

Professor Dionigi,  
Professor Pasquini,  
Professor Calandrino,  
Professor Fratadocchi,  
Professor Trifirò,  
Dr Farraggio,  
Distinguished guests,  
Ladies and gentlemen,

I am deeply honoured to receive these awards as Director-General of the OPCW from such venerable institutions.

Both the Accademia delle Scienze and the University of Bologna have a strong pedigree in chemistry.

It was in fact a native of Bologna, Bartolomeo Beccari, who introduced courses in chemistry at the Accademia back in 1737 – the first time that this discipline was ever taught at an Italian university.

Today, almost three centuries later, the expertise of your institutions and faculty members in chemistry is well known. Indeed, so well known that it has formed the basis of a highly productive partnership with the OPCW.

Our Scientific Advisory Board is benefiting from insights provided by a membership that currently includes Professor Trifirò. Recently, Professor Fratadocchi also served on the Board with distinction.

This interaction accords with Italy's strong commitment to chemical disarmament on a broad range of fronts.

Italy has been proactive in destroying old chemical weapons on its territory. It has generously assisted the OPCW in providing training for new inspectors. And its industry has hosted representatives from around the world for industrial training under the OPCW's Associates Programme.

More recently, Italy has been among major contributors to the international effort to eliminate Syrian chemical weapons, which I will turn to presently.

It is a special honour, therefore, to receive these awards at institutions representing the finest traditions of Italian scholarship and humanism – traditions that are reflected in the valuable partnership that has developed between Italy and the OPCW.

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In important ways, the history of chemical warfare and disarmament begins and ends in science.

It was through misuse of scientific discoveries that chemical weapons were developed. And it is through responsible science that we are now guarding against the re-emergence of such weapons, as their destruction nears completion.

To illustrate this, it is worth considering one of the major research interests of your famous alumnus. Beccari sought to devise ways of making populations resistant to famine, including by replacing wheat and corn with alternative cereals such as millet and rye.

This was a noble quest that preoccupied scientists, in various ways, until early in the twentieth century, when the German chemist Fritz Haber achieved a major breakthrough. His process for synthesising ammonium laid the foundation for the modern fertilizer industry and reliable food supply for millions of people around the world.

But Haber also turned his research to producing chemical weapons in a bid to obtain a decisive military advantage for Germany during the First World War. His less famous counterparts in other countries were no less actively engaged in similar activities.

As the history of the twentieth century has all too often shown, the great benefit that advances in chemistry bring can also harbour great destructive potential. This is what has come to be known as the dual-use dilemma.

On the eve of the hundredth anniversary of the first large-scale use of chemical weapons near Ieper in Belgium, it is worth briefly considering the legacy of these weapons and what was eventually done to ban them.

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Despite strictures against military use of poisonous gases in the Hague Convention of 1899, more than 50,000 tonnes of chemical agent had been deployed by the time the First World War ended. This resulted in almost 1.3 million casualties, including some 85,000 fatalities.

Those who did not die from asphyxiation were scarred for the remainder of their often short lives with severe respiratory problems, varying degrees of blindness and irreparably blistered skin.

The horrendous impact of chemical weapons prompted a push for a more effective ban after the war in the form of the 1925 Geneva Protocol. But, as clear as its prohibition against use was, the Protocol did not ban the possession and production of chemical weapons.

The upshot of this was that, by the end of the Cold War some six and a half decades later, tens of thousands of chemical weapons had been amassed, including highly lethal nerve agents.

But, more disturbingly, chemical weapons were used with brutal regularity across the world – tragically, also against civilian populations – through to the late 1980s.

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The impunity with which such attacks appeared to be perpetrated and their indiscriminate nature, especially in the Iran-Iraq War, finally rallied the international community to take decisive action.

Almost one hundred years after the Hague Convention, a comprehensive global ban against chemical weapons finally came into being.

Following arduous, decade-long negotiations in Geneva, the Chemical Weapons Convention was concluded in 1992, entering into force in 1997.

This was, and remains, a unique achievement in the history of multilateral disarmament.

The Chemical Weapons Convention is still the only legally binding international treaty banning an entire class of weapons of mass destruction, under international verification.

It is comprehensive, prohibiting not only the use of chemical weapons, but also their development, production, stockpiling, transfer and retention.

