



# **The OPCW Africa Bulletin**

**Volume 3**

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- *Cover photo: 1<sup>st</sup> Pan-African Chemical Emergency Capacity Building Exercise “CHEMEX Africa 2023”, jointly organised by the OPCW and the government of Algeria, from 23 September to 5 October 2023, in Algiers, with financial support from the government of Canada.*
  - *Pictures illustrating OPCW online training events are courtesy of the participants and partners in the organisation of these events.*
  - *Disclaimer: The views expressed in the contributions received by the OPCW Technical Secretariat are those of the authors alone and do not represent the views of the OPCW Technical Secretariat nor of its personnel.*

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## Message from the Director-General

**Dear Readers,**



I warmly welcome to you to this edition of the bulletin, and I thank you for your interest in the cooperation between the OPCW and Africa.

The completion of the destruction of all declared chemical weapons stockpiles in July 2023 fulfilled one of the main goals of the Chemical Weapons Convention. The Organisation is now intensifying its focus on preventing re-emergence, and, for this purpose, on increasing international cooperation, including for the Africa region.

In 2023, the Secretariat initiated the implementation of the 6<sup>th</sup> phase of the OPCW Programme for Africa. Fifty-five capacity building and technical assistance activities benefited some 850 participants from 45 African States Parties throughout the year. Activities focused on promoting the domestication of the Convention, strengthening controls over cross-border transfers of toxic chemicals, upgrading chemical emergency response capabilities, enhancing chemical safety and security, empowering chemical laboratories, including to achieve OPCW designation, and promoting peaceful chemistry on the continent.

Several of these activities were organised at the OPCW Centre for Chemistry and Technology, inaugurated on 12 May 2023. The Secretariat continues to develop the potential of the Centre based on the needs of States Parties, including in the Africa region.

The Africa Programme continued to be funded through the OPCW regular budget, alongside extrabudgetary projects supported by the Secretariat. I wish to highlight one project in particular – “CHEMEX Africa” – which was the first ever pan-African chemical emergency response capacity-building exercise. Gathering experts from 33 African States Parties, CHEMEX Africa was co-organised with and hosted by Algeria and funded through a voluntary contribution made by Canada.

In implementing all these activities, the Secretariat continued to be attentive to the views and preferences of the Programme stakeholders. It is in this perspective that the Secretariat has been regularly consulting with the African Member States and the Programme Steering Committee.

The Secretariat also collaborated with a wide range of stakeholders to organise events and explore new synergies and initiatives. In this context, I had positive meetings with the African Union’s Commissioner for Political Affairs, Peace, and Security, to revitalise the cooperation between the OPCW and the African Union, as well as with the Minister of Foreign Affairs and International Cooperation of South Sudan to encourage South Sudan to accede to the Convention as the 194<sup>th</sup> State Party.

The Africa Programme is expanding and maturing, continuously adjusting its many activities to the evolving needs and priorities of African States Parties, and the Programme is delivering results. Markedly, Djibouti and Togo adopted comprehensive national legislation covering all initial measures under the Convention this year, bringing the number of African States Parties with such legislation to 25.

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Projects and activities leading to such progress would not have been possible without the positive engagement of all stakeholders. Particularly, I would like to acknowledge the African National Authorities and Permanent Representations, as well as our donors and partners.

Details regarding these and other developments are presented in this edition of the bulletin. Moreover, the bulletin reflects inspiring insights from African National Authorities and shares updates received from Alumni of capacity-building activities organised by the OPCW under the Africa Programme. I thank all authors for their enriching contributions.

I close by thanking you once again for your interest and I wish you an enjoyable read. I take this opportunity to wish you all the very best for 2024.

***Fernando Arias, OPCW Director-General***



## Main Developments in the OPCW Africa Programme in 2023

In 2023, the OPCW Technical Secretariat (hereinafter “the Secretariat”) continued to actively address the specific needs of the Africa region in relation to the Convention through the OPCW Programme for Africa.

### *Capacity building*

The implementation of the 6<sup>th</sup> phase of the Programme, covering the period 2023 to 2025, has been progressing apace throughout the year. Fifty-five capacity building activities organised this year by the Secretariat benefited some 850 participants from 45 African States Parties. These activities include 22 activities organised specifically for the Africa region.

In line with the phase objectives, activity focus ranged from enhancing national implementation of the Convention to improving controls over cross-border transfers of scheduled chemicals, to developing assistance and protection capabilities against chemical emergencies, to advancing chemical safety and security management, and to upgrading laboratory competencies across the continent.



*Glimpses of capacity building activities conducted in 2023 in the framework of the OPCW Africa Programme*

Several of these activities were organised at the new OPCW Centre for Chemistry and Technology. The Secretariat has also been providing sponsorship for six fellowships and four research projects conducted by African scientists. Eight additional African research projects have been co-funded with the International Foundation for Science (IFS). Under the Conference Support Programme, the Secretariat has also provided sponsorship to three international scientific events held in Italy, Finland, and online from Mauritius. These events accommodated some 101 scientists from Africa. The Secretariat also facilitated transfers of laboratory equipment from Germany to Kenya and Tanzania.

The year was also marked by the intensive support provided by the Secretariat together with partners to strengthen the capabilities of interested and eligible laboratories in Africa to pass the OPCW Proficiency test and gain the OPCW designation. In this context, the Secretariat launched the fifth phase of the UK-funded project to assist laboratories from Africa and Latin America and the Caribbean seeking

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designation, which is helping laboratories from Kenya and Nigeria. Moreover, two additional extrabudgetary projects funded by Germany and Spain are being initiated for the development of capacities of African laboratories. In addition, two twinning projects between the Netherlands and South Africa, and Germany and Algeria are ongoing with the Secretariat's support.

### ***Special Projects for Extrabudgetary Funding***

The Africa Programme continued to be funded essentially through the OPCW regular budget. In addition, three key extrabudgetary projects were delivered in the framework of the programme in 2023, namely:

- A “Conference on enforcing effective customs control of trade in toxic chemicals in Africa” (Brazzaville, Republic of the Congo, 23-25 May 2023). The conference was funded through a voluntary contribution made by the United States of America;
- “CHEMEX Africa: the first pan-African chemical emergency response capacity building exercise” (Algiers, Algeria, 23 September-5 October 2023). The exercise was funded through a voluntary contribution made by Canada and co-organised with and hosted by Algeria; and,
- A “Peer-to-peer training course for African customs training institutions” (Nairobi, Kenya, 10-12 October 2023). This project is funded through a voluntary contribution made by Canada and includes a second course scheduled in 2024.

These projects, particularly “CHEMEX Africa” and “the Peer-to-Peer training course for African customs training institutions”, exemplify the forward-thinking approach the Secretariat applies and develops for capacity-building support to its Member States: a strong focus on developing sustainable capabilities and on facilitating and leveraging south-south cooperation.

### ***Partnerships and Stakeholder Engagement***

The Secretariat continued throughout the year its cooperation with a variety of stakeholders to organise activities and to explore new synergies in the framework of the Programme. The list of partners features relevant national, regional, and global organisations.

