

Madame Director,

Distinguished guests,

Ladies and gentlemen,

It is a great pleasure for me to address you here on this fortieth anniversary of VERIFIN.

I recall fondly my last visit to this institution, almost two years ago in December 2011. On that occasion, I acknowledged the valuable work undertaken by VERIFIN in support of the OPCW. Today I will gladly reaffirm and expand on those remarks.

Since its inception in 1973 as the CW Research Project at the University of Helsinki, VERIFIN has grown into a world-leading institution – not only on the strength of its expertise, but also the broad range of its activities. Its rapid early growth was well served by Finland’s robust and constructive engagement in negotiations on the Chemical Weapons Convention throughout the 1970s and 1980s.

The VERIFIN of today has well earned its enviable reputation as a one-stop shop for all matters related to achieving successful chemical weapons disarmament. It serves as a model for how science can make a direct and practical contribution to improving human security – a model worthy of emulation.

Accommodating the Finnish National Authority for the CWC is but one of VERIFIN's many functions.

Its research arm has pioneered new methods for screening and identification of chemical warfare agents, their degradation products and starting materials, covering thousands of chemicals. Among these are not only known warfare agents, but also toxins, such as saxitoxin and ricin, which require more specialised methodologies. Usefully, these methods have included complex and challenging sample types, including biomedical and environmental samples.

VERIFIN has also helped guide the application of these methods. Its seminal 1977 publication, *Chemical and Instrumental Verification of Organophosphorus Warfare Agents*, provided the basis for what has come to be known as the "bluebook" series of reports that document methods of analysis. This series was collated and updated in 2011, with the assistance of international partners, as a 400-page freely available resource under the title, *Recommended Operating Procedures for Analysis in the Verification of Chemical Disarmament*.

The methods it outlines have been put to use not only in VERIFIN's own laboratory, but in laboratories around the world. They have in effect become the international standard for helping to achieve our shared objective of a world free of chemical weapons.

At the same time, VERIFIN has made a valuable contribution to applied training for chemists from developing countries to assist them in

implementing the CWC. Through a number of initiatives and tailor-made workshops, VERIFIN has helped build States Parties' capacity to analyse chemicals and raised the level of technical expertise at the national level in States Parties with developing economies or whose economies are in transition. As a result, a pool of human resources – highly skilled and trained professionals – is now available to stakeholders in industry, academic institutions and government laboratories.

For the OPCW, VERIFIN has long provided a vital anchor of support. Indeed, few institutions have been as intimately engaged with the work of the OPCW from its very beginning, as has been VERIFIN.

This support has taken many forms over many years.

In addition to the development of methods for off-site and on-site analysis, it has included supplying the OPCW with important chemicals for on-site analysis, participating actively in the creation and updating of the OPCW Central Analytical Database, training of OPCW analytical inspectors and arranging workshops, such as the one I addressed here during my last visit [“Third International Workshop on Analysis of Chemical Warfare Agents”].

Training has been an especially productive area of cooperation between VERIFIN and the OPCW.

In collaboration with VERIFIN, the OPCW has so far delivered 15 Analytical Skills Development Courses, some of which were exclusively focused on the Africa region where capacity-building remains a priority.

This collaboration also spawned a regular analytical skills course at the Protechnik Laboratories in South Africa, with five such courses having been delivered there to date.

In addition, I would like here to acknowledge the valuable contribution made by VERIFIN's director, Professor Vanninen, as a member of the OPCW Scientific Advisory Board, as well as that of her predecessors and colleagues. Professor Vanninen is also active on the Board's Temporary Working Group on Verification, and contributed in a significant way to the Temporary Working Group on Sampling and Analysis.

Finally, VERIFIN's laboratory has an especially impressive pedigree with the OPCW. Not only was it among the first to be designated by the OPCW for its verification activities, it is just one of currently 21 OPCW-designated laboratories that has consistently earned straight 'A's in OPCW proficiency tests.

VERIFIN has been generous in sharing this expertise, in close cooperation with the OPCW.

To date, 15 advanced courses have been conducted to enable laboratories to participate in OPCW proficiency tests. VERIFIN has played an instrumental role in organising these courses, and in creating new ones to meet the specific needs of laboratories in countries with developing economies, such as laboratory quality management and nuclear magnetic resonance to analyse chemicals related to the Convention.

This cooperative effort is crucial for strengthening institutions across all States Parties to create a network of laboratories that would support effective implementation of the CWC.

The range and depth of VERIFIN's activities, therefore, especially the applied nature of its research, go to the very heart of what is arguably the single most important defining feature of the effectiveness of the CWC – its verification regime.

VERIFIN recently had the opportunity to further bolster its credentials in this regard.

