



OPCW

Organisation for the Prohibition of Chemical Weapons

“The OPCW Africa Programme: Latest Developments and Outcome of the Recent Impact Assessment”



Volume 1 - November 2020



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I. Message from the Director-General

Dear readers,

At the outset, I wish to extend a warm welcome to you to this Bulletin and thank you for your interest in the cooperation between the OPCW and Africa.

This is the first time that the Technical Secretariat issues a special Bulletin on the OPCW Africa programme. As suggested by the title, the goal of the Bulletin is to give stakeholders a closer look into the Programme's recent developments and share insights into the impact it generates.



With 52 States Parties to the Chemical Weapons Convention (CWC), Africa represents a key part of the membership of the OPCW. With a growing chemical industry and trade, Africa has specific needs and priorities in relation to the Convention that are focused, inter alia, on development and security.

In recognition of these specific needs, the Africa Programme was initiated in 2007 as a stand-alone initiative aimed at supporting African States Parties. This year, the Secretariat has successfully initiated the 5th phase of the Programme (covering the period 2020-2022), in coordination with the African States Parties and with the support of a diverse range of partners. Since the beginning of 2020 and despite the physical constraints imposed by the COVID-19 pandemic, various projects including online capacity building events have been addressing the eight objectives of the Programme's ongoing 5th phase.

The Africa Programme continues to be essentially funded through the OPCW regular budget. In order to further enhance its effectiveness, the Secretariat has designed and published this summer eight project proposals for extra-budgetary funding by interested donors. These projects focus on laboratory capacity development, chemical safety and security and the national implementation of the Convention.

For the first time in the history of the Programme since its inception 13 years ago, a targeted impact assessment has been conducted by the Secretariat to gauge the impact of the Programme at the outcome level. The feedback received through this assessment has confirmed the effectiveness of the Programme and the positive and concrete results it yields in terms of responding to the needs of African States Parties in relation to the Convention.

Details regarding these developments and others are presented in this Bulletin. I would like to conclude by sincerely thanking all Programme donors and partners for their generous support and reiterate the Secretariat's unwavering commitment towards promoting the peaceful uses of chemistry in Africa for a safe, secure and developed continent.

I wish you an enjoyable read.

Fernando Arias,
OPCW Director-General

II. OPCW Africa Programme: Recent Developments

Over the past year, the Africa Programme has witnessed substantial developments and gained significantly in maturity. The Programme concluded successfully its 4th phase and moved on to the 5th phase. In this section, the bulletin provides a succinct overview of the major developments in the programme in 2020. The most recent annual report on the Africa Programme [EC.95/DG.11](#) covers these developments in more details.

- *Launching of Phase 5 (2020-2022)*

Designed on the basis of wide and inclusive consultations held with African States parties throughout 2019, the 5th phase of the Africa Programme was effectively launched by the Technical Secretariat on 1 January 2020. Following a robust result-based approach, this new cycle covers the period from 2020 to 2022 and has eight specific objectives:

1. Advance national implementation of the Chemical Weapons Convention (CWC) in Africa.
2. Enhance the effectiveness of the African CWC National Authorities
3. Strengthen controls over cross-border transfers of toxic chemicals to prevent access to such chemicals, including by non-State actors, for purposes prohibited under the Convention.
4. Enhance protection and response capabilities against chemical incidents and attacks.
5. Advance chemical safety and security culture, standards, and practices in Africa.
6. Strengthen the capabilities of chemical laboratories in Africa.
7. Promote knowledge of peaceful chemistry and its exchange in Africa.
8. Foster Programme visibility, stakeholder engagement, and partnerships.



The programme components consist of capacity building, provision of expertise and technical assistance as well as sponsorship and facilitation of exchange of scientific and technical information and resources. More details on the planning of the fifth phase of the Africa Programme are reflected in the Note by the Director-General, [EC.93/DG.9](#)

- *Capacity Building Projects and Activities for Africa in 2020*

The Secretariat initiated since the start of 2020 the implementation of capacity building activities addressing the eight objectives assigned to the fifth Phase of the Africa Programme. Several courses have been delivered before the outbreak of Covid-19 pandemic in March.

Coping with the Covid-19 situation, the Secretariat has adjusted its operational modalities to the pandemic-imposed restrictions and has been conducting, starting from the month of June, as many of its training courses as possible in an online format, including under the Africa Programme. Due regard has continued to be paid to the Organisation's information security and confidentiality requirements.



As a result, a total of 22 targeted capacity-building activities and events have been accommodating nearly 40 African States Parties throughout 2020. These activities include the provision of online training in diverse areas of the programme including enhancing National Authorities' effectiveness, improving control over cross-border transfers of scheduled chemicals, streamlining assistance and protection capabilities against chemical threats and incidents, educating on chemical safety and security management, developing laboratory competencies, and promoting knowledge of peaceful chemistry and its exchange in the continent. The detailed list of these activities is made available as part of the annual report on the Programme submitted for the consideration of the Executive Council and the Conference of States Parties.

The Secretariat has also been facilitating the transfer of analytical equipment from Germany to two African Member States and sponsored several projects for the benefit of African participants under the Conference support Programme, the Programme for support to Research Projects and the Fellowship Programme. Additionally, the Secretariat has made the best use of the peak of the Covid-19 period to advance strategic-level work on various Programme-related initiatives, such as the formulation of the ICA's programming approach and the design of the special projects for extra-budgetary funding under the fifth phase of Programme.

- *Partnership and cooperation*

Enhancing and diversifying partnerships and cooperation ties with various relevant stakeholders is a key enabler of the success of the Africa Programme. The concept and plan of the fifth phase incorporate additional efforts in this regard in comparison to the four previous generations of the Programme. Since the start of the fifth phase in January 2020, the Secretariat has engaged with a variety of relevant stakeholders to deliver on planned projects and activities and to explore new and effective partnerships. Stakeholders include national, regional, and global organisations that are relevant to the Programme implementation and development, such as the World Customs Organization (WCO), the United Nations Office for Disarmament Affairs, the 1540 Committee Group of Experts, the African Union, African Regional Economic Communities, chemical emergency response agencies, customs authorities, academia, laboratories, and research institutions.

The Secretariat has also developed an action plan aimed at streamlining the partnership and bilateral cooperation between the OPCW and the African Union Commission for the effective delivery and visibility of the Programme. Based on the memorandum of understanding signed previously by the two organisations, the plan foresees the conduct of bilateral consultations and the exchange of high-level visits by senior officials of the two organisations. The full implementation of the action plan is envisaged once the COVID-19-related circumstances allow.

- *Funding and voluntary contributions*

While the activities under the Africa Programme since its inception are financed largely by OPCW regular budget, the Secretariat recognises and highly appreciates the in-kind contributions made by African States Parties hosting activities under the Africa Programme, as well as the generous voluntary financial contributions made to the programme by Czech Republic, Federal Republic of Germany, United Kingdom of Great Britain and Northern Ireland, United States of America and the European Union.