As part of strengthening relevant partnerships, the OPCW Director-General received, on 13 April 2023, the visit of H.E. Ambassador Bankole Adeoye, the African Union Commissioner for Political Affairs, Peace and Security. The two parties had a fruitful exchange and agreed to revitalise the collaboration between the two Organisations with a view to further promoting the universality of the CWC and its domestication in Africa and reviving the Memorandum of Understanding signed by the two Organisations in 2006. As a follow-up on the meeting, a revised list of proposed action items was shared by the Secretariat with the African Union Commission and contact is ongoing in this context.

The Secretariat also organised in Algiers, on 3 October 2023, on the margins of CHEMEX Africa, a meeting between the OPCW Director-General and the Minister of Foreign Affairs and International Cooperation of South Sudan, Hon. James Pitiya Morgan. The two high-level officials agreed to work together to ensure the accession of South Sudan to the CWC as soon as possible and signed a joint communiqué in this regard.



***Visit of the African Union Commissioner for Political Affairs, Peace and Security, H.E. Mr Bankole Adeoye and meeting with the OPCW Director-General (OPCW Headquarters, 13 April 2023)***



***Meeting between the OPCW Director-General and the Minister of Foreign Affairs and International Cooperation of South Sudan, Hon. James Pitia Morgan (Algiers, 3 October 2023)***

Further, as part of ensuring continued dialogue with and sustaining the engagement of key stakeholders, the Secretariat continued to take every opportunity to update the African delegations and exchanging with them on the developments in the Programme. In addition to reporting to the regular sessions of the Policy-Making Organs, key interactions with the African delegations on the Programme took place as part of the annual briefing to non-Hague based Permanent Representations to OPCW (3 November 2023) and the 25<sup>th</sup> Annual Meeting of the National Authorities (22 November 2023).



***Annual briefing to non-Hague based Permanent Representations to the OPCW (OPCW ChemTech Centre, 3 November 2023)***

Moreover, the Secretariat has been maintaining and further developing the OPCW Africa Network which counts today over 1100 members, notably African chemists and CWC stakeholders in the continent. The Secretariat also continued to engage with Programme alumni and collaborated with contributing authors to prepare the third edition of the OPCW Africa Bulletin.



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### *Steering Committee*

The Africa Programme Steering Committee has continued to monitor and support the Programme implementation in 2023. The Committee members for 2023 included Algeria, Angola, Cameroon (Chair), Chad, Ghana, Kenya, Morocco, Senegal, South Africa, and Sudan; Committee observers (Donors to the Programme) included Canada, Czech Republic, France, Germany, Switzerland, United Kingdom of Great Britain and Northern Ireland, United States of America, and the European Union.

Chaired by H.E. Ambassador Madeleine Liguemoh Ondoua of Cameroon, the Committee met twice during the year, as planned, on 26 June and on 20 November, and reviewed in detail the recent developments in the Programme. It has commended the results achieved in the 5<sup>th</sup> phase and the advancement accomplished in the implementation of the 6<sup>th</sup> phase.



*Meeting of the Steering Committee of the OPCW Africa Programme*

Overall, the Programme continued to make progress and generate tangible added value. This year, Djibouti and Togo adopted comprehensive national legislation covering all initial measures under the Convention, bringing the number of African States Parties with such legislation to 25.

The Secretariat acknowledges with gratitude all contributions received for the conduct of the programme, whether technical, logistical, or financial. Voluntary contributions were made by Canada, Czech Republic, France, Germany, Switzerland, United Kingdom of Great Britain and Northern Ireland, United States of America, and the European Union. The Secretariat also expresses its high appreciation to African States Parties that hosted events and activities organised under the Programme in 2023.



## CHEMEX Africa 2023

(Algiers, Algeria, 23 September-5 October 2023)

The “**C**hemical **E**mergency Response Capacity-Building **E**xercise for **A**frica” (CHEMEX AFRICA) was the first OPCW exercise of its kind. Devised as a special project under the OPCW Programme for Africa, the exercise was jointly organised by the OPCW and Algeria, in Algiers, from 23 September to 5 October 2023, and was funded through a generous voluntary contribution made by Canada.

As part of the event, first responder teams from the Economic Community of West African States (ECOWAS), the Economic Community of Central African States (ECCAS) and the Southern African Development Community (SADC) received training from instructors from the East African Community (EAC), who were supported by technical teams from North Africa and the Sahel, and the Intergovernmental Authority on Development (IGAD).

Course instructors themselves have been trained through the OPCW Assistance and Protection Programme under the framework of the Africa Programme since 2016, in partnership with the Czech Republic and the United Kingdom of Great Britain and Northern Ireland, with a view to augmenting the skills and capabilities of the next generation of African first responders.



*CHEMEX Africa 2023: Highlights of the training phase*

Eighty-one first responders from 33 African States Parties took part in CHEMEX. In addition, external experts, notably from the Czech Republic, the United Kingdom of Great Britain and Northern Ireland, the United States of America, and European Union CBRN Centres of Excellence took part in the exercise in different capacities (supervisors, observers, and evaluators).

The culmination of the Programme was the VIP Day, held on 3 October 2023, under the high patronage of H.E. Abdelmadjid Tebboune, the President of the People’s Democratic Republic of Algeria, and chaired by Army General Saïd Chanegriha, Chief of Staff of the Algerian National People’s Army. The VIP Day was attended by the Director-General and the Deputy Director-General. The Prime Minister of Algeria was the guest of honour of the event. The VIP Day included inter alia a major exercise simulating

a coordinated response to a terrorist attack involving a toxic chemical agent, as well as an international equipment exhibition. In attendance were also Ambassadors accredited to Algiers as well as Hon. James Pitia Morgan, Minister of Foreign Affairs and International Cooperation of South Sudan, a State not Party, who was invited by the Technical Secretariat as part of its continued efforts to promote the universality of the CWC.



*Highlights of the VIP Day of CHEMEX Africa 2023*

### ***Short-term results***

- CHEMEX Africa enhanced the preparedness of African teams to manage and respond to complex chemical emergencies, including attacks that may be perpetrated by terrorists, thereby strengthening the resilience in the Africa region against chemical threats and terrorism.
- The Exercise tested and confirmed the readiness of the Secretariat to deliver, together with partners and donors, major and complex capacity building activities responding to the specific needs of States Parties.
- The Exercise further developed the OPCW Network of partners in the area of chemical emergency response training, at the national, regional and international levels.
- The Exercise increased South Sudan's commitment to join the CWC as soon as possible, by showcasing the nature and relevance of the capacity building support provided by the OPCW to States Parties.

### ***Way forward***

- CHEMEX allowed the OPCW and the African States Parties to evaluate existing gaps in terms of chemical emergency response capabilities within the participating countries. The gap analysis will assist the participating States Parties to build up and improve their National Programmes for Protective Purposes (NPPP).

