

Draft Programme

Day 1	22 October 2024
09:30	<i>Registration</i>
10:00	<p>High-Level Opening Ceremony</p> <p>Welcome Address by H.E. Mr. Nasser Bourita, Minister of Foreign Affairs, African Cooperation and Moroccan Expatriates Kingdom of Morocco</p> <p>Inaugural Address by H.E. Ambassador Fernando Arias Director-General, Organisation for the Prohibition of Chemical Weapons (OPCW)</p>
10:45	<i>Coffee break and networking (group photo)</i>
11:30	<p>Keynote Speeches</p> <p>Address by the representative from the United Nations – TBC’</p> <p>Address by Dr. Greta Heydenrych Executive Director, International Union of Pure and Applied Chemistry (IUPAC)</p> <p>Address by the representative from chemical industry – TBC’</p> <p>Address by Ms. Catherine Colthart Assistant Director, INTERPOL</p> <p>Briefing on “Berlin Conference on Artificial Intelligence and Weapons of Mass Destruction (WMDs)” by Mr. Stefan Kordasch, Head of Division, Biological and Chemical Weapons Disarmament, Federal Foreign Office of Germany</p>
12:45	<i>Lunch and networking</i>
14:30	Session 1 – Advances in AI for Chemistry: Innovations, Applications, and Future Directions
16:00	<i>Coffee break and networking</i>
16:30	Session 2 – AI Governance: Balancing Ethics, Policy, and Innovation
18:00	<i>Coffee break and networking</i>

18:30	<i>Close of day 1</i>
18:30	<i>Welcome Reception hosted by the Kingdom of Morocco</i>

Day 2	23 October 2024
09:00	Session 3 – Leveraging AI for peaceful uses of chemistry
10:30	<i>Coffee break and networking</i>
11:00	Session 4 – AI in chemical security and chemical terrorism
12:30	<i>Lunch and networking</i>
14:00	Session 5 – Enhancing chemical safety with AI
15:00	<i>Coffee break and networking</i>
15:30	Session 6 – Parallel sessions on AI science and policy
16:45	Session 7 – Exploring the challenges of AI to implementation of the CWC
18:00	<i>Close of day 2</i>

Day 3	24 October 2024
09:00	Session 8 – Role of AI in strengthening implementation of the CWC
10:30	<i>Coffee break and networking</i>
11:00	Session 9 – Moderator readouts
12:00	Closing Ceremony – Wrap-up discussions and closing remarks
12:30	<i>Lunch and networking</i>
14:00	Side events
17:00	<i>Close of conference</i>

Caveats: Programme and relevant topics are subject to change

Session 1 – Advances in AI for Chemistry: Innovations, Applications, and Future Directions

Format: symposium

Timing	Activity
5'	Introduction by moderator
10'	Expert presentations:
10'	1. Cutting-edge AI methods for scientific research to enhance data analysis, automate complex processes, and provide innovative tools to support and accelerate scientific discoveries
10'	2. Process design, optimisation, and control
10'	3. Drug discovery and design
10'	4. AI tools and platforms for chemistry, including robotic automation
10'	5. Data management and curated information
30'	Audience interaction: Open Q&A session where the moderator will facilitate discussions and ensure balanced participation
5'	Summary and wrap up by moderator
90'	Total session

Session 2 – Responsible use of AI

Format: panel discussion

Timing	Activity
10'	Introduction by moderator
4x 5'	Opening statement by each participant focusing on some of the key challenges drawing on experiences from their respective sectors
25'	Panel discussion on the interplay between ethical concerns and policy regulations, and how they influence AI practices (e.g. How can ethical principles be integrated into AI policymaking? What are the biggest challenges in developing and/or enforcing AI regulations? How do industry practices align with or challenge existing policies and ethical standards? What frameworks or guidelines can help ensure AI is used for peaceful and ethical purposes?) The role of the UN SG's AI Advisory Body in governing AI for humanity.
30'	Audience interaction: Open Q&A session where the moderator will facilitate discussions and ensure balanced participation
5'	Summary by moderator
90'	Total session

