IWA Water and Development Congress & Exhibition

the international water association

Congress Programme & Exhibition Overview

Water, sanitation, and innovation – pathways to progress and a resilient future

BANGKOK
THAILAND

8-12 DECEMBER

2025

Organised by

the international water association

Co-organiser

AIT Asian Institute of Technology

www.waterdevelopmentcongress.org
#WaterDevelopmentCongress

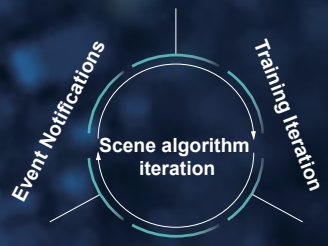
Comcore

Comcore Technology innovates for a sustainable future through its advanced smart water and energy meter solutions to support utilities optimize resources, reduce losses and enhance service delivery. Enhanced with Ai Comcore establishes water management systems to support communities worldwide in meeting todays challenges and tomorrows opportunities.

Application of cognitive AI algorithm in leakage management

leakage management scenarios

- Support the digital transformation of water department
- The quantitative analysis results can assist utilities to further optimize network, such as the dynamic balance of pressure, diameter pressure matching, etc
- Using EPANET to generate millions of simulation scenarios of random leaks to learn the optimal sampling strategy



Zero-Coding ML System

Cognitive AI algorithm services

- Provide algorithm suggestions
- Minimum and optimal sensor placement locations are recommended to reconstruct the flow characteristics of each node in the network to detect leaks
- Deep learning based on real-time data Synchronous optimization algorithm, learn to reconstruct external flow + detect leaks + dangers, defects, etc

Welcome

Sponsors, Organisers, Partners, Programme Committee, Reviewers

Event Overview

Congress Focus

Detailed Programme

Posters

Exhibition

Welcome to the IWA Water and Development Congress & Exhibition

It is my great pleasure to welcome you to the International Water Association's 2025 Water and Development Congress & Exhibition, hosted in the vibrant city of Bangkok, Thailand.

The event is the latest to continue IWA's proud tradition of convening the global water community to share knowledge, inspire innovation, and advance solutions that drive equitable and sustainable water and sanitation outcomes for all.

More than this, it is also the eighth in IWA's Water and Development Congress & Exhibition series. This series focuses specifically on the interests of low- and middle-income countries and the Bangkok edition builds on the great success of the 2023 edition held in Kigali, Rwanda. I took office as IWA President at the close of the IWA World Water Congress & Exhibition in Toronto last year. I am honoured to now be serving as IWA President at the time of this important Congress – IWA's flagship event for 2025 – and to see it take place in a region where an exchange of insights focused on low- and middle-income countries is of huge relevance.

Our theme for 2025 – Water, sanitation, and innovation: pathways to progress and a resilient future – reflects both the urgency and the opportunity of our time. Around the world, we face increasing pressures on water systems from climate change, population growth, and urbanisation. Yet, within these challenges lies immense potential. Through innovation, collaboration, and leadership, we can reimagine how we manage water and sanitation to build resilience, strengthen communities, and protect our shared environment.

The Congress programme in Bangkok is set to be as dynamic as it is diverse. Over five thematic tracks – spanning ensuring safe drinking water, advancing wastewater treatment, smart water management, sustainable utility operations, and robust governance and finance – delegates will engage with the latest research, technologies, and practices shaping our sector. Alongside the technical sessions, workshops, and forums, the Exhibition will serve as a vibrant hub for connecting ideas, people, and partners.

Bangkok provides an inspiring setting for this Congress, and I am especially pleased that this edition is co-hosted by the Asian Institute of Technology, whose expertise and commitment to sustainable development in the region align perfectly with IWA's mission. Together, we aim to foster stronger regional collaboration and empower professionals across Asia and beyond, to lead the transformation towards water security and resilience.

As we gather here, we do so with a shared sense of purpose: to accelerate progress on the Sustainable Development Goals, to strengthen the systems that sustain life, and to ensure that every community has access to safe water and sanitation.

I look forward to what I am sure will be an exceptional congress, and to meeting many of you in person, exchanging ideas, and working together to shape a resilient, inclusive, and water-wise future.

Hamanth Kasan, *President, International Water Association*

Welcome from the Asian Institute of Technology

On behalf of the Asian Institute of Technology, it is our great honour to welcome you to Bangkok, Thailand, for the IWA Water and Development Congress & Exhibition 2025. As co-organiser of this prestigious global event, it is a particular pleasure to invite you to this year's gathering under the theme - 'Water, Sanitation, and Innovation: Pathways to Progress and a Resilient Future.'

The congress represents a vital platform for advancing solutions to global water challenges, fostering innovation, and strengthening regional collaboration focused on the Global South. For Southeast Asia, it offers an unparalleled opportunity to address pressing water issues, sanitation challenges, build resilience, and drive sustainable development in our communities. We are confident that the event will leave a lasting impact by bringing together diverse expertise and actionable ideas.

Bangkok, a city renowned for its cultural richness, hospitality, and commitment to innovation, provides a perfect setting for this important event. Thailand's leadership in sustainable development and regional cooperation makes it an inspiring host for discussions on how we can collectively advance water security and resilience.