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- An evaluation session was convened by the Secretariat on 9 November 2023 with key partners in the organisation of the event, namely: the Algerian CWC National Authority and Permanent Representation to the OPCW, the Czech Supervisor Team, the UK Observers and evaluators. The meeting took stock of the positive outcome of the exercise and discussed and identified areas for development in terms of organisational aspects and training content and delivery.
  - The Secretariat will use the lessons learned from CHEMEX Africa to further fine-tune the capacity building support it provides to its Member States in Africa and beyond.
  - CHEMEX promoted the engagement of participating States Parties to make annual submissions of information on their NPPP, in fulfilment of their obligations under Article X, para 4, of the CWC.
  - CHEMEX illustrated in a tangible manner the benefits of joining the CWC for the countries that are yet to do so.

### ***Benefits beyond the Africa Region***

- The exercise tested and confirmed the benefits of the OPCW model for regional capacity building in area of assistance and protection, which is based on the provision of a comprehensive training cycle that culminates into a pan-regional simulation exercise. The Secretariat envisages to replicate the exercise for other geographical regions in the future.
- The exercise showcased the added value of extrabudgetary projects in further achieving the OPCW mandate and activities in areas of capacity-building support to Member States. An exercise of such magnitude would not have been possible without the substantial voluntary contribution received from Canada and the significant resources and support provided by Algeria.

The Secretariat would like to seize this opportunity to express its high appreciation to the governments of Algeria and Canada for their contributions and collaboration which were instrumental for the effective organisation and success of CHEMEX Africa 2023.

[Watch here a video on CHEMEX AFRICA 2023](#) (OPCW YouTube Channel)



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## **Experience-Sharing by African States Parties and Feedback Received from Alumni of the Africa Programme**

This section of the bulletin aims at sharing experiences from African States Parties in connection to the national implementation of the Convention.

These experiences highlight notably the best practices identified and the challenges faced by concerned States Parties in relation to the domestication of the Convention and the daily functioning of their National Authorities.

Publicising such national experiences contributes effectively to knowledge sharing and awareness raising among National Authorities and other CWC stakeholders. It also stimulates more cooperation among States Parties.

For this edition, the CWC National Authorities of the following Member States kindly provided articles for the bulletin: Algeria, Morocco, Namibia, and Sudan.

The articles from Algeria, Morocco and Namibia focus on the implementation of the Convention by these Member States.

The article from Sudan sheds light on the best practices adopted in the country in the area of Chemical Safety and Security Management.

In addition, this section of the bulletin also includes feedback received from two alumni of ICA capacity-building activities under the Africa Programme, namely Dr. Bazie Bazoin Sylvain Raoul of Burkina Faso and Dr Tsatsop Tsague Roli Karole of Cameroon. Each reflect on their participations in OPCW events and share updates on their follow-up activities.



اللجنة الوطنية لحظر الأسلحة الكيميائية

الجمهورية الجزائرية الديمقراطية الشعبية  
People's Democratic Republic Of Algeria

Organisation For The Prohibition Of Chemical Weapons  
منظمة حظر الأسلحة الكيميائية



## Update on the Implementation of the Chemical Weapons Convention (CWC) at National Level in Algeria



***By Mr. Abdelghani Merabet,** Director of International Political Affairs at the Ministry of Foreign Affairs and member of the Inter-Ministerial Committee in charge of the Implementation of the CWC.*

### I- Overview of the National Implementation of the CWC in Algeria

As a strong advocate of a world free of weapons of mass destruction, Algeria actively participated in the negotiations that led to the adoption of the Convention on the prohibition of the development, production, stockpiling and use of chemical weapons and on their destruction (CWC).

The Convention has been opened for signature in 1993 and Algeria was among the first countries to ratify it in 1995 by Presidential Decree No. 95-157 dated June 3, 1995, contributing thus to its speedy entry into force, four years later, in April 1997.

Immediately after its entry into force, Algeria set up, by Presidential Decree No. 97-125 of 26 April 1997, a National Authority, embodied in the Inter-Ministerial Committee responsible for Implementing the Convention, placed under the supervision of the Ministry of National Defense.

This Inter-Ministerial Committee is primarily responsible for coordinating all actions related to the implementation, at national level, of the CWC and for incorporating the provisions of the Convention into the national legislation.

Moreover, this Committee is in charge of the communication with the Organization for the Prohibition of Chemical Weapons (OPCW), including the submission of a variety of documents, such as declarations on products and sites of production and/or use of chemical products, as well as the management of inspections carried out by the Organisation on these sites.

As such, and in order to fully fulfill its commitments in accordance with the CWC, Algeria has adapted its national legislation by promulgating enabling texts, in particular:

- Law No. 03-09 of July 20, 2003, on the repression of violations of the provisions of the Convention on the prohibition of the development, production, stockpiling and use of chemical weapons and on their destruction;
- Executive Decree No. 09-157 of May 2, 2009, setting the operating conditions for facilities related to the manufacturing of chemicals in schedules 1 and 2 of the appendix on chemicals of

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the Convention on the prohibition of the development, production, stockpiling and use of chemical weapons and their destruction;

- Executive Decree No. 09-158 of May 2, 2009, setting the procedures and formalities for authorizations of chemicals transfer listed in schedules 1 and 3 of the appendix on chemicals to the Convention on the prohibition of the development, the production, stockpiling and use of chemical weapons and their destruction;
- Executive Decree No. 09-159 of May 2, 2009, setting the procedures for national and international verification inspections of declared facilities within the meaning of the Convention on the prohibition of the development, production, stockpiling and the use of chemical weapons and their destruction;
- Executive Decree No. 09-160 of May 2, 2009, setting the procedures for declaring activities related to the application of the Convention on the prohibition of the development, production, stockpiling and use of chemical weapons and their destruction.

This architecture has enabled Algeria to submit, within the required timeframe and on a regular basis, its annual declaration on chemicals listed in the schedules of the CWC and used in the factories located on its territory, in accordance with the provisions of the Convention.

Furthermore, Algeria takes an active part in the various activities organised by the OPCW and has served regularly as a member of the Executive Council of the OPCW, since its inception.

## **II- National Good Practices in the Implementation of the CWC in Algeria**

In order to ensure a better understanding of the CWC framework by economic operators and to facilitate the fulfillment of their reporting obligations, a website of the Inter-Ministerial Committee has been launched on September 18, 2018, on the occasion of the visit of the Director-General of the OPCW, H.E. Mr. Fernando Arias, in Algeria.

The informational platform is updated in real time and remains accessible to all operators. It offers quick and easy access to valuable information about the CWC to the public, particularly Algerian economic operators.

The website allows Algerian economic operators to electronically submit to the Inter-ministerial Committee forms related to their annual declarations on their activities related to chemical products (import, storage, transfer, manufacture and/or use), while providing a completely secure and confidential process.

Moreover, the Inter-Ministerial Committee, in collaboration with all national stakeholders, periodically organises workshops to the benefit of economic operators, whose activities are linked to the products listed in the Convention's schedules, in order to inform them about their obligations towards the regulations set up in this regard, as well as the new provisions relating to the CWC, at the international level.