In support of the United Nations mission investigating allegations of chemical weapons use in Syria, analysis of samples collected by the UN team, which included OPCW inspectors, was conducted at VERIFIN's laboratory. The results of these analyses were instrumental in confirming that chemical weapons had indeed been used in Ghouta, a suburb of Damascus, on 21 August.

The integrity of these results provided further testimony of the success and robustness of methods developed at VERIFIN.

Since then, we have been presented with an extraordinary opportunity to rid the world of a major chemical arsenal by Syria's undertaking to accede to the CWC – an opportunity which also entails challenges and complexities unprecedented in the sixteen-year history of the OPCW. In meeting these

challenges, it is my expectation that VERIFIN will continue to play a significant role in support of the OPCW.

Last Friday's historic decision by the OPCW's Executive Council and the resolution adopted by the UN Security Council paved the way for an accelerated programme for destroying Syria's chemical weapons, setting an ambitious completion target of mid-2014. The OPCW has been quick off the mark in implementing this programme.

A team of OPCW experts has been in Syria since Tuesday. They have worked effectively with Syrian officials in further detailing Syria's chemical weapon stocks and facilities, and are making steady progress towards framing the challenge ahead for the inspectors who will follow them next week.

This is a daunting challenge, but one which I am confident the OPCW can meet. We are doing so systematically and diligently, with a sense of mission – and of destiny, underpinning the historic nature of this endeavour.

But this is not a task which we can complete alone. The OPCW will be relying on its partners – in particular, the United Nations – to provide vital assistance, as we quantify what will be needed to complete the mission.

This will doubtlessly include assistance by VERIFIN.

At the same time, VERIFIN's cooperation with the OPCW will continue to have a strategic dimension intimately linked with the future of the OPCW, as

we work to address new and emerging challenges. Earlier this year, in April, these challenges were the subject of close attention at the third special session of the Conference of States parties to review the operation of the CWC, which provided guidance at a seminal point in the Convention's history.

I will highlight a few key challenges here, which I consider to be of special relevance to the work that institutions such as VERIFIN do.

Syria's accession to the CWC has brought membership of the Convention to 190, and the goal of universality that much closer, with only six states remaining outside the Convention. The OPCW will work assiduously with States Parties to urge those six states to join the Convention at the earliest opportunity, and will offer every assistance to this end.

In the wake of the brutal chemical attacks in Syria, no state can afford to run against international consensus against these heinous weapons.

At the same time, with over 80% of declared stocks of chemical weapons having already been destroyed, we must now turn our attention to closing any opportunities for chemical weapons to re-emerge in the future. This will require special efforts – specifically, to prevent new technologies from being used to circumvent the CWC, and to deny non-States Parties to the Convention, including non-state actors, access to chemical weapons.

As I have noted elsewhere [Vienna, March 2013], scientific and technological developments are crucially important for the implementation

of the CWC. Their implications for the verification mechanism must be closely followed – and they have a special role in relation to the emerging challenges I have highlighted.

The work of institutions like VERIFIN reaffirms the important nexus between science and security. Because the history of modern warfare has all too often recorded instances of scientific advances being turned to nefarious purposes, our scientific community must remain vigilant to detect, and defend against, such misuse.

To this end, advances in science and technology also provide opportunities for better assistance and protection against chemical weapons – opportunities which we must seize with both hands.

We must ensure that our research constantly improves verification capabilities as insurance for our future security. This research directly assists the OPCW to continue to broaden its expertise to monitor and verify destruction of chemical weapons stockpiles. It also allows the OPCW to maintain a well-equipped and well-trained Inspectorate to enforce effectively the Convention's verification regime.

However arcane this work may seem to laypersons, no-one should be under any doubt about its relevance and its importance. Nor should we underestimate the level of international interest and scrutiny that is now being directed at chemical disarmament in the wake of events in Syria.



Scientists, such as those working at VERIFIN, provide the backbone of multilateral disarmament efforts. Without their expertise, without their discretion, governments would have little confidence in the integrity of the treaties they sign up to. The CWC is no exception.

Through their work in support of the CWC, VERIFIN's researchers and scientists are helping to realise international norms aimed at abolishing chemical weapons. Their development of new technologies and methods of chemical analysis is what ensures that chemical weapons not only become a thing of the past, but remain so.

This is very much a cooperative effort among scientists around the world, one which the OPCW values and nurtures. And, in the wake of the horrific effects of chemical weapons use in Syria, it is one which the international community has learned to value all the more deeply.

Allow me, then, to once again warmly congratulate you on this important anniversary and extend my best wishes to all staff, past and present, who have contributed to VERIFIN's remarkable success.

Allow me also to express my hope that the close and productive collaboration that we at the OPCW have enjoyed with VERIFIN may continue to flourish and work to protect future generations against the scourge of chemical weapons.

Thank you.