Regarding the 5th Phase, the United States of America pledged USD 100,000 for ongoing capacity-building activities conducted under Articles X and XI of the Convention, focusing on protection against chemical incidents and attacks and on the development of laboratory competencies in Africa.

On 19 August 2020, the United Kingdom of Great Britain and Northern Ireland made a £800,000 voluntary contribution to diverse OPCW projects, including a £100,000 to the Trust Fund for the Implementation of Article X of the Convention. This contribution goes towards further strengthening mitigation and preparedness to respond to chemical incidents in the East Africa Community (EAC), the Economic Community of West African States (ECOWAS), and the Southern African Development Community (SADC) Regions. The voluntary contribution by the United Kingdom includes also a £250,000 to the Trust Fund for Training earmarked for assessing and enhancing the capacity of analytical laboratories including from African Member States.



The Federal Republic of Germany funded the “Wuppertal Online Course on Explosion Protection and Error Management” (7-30 September 2020) with EUR 212,000. The course accommodated, inter alia, 11 participants from as many African States Parties.

The Czech Republic’s Population Protection Institute has also been supporting the Programme by co-facilitating two specialised assistance and protection courses in 2020 for the benefit of States Parties in the East African Community region.

The Secretariat acknowledges with high appreciation all donors for their steadfast support to the programme.

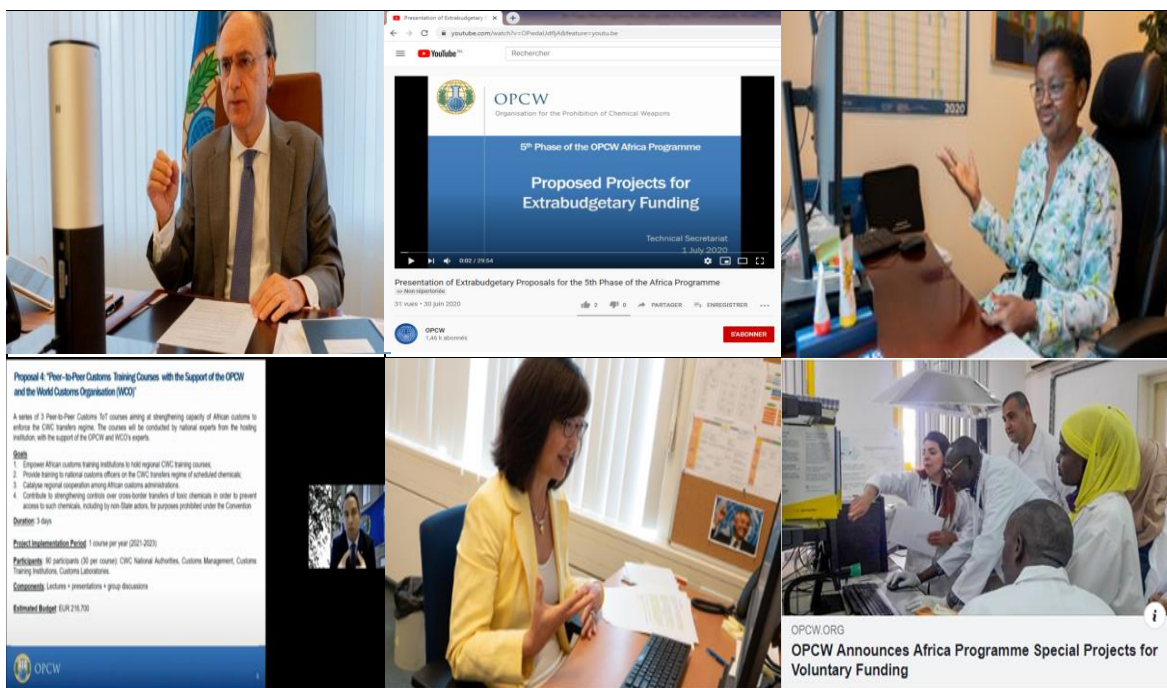
- *Special Projects for Extrabudgetary Funding*

In line with the planning of the fifth phase, the Secretariat developed in Q2 2020 a series of eight special projects for voluntary funding for the benefit of the Africa region. The special projects address the three overarching areas of need identified for the fifth phase, namely, chemical safety and security, laboratory capacities development, and national implementation

of the Convention. The total estimated budget of the eight proposed projects amounts to EUR 1.2 million.

#	Project	Estimated Budget (EUR)
1	Africa CHEMEX: Emergency response and coordination exercise	405.900
2	Conference on Transfer of Toxic chemicals	165.000
3	Specialized Course for Customs Laboratories	81.400
4	Peer-to-Peer Training for African Customs Training Institutions	216.700
5	Specialized Course on Maintenance of Lab Equipment	66.700
6	Influential Visitors Programme for PAP	71.500
7	Legal Workshop for African Parliamentary Institutions	41.800
8	Enhancing South-South Cooperation through Mentorship/Partnership Programme	154.000
Total		1.203.000

The projects were announced to all States Parties in a [video presentation](#) on 1 July 2020, and the detailed project proposals were made available on the OPCW extranet (<http://data.opcw.org/external/homepage.nsf>), under Informal Paper/2020/Technical Secretariat/OPCW Programme for Africa.



- *Assistance and Protection Project for the Southern African Development Community (SADC) under the 5th Phase of the Africa Programme (2020-2021)*

The project aims at assisting OPCW Member States in the SADC region (16 countries) to identify critical needs related to their national protection against chemical weapons. It will help participating Member States draw a calculated national (and subregional) picture of chemical risk and response capacity, upon which future national (and subregional) protection planning and capacity building under Article X can be based and against which results can be measured.



The project features two phases:

- a. Self-Evaluation Phase (Sep2020- March 2021): stakeholders from the relevant national sectors in the participating Member States will use an Online Self-Assessment Tool (OSAT) that will developed by the Secretariat in consultation with them, to identify and assess chemical risks and institutional response capacity at the national level.
- b. External Evaluation Phase (April 2021+): the findings of the self-evaluation phase will be discussed by the participants with the Project Expert Working Group with a view to establish plans of activities to improve the chemical response capacity at the national and subregional levels.

Phase 1 has already been launched in September 2020 and is supported and funded by the United Kingdom of Great Britain and Northern Ireland. Once completed, the project can potentially be implemented in different Regional African Communities RECs, subject to the availability of funds.

The project was developed in line with objective 4 of the 5th Phase of the Africa Programme: (Enhance protection and response capabilities against chemical incidents and attacks), more specifically with the sub-objective related to: “Further supporting African States Parties in their assessment of relevant national chemical threats and risks, and providing expert advice in the development of national protection programmes to prepare responses to chemical attacks”.

