the failed attempt of killing the former GRU agent and his daughter was attributed to Russia by the British Government. The OPCW sent a team of experts to Salisbury and independently confirmed the use of Novichok. This incident showed that more had to be done to deter further uses of CWs in Syria and elsewhere. The UK and other western countries undertook a wide and effective campaign which culminated in the June decision of the Special Session of the Conference of States Parties. The Investigation and Identification Team (IIT) was established under the authority of the OPCW Director General. This was a significant milestone in the history of the OPCW. An international organization was mandated, without a UN resolution, to establish not only the violations but also to identify those who were responsible of them. The IIT produced three reports and identified the Syrian Armed Forces as responsible of use of CWs in several incidents,

including in Douma, in April 2018. The reports were also sent to the UN Secretary General and International, Impartial and Independent Mechanism to assist in the Investigation and Prosecution of Persons Responsible for the Most Serious Crimes under International Law Committed in the SAR since March 2011. (IIM)

As a result of the IIT reports the CSP decided to suspend some rights of Syria until it redressed the situation, fulfilled certain specific obligations. Some senior Syrian officials had been included on the U.S. and EU sanctions lists. However, no individual had yet been prosecuted. In the absence of an international court which could be seized for that purpose, national tribunals in western countries could perhaps prosecute and convict in absentia the Syrian officials who are responsible of the use of CWs.

In retrospect, I believe that Syria should have been subject to further scrutiny before it was allowed to become a full member of the OPCW in 2013. Its compliance could have been tested during a probationary period. Although the Convention didn't foresee it, a CSP decision or a UNSC Resolution or both could have provided the legal basis for that approach. If some possessor states are to become new members in the future, in the light of the Syrian experience, a probation might be considered.

In spite of a number of incidents in Syria, in Malaysia, in the UK and Russia over the past decade, the international norm against the use of toxic chemicals as weapons is solid. No country or individual claimed any responsibility. On the contrary, the States Parties condemned on several occasions, the use of CWs anywhere, at any time, by anyone, under any circumstances. More specifically, at the meeting in Ypres, in 2015, on the occasion of the Centennial Commemoration of the First Large-Scale Use of CWs, they solemnly declared that any use of CWs as such was totally unacceptable and would violate the legal norms and standards of the international community, and expressed their conviction that those responsible for the use of CWs should be held accountable. This is clearly the result of international efforts that took more than a century.

In 1899 The Hague Peace Conference prohibited the use of poison at war. Following the devastating consequences of the widespread use of CWs during the First World War, the Geneva Protocol was concluded in 1925. This legally binding document prohibited the use of chemical and biological weapons in warfare but the development, production and stockpiling were still allowed. Prior to and during the Second World War and in early years of the Cold War, the Soviet Union and The United States manufactured large stocks of CWs, of different types. Extremely lethal nerve agents were developed and weaponized by both sides, especially after the war. If these weapons were used during a war, the results would have been more disastrous than the First War.

The collapse of the Soviet Union, the use of CWs during the Iran-Iraq war and the attacks in Sardasht and Halabjah by the Saddam regime against civilian Kurds did accelerate the international efforts in search of a total ban on these weapons. It is also true that protective measures against such weapons had become more effective and the safe storage of them had become increasingly costly.

When the Conference on Disarmament in Geneva successfully concluded the CWC, in 1992, it was regarded as one of the most significant peace dividends at the end of the Cold War, and a major triumph in the history of multilateralism. The ceremony of the opening of the CWC for signature in January 1993, in Paris was well attended. The whole world welcomed the global ban on a certain category of weapons of mass destruction, without any discrimination.

The Convention is a well-balanced legal document. We should be thankful to the negotiators for putting together such a comprehensive legal instrument with a robust verification annex. In addition to the verification of destruction activities, a mechanism of onsite inspections at industrial plants, randomly selected by a software was foreseen. This required the cooperation of the global

chemical industry and it helped to ensure a certain order and discipline worldwide. Furthermore, the articles on national implementation, assistance for response as well as the peaceful uses of chemistry provided incentives for the engagement of member states which didn't possess CWs nor chemical industry.

The initial euphoria after the entry into force of the CWC in 1997 had slightly waned when technical problems emerged in destruction activities. Potential difficulties were clearly underestimated at the negotiating phase. The members who had smaller stocks completed the destruction in a short time. The United States and Russia which inherited the Soviet stockpiles had realized that the process would be time consuming, costly and technically complicated. These weapons were not designed to be destroyed, but to be used in the battlefield.

The US and some other western countries provided financial and technical support to Russia at the initial stage. The progress was still slow on both sides. Although the deadline foreseen by the Convention could not be met, the two countries were firmly committed to complete the destruction in the shortest possible time. The rest of the membership was also convinced of that. A few statements of criticism were politically motivated.

The Russian Federation finalized the process in 2017 and the US in July, this year. The OPCW inspectors were permanently present in destruction plants, including during the pandemic. Safety measures were strictly followed and no major incident occurred. The civil society played a positive role in all these endeavors.