It is non-discriminatory, committing all of its Member States, without exception, to its prohibitions and obligations. All those possessing chemical weapons must destroy their stockpiles, and all Member States must ensure, on an ongoing basis, that chemistry is used only for peaceful purposes within their jurisdictions.

And, most importantly, the Convention is backed by strict international verification. In addition to inspections verifying destruction of chemical weapons and the peaceful purposes of commercial industrial facilities, it includes a challenge inspection mechanism.

Any member can call for investigation of another member on the basis of well-founded concerns over compliance.

Further afield, the Convention obliges Member States to assist one another in the event of chemical weapons being used against them. And, importantly, it promotes cooperation in peaceful uses of chemistry in a way that benefits all members.

In short, the Chemical Weapons Convention takes the dilemma out of the dual-use nature of applications in chemistry. It does so by pointing the way forward for responsible science that seeks to benefit, rather than harm, humankind.

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The OPCW was established as an independent international organisation, supported by Member States, to oversee implementation of all aspects of this multifaceted treaty.

Our mandate requires us to:

- verify destruction of chemical weapons and their production facilities,

- prevent chemical weapons from re-emerging,
- help Member States protect their citizens against the impact of dangerous chemical agents, and
- facilitate exchanges between Member States on beneficial applications in chemistry.

Over the course of its sixteen-year history, the OPCW has been able to notch up an impressive record of achievement.

With 190 Member States, the Chemical Weapons Convention has achieved near universal adherence.

Since the Convention's entry into force in 1997, OPCW inspectors have conducted some 2,500 inspections in 86 countries at many of the 5,000 facilities of interest for implementation of the Convention.

At the same time, the OPCW has provided extensive support to Member States through cooperation programmes to help strengthen national-level implementation of the Convention, as well as assistance and protection measures against chemical attacks or incidents.

The OPCW has also facilitated more broad-ranging collaboration, identifying opportunities for peaceful uses of chemistry that bring humanitarian, development and economic benefits, especially to Member States with economies in transition.

These include training for chemists and engineers in best practices for safely managing dangerous chemicals in an industrial environment, as well as funding for research projects and internships at research institutions around the world.

On the disarmament front, the OPCW has verified the destruction of some 58,170 metric tonnes, or nearly 82%, of all chemical weapons stocks declared by seven Member States – before Syria’s recent accession as the eighth possessor state.

Of 70 declared production facilities, almost 93% have been destroyed or converted to civilian use.

The two major possessor states, the Russian Federation and the United States, are well on track to achieving their destruction targets, as revised in agreement with Member States in 2011. Three others – Albania, India and another State Party – have completed destruction of their stockpiles.

The few remaining possessor states are moving quickly to complete destruction. We are hopeful that Libya’s remaining stocks will be eliminated in coming weeks, and Iraq is proceeding with a plan to destroy remnants of chemical weapons on its territory.

And work is now underway in Syria.

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The tragic conflict in Syria has presented a seemingly insurmountable challenge for international efforts to broker a peaceful resolution for almost three years.

But the shocking sarin attacks in the Damascus suburb of Ghouta last August – confirmed by a UN investigation to which the OPCW contributed crucial expertise – changed this.

For the first time since the conflict began, the international community was able to reach unanimous agreement on one aspect in relation to the crisis – namely, that Syrian chemical weapons must be eliminated.

Following Syria's move to accede to the Chemical Weapons Convention, Russia and the United States agreed a framework for such a process. This, in turn, formed the basis for a decision by the OPCW's Executive Council, on 27 September, outlining an accelerated programme for eliminating Syrian chemical weapons. This decision was endorsed that same day by the United Nations Security Council.

Since then, we have seen steady progress towards meeting what is an unprecedented challenge – overseeing the destruction of a major chemical weapons programme in a country at war and within highly compressed timeframes.

Syria's capacity to produce chemical weapons was rendered inoperable within a month of inspectors arriving in Damascus on 1 October.

The OPCW-UN Joint Mission is now focusing on the removal from Syria of chemical weapons and chemical weapon components for destruction, in accordance with a further decision by the OPCW Executive Council.