- *Programme Steering Committee*

The Africa Programme Steering Committee was successfully constituted under the fifth phase to provide support, advice, and guidance for the implementation of the Programme. As foreseen in the concept for the fifth phase, the Committee is composed of 10 African States Parties designated by the African Group of States Parties on an annual rotational basis. For 2020, the nominated Committee members are as follows: Algeria, Angola, Cameroon, Ghana, Kenya, Morocco, Rwanda, Senegal, South Africa, and the Sudan. The Sudan has assumed the chairmanship of the Committee for 2020. The Czech Republic, Germany, the United Kingdom of Great Britain and Northern Ireland, the United States of America, and the European Union joined the Committee as observers, as they contribute financially to the Programme.

Two ordinary meetings are planned annually for the Steering Committee. Convened online on 26 June, the Inaugural meeting received an update from the Secretariat on the implementation of the fifth phase of the Programme and an overview of ongoing capacity-building support, including via remote means. The Secretariat presented also the project proposals for extra-budgetary funding, as well as the initial findings of the impact assessment of capacity-building activities delivered under the Africa Programme in 2019. The second meeting of the committee is scheduled in November 2020.

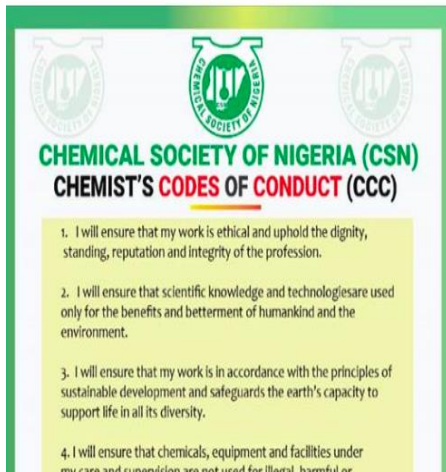


- *The OPCW Africa Network*

The network was successfully established under the fifth phase of the Programme, using a Facebook group page entitled “OPCW Africa Network”. Open to all chemistry professionals and CWC stakeholders in Africa, it facilitates the exchange of views, scientific information, experiences and ideas with regard to the OPCW work in Africa and, more generally, to chemistry for peaceful purposes. The Network members are also kept abreast of the latest developments in relation to the cooperation between the OPCW with Africa, as well as the opportunities open to Africans such as capacity-building events, sponsorships and job vacancies.

Outreach efforts on the part of the Secretariat have continued to attract relevant stakeholders among African chemistry professionals and other Africa Programme stakeholders including within the region’s governments agencies, industries, academia, laboratories and research institutions. The network counts currently over 500 active members.

Adeyinka Fasakin shared a photo.
May 15 at 11:10 PM



OPCW Africa Network

Fred Moradi shared a link.
14 Oct · Private group

I would like to share out latest research!



Akram Domun shared a post
September 27 at 2:32 PM



TIAFT

September 9 at 11:00 AM

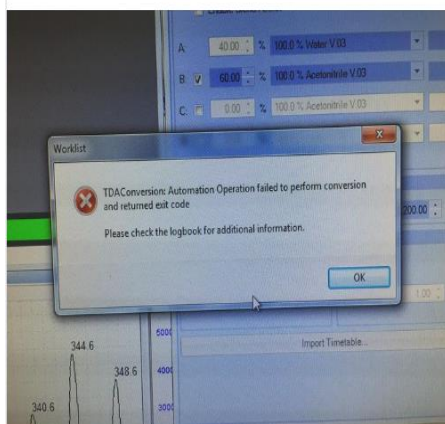
Meet the Toxicology Unit of the Forensic Science Laboratory of Mauritius! Serving this African's country 1.2 million population, they are in the spotlight for o... See More

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Raoul Bazie
September 17 at 7:06 PM

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Stellamaris Olisa
March 19

The Nigerian National Authority on Chemical and Biological Weapons Convention on Annual Declaration Visit/ Inspection to Chemical Industries in Nigeria.



Raoul Bazie
11 Aug · Private group

Hello valuable colleagues
. I am looking for NIST
Mass spectra library,
please someone can help
me? Thanks

You, Raoul Bazie and 3 others

6 comments

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Deadline for applications: 22 June



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Organisation for the Prohibition of Chemical Weapons - Head,
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Founding Member · January 22

First Call - 10th International Conference of the Kenya Chemical Society (KCS) 4-7 August 2020



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Chemists and Chem Soc Nig Csn.
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III. OPCW Africa Programme: Glimpses of Impact

- *Introduction*

Impact Assessment is a means of measuring the effectiveness of organisational activities and judging the significance of changes brought about by those activities. The Secretariat attaches great importance to ensuring that its activities are most impactful and the Africa Programme is no exception in this regard.

In this context, the Secretariat has conducted in the first half of 2020 an assessment of the impact of the Africa Programme. The survey designed and distributed as part of this assessment focused on the outcome of the capacity-building activities offered by the Secretariat to African States Parties in 2019.

A total of 391 African participants were registered in the OPCW capacity-building events held in 2019. The Secretariat registered a response rate of 54% (211 surveys filled out and returned). Importantly, hundreds of constructive comments were provided by responding participants, giving unique insights into how ICA capacity-building activities had been followed up on by African alumni, including first-hand accounts of success stories and existing challenges.

Nearly all responding participants (96.6%) reported that, in follow-up to their participations, they had since engaged in diverse awareness-raising and knowledge-sharing activities in their countries in relation to the Convention and the OPCW, as well as to the specific areas of the training they had received. An overview of these activities is provided per training area in the tables below.

Moreover, 86.6% of the responding participants reported that they are keeping in contact with their National Authorities and 69.8% reported that they had taken part in and/or organised relevant specific capacity-building activities in their home countries.

- *Activities reported by African alumni in follow up of their participation in OPCW capacity-building events held in 2019 under the Africa Programme*

The Secretariat examined the impact of the Africa Programme in five main areas of activities, namely: Assistance and Protection, Laboratory capacity development, chemical safety and security, chemical knowledge promotion and exchange, and the national implementation of the Convention. The activities reported by the African alumni of 2019 are described below:

✓ Assistance and Protection against Chemical Weapons

Area of action	Example of activities reported	Member State where such activities were observed
knowledge transfer	Technical meetings, events, diverse assistance and protection training activities covering, inter alia, decontamination, evacuation of victims of chemical incidents, hospital preparedness, and management of casualties of chemical incidents and/or attacks.	Angola, Benin, Burkina Faso, Burundi, Cabo Verde, Cameroon, the Democratic Republic of the Congo, Djibouti, the Gambia, Ghana, Guinea Bissau, Kenya, Lesotho, Madagascar, Morocco, Mozambique, Nigeria, Rwanda, Senegal, South Africa, the Sudan, Togo, Tunisia, Uganda, and the United Republic of Tanzania.
Awareness-raising	Development of a sensitisation strategy covering various national stakeholders, including first responders, the International Committee of the Red Cross, volunteers, and industries, as well as the set-up of an occupational health and safety committee to raise awareness and organise national capacity building.	Burundi, Kenya, Morocco, and Togo.
Networking and technical cooperation	Use of electronic platforms for cooperation and exchange of information and best practices in areas of assistance and protection against incidents and attacks involving toxic chemicals; chemical emergency scene management; and sampling and analysis in contaminated environments.	Algeria, Botswana, Burkina Faso, Cameroon, Guinea Bissau, Kenya, Lesotho, Morocco, Nigeria, South Africa, Togo, and Tunisia.
Improved coordination among assistance and protection stakeholders at the national level	Enhanced coordination across relevant government agencies, industries, academia, laboratories, and civil protection, police, and customs authorities	Angola, Ghana, Kenya, Madagascar, Morocco, Rwanda, Tunisia, and Uganda.
Review and development of operational rules used in assistance and protection	standard operating procedures on safety in laboratories; guidelines for hospitals treating victims of toxic chemical agents; chemical response guide; standard operating	Kenya, Madagascar, the United Republic of Tanzania, Morocco, and Côte d'Ivoire.

	procedures on on-site behaviour and safety measures for customs authorities.	
Increased effectiveness of interventions in response to chemical emergencies	set-up of an early warning system for stakeholders in case of chemical emergency; review of national legislation on CBRN risk mitigation and capacity building and the establishment of a national action plan on CBRN; set-up of a national action plan on chemical and radiation emergencies.	Benin, Burundi and the Gambia
Lobbying resulting in an improved state of protection and response against chemical threats	purchase of personal protective equipment for first responders; set-up of specialised national chemical emergency response teams and the inclusion and development of a chemical emergency component in hospital disaster preparedness plans; conduct of regular training exercises and the installation of a chemical decontamination area in hospital emergency wards and in multiple-country entry points; set-up of a triage system for victims of toxic chemicals, and the installation of staff and patients' decontamination booths, as well as donning and doffing areas for hazmat suits.	Togo, Rwanda, Uganda, Nigeria, Côte d'Ivoire, the Democratic Republic of the Congo, Kenya, Lesotho, Mozambique, Nigeria, Rwanda, Togo, and Uganda
Conducting a hazard vulnerability studies	Conduct of analysis to identify and subsequently mitigate risks at hospitals treating victims of chemical incidents	Kenya
Evaluation of national needs	Assessment of national needs in the field of countering chemical terrorism or CBRN threats followed by a review and subsequent improvement of the training and response plans and risk management procedures at the national level	Niger, Nigeria, Togo, and Tunisia

Inclusion of former participants on the list of national experts	Provision of technical assistance to National Authorities by former participants	Benin, Burundi, Cameroon, the Gambia, Kenya, Senegal, and the Sudan
Relevant expertise was provided at the regional level	Organisation of regional training courses and development of regional cooperation	Algeria, Kenya, Morocco, South Africa, Tunisia, and Uganda
Best practices learned in managing hospital preparedness in the context of COVID-19 were put to use	set-up of special COVID-19 wards, development and implementation of relevant decontamination protocols, set-up of separate entry points for staff and patients, and donning and doffing of personal protective equipment	the Democratic Republic of the Congo, Guinea Bissau, and Kenya

✓ Laboratory Capacity Development

Area of action	Example of activities reported	Member State where such activities were observed
knowledge transfer	Provision of training to other laboratory analysts and technicians on the use of sophisticated laboratory equipment, including gas chromatography-mass spectrometry (GC-MS), liquid chromatography-mass spectrometry (LC-MS), and nuclear magnetic resonance (NMR) instruments	Botswana, Burkina Faso, Burundi, Cameroon, Kenya, Lesotho, Malawi, Mauritius, Morocco, Namibia, Nigeria, South Africa, the Sudan, Togo, Tunisia, Uganda, the United Republic of Tanzania, and Zimbabwe
Awareness raising	Conduct of in-house awareness-raising activities and training on safety handling of Convention-related samples, including decontamination and disposal of chemicals after analysis	South Africa
Networking and technical cooperation	Networking among alumni of OPCW courses within and outside Africa Sharing best laboratory practices and conducting joint research projects	Algeria, Botswana, Burundi, Cameroon, Kenya, Lesotho, Madagascar, Malawi, Mauritius, Morocco, Nigeria, South Africa, the Sudan, Tunisia, Uganda, the United Republic of Tanzania, and Zimbabwe

Increased effectiveness in using chemical analysis equipment and production of sound results	Improvement in sample preparation and analysis, result interpretation, and adoption of good laboratory practices	Botswana, Burkina Faso, Cameroon, Lesotho, Madagascar, Malawi, Morocco, Nigeria, South Africa, the Sudan, Tunisia, Uganda, the United Republic of Tanzania, and Zimbabwe
Resolution of technical problems and provision of technical advice	Improvement in the quality of chemical analysis thanks to increased expertise in instrumentation, standards preparation, sample preparation techniques, analysis by instruments (GC-MS, LC-MS, and NMR)	Burkina Faso, Cameroon, Lesotho, Malawi, Mauritius, Morocco, Nigeria, South Africa, the Sudan, Tunisia, Uganda, the United Republic of Tanzania, and Zimbabwe
Review and update of laboratory technical documents	Review and update of standard operating procedures, and improving laboratory performance in line with ISO 17025	Cameroon, Madagascar, and Malawi
Maintenance of lab infrastructure	Performance of basic maintenance of laboratory equipment	The Sudan
Review and improvement of safety practices in chemical laboratories	Establishing dedicated safety teams and/or the drafting and implementation of chemical management and safety action plans	Burkina Faso, Burundi, Cameroon, Lesotho, Madagascar, Malawi, Mauritius, Morocco, Nigeria, South Africa, the Sudan, Tunisia, Uganda, the United Republic of Tanzania, and Zimbabwe
Provision of Technical support to various national stakeholders to enhance safety and security and protect health and environment	Provision of training and technical advice to industries, farmers, associations of chemicals importers, exporters, and traders to improve the safety and security in the supply chain of chemicals and to reduce environmental pollution and safeguard human health	Burkina Faso, Nigeria, and Uganda
Development of peaceful uses of chemistry	Advancing research and development in chemical laboratories in relation to agriculture and farming	Madagascar
OPCW proficiency testing	Increased preparedness and confidence to enrol in or take the OPCW proficiency tests	South Africa and Uganda