Our country offers regularly technical assistance to other African State Parties in the process of elaborating and adopting their national legislations as well as their National Authorities within the framework of the OPCW Mentorship/Partnership Programme. This programme, funded by the Technical Secretariat of the OPCW, aims at providing countries that have not yet adopted CWC national

implementing legislations with the experience of countries that have already done so. It is in this context that representatives from Niger and Burkina Faso visited our National Authority respectively in 2012 and 2014.

In recent years, our country has organised on a regular basis, almost annually, training activities on various aspects related to the Convention, for the benefit of all African States Parties and for "North Africa and Sahel" sub-region countries, such as the regional seminar on sampling and analysis in a highly contaminated environment.

At the same time, Algerian officials from the ministries responsible for Energy, Interior (national security), Industry, and Finance (customs) participate regularly and continuously in a number of training programmes and seminars offered by the OPCW, which are coordinated and monitored by the National Authority.



Last but not least, the Inter-Ministerial Committee proceeds annually, in accordance with the provisions of articles 11 to 15 of the Executive Decree n° 09-159 of 2 May 2009, with the operations of inspection and verification of the installations declared to the OPCW, in order to ensure the strict compliance with the commitments under the CWC.

### **III- Challenges**

During the last two decades and after having participated in capacity building activities organised by the OPCW Technical Secretariat, Algeria has acquired a considerable expertise and has consolidated its experience in the fields of chemical safety and security, assistance and protection against chemical weapons and the analysis of chemical warfare agents and industrial toxic compounds, which allows it to play a leading role in its region on matters of great importance and sensitivity for African countries.

The Algerian Government is also set to strengthen and develop the analytical skills of national specialized laboratories in the field of detection and identification of chemical warfare agents and industrial toxic agents, and to participate regularly, to first and second level inter-laboratory testing, organised by the OPCW, with the ultimate objective of integrating the network of OPCW designated laboratories.

With a substantial expertise in this field at the regional level and a vision dedicated to promoting South-South cooperation, Algeria will spare no effort to pursue its cooperation with the OPCW, and ensure the sharing of knowledge, know-how and experience with all the countries of the North Africa and Sahel region and beyond, in order to safeguard our world from the proliferation of arms of mass destruction.





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## Morocco and the Implementation of the Chemical Weapons Convention



*by Mr. Ismail CHEKKORI, President of the CWC National Authority of Morocco, Ministry of Foreign Affairs, African Cooperation and Moroccan Expatriates*

The Kingdom of Morocco signed the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction (CWC), on January 13, 1993 (the very day of its opening for signature), and ratified it on December 28, 1995. Indeed, Morocco had actively contributed to the process, which led to the drafting and then the adoption of the CWC, first, through negotiations in the framework of the Conference on Disarmament, until the opening of the Convention for signature (Paris, January 13, 1993) and its entry into force on April 29, 1997.

Morocco considers the Organization for the Prohibition of Chemical Weapons (OPCW) as a model which should inspire all the stakeholders in the field of disarmament and works for the achievement of the noble objectives of the CWC, while condemning the use of chemical weapons by anyone, anywhere, under any circumstances and for any reason.

Indeed, as the first multilateral disarmament instrument providing for the elimination of an entire category of weapons of mass destruction within a specified period, the merit of the CWC lies, in particular, in the verification system it set and which allows rigorous monitoring by the OPCW of compliance with the CWC obligations of States Parties. This aspect of control contributes to the effectiveness of the Organization which, until July 2022, supervised and verified the destruction of 99% of the chemical weapons declared stocks in the world. The complete destruction of this category of chemical weapons will mark a historic milestone in the process of elimination of weapons of mass destruction.

Morocco's accession to this Convention has resulted in **several national measures** aimed at implementing the obligations arising from the Convention, in particular its Article VII. These national measures include:

- **Decree No. 2-04-472**, of January 17, 2005, established a National Commission responsible for implementing the Convention. The said National Commission is chaired by the Ministry of Foreign Affairs as National Authority. The work of the Moroccan National Authority in the implementation of the CWC is based on coordination with four sub-commissions created on February 20, 2006, namely: the Legal sub-commission (chaired by the Ministry of Justice), the Technical sub-commission (chaired by the Ministry of Industry), the Safety and Security sub-commission (chaired by the Ministry of the Interior) and the International Cooperation sub-commission (chaired by the Ministry of Foreign Affairs);
- **Law No. 36-09** on the prohibition of the development, production, stockpiling and use of chemical weapons and their destruction. Promulgated on August 17, 2011, this national legislation comprises 55 articles divided into six chapters reflecting all the provisions of the CWC;
- **Law No. 26-21** Approved by the Council of Ministers, **on June 28, 2021**, in the purpose of amending and supplementing the national legislation on Chemical Weapons. This Law aims to update table 1 annexed to the national Law on CWC, through the addition of a series of chemical products, in particular "NOVITCHOK", and also provides for a flexible mechanism for revising the tables annexed to the CWC.

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Based on the aforementioned Legal texts, Morocco ensures the effective implementation of its obligations. In this sense, Morocco, in particular, transmits to the Technical Secretariat of the OPCW, in a regular manner and compliance with the deadlines, the various annual declarations required by the CWC (e.g. Art VI: declarations of past activities and programmed) and cooperate with the TS in different aspects related to the CWC (Assistance and protection programs, Capacity building projects, Mentorship programs...).

On another register, it should be emphasized that Morocco attaches particular importance to the presence, **interaction, and contribution within the various organs of the OPCW** (CSP, EC, and TS). In this sense and in addition to its participation in the various meetings of the Organization, Morocco has occupied various positions of responsibility within the bodies of the OPCW, in particular, the presidency of the 22nd Conference of States Parties in 2017, the re-election in 2021 for a new two-year term (2021- 2023), within the Executive Council of the OPCW, or the recent Presidency of the EC (from May to December 2021). In addition, Morocco participated, on behalf of the African Group, in several Commissions and bodies of the CSP, and this, during its various sessions;

Concerning the **cooperation between Morocco and the TS of the OPCW**, Morocco actively participates in the various courses, workshops, exercises, and training organized by the TS or jointly with certain States Parties to the CWC. In this regard, Morocco has co-organized with the OPCW several activities aimed at strengthening the capacities of States Parties and has hosted several meetings and gatherings. For example:

- The co-organization with the OPCW of a basic course for the benefit of Arab States Parties on assistance and protection against chemical weapons, held in Casablanca, from May 14 to 18, 2017;
- Morocco hosted the 16<sup>th</sup> regional meeting of National Authorities of African States Parties from June 19 to 21, 2018 (the penultimate face-to-face edition since the start of the COVID-19 crisis). It should be recalled that this meeting is the 2<sup>nd</sup> of its kind hosted by Morocco after the 7<sup>th</sup> edition, held in Rabat in 2009;
- Morocco hosted, in Marrakech from October 29 to 31, 2018, a workshop for the benefit of States Parties to the CWC to coordinate assistance and protection under Article X;
- Morocco hosted a "Forum on Peaceful Uses of Chemistry under the theme "Bridging the Gap: Knowledge Transfer on Chemical Safety and Capacity Building for the Future Generation", which took place in Casablanca, from November 12 to 14, 2019;
- Morocco participated in The Hague from January 30 to 31, 2020, in a Workshop on lessons learned from the participation of States Parties in the OPCW Mentorship/Partnership Program;
- **The Moroccan Regional Training Centre for North Africa and the Sahel co-organized with OPCW, from 27 February to 3 March 2023, the Basic course on chemical emergency preparedness for North Africa and Sahel Region.** The establishment of the Regional Centre has so far been recognized by 7 countries in the region, which have expressed their support for Morocco's hosting this Regional Centre for North Africa and the Sahel in the near future.<sup>1</sup> This course embodies a proactive

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<sup>1</sup> Disclaimer by the OPCW Technical Secretariat: the establishment of a Regional CWC Assistance and Protection Centre must be the subject of consultation and agreement between the offering State Party and other States Parties in the region (Technical Secretariat Note S/984/2012, dated 7 February 2012). For North Africa and the Sahel region, consultations are still ongoing on this matter.

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approach to capacity-building, aligning with the principles outlined in Article X of the Chemical Weapons Convention. Its primary objective is to empower OPCW Member States in the region, fostering their ability to respond effectively to incidents involving chemical warfare agents and toxic industrial chemicals;

- **Morocco co-organized with OPCW, workshop on chemical incident preparedness for hospitals (HOSPREP), held in Rabat, Morocco from 7 to 10 November 2022.** This training program, held at the Royal School of Paramedic Personnel Lalla Meryem, brought together medical and emergency response experts from African OPCW Member States. Its purpose was to enhance the capabilities of medical institutions in effectively dealing with emergencies associated with dangerous chemicals or chemical warfare agents;

- **Morocco held the second edition of the Education and Training Programme on Peaceful Uses of Chemistry for Youth in Kenitra, from 31 October to 4 November 2022. This program offers to aspiring professionals in the field of chemistry a platform to advance their careers and deepen their understanding of the Chemical Weapons Convention (CWC).**

- Adapting to the restrictions imposed by COVID-19 and in the spirit of contributing to the continuity of the OPCW programs on capacity building, the Moroccan Regional Training Centre for North Africa and the Sahel<sup>2</sup>, jointly with the OPCW, held from December 7 to 10, 2020, a basic online course within the framework of Article X of the Convention. The course aimed to strengthen the capabilities of the States Parties in the region to deal with chemical incidents. The event was attended by 64 participants and was an opportunity for African experts to improve their skills about the management of emergencies involving chemical weapons or toxic industrial chemicals.

Among the other OPCW programs to which **Morocco attaches great importance are the Partnership/Mentorship programs.** As part of this program, Morocco has initiated two partnerships, as follows:

*Morocco-Togo partnership:* A Togolese delegation visited Morocco from October 15 to 19, 2018. A Moroccan delegation also visited Togo from March 25 to 29, 2019. As a result, five (5) axes were covered, particularly, with the sharing of practices and solutions developed by the Moroccan authorities in the implementation of the CWC;

*Morocco-Mauritania partnership:* Following the positive results that were shared by Morocco and Togo during multilateral and regional meetings organized by the TS, a similar partnership program was launched with Mauritania. In this sense, Morocco received, in February 2022, the first visit of the delegation of the National Authority of Mauritania. A second visit to Nouakchott was established by the National Authority of Morocco from January 16 to 20, 2023, as part of the second phase of this program, the aim of which was to establish an exchange of experience and best practices in the implementation of the Chemical Weapons Convention.

In sum, Morocco remains committed towards **active South-South cooperation** among all stakeholders in order to promote the exchange of best practices and mutual capacity building, taking into account the specificities of each State Party and each sub-region. In this context, my country continues its work to promote South-South cooperation, and in this regard, planned **several upcoming events that will be jointly organized with the TS in Morocco**, covering different aspects of the CWC implementation

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<sup>2</sup> Please see footnote 1.

(Chemical Incident Preparedness, Seminar on Peaceful uses of Chemistry, Course on Protection and Assistance against Chemical Weapons, etc.).

Additionally, Morocco continues to support the OPCW Director-General's initiative regarding the establishment of the « **Africa Programme** », whose primary objective is to promote Convention implementation in Africa, and in this regard, welcomes the implementation of its fifth phase, despite the challenges imposed by the COVID-19 pandemic. Morocco remains committed to participate in the process of the elaboration and implementation of the sixth phase of Africa Program which would capitalize on current achievements, and adopt an achievable action plan covering the priorities and needs of the African continent.

Concerning the **challenges in the implementation of the CWC**, it should be noted that Morocco attaches great importance to further strengthening its response and protection capacities in the event of a chemical emergency, in particular by:

- Strengthening the capacities of national law enforcement agencies and intervening departments in response to complex chemical emergencies, particularly in terms of detection, recognition, response, and management of emergencies;
- Capacity building of national laboratories. Indeed, the OPCW should support African States Parties with regard to detection and laboratory analysis. The objective is the success of these laboratories in the official proficiency testing for the analysis of OPCW samples to obtain the status of OPCW reference laboratories;
- Reflection on the theme of chemical terrorism and the role that the OPCW can play in building resilience to the risk of use of chemical agents by non-State actors. With the TS support, and also through regional cooperation, the States Parties, particularly in Africa, must strengthen their capabilities to tackle this global challenge. As highlighted by the relevant reports of the OPCW, nowadays, chemical terrorism pose a genuine threat not just to conflict zones but also to international peace and security.



*Group Photo, Mentorship/Partnership Programme between National Authorities of Morocco and Togo (Rabat, 15 October 2018)*





***Group Photo, Mentorship/Partnership Programme between the National Authorities of Morocco and Mauritania (Rabat, 21 February 2022)***

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# Implementation of the Chemical Weapons Convention in Namibia



*By Ms. Diina V. Nashidengo, Director of the Commerce, Directorate at the Namibian Ministry of Industrialisation and Trade, and Focal Point for the CWC National Authority of Namibia*

## I- Overview

Namibia signed the Chemical Weapons Convention (CWC) on 13 January 1993 and ratified it on 27 November 1995.

The Government of the Republic of Namibia designated the Ministry of Industrialisation and Trade as the CWC National Authority (Focal Point) and Chair for the liaison with the OPCW and other Member States on the Convention. As a result, a National Authority Committee was established and comprises thirteen (13) stakeholders from several ministries, with the mandate to spearhead the implementation of the CWC at the national level.

With assistance from the OPCW Technical Secretariat, the National Authority developed a draft Chemical Weapons Prohibition and Control Bill. The draft Bill has been compiled in line with all aspects of the Convention so that Namibia can effectively domesticate the CWC.

In 2016, the National Authority held stakeholders sensitisation/consultation workshops with the chemical industry, and the Parliamentary Standing Committee on Foreign Affairs, Defence and Security, on the Draft Chemical Weapons Prohibition and Control Bill.