This phase of the operation is complex, requiring a collective, carefully coordinated international effort. While some chemicals have been loaded for removal, various circumstances have conspired to slow consolidation of stocks in Syria for transportation. Nonetheless, I am confident that the timeframe for complete destruction by mid-2014 can be met.

I take this opportunity, as I did yesterday in the Italian Parliament, to acknowledge the strong support that Italy has extended to this mission, notably, in making available port facilities for trans-loading chemical weapons cargo from Syria.

This comes on top of a generous EUR 3 million contribution to the OPCW's Syria Trust Fund, as well as provision of a military aircraft to transport the very first team of OPCW inspectors to Syria.

These contributions truly exemplify the spirit of cooperation underpinning the vitally important international effort to rid Syria of chemical weapons.

There can be no doubt that this effort will deliver clear security and humanitarian benefits by removing the threat of chemical weapons being used again in Syria.

We should also bear in mind that, while consigning Syria's chemical arsenal to history will not end the conflict, the diplomatic effort that got chemical disarmament underway has been far from expended.

It has provided however a much needed impetus for obtaining agreement on a conference bringing parties to the conflict to the negotiating table next week in Switzerland. The OPCW is proud to have contributed to forging this consensus, along with Italy and other States Parties playing a major role in the Syria mission.

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While Syria is occupying much of our present efforts and resources, the OPCW has not lost sight of the broader strategic context of our work – and of new challenges ahead.

The most immediate of these is to persuade the six countries that still remain outside the Convention – Angola, Egypt, Israel, Myanmar, North Korea and South Sudan – to join it, without delay and without conditions.

The Convention is the fastest-growing treaty in the history of multilateral disarmament, and for good reason.

Every country has a responsibility to protect its citizens against the suffering wrought by chemical weapons, as well as to help them enjoy the full benefits that come with cooperation on peaceful uses of chemistry.

And no country can make a valid case for remaining outside a treaty that enshrines these responsibilities and benefits, especially in the face of international reaction to the barbarous use of chemical weapons in Syria.

Events in Syria, alongside the attention that the Nobel Peace Prize has generated, will, I hope, compel states not yet party to the Convention to reconsider their position, or to speed up internal processes that they may have already initiated to accede to the treaty.

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The rapidly changing strategic environment means that we must also redouble our efforts to guard against the re-emergence of chemical weapons. This is assuming an especially high priority as we draw closer to completing destruction of existing stocks.

How economic interdependence and rapid advances in technology and communications are increasingly shaping our security will have a major impact on implementation of the Convention in this regard.

While the definition of what constitutes a chemical weapon under the Convention is very clear, it is possible that new technologies will challenge our ability to recognise when developments in chemistry might be intended for harm. This may require us to broaden our reach – to include new materials and technologies of interest as a result of such advances.

Increased and much faster access to information is also posing new challenges for how we protect sensitive materials and technologies against misuse, without curtailing access to their beneficial applications.

This is no longer just a case of preventing transfers of chemical weapons-relevant materials to states unwilling to comply with international norms. The rise of international terrorism has heightened proliferation risks in ways that current non-proliferation regimes are not fully equipped to address.

Well-resourced non-state actors have made no secret of their aim not only to acquire weapons of mass destruction, but also to use them. The fact that deterrence and sanctions measures have little sway over such groups means that we will need to be more alert to this threat – and more imaginative in how we deal with it.

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The OPCW has very strong fundamentals for responding to these challenges. Foremost among these are partnerships we have forged with the scientific and research community.

These partnerships are vital for implementing a treaty grounded in science – from the definition of chemical weapons, to verification and monitoring activities – from investigation of alleged use, to cooperation on peaceful uses of chemistry.

The OPCW Scientific Advisory Board, which I have already mentioned, plays a key role in this respect. It continually reviews scientific and technological developments on the basis of their potential impact on the Convention. Board members provide independent advice, drawing also on their own extensive networks.

In this way, the Board functions as a vital early-warning system for discoveries and new technologies that could be misused – or that open up opportunities for adopting improved practices and methodologies to strengthen implementation of the Convention, especially verification. This role is only set to increase in importance over coming years.

More broadly, the habits of consultation that we have developed with scientists are also crucial for maintaining awareness of the need for vigilance at the national level.

Such an interaction has also helped scientists communicate the rationale for Convention-related implementation measures in accessible terms, especially to policy-makers and enforcement officials who may have limited scientific knowledge.