✓ Chemical Safety and Security

Area of action	Example of activities reported	Member State where such activities were observed
Awareness raising and dissemination of knowledge	Seminars and technical workshops for chemical manufacturers, distributors, marketers and retailers, in addition to academia, chemical associations, and defence and customs authorities. Areas of focus in these activities included industrial chemicals risk management, environmental safety and public health	Botswana, Burkina Faso, Burundi, Cameroon, Côte d'Ivoire, the Gambia, Kenya, Lesotho, Malawi, Mauritius, Namibia, Nigeria, South Africa, the Sudan, Togo, Tunisia, Uganda, the United Republic of Tanzania, and Zambia
Networking among relevant institutions and individuals	Networking among institutions dealing with chemical risk mitigation and disaster management in Africa with training institutions in Europe and among alumni of OPCW chemical safety and security events, with a view to sharing relevant expertise and best practices	Botswana, Burkina Faso, Burundi, the Gambia, Ghana, Lesotho, Malawi, Mauritius, Namibia, Nigeria, South Africa, the Sudan, Tunisia, Uganda, and Zambia
Education on chemical safety and security	Set-up of NGO's with the objective of developing chemical safety culture and educating chemicals users on basic chemical safety rules and procedures, including those for chemicals storage and handling.	Burundi ("Burundi Women in Chemistry") and Nigeria ("The Safety Awareness on Chemical and Environmental Protection Initiative")
Research in chemical safety and security	Development of research in the field of destruction of harmful chemicals in air and water environments as well as in chemicals import, supply, distribution, and end-use	Ghana
	Development of research proposals for funding aimed at collecting baseline data on chemicals management and security, and mapping facilities handling relevant chemicals, to be updated on an annual basis	Malawi
Chemical risk identification and mitigation in Industry	Improvement of the state of protection and response against chemical threats in the chemical industry, including through the formulation of a manual for first responders to chemical incidents	South Africa and Zambia

	Adoption of concepts and check-up tools to identify chemical risks and devise mitigation solutions in the workplace (failure mode and effects analysis, human factor, perception process engineering, and safety culture)	the United Republic of Tanzania
	Mentorship and coaching of small and middle-scale enterprises on chemical safety and security	Burkina Faso
	Reviewing policy documents and improving the effectiveness of routine inspections of chemical industries that import and/or use chemicals scheduled under the Convention.	Burkina Faso and Nigeria
	Use of the expertise acquired in chemical safety and security management to guide new developments and operational projects in industry	South Africa
	Formulation of a training manual on safety and security for petroleum companies	Malawi
	Establishing an inventory of industries using chemicals, with a view to sensitising them on the implementation of Convention	Burundi
Chemical safety and security in Laboratories	Launch of a national initiative to train laboratory personnel on chemical safety for laboratories, procurement of personal protective equipment for all laboratory researchers, strengthening the “no personal protective equipment = no laboratory work” policy	Malawi
	Improving safety and awareness in a laboratory through the introduction of new monitoring forms (National Institute of Occupational Health, South Africa)	South Africa
	Leading the team responsible for the action plan on chemical events and radiation emergencies	The Gambia
Chemical safety and security in Universities	Incorporation of topics related to chemical safety and security in academic curricula and establishment of a chemicals management system at universities, including a database of chemicals in use; use of expertise acquired in OPCW training activities in drafting relevant proposals,	Nigeria

✓ Chemical Knowledge Promotion and Exchange

Area of action	Example of activities reported	Member State where such activities were observed
Awareness-raising, knowledge-sharing, education and outreach	<p>Activities conducted by African alumni of the relevant 2019 OPCW capacity-building events (such as the Conference Support Programme, the Programme for Support of Research Projects, and the workshop on policy and diplomacy for scientists) included delivering lectures, reviewing and updating chemistry educational curricula in schools and universities, and the use of various media such as television channels and social media platforms for education.</p> <p>The topics of these activities focused on peaceful applications of chemistry and the CWC, including chemical sciences and technologies, chemical safety and security, sustainable chemistry, chemical laboratory management, and chemical research and development.</p>	Burkina Faso, Cameroon, Ghana, Kenya, Lesotho, Mozambique, Namibia, Nigeria, South Africa, the Sudan, Uganda, the United Republic of Tanzania, and Zimbabwe
Networking	Networking between and among laboratory managers, university professors, and alumni of OPCW programmes for exchange of expertise on chemicals and chemical sciences	Eswatini, Ghana, Lesotho, Mozambique, Namibia, the Niger, the Sudan, and Uganda
Research and development	Developing green chemistry methods at universities to reduce the damage of chemical waste disposal to the environment	Kenya and Namibia
	Reviewing national policies on persistent organic pollutants	Ghana
	Formulating a paper for the National Authority on promoting chemical safety and security	Zimbabwe
Upgrading laboratory chemical safety	Set-up of a dedicated laboratory safety unit	Mozambique
	Reinforcing the safety committee at the University of Johannesburg	South Africa

		Significant efforts to establish a chemical safety programme at the Federal University of Technology in Akure	Nigeria
		Set-up of a dedicated committee to ensure that chemicals in use follow green chemistry principles	Namibia
Provision of consultancy services to National Authorities		Undertake relevant needs assessments for the National Authority	Uganda
		Contribute to a chemical safety and security project in the Central and Eastern Africa subregions	Kenya

✓ National Implementation of the Convention

Area of action	Example of activities reported	Member State where such activities were observed
Sensitisation, knowledge sharing, and training of peers and other relevant stakeholders	Relevant activities in areas of drafting, enacting, and successfully implementing and/or developing national legislation on the Convention	Angola, Burundi, Côte d'Ivoire, the Democratic Republic of the Congo, Kenya, Nigeria, Senegal, Sierra Leone, South Africa, Togo, Tunisia, and the United Republic of Tanzania
Facilitation of the adoption of national legislation implementing the Convention through specific initiatives such as	Development and submission of a guiding paper and a road map for the enactment of national implementing legislation	Sierra Leone
	Provision of advice on legal aspects related to the process of drafting national legislation	Kenya
	Review of the draft national bill before submission to parliament	Ghana
Improvement of the performance of National Authorities	Activities aimed at improving the preparation and submission of Convention-related annual declarations, including through the sharing of best practices	Nigeria and South Africa
Streamlined cooperation and knowledge sharing with national stakeholders of the	Cooperation among industry, customs, and chemical supply chain components for a more effective implementation of the Convention at the national level, including by improving the quality of Convention-related	Burundi, the Democratic Republic of the Congo, and Nigeria

Convention	annual declarations	
Development of sectoral policies	Development of sectoral policies in line with the relevant provisions of the Convention, such as for petrochemicals	Nigeria
Escort of OPCW Inspections	Improvement of the readiness to receive and escort OPCW inspection teams	South Africa
National implementation of the Convention	Building on experiences shared during the Mentorship/Partnership Programme to lobby for improvements in the national implementation of the Convention (for example, the purchase of relevant equipment, and upgrading relevant policies and practices)	Togo

IV. Alumni Space: interviews with Africa Programme Alumni

In this part of the bulletin, the space is given to alumni of OPCW Africa Programme to share their experiences with OPCW capacity-building events and with conducting follow-up activities to benefit relevant CWC stakeholders in their home countries and regions.