Throughout the congress, experts, researchers, policymakers, and practitioners from around the world will exchange insights, share experiences, and explore innovative pathways toward achieving universal access to safe water and sanitation. This is also an opportunity to forge new partnerships and strengthen our shared commitment to a sustainable and resilient future.

We encourage you to take time to experience the warmth of Thai hospitality and explore the country's natural and cultural treasures. From the vibrant energy of Bangkok to Thailand's serene landscapes, these experiences will enrich your visit and highlight the importance of environmental stewardship and resilience in practice.

As co-hosts, AIT is proud to support this transformative gathering. We look forward to meeting fellow professionals from around the world, exchanging experiences, and learning together as we chart the future of water and sanitation.

We wish you a successful and inspiring congress, and a memorable stay in Thailand.

Prof. Thammarat Koottatep, *(Congress President)*
Professor and Co-Director, Global Water & Sanitation Center,
Asian Institute of Technology, Thailand

Prof. Pai Chi Li, *Professor and President, Asian Institute of Technology, Thailand*

A platform for progress on water, sanitation, and innovation

Welcome to Bangkok, the cosmopolitan capital of Thailand, and to the 2025 IWA Water and Development Congress & Exhibition. This event brings together water sector professionals from around the world with a shared purpose in mind—to advance water and sanitation access and management, and to harness innovation as a driving force for resilience and sustainable development.

The Water and Development Congress & Exhibition has become a cornerstone of the International Water Association's calendar. The Bangkok edition represents IWA's flagship event for 2025 and it provides a vital platform where ideas, evidence, and experience converge. What makes it truly special is its focus on advancing solutions that are particularly relevant to low- and middle-income countries – countries where creativity, collaboration, and commitment are reshaping the water and sanitation landscape in remarkable ways.

Our 2025 theme 'Water, sanitation, and innovation – pathways to progress and a resilient future' speaks to the transformative power of innovation. Innovation is not only about technology; it is about new ways of thinking, new partnerships, and inclusive approaches that enable lasting change. It includes digital tools, decentralised systems, and circular economy models. Innovation can help us bridge gaps in service delivery, strengthen climate resilience, and ensure no community is left behind.

These opportunities exist across our sector, not least when we look at sanitation. Achieving safely managed sanitation for all requires a systems approach that values equity, affordability, and sustainability as much as infrastructure.

To advance the pathways to progress and a resilient future, we need contributions from right across our sector. Here, the approach of the Water and Development Congress & Exhibition as an open platform is vital.

The format brings together multiple, diverse perspectives and insights. Reflecting this, as well as AIT as a coorganiser, the Asian Development Bank has joined as Principal Strategic Partner, while the World Bank and South Africa's Water Research Commission have joined as Strategic Partners. This is in addition to excellent support from key local entities and from sponsors.

Meanwhile, the format allows for multiple agendas to be advanced. This is most visible in this year's outstanding array of key programme features. A High-Level Summit on Water Security and Resilience is being convened in collaboration with the AIT, ADB, and other strategic partners. There are dedicated forums on key themes - on inclusive urban sanitation, on the impact of pollutants from land to sea, and on water efficient sanitation solutions. And there are equally important forums that are regular features of our congresses – bringing together utility leaders, regulators, and emerging water leaders.

Combined with the regular programme elements, this all makes for a vibrant and impactful event. I wish you an engaging and rewarding congress, and I look forward to the ideas and collaborations that will emerge to shape the next chapter of our shared water story.

Dr Kala Vairavamoorthy, *Executive Director, International Water Association*

Sponsors and Partners

Organiser

The International Water Association (IWA) is a global organization that works with an interdisciplinary network of water professionals and partners to create a water wise world. Our experts collaborate and combine their knowledge to spread practical know-how throughout the entire water cycle to help us reduce, reuse, and replenish water resources.

www.iwa-network.org/

Co-organiser

The Asian Institute of Technology (AIT), founded in 1959, is a not-for-profit international English-speaking postgraduate institution located on a green campus north of Bangkok, Thailand. AIT offers the opportunity to study at an institution in Asia which possesses a global reputation. Going forward, AIT will be stressing its global connections, injection of innovation into research and teaching, its relevance to industry, and its nurturing of entrepreneurship, while continuing to fulfill its social impact and capacity building role.

www.ait.ac.th/

Principal Strategic Partner

Asian Development Bank (ADB) is a leading multilateral development bank supporting inclusive, resilient, and sustainable growth across Asia and the Pacific. Working with its members and partners to solve complex challenges together, ADB harnesses innovative financial tools and strategic partnerships to transform lives, build quality infrastructure, and safeguard our planet.
ADB supports its developing member countries in achieving water-related Sustainable Development Goals.

www.adb.org

Strategic Partners

The Water Research Commission (WRC) provides South Africa with applied knowledge and water-related innovations by continuously transforming national needs into research ideas and translating research outcomes into practical solutions. By supporting water innovation and its commercialisation, the WRC enhances the country's socio-economic and environmental well-being. Its core strategic role is to remain relevant, responsive, and effective.

www.wrc.org.za

The World Bank Group aims to