At the same time, it is not only our scientific elites that need to be engaged.

We need to instil the highest ethical standards in our scientists at the very beginning of their careers.

To this end, the OPCW, with the cooperation of Member States, will be unrolling tools and materials for awareness-raising, education and outreach purposes, some of which are already available on the OPCW website.

Our purpose is not only to nurture more ethical scientists, but also more capable and rounded ones.

To this end, it is especially important for young scientists, such as many of those conducting research here, to develop a world view from the very beginning of their careers. However specialised your researchers' current and future work might be, it is important that they are able to contextualise its broader purpose and applications in order to serve it responsibly.

There are few fields where this is more important than those that provide access to materials and technologies that can be misused for harmful purposes.

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Industry has been no less vital a partner for the OPCW than has science, with a somewhat different set of challenges.

Without enjoying the full confidence of industry, there can be no effective means of inspecting commercial chemical production facilities to ensure that they are engaged in exclusively peaceful activities.

Protection of commercially sensitive information was written into the Chemical Weapons Convention specifically to address this issue. Indeed, industry played a strong and productive role in informing negotiations on the Convention in this area.

In light of some of the challenges I have outlined, we need to be more creative in how we engage industry as a partner – not only in shoring up compliance with the Convention, but also in developing proactive strategies. These strategies could usefully address new production technologies and the expansion of the worldwide chemical industrial sector, as well as realignments in its production base.

In the first instance, this means adapting inspection procedures and timetables in ways that maintain the confidence of industry and governments in our confidentiality arrangements.

We could also consider broader and more imaginative ways of engaging the private sector. There is enormous potential for stronger public-private partnerships, which are already making a difference in relation to new, non-traditional multilateral challenges.

We are already seeing how the private sector is coming up with efficient options for destruction of certain chemical components of Syrian weapons stocks.

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Civil society has also been a longstanding partner in our activities and, even before the establishment of the OPCW, in international efforts to prohibit chemical weapons.

I have consistently made the point that academic discourse is vital for informed policy making.

The Convention – and, along with it, the OPCW – stand to benefit from a revitalised, informed and sustained academic discussion. Such exchanges offer an essential contribution to official processes of policy formulation and implementation.

Universities, research institutes, think tanks and other NGOs are a source of ideas for us in the OPCW. They also serve as effective partners for OPCW outreach, given their expertise and reach into broad-based constituencies.

I am firmly committed to the OPCW reinforcing its relationship with civil society as a means of increasing the profile of the OPCW – both to build awareness of its past achievements, as well as to debate its future challenges. The OPCW is now in a time of change and adaption in which it needs the engagement of civil society to consider and assess possible ways of adjusting its priorities and work practices.

It is in recognition of our important partnerships with an ever broadening set of stakeholders, including civil society, that I agreed that the OPCW would use Nobel prize money to establish annual awards.

These awards will recognise outstanding contributions to advancing the goals of the Chemical Weapons Convention.

Our hope is to harness the renewed interest in chemical disarmament as a result of the Peace Prize to encourage continuing excellence in this area, among as wide a community of stakeholders as possible.

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Ladies and gentlemen,

Recent months have witnessed what have been truly historical developments for the OPCW.

The mission currently underway in Syria affords a unique opportunity to rid the world of a major chemical arsenal. Its successful completion will bring us within reach of making the vision of a world free of chemical weapons a reality.

And the award of the 2013 Nobel Peace Prize has served to dramatically increase the visibility of the OPCW and the cause of chemical disarmament.

This has not only enhanced our energy and enthusiasm for the tasks at hand – it has also fuelled our hope that the OPCW's record of success might add impetus to disarmament efforts further afield.

Both these developments come at a defining moment of transition for the OPCW, as we work to re-order existing priorities, and to set new ones.

Our work does not, of course, end with the destruction of chemical weapons stocks. It remains our responsibility to ensure that such weapons do not re-emerge in any form or quantity in the future.

To this end, we are committed to working with our Member States and an ever-widening community of stakeholders.

Recognition by such institutions as the University of Bologna and the Accademia delle Scienze greatly enhance our standing in this endeavour – a standing we will continue to do our very best to remain worthy of.

Thank you.