For this edition of the bulletin, 5 alumni representing the five sub-regions of Africa are sharing their thoughts and views:

- Mr Austin Aluoch of Kenya
- Mr Adeyinka Fasakin of Nigeria
- Mr Raouf Medimagh of Tunisia
- Mr Roger Baleba of Cameroon
- Mr Sessley of Zimbabwe

We asked them to share with the readers:

- 1/How the Africa Programme impacted their expertise and careers;
- 2/How they followed up on their participations in OPCW capacity building activities;
- 3/Share with fellow African chemistry professionals relevant recommendations in relation to the OPCW and the CWC; developing expertise thanks to OPCW activities under the Africa Programme as well as conducting follow-up activities.

Here is their feedback:

- *Austin Ochieng Aluoch (Kenya)*

Could you briefly introduce yourself?

My name is Austin Ochieng Aluoch, from Kenya. I hold a Bsc and Msc in Chemistry from the University of Nairobi and a PhD in chemistry from the State University of New York at Binghamton (USA). I am a senior lecturer of chemistry at the School of Chemistry and Material Science, the Technical University of Kenya.



I am also an OPCW Associate, an IUPAC STP Fellow, the current National Secretary of the Kenya Chemical Society (KCS), founder and former president of the Biorisk Management Association of Kenya (BMAK) and a member of the OPCW Advisory Board on Education and Outreach (ABEO) where I served as the board's vice chairman in 2018. As a chemical security expert I have implemented several projects in Africa on chemical security and on Chemical Biological Radiological and Nuclear (CBRN) in the framework of the Chemical Security Program and the European Union CBRN Risk Mitigation Centers of Excellence (EU CBRN CoE) Initiatives

respectively. The projects have involved training of chemical practitioners, security personnel, and provision of equipment to improve chemical security.

What OPCW courses have you benefited from?

In addition to my participation to the Associate Programme 2013, I have taken part over the past years to numerous courses in the areas of assistance and protection, analytical chemistry and chemical safety and security.

Through these programmes I learnt new topics, which I was surprised I did not know about despite being a PhD holder in chemistry. These topics include but are not limited to the Chemical Weapons Convention (CWC), Scheduled chemicals, Dual-use chemicals, Australia Group, Chemical Safety and Security, Chemical Risk Vulnerability Assessment, and Chemical Inventory Management. Another great benefit was growing of my professional network. I could in fact connect with Kenya's CWC National Authority (the Government Chemist Department), the US Department of State Chemical Security Program (CSP), The European Union Chemical Biological Radiological and Nuclear Risk Mitigation Centres of Excellence (EU CBRN CoE) Initiative and International Union of Pure and Applied Chemistry (IUPAC) among others.



How did you use the knowledge acquired from OPCW courses?

Through my networks, I started several initiatives in 2013 to raise awareness on CWC and chemical security for personnel at academic, industrial and government facilities. These ongoing initiatives have targeted laboratory, teaching, research, procurement, logistics, production, emergency responders, administrative personnel, pharmaceuticals, agrochemicals, veterinary drugs, and end users of assorted chemicals in the informal and unregulated chemical sectors. Some of the approaches we have used to create chemical security awareness and introduce best practices are as follows:

- **Chemical Security training** - KCS has worked with several partners including the Chemical Security Program (CSP) of the US Department of State to raise awareness and reduce the threat of misuse, theft and diversion of hazardous and dual-use chemicals. In this regard KCS has held over 40 workshops in Kenya, Somalia and Malaysia. The trainings have been accomplished through workshops and hands-on activities involving

table-top and field exercises. Some of the topics covered include chemical weapons convention (CWC) and scheduled chemicals, chemicals of concern and dual use chemicals, chemical procurement and supply chain security, chemical transportation security, chemical risk assessment, vulnerability assessment, chemical inventory management, physical security, personnel reliability and chemical storage best practices. These trainings have targeted personnel from universities, colleges, research institutes, government laboratories, industrial facilities, informal chemical sector, agrochemical sector, pharmaceutical sector, security agencies and first responders.



- Integration of chemical security into the chemistry curriculum:** KCS has engaged university leadership in Kenya which has resulted in the incorporation of chemical safety and security best practices in some tertiary institutions chemistry curriculum. This has ensured that graduates of chemistry and related programmes are trained and able to apply chemical security best practices and inculcate a chemical security culture wherever they are employed. Some of the universities that have included chemical security in their curriculum include the Technical University of Kenya, Machakos University and Maseno University.



Pic 1(top left): Chemical Safety, Security and Waste Management Workshop, TU Kenya (Dec 2016)

Pic 2&3 (top center and right): Awareness-raising on chemical safety and security, the St. Barnabas Anyiko Secondary School, Kenya (Jan 2018)

- **KCS chemical security e-learning platform:** (<https://learn.kenyachemicalsociety.org>) In order to create chemical security awareness among a wider target audience specifically from remote regions and those with limited time due to work commitment, KCS developed an online curriculum for chemical safety and security to support e-learning by chemical practitioners in Kenya. The chemical security concepts on the KCS e-learning platform are organized in modules with self-assessment tests and certification upon completion.
- **Chemical Security Risk and vulnerability Assessments:** KCS Chemical Security experts have conducted Chemical Security risk and vulnerability assessments at chemical facilities. The assessments were carried out in university laboratories, government laboratories and chemical industries. Similar assessments have been carried out at informal and unregulated chemical industries around the port of Mombasa.
- **Improvement of physical security infrastructure:** Based on the vulnerability assessments of chemical facilities and infrastructures by Chemical Security trainees and KCS Chemical Security experts, physical security installations and upgrades were recommended. Institutions that partnered with KCS received support from CSP and other implementers to improve chemical security infrastructure. The improvements include installation of fume hoods, surveillance cameras and biometric access control systems at universities, government (Government Chemist Department which is the Kenya's CWC National Authority) and industry facilities.
- **Participation in activities organized by the National Authority** in relation to the implementation of the Chemical Weapons Convention (CWC). – For example, I was invited by the National Authority to participate in the review of the Chemical Weapons Control Draft Bill (2019). The draft bill aims to domesticate the CWC in Kenyan law.
- **Member of the Advisory Board on Education and Outreach (ABEO):** With the knowledge and experience from the OPCW capacity building programmes, I joined the OPCW Advisory Board on Education and Outreach in 2016 for a 3 year term, which was renewed in 2019 for a further 3 years. In 2018 I served as the ABEO vice chairman.

What advice could you give to other chemists?