## II- Namibia's Cooperation with the OPCW

The Government of the Republic of Namibia is grateful to the OPCW for its continued support to the participation of Namibian professionals from various industries in fully sponsored capacity building events.

The OPCW supports the national implementation of the Convention by providing sponsored training, organising exchanges and workshops, and facilitating on-site assistance with declarations and legislation. This support has positive spin-offs in other fields contributing to economic and technological development.

Namibia received assistance from the OPCW Technical Secretariat in preparing the initial draft of its CWC national implementing legislation in 2015, through its participation in the Internship Programme for Legal Drafters and National Authority Representatives.

Namibia took part in the OPCW's Influential Visitors Programme (IVP) organised from 19-21 April 2017. The Programme enabled Namibian delegates to gain a better understanding of the Convention and provided them with a valuable opportunity to prepare and review an action plan for the adoption of the draft CWC national implementing legislation.

In addition, the CWC National Authority of Namibia benefitted as a mentee from a Mentorship/Partnership Programme with CWC National Authority of Switzerland. The Mentorship/Partnership Programme is designed to create a close cooperation between a National Authority, which has proven to be efficient and successful in the implementation of its obligations under

the Convention (Switzerland) with another one at a lower level of CWC implementation, in order to enhance the functioning of the latter National Authority (Namibia).

As part of the Programme workplan, Representatives of the Namibian National Authority visited Switzerland from 8 to 11 February 2016. The Swiss National Authority visited Namibia from 7 to 12 August 2016.



*Glimpses of the above-mentioned activities of the Namibian CWC National Authority*

Separately, Namibia has been regularly participating in capacity building activities organised by the Secretariat. The OPCW Associate Programme represents a unique capacity-building programme combining global efforts to ensure that chemical weapons do not re-emerge and that chemistry is applied exclusively for the benefit of humankind. Namibia regularly sends a participant to attend this annual 3-month flagship training.

Furthermore, the OPCW supported the participation of four (4) Namibians in the “Regional Meeting for the Joint Review of Chemical Emergency Preparedness and Response in Member States in the Southern African Development Community (SADC)”. Organised from the 28 to 30 March 2022 in Cape Town, South Africa, with the financial support from the United Kingdom of Great Britain and Northern Ireland and the European Union, the meeting was attended by three officials from the National Authority and one industry expert. The overall objectives of this event were for the Member States in the SADC region to prepare and present their national chemical emergency preparedness and response plans, stemming from the implementation of Online Chemical Emergency Self-Assessment Tool (OSAT). The participation in this event was an eye-opener for the Namibian representatives and facilitated thorough consultations with key stakeholders in the field of chemical emergency response.



*Namibian Delegation at the Regional Meeting for the Joint Review of Chemical Emergency Preparedness and Response, Cape Town, South Africa (28-30 March 2022), with the National Authority Focal Point, Ms. Diina V. Nashidengo, standing at the OPCW banner*

As a follow-up activity, Namibia conducted a one (1) day workshop on 9 June 2022, with experts from the Government and the chemical industry, to complete the OSAT questionnaire. A joint review of the national self-assessments of chemical preparedness and response capacities in Namibia was conducted. Following consultations with key stakeholders, Namibia's CWC National Authority has then completed the OSAT questionnaire and submitted it with a view to developing a national chemical emergency preparedness and response Plan.

More recently, as part of its contribution to OPCW capacity building activities, the Government of the Republic of Namibia co-organised with the Technical Secretariat a "Sub-Regional Basic Course on Emergency Response to Chemical Incidents for the SADC Region". Held in Swakopmund, Namibia, from 9 to 13 May 2022, the course received financial support from the European Union.



*Sub-Regional Basic Course on Emergency Response to Chemical Incidents for the SADC Region  
(Swakopmund, Namibia, 9 to 13 May 2022)*

### **III- Challenges and Best Practices for the Implementation of the CWC in Namibia**

The world is experiencing a global economic crisis in the aftermath of the Covid-19 pandemic. Namibia is no exception to this crisis.

The National Authority has developed a CWC-implementing Bill with the support of the OPCW Technical Secretariat. However, the Bill could not be finalised as yet due to the lack of specialised expertise and insufficient or limited financial resources in the National Authority. The completion of the Bill will assist Namibia to regulate and control all chemical being imported into and produced in Namibia.

Separately, Namibia intends to develop a database of all chemical industries in the country, with the possible support from the OPCW. This database will assist the National Authority in conducting regular inspections at the chemical industries and obtain information regarding declarable chemicals and also gain an in-depth understanding of the operations and challenges faced by various industry players.

In addition, Namibia is in the process of developing a National Programme for Protective Purposes in line with paragraph 4 of Article X of the CWC. The process is spearheaded by the Ministry of Defence, with the assistance of the Ministry of Industrialisation and Trade. The pace of the ongoing policy amendments and reforms under the current business climate however is rather slow, which might pose a challenge to the expeditious finalisation of the Programme.

Namibia, through its National Authority, will intensify its working relationship with the OPCW Technical Secretariat so that participation of all professionals attending capacity building initiatives can also be recorded by the National Authority. National Authority would also like to learn more about best practices in terms of CWC national implementation by other Member States.





## Best Practices and Challenges in Chemical Safety and Security Management in Sudan



*By Dr. Khalid M. Osman Mohamad, Director-General, Sudan's National Authority for the Chemical Weapons Convention*

*Chemicals* are used in different fields, scientific, industry, agriculture, oils, medical drugs, military, domestic life, etc.

*Chemicals* are an important part of nearly every workplace, from specialized industrial chemicals to everyday cleaning products.

*Chemicals and chemical industries* played most important role in developing human communities around the world.

*Chemicals* can be hazardous if they can irritate the eyes, skin, or respiratory tract, can be toxic or carcinogenic (cancer-causing), can be corrosive, and can explode or cause fire and can create low-oxygen environments.

*Chemicals* do not always come in pre-packaged containers. Some are harder to spot because they are created and released by work activities or equipment, e.g. exhaust from fuel-powered vehicles or equipment toxic gases created by decomposing materials and particles from hazardous liquids or solid materials created by spraying, grinding, or welding.

*Chemical safety and Chemical security* can be thought of as two sides of the same coin. Chemical safety aims to protect people from the hazardous effects of chemicals, whereas chemical security aims to prevent chemicals from being used by those who deliberately aim to expose others to hazardous chemicals.



*Chemical industries in Sudan* started in early fifties of the last century in different industrial fields that include traditional leather tanning, textile bleaching and dying, drugs, pharmaceuticals, cosmetics, soap production, dry and liquid batteries, petrochemicals industries (plastic industry), fertilizers, sugar industries, oil extraction and refining, paints, mining, metal foundries etc. Most of these chemical industries have negative impact on the human health and environment during all its different industrial processes, and finally the industrial waste (both solid and liquid).