Session 3 – Leveraging AI for peaceful uses of chemistry

Format: symposium

Timing	Activity
10'	Introduction and brief overview (by moderator) of how AI is being leveraged in the chemical science to support various UN Sustainable Development Goals (e.g. hunger; good health and wellbeing; affordable and clean energy; responsible consumption and production)
10'	Expert presentations:
10'	1. Production of innovative materials
10'	2. Agri-solutions and innovation
10'	3. Repurposing chemical waste into drugs
10'	4. Accelerating drug discovery
10'	5. Chemicals and energy
25'	Audience interaction: Open Q&A session where the moderator will facilitate discussions and ensure balanced participation
5'	Summary and wrap up by moderator
90'	Total session

Session 4 – AI in chemical security and counter-terrorism

Format: symposium

Timing	Activity
5'	Introduction by moderator
10'	Expert presentations:
10'	1. AI in preventing chemical terrorism – an INTERPOL perspective
10'	2. Cybersecurity and data security
10'	3. Information technology and operational technology security in the chemical industry
10'	4. AI in tracking (WCO)
20'	Panel discussion on opportunities, challenges, and limitations of using AI in enhancing chemical security and preventing chemical terrorism. Additional discussion points include the use of the following: <ul style="list-style-type: none"> • surveillance, detection, and monitoring • predictive analytics • AI-enhanced chemical security measures • scenario/response modelling
20'	Audience interaction: Open Q&A session where the moderator will facilitate discussions and ensure balanced participation
5'	Summary by moderator
90'	Total session

Session 5 – Enhancing chemical safety with AI

Format: panel discussion

Timing	Activity
5'	Introduction by moderator
3x 5'	Opening statement by each participant focusing on some of the key developments based on their respective experiences
15'	Panel discussion on developments, challenges, and limitations of using AI in chemical safety
20'	Audience interaction: Open Q&A session where the moderator will facilitate discussions and ensure balanced participation
5'	Summary by moderator
60'	Total session

Session 6 – Deep dive into science and policy aspects of AI

Format: Parallel presentations/tutorials

Science session

Timing	Activity
5'	Introduction by moderator
25'	Tutorial on using synthesis design tools
25'	Presentation on advances in automated chemistry
20'	Questions and discussion
75'	Total session

Policy session

Timing	Activity
5'	Introduction by moderator
20'	Dimensions of impact of AI to the CWC
20'	Ethical consideration of AI – industry perspective
15'	Adopting and implementing AI-related policy
15'	Questions and discussion
75'	Total session

Session 7 – Exploring the challenges of AI to implementation of the CWC

Format: panel discussion

Timing	Activity
10'	Introduction by moderator
30'	Panel discussion on potential challenges of AI to CWC implementation and possible solutions. Relevant topics may include: <ul style="list-style-type: none"> • dual-use AI tools • manipulation of AI systems to evade detection • designer chemicals • disinformation/misinformation
30'	Audience interaction: Open Q&A session where the moderator will facilitate discussions and ensure balanced participation
5'	Summary by moderator
75'	Total session

Session 8 – Role of AI in strengthening implementation of the CWC

Format: enhanced panel discussion

Timing	Activity
10'	Introduction by moderator
10'	1. Verification
10'	2. Inspections
10'	3. International cooperation
10'	4. Outreach, collaboration, research
10'	Panel discussion on the opportunities, tools, and equipment AI offers to bolster implementation of the CWC and how they can be effectively leveraged by the OPCW
25'	Audience interaction: Open Q&A session where the moderator will facilitate discussions and ensure balanced participation
5'	Summary by moderator
90'	Total session

Session 9 – Session summaries

Session	
Advances in AI for Chemistry: Innovations, Applications, and Future Directions	7'
Responsible use of AI	7'
Leveraging AI for peaceful uses of chemistry	6'
AI in chemical security and chemical terrorism	6'
Enhancing chemical safety with AI	6'
Science-focused parallel session	7'
Policy-focused parallel session	7'
Exploring the challenges of AI to implementation of the CWC	7'
Role of AI in strengthening implementation of the CWC	7'
Total	60'