OPCW capacity development programmes are immensely beneficial. As I mentioned earlier, despite my PhD in chemistry, I still had a lot to learn from the OPCW. Applicants to the OPCW capacity building programmes, should work closely with their National Authorities, ensure to follow instructions given during the application process and submit all the requirements before the stipulated deadlines. When participating, in the programmes, have an open mind, learn, take notes and build your network by keeping in touch with all the other participants. When you return to your home country, work closely with you National Authority and give seminars to others about what you have learnt - knowledge shared is immortal.

- *Adeyinka Fasakin (Nigeria)*

Introducing myself...

My name is Adeyinka Olubunmi Fasakin, Lecturer at the Department of Industrial Chemistry, Ekiti State University, Nigeria. I studied chemistry at undergraduate and postgraduate levels at the University of Ibadan. My professional experience traversed teaching, industry and research with exposure to chemistry practice in developing and developed countries.

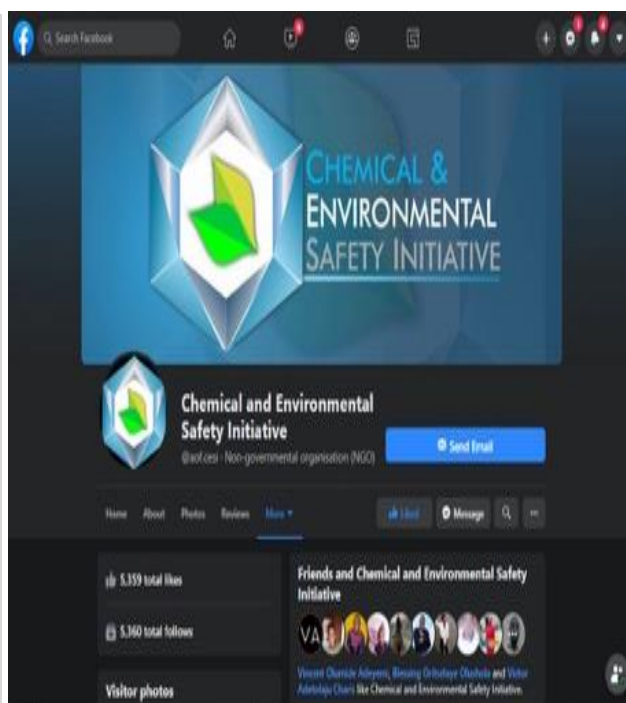
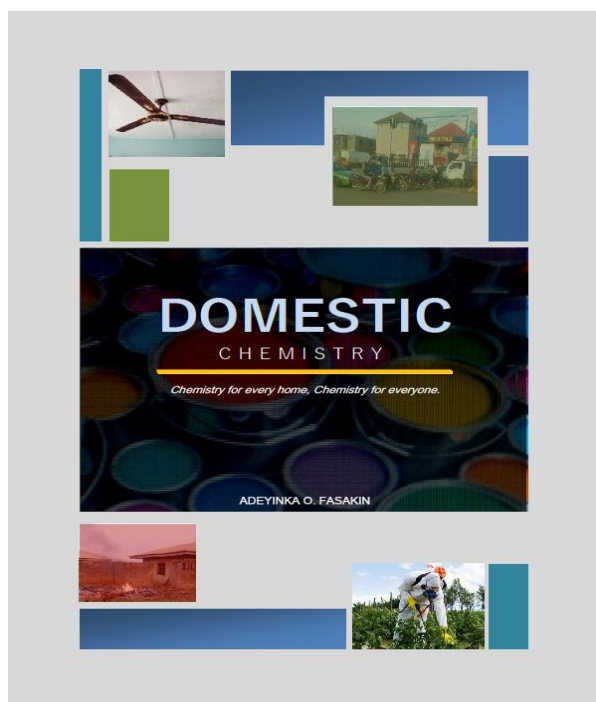


OPCW Capacity Building Courses attended

I have participated to the Associate Programme (2013), the Wuppertal Annual Course on Loss Prevention and Safety Promotion in the Chemical Process Industries (2015), and the Analytical Chemistry Course, Pretoria, South Africa (2018).

Activities conducted in follow-up of OPCW Courses attended

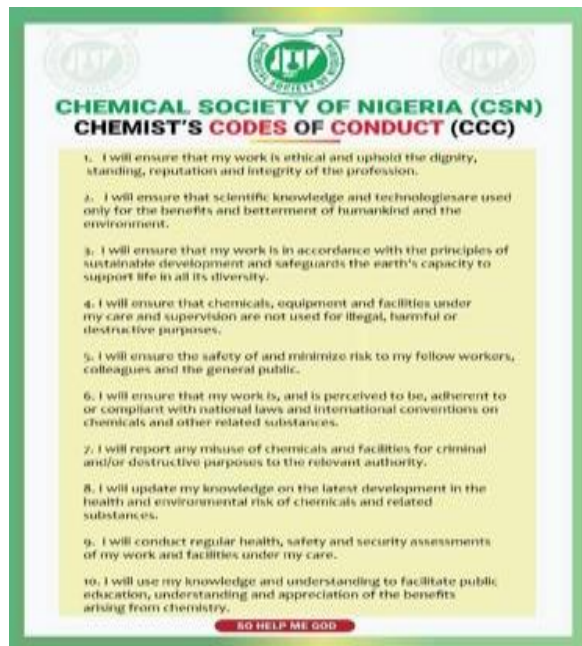
Banking on the learning acquired from OPCW courses, my work centered on raising awareness and strengthening ethics in the use of chemicals. In this context, I authored a book “Domestic Chemistry” on general public chemical safety awareness, as well as a chemical policy initiating paper for the development of viable and sustainable homegrown chemical industry in Nigeria¹. I have also set up an NGO “Chemical and Environmental Safety Initiatives”² encompassing more than five thousand people worldwide



https://www.academia.edu/27837384/THE_NIGERIAN_INDUSTRIAL_SECTOR_CANNOT_DEVELOP_WITHOUT_A_VIABLE_AND_SUSTAINABLE_HOME-GROWN_CHEMICAL_INDUSTRY

<https://www.facebook.com/aof.cesi>

In addition, I have successfully introduced Codes of Conduct¹ and Chemists Oath to chemistry professionals.



I participated as a speaker in the several international awareness raising events dedicated to youth and junior professionals on chemistry education, chemical safety and security focusing



I have been also contributing to improving the state of chemistry in Nigeria in my capacities as a Member of the National Executive Council of the Chemical Society of Nigeria (CSN) and chairman of the CSN National Committee on Young Graduate Chemists. I am also the Representative of Nigeria to IUPAC and Member of Division VIII, IUPAC – Committee on Chemical Nomenclature and Structure Representation.

Any advice to fellow African chemists and future participants in OPCW Courses?

OPCW courses are highly-loaded career enhancing programmes designed to equip participants with skills and knowledge that can make great impact on their careers. If the participants disseminate knowledge and skills gained, the courses can significantly improve chemistry education and the economies of their countries. African chemists should apply to participate in OPCW courses. Those selected should participate effectively in the programmes and after the courses, they should disseminate generously in their countries.