*Chemicals and their uses in Sudan* are controlled by the National Chemical Management Profile, Inventory of Persistent Organic Pollutants (POPs), Inventory of Existing Chemical, National public health emergency response plan and effective National Laws.

*Focal points for chemical safety and security related matters in Sudan* are represented by the National Authority for the Chemical Weapons Convention, National Medicines and Poisons Board, Higher Council for Environment and Natural Resources, Sudanese Organisation for Standards and Metrology, National Pesticides Council, General Administration of Civil Defense and Customs Authority.

In terms of best practices on chemical safety and security Management (CSSM), Sudan has made good strides in this field, including, but not limited to, proposing a national body to monitor and regulate all activities involving chemicals and hazardous substances, forming a national committee for chemical events including all concerned stakeholders and NGOs, adopting the national health emergency response plan, setup of the Sudan Center for Consultancy and Training on Chemical Safety and Security Management, setup of a comprehensive awareness and outreach programme (Facebook page, WhatsApp group, National Authority website and periodical journal) and organising many activities regarding the matter (workshops, seminars, courses, side visits); signing MoUs with national stakeholders, establishing a network system with partners, setup a database for chemical industries and experts, participation in the OPCW Mentorship/Partnership Programme 2013-2014; developing a national inspection guide, setting up a curriculum on the subject for secondary schools as well as conducting capacity building programmes on relevant topics including first responders and medical management for chemical incidents, assistance and protection, chemical analysis, chemical disasters, medical management and declarations.



One of the best initiatives that is believed to contribute effectively to supporting the chemical safety and security is the Sudan Centre for Chemical Safety and Security. The Centre is to establish a database of all chemicals in Sudan (Sudan's Chemical Map), promote awareness about the role of OPCW and National Authority in chemical safety management, create smart partnerships with stakeholders and provide capacity building and training programmes.

The Centre is also to provide technical advice in relevant areas such as new chemical projects planning, chemical risk assessment, safety precautions, health safety management, loss control assessment, chemical incidents investigation, chemicals monitoring, chemical safety and security management, ways to replace hazardous materials by environment-friendly materials, as well as to provide technical advice on related research.



Despite the good steps that have been taken in the field of chemical safety and security, there are still some challenges (gaps) facing the work, such as the lack of awareness and knowledge, even among the chemical practitioners themselves, in many institutions. While chemistry and chemical engineering undergraduate and graduate students take mandatory chemical safety induction courses, chemical security training is not offered.



Implementation of chemical best practices in safety and security are equally lacking. This likely stems from a lack of emphasis on chemical security in tertiary learning institutions. Poor documentation and lack of tracking of chemicals are a particularly serious security problem in both governmental and private chemical sectors. Furthermore, overstocking of dual-use chemicals presents a chemical security challenge for the informal and unregulated chemical sector where physical security, storage, and inventory management practices are limited, leaving chemicals susceptible to theft or diversion.

Another challenge is the limited use of personal protective equipment (PPE) and safety data sheets (SDSs). In addition, some chemicals may not be segregated and not properly documented while in transit, and neither physical nor electronic records of the chemicals received are kept. Another challenging issue is the inadequate chemical storage practices (poor labelling leads to a difficulty in the identification of the chemicals in the case of incidents) as most of the storage areas do not have controlled access, exposing these chemicals to risk of theft, diversion and sabotage (cases of chemical incidents due to reactions between incompatible chemicals have been reported), improper disposal of orphan waste, hazardous chemical containers, and/or expired, legacy, or abandoned chemicals poses.



The costs associated with professional disposal of the hazardous waste is very high and the disposal facilities currently in use are not adequate for hazardous chemical waste disposal. Finally, the absence of a unified regulatory body to control all chemicals in Sudan is a significant matter that remains to be addressed.

In light of the foregoing, we can conclude with recommendations that may contribute to solving some dilemmas. The most important ones are: learning from the past lessons (documenting chemical accidents is crucial for instance); continuing developing relevant national effective legislations; promoting safety and security precautions; raising awareness on chemical safety and security management among relevant industrial institutions; and introducing CSSM gradually in the curriculum of high schools and relevant universities.





## Follow-up on Participation in OPCW Capacity-Building Activities in Burkina Faso: Case of Dr. Bazie Bazoin Sylvain Raoul

Can you please introduce yourself to the readers?



Hello! My name is BAZIE Bazoin Sylvain Raoul, an analytical chemist at the National Laboratory of Public Health of Burkina Faso.

My work there is focused on chemical contaminants and risk assessment. I am also teaching analytical techniques as a part-time lecturer in public and private universities in my country.

I hold a Master's degree and a PhD in Biochemistry from University Joseph KI-ZERBO, Ouagadougou, Burkina Faso.

Which capacity building activities have you benefited from under the OPCW Africa Programme?

I had the chance to benefit from several training programmes offered by the OPCW notably in areas of laboratory skills development and chemical safety and security. These included the 2011 Analytical Skills Development Course at VERIFIN (Finland), the 2012 Associate Programme, as well as the Basic and Advanced Wuppertal Course on Loss Prevention and Safety Promotion in the Chemical Process Industries, jointly organised with the University of Wuppertal (BUW), Germany, in 2016 and 2019 respectively.

In addition, thanks to an OPCW sponsorship under the Fellowship Programme, I have undertaken a rewarding internship at the Gent University in Belgium in 2013.





## How did you follow up on your participation in these activities?

My exposure to OPCW capacity-building programmes instilled me with a strong motivation that oriented my professional career in analytical chemistry. In fact, right after my participation in the Analytical Skills Development Course at VERIFIN, I started a Master's programme at the University of Ouagadougou. For the Master's thesis project, I obtained a grant from the OPCW for a 3 month-fellowship at the University of Ghent in Belgium. The project was focused on the evaluation of mycotoxin contamination levels in sorghum. The outcome of the Master's studies led to a PhD project on the "Composition and Chemical Risk Associated with the Consumption of Roasted Chicken in Burkina Faso". Scientific papers associated with the results of the thesis have been published in high impact journals and the local media have widely reported the main findings through press articles and televised interviews. In my opinion, this is a good example of the peaceful use of chemistry to improve the living conditions of the populations.



I have also developed and maintained an expertise in chromatographic analysis and I constantly share it, through training courses, with my chemist colleagues in Burkina Faso and also in countries of the West African sub-region such as Mali, Niger and Benin.

The latest capacity building activity for laboratory technicians that I spearheaded was the one organised at the National Public Health Laboratory of Burkina Faso from 9 to 13 August 2021. It was focused on Liquid Chromatography, Mass Spectrometry and Atomic Absorption Spectrometry applied to the control of food, drugs and the environment.



## Any recommendations to fellow African chemists with regard to OPCW capacity building programmes?

The capacity building activities offered by the OPCW under the Africa Programme present an invaluable opportunity to be seized and exploited by African chemists.

Successful participation in these training activities should be translated into a better use of chemistry for the welfare of the community. In this context, maintaining and nurturing contacts with the host organisations and fellow participants is key for the development of a solid network of chemists promoting the peaceful use of chemistry throughout the continent and the world.