I had the opportunity as DG, OPCW to visit four plants in the United States and an equal number in Russia. I observed the professional skills of engineers and other technical staff. By time, sophisticated capabilities were developed, especially in the US, which helped enhance the human safety, but the cost was still high. The US program of destruction of CW stockpiles has reportedly cost over fifty billion dollars.

The achievements by Russia were, however, overshadowed by the position it took on Syria-related issues and the uses of Novichok in Salisbury and against Navalny in Russia. The disinformation activities aimed at discrediting the FFM, JIM and IIT findings tarnished the image of Russia and raised doubts about its commitment to the credibility and integrity of the CWC and beyond.

In 2012 I sent a letter to a senior American official, in charge of steering the program of the CW stockpiles' destruction. I asked whether some measures could be taken to accelerate the process and I dared to add that if this was possible the common success of the organization and its membership could be crowned by the Nobel Peace Prize. US colleagues explained at length that all necessary measures were taken to complete the destruction in the shortest possible time and reaffirmed their commitment to fulfil their obligations. I had no doubt about that. Nor did the Nobel Peace Prize Committee.

In mid-September 2013 I was on a visit to China, to observe the progress in destruction of chemical weapons abandoned by Japan at the end of the Second World War. The negotiations between the US and Russian delegations in Geneva were underway. I was called by the representatives of the two countries and asked what the OPCW could deliver if it was given a mandate to run a chemical demilitarization mission in Syria. I assured them that the OPCW was fully prepared for such missions. I decided to cut short my visit and return to The Hague. While waiting for my flight at the Beijing airport, a young Chinese diplomat who was aware of what was going on said "Sir, if the OPCW assumes the role of eliminating the Syrian CW program in Syria, and if you are successful in that mission, you will definitely win the Nobel Peace Prize". We didn't need to wait that long.

The efforts of the OPCW and its member states to eliminate the CWs in the previous years was recognized by the Nobel Committee in October 2013. The level of destruction was still eighty percent but the Committee was clearly assured about the determination of the OPCW and the commitment of possessor states to complete the job. In my lecture at the ceremony in Oslo, I paid tribute to all those who, through their dedication and resolve, contributed to this hard-won success for chemical disarmament.

The Nobel Peace Prize that I had the privilege to receive on behalf of the Organization was timely. The OPCW staff were being deployed to Syria in the midst of a civil war and the prize was a huge morale boost for them. The prize also helped forge closer ties with other stakeholders. The OPCW had concluded MOUs with the IUPAC (International Union of Pure and Applied Chemistry), the International Council of Chemical Industry Associations, the World Customs Organization, etc. The OPCW also provided a platform to develop The Hague Ethical Guidelines in 2015, with the participation of other stakeholders. The OPCW was no more a tiny, obscure organization in The Hague, as described by some media outlets when the Nobel Peace Prize was announced in October 2013.

I should add here that the Nobel prize money had been used over the past ten years to award, together with the city of The Hague, those institutions or individuals who made outstanding contributions to the goals of the CWC. My friend Paul Walker received the OPCW-The Hague award last year on behalf of the CWC coalition.

I should here touch upon briefly on the status of the NGOs in the proceedings of the OPCW. When I arrived at the OPCW the NGOs were not allowed to express their opinions and provide their inputs. In Geneva where I was representing my country at different UN agencies the situation was totally different. A much more liberal approach was followed. I supported behind the scenes the initiative taken by some delegations to the OPCW, to allow the NGO representatives to speak at the annual Conferences of States Parties. The outcome was successful. I believe that Paul Walker played a crucial role in convincing those delegations who were hesitating to accord such a right, by his responsible and reassuring attitude.

The OPCW is now a mature organization with 193 member states. Only four countries are expected to become members, to render the CWC fully universal. I hope that they will do it without further delay. Egypt and Israel should be convinced that it is in their interest to join the CWC and could thereby contribute to peace and security in the Middle East. I am aware of the Egyptian position promoting the establishment of a WMD Free Zone in the Middle East, but I find it unrealistic for the foreseeable future. Some other formulas and incentives must be explored.

The first year in my office at the OPCW I was invited to London, to speak at the Royal Society of Chemistry. I was impressed by this prestigious institution which is older than three centuries and the calibre of its members. The Society had a motto, in Latin of course, "Nullius in verba" which meant to emphasize its reliance on experimental rather than on metaphysical arguments. This gave me the idea to find an appropriate motto for the OPCW. Upon my return to The Hague we drafted a few alternatives. The motto should reflect the fundamental goal of the organization and should be forward leaning. We made a survey within the Secretariat and I consulted with some Ambassadors. We finally decided on "Working together for a world free of chemical weapons". I believe that the OPCW made great strides to achieve this goal but we are not there yet.