- *Raouf Medimagh (Tunisia)*

Introducing myself...

Hello, I am Dr. Raouf MEDIMAGH, Associate Professor in organic chemistry at the Tunisian National Institute for Research and Chemical and Physical Analysis (INRAP). I hold an Engineering Degree and a PhD in industrial chemistry. I have been a Fulbright visiting scholar at Virginia Tech University in USA. My work earned me several innovation awards and gold medals in Kuwait and Geneva Invention Fair for innovative projects.



OPCW capacity building activities attended

I took part to the Analytical Skills Development Course held at the Finnish Institute for Verification of the Chemical Weapons Convention (VERIFIN) in 2011. I then participated in the 2012 edition of the OPCW Associate Programme and the Wuppertal course on Loss Promotion and Safety Prevention in Chemical Process Industries in 2013.



Activities in follow-up of my participation to OPCW training events

My participation to OPCW capacity-building programmes helped me better understand the CWC and inspired me to contribute the promotion of peaceful uses of chemistry. With other alumni of OPCW programmes at the INRAP, and in collaboration with the OPCW Technical Secretariat, we have set up starting from 2011 the first analytical skills development course in French, under the OPCW Africa Programme. It has been a success. We organized so far 4 courses which were all very well received by the participants.



Advice(s) to fellow African chemists and future participants to OPCW trainings

Africa is the continent of the future and a lot needs to be done in the development area. We endeavor vigorously with colleagues from all over the continent to put this mindset in place. Through the Africa Programme, the OPCW is actively helping out with the provision of concrete trainings and funding in the field of chemistry for peaceful purposes. I strongly encourage my African peers to benefit from the OPCW programmes, enhance their lab capacities and promote green concepts. Another important topic is infrastructure development and maintenance: the effectiveness of African laboratories relies greatly on keeping their analytical equipment in a good shape. We work intensively within the OPCW to that end and to reinforce the autonomy of laboratories in Africa in terms of preventive and curative maintenance.

- *Roger Baleba (Cameroon)*

Introducing myself...

I am Roger Moise BALEBA MBANGA from Cameroon, Chemical Research Officer. I hold a Master of Science in Organic Chemistry, preparing my doctorate in the same field at the University of Yaoundé 1. Regarding my professional career, I am leading the Pesticide Residue Monitoring Unit, deputy Chief of the food quality control laboratory at the Cameroonian Ministry of Scientific Research and Innovation. I am also a technical advisor to the CWC National Authority of Cameroon.



OPCW capacity building activities attended...

I had the opportunity to start my capacity building with the OPCW in 2015, with a course in analytical chemistry at Protechnick, South Africa, then with a 3-month fellowship in the campus of the University of South Africa (UNISA). My career was particularly energized when I took part to the Associate Programme 2016. In addition, I benefitted from a training course on the conduct of samples and analyzes in highly contaminated environments held in Algeria in 2019.

Activities in follow-up of participation to OPCW events...

I have been giving seminars in my institute and in universities in Cameroon on the CWC implementation. Moreover, using the knowledge acquired during the Associate Programme, I contributed to a seminar organized by the CWC National Authority of Cameroon to sensitize the pharmaceutical and chemical industries on the need to start using green chemistry by replacing certain toxic chemicals or solvents with green ones.

- I have been applying the techniques I learned in OPCW Laboratory courses (HPLC, FTIR, etc.) in my daily research work on pesticides in regions in Cameroon where we have heavy plantations and also on pesticides in fruit and vegetables on sale at the Yaoundé and Douala markets. I also write projects and scientific articles in the field of green chemistry and pesticides. Furthermore, due to security concerns, I have been involved in the analysis of homemade bombs used by certain terrorists, in partnership with army officers.

Advice to fellow African Chemists and future participants to OPCW training events...

Africa continues to face terrorism which has the possibility of using chemical weapons. Luckily, as Africa chemists, we can tremendously benefit from the very good capacity building programmes offered by the OPCW to face and respond to such threat. We must therefore learn first and at home, disseminate and implement the knowledge acquired in our community. It is an important tool to make Africa safe from chemical weapons.



- *Sessley Mavunga (Zimbabwe)*

Introducing myself...

I am Sessely Mavunga from Zimbabwe. I work as Senior Analytical Chemist/ Environmental Officer at the Environmental Management Agency of Zimbabwe. I hold a BSc. In Biochemistry & Chemistry (University of Zimbabwe), a PG Dip Freshwater Quality Monitoring & Assessment from the University College Cork – Ireland. I am also completing my MSc. Freshwater Quality Monitoring Assessment (University College Cork - Ireland), a UNEP GEMS/Water sponsored program.



Participation to OPCW training events under the Africa Programme...

I took part to the Analytical Skills Development Course 2017 held at the Helsinki University, in Finland as well as the Associate Program 2018 (Photos of AP & Helsinki)



Activities in follow-up of my participation to OPCW training events

Essentially, I have been training laboratory staff on handling, preparation and analysis of CWC-related samples. I have also been ensuring the integration of regulations inspired by ECHA and REACH in our Hazardous Substances licensing process.

Furthermore, I am helping the CWC National Authority of Zimbabwe in managing the database of hazardous substances, for declaration purposes, and in conducting Inspections of chemical plants in the country.



Advice to fellow African Chemists and future participants to OPCW training events...

It is our responsibility as African chemists to contribute to the development of our countries and continent using chemistry for peaceful purposes. The OPCW is a great ally in this enterprise. I would encourage fellow African chemists to seek to benefit from the various capacity-building courses offered by the OPCW under its Africa Programme.

Participants should endeavor after course completion to disseminate the knowledge they would have acquired and raise awareness about the OPCW and its functions among younger generations.

Specifically, in the area of chemical safety management, I believe former participants that are in a position to do so should seek to form synergies between chemical industries, users and regulators for sound management of chemicals in their countries.

V. Recent Arrivals in the Team of the ICA Division

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

- Ms Beatrix Lahoupe, Head, Implementation Support Branch (IPB), who replaces Mr Kesrat Sukasam, starting from mid-Nov 2020
- Mr Miguel Albaladejo Pomares, Senior Programme Officer (APB), who replaced Mr Justo Quintero
- Mr Anton Martyniuk, Senior Programme Officer (APB), who replaced Ms Ditta Ciganikova
- Mr Patrick Wengler, Project Officer (APB), who replaced Mr Guy Valente



✚ 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!





Useful links

- OPCW Website: www.opcw.org
- OPCW Africa Programme: <https://www.opcw.org/resources/capacity-building/international-cooperation-programmes/africa-programme>
- OPCW Africa Network: <https://www.facebook.com/groups/2411779418947457>

For feedback and questions, please contact:



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