## Feedback from Cameroon on Participation in OPCW Capacity-Building Activities: Case of Dr Tsatsop Tsague Roli Karole

**Can you please introduce yourself to the readers?**



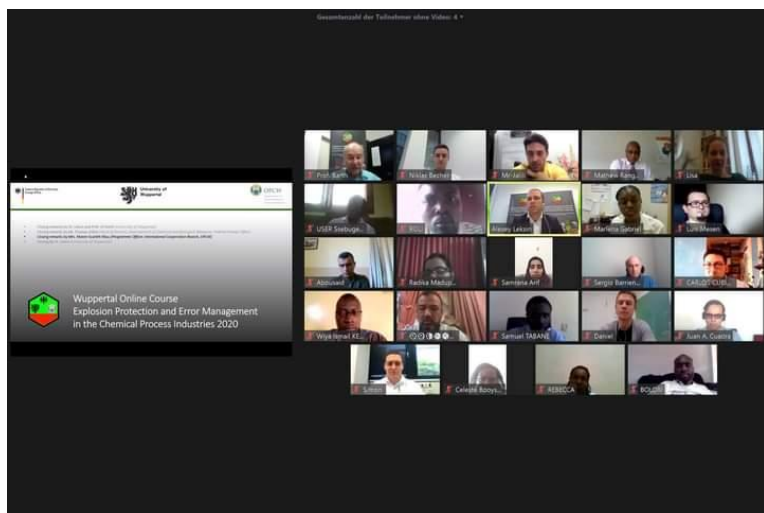
Hello! My name is Dr. TSATSOP TSAGUE Roli Karole, Senior Lecturer at the Applied Chemistry Department of the National School of Agro-Industrial Sciences (ENSAI), University of Ngaoundere, Cameroon.

I hold an Engineering Degree and a PhD in the field of Industrial chemistry and Environment.

I have teaching and research responsibilities. My research activities allow me to work in collaboration with other organisations/companies in the development and sustainability projects. Currently, I am working on a project entitled “PCB (Polychlorinated Biphenyls) reduction in Cameroon”, with the Ministry of Environment, Nature Protection and Sustainable Development.

**Can you explain your interest in Wuppertal course training courses in area of safety and security?**

In recent years, Cameroon has witnessed large industrial fires, notably at the National Refining Company (SONARA) in May 2019 and before that, at the “Société Camerounaise de Fermentation” (FERMENCAM) in January 2018. Both fires caused significant material damage and economic losses amounting to several billion of CFA francs. That particularly sparked my interest in safety and security in chemical industries.



In this context, I participated in the Wuppertal course on Explosion Protection and Error Management in the Chemical Process Industries, which was jointly organised online by the OPCW and the University of Wuppertal, from 7 to 30 September 2020, with funding from the German Federal Government.

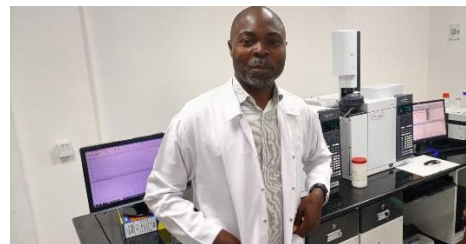
This course covered important topics such as safety characteristics of substances (gases, liquids and dusts); explosion risk assessment; hazardous areas classification, avoidance of explosive atmospheres according to

ATEX regulations, error and error management: individual and organisational aspects; explosion protection measures, etc.

Any risk assessment and prevention approach in business should be considering the fire risk. Thanks to this Wuppertal course, I have acquired invaluable expertise in areas of management and control of fire risks in industries.

## Have you managed to follow up on your participation in this course?

Indeed! I have been engaging in knowledge transfer activities which benefited other colleagues and students interested in the field of safety management. In fact, ENSAI is an engineering school training future engineers in agro-food industry, industrial and production maintenance as well as industrial chemistry and environmental engineering. One of the objectives of the school, is to produce engineers with some basic knowledge of industrial safety.



My objective is to use the teachings of the Wuppertal course to facilitate the launching in the coming years of a professional master's degree programme at ENSAI entitled "Industrial Safety and Environmental Management".

The course also facilitated my work in the field of environmental risk assessment of soil contamination/pollution by Polychloride Biphenyl (PCB) from transformer oil in some Cameroonian's industries.

During the Wuppertal course, the module based on Error and Error management is very important and beneficial for my teaching functions; indeed, I use the concepts shared during the course for my class of engineering students from the Industrial Chemistry and Environmental Engineering sector and the Agrofood Industries sector. For my course entitled "Nuisances et Pollutions Industrielles" (Industrial Nuisances and Pollution), the approach adopted is the identification for a given process and unit plant, the potential sources of pollution, the potential risks of fire, etc., and we propose means of prevention of these pollutions, nuisance, and fire in several industrial fields, in particular: breweries, vegetable oil refineries, petroleum industries, etc.



In addition, the expertise I acquired during the training was of great value in the context of my role of Examiner of research projects conducted by engineering students in industrial chemistry and environment. An interesting project I have been dealing with in this context consisted in the setup of a safety management plan for a vegetable oil refining company located in Douala, Cameroon.



## Any recommendations to fellow African chemists with regard to OPCW capacity building programmes?

Knowledge of safety management is important for chemistry and engineering professionals. That is why I encourage my colleagues and students, after getting their engineering diploma, to participate in safety and security trainings, such as the Wuppertal course and other ones offered under the OPCW Africa Programme.

This participation will help propagate chemical safety concepts in industries, laboratories and in other domains. Capacity -building in this area contributes to safety and development in Africa. To attain this objective, participants should follow up on their training with sensitisation and knowledge-dissemination activities. My advice does not concern only the chemists, but all other engineers and collaborators working in industrial chemistry, agro-industrial fields and others.



## Recent Arrivals in the Team of the International Cooperation and Assistance -ICA- Division

✚ The Secretariat wishes to extend a warm welcome to the new colleagues in the ICA Division Team:

- Ms. Rebecca Eapen, Head, Assistance and Protection Branch (APB), who replaced Mr. Gareth Williams
- Ms. Suzanna Khoshabi, Programme Officer-Legal (IPB), who replaced Ms. Sharon Rivera
- Ms. Elena Gjoreska, Programme Officer (IPB), who replaced Mr. James Pettit
- Ms. Toko Okozaki, Associate Programme Officer (APB)

✚ A recruitment process is underway to identify a successor for Ms. Kazumi Ikeda-Larhed, Director of the ICA Division



✚ The Secretariat would like to seize this opportunity to thank outgoing ICA colleagues for their dedicated services and enjoyable camaraderie, and to wish them best of luck in their future endeavors!







*The OPCW Centre for Chemistry and Technology (ChemTech Centre)*

## Useful links

- Website: [www.opcw.org](http://www.opcw.org)
- OPCW Africa Network: <https://www.facebook.com/groups/2411779418947457>
- OPCW International Cooperation and Assistance Programme E-learning modules: <https://learn.opcw.org/course/index.php?categoryid=21>