Some prospective members are suspected of possessing CWs. Once they join the CWC, the safe and verified destruction of their stockpiles will need the OPCW's technical support. And these will be again declared stockpiles. There will be a need for permanent monitoring to prevent their reemergence. Apart from states, the threat of production and use of CWs by non-state actors,

particularly terrorists will continue to pose a serious challenge. This will entail preventive and response measures to be developed and implemented. The knowledge and expertise on chemical weapons accrued by the OPCW over the years will have to be retained.

In view of all this and based on the experience we had in Syria, I thought in my last few months in The Hague, that additional capabilities were required. The OPCW laboratory, even though it coordinated the analysis of more than one thousand samples during the Syria missions, was a small facility with limited equipment and other resources. Following consultations with some members, especially the host country, the Netherlands, I concluded that the construction of a Centre for Chemistry and Technology was a realistic prospect. I started the initiative a few weeks before my departure from The Hague. I am very pleased to see that the project was diligently pursued by my successor Ambassador Arias and the OPCW staff and a large number of States Parties contributed to the trust fund for that purpose. The Center is now operational as of May this year. I am sure that it will help ensure that the OPCW keeps pace with all relevant developments in science and technology. It will also provide a capacity building platform for closer international cooperation in research and training with the participation of a wide range of stakeholders.

The development of such a new capability for the OPCW is timely since the destruction of declared stockpiles is over and a new strategic direction for the Organization is being drawn. Scientific and technological developments have gained a new momentum, thus creating new opportunities as well as challenges. The concerns raised about emerging technologies are also valid for the CWC regime. Nevertheless, the OPCW is fortunate to have the Scientific Advisory Board composed of 25 experts from different countries, which assumes the task of observing all relevant developments and providing recommendations to the Director General and member states.

While talking about science, I would be remiss not to speak about Fritz Haber, a prominent German scientist, who is remembered by his role in the large-scale use of CWs during the First World War. Haber developed the means of dispersing chlorine as a weapon in Ypres, in April 1915 and sulfur mustard in 1917 and oversaw personally their deployment at the frontline. While the successful use of chorine was celebrated back at home with colleagues and friends, his wife Clara, also a chemist committed suicide. According to some researchers, she could not stand her husband's active involvement in war efforts and for others this was due to a combination of a variety of different reasons. Anyhow, Fritz Haber was promoted in military rank and was received everywhere as a loyal patriot. There was no criticism against him at all. Moreover in 1918, Haber was awarded the Nobel prize for chemistry, for synthesizing ammonia from nitrogen and hydrogen. This enabled large scale synthesis of fertilizers which helped enhance food security worldwide. All this didn't help him to stay in his native country and he had to leave Germany in 1933 and died in Switzerland a year later. Because he was Jewish. If you want to know more about Fritz Haber and his first wife Clara Immerwahr you should read the two fascinating articles written by Professor Bretislav Friedrich that he kindly shared with me a few months ago.

And now about Oppenheimer. I am sure many of you watched the movie this summer and I would advise you to do it if you haven't done it yet. Similarities are striking. Both scientists played a leading role in the development and use of two categories of WMDs. Haber wanted to help break the stalemate in trench war and Oppenheimer to bring an end to the war. The humanitarian consequences of the atomic bombs used in Hiroshima and Nagasaki were of course more devastating. In his own words Oppenheimer "became death ". But the nuclear technology was later used to produce energy in an environmentally friendly manner and in medicine to save lives. Indeed, the dual use of science and technology remains a conundrum.

The dilemma faced by scientists has now been exacerbated, given the amazing pace of technological advances. The question of mitigating the risks is being addressed by several countries. This requires a collective undertaking by the international community as a whole rather than being done piecemeal.

While awaiting for possible regulations, the scientific community could increase its education and outreach activities in order to promote ethical values. This applies to all disciplines in an increasingly multidisciplinary world. The OPCW established eight years ago an Advisory Board on Education and Outreach composed of fifteen representatives from member states. The board develops recommendations to be implemented by the Secretariat as well as member countries in order to raise awareness about the goals of the Convention, the ethical values, the peaceful use of chemistry and about the risks associated with the activities of chemistry practitioners. During my tenure as DG of OPCW I spoke on ethics in chemistry in international conferences. I am now an honorary member of a Working Party on Ethics in Chemistry within the European Chemical Society, a Group of academics who are promoting the peaceful use of chemistry. I believe that each of us, either policy planners, diplomats, experts or scientists should contribute to the efforts aimed at preventing the misuse of science and technology.

At the end of my statement today, I would like to quote my concluding remarks of ten years ago in Oslo "The CWC has given us a legacy that no future disarmament effort can afford to ignore. A legacy that has at its core, verification, broad stakeholder engagement, consensus born of trust and, above all, a commitment to science that actively serves the cause of peace and security. It is this legacy that we must set as the keystone in an ever-widening arch of disarmament. Only by building such an arch will we be able to bridge our security and our prosperity. Destiny has ruled that we rid the world of chemical weapons. And that we achieve this in our lifetime. This is our place in history. And this is the future we are creating. A future for which our children and grandchildren can be truly thankful."

Thank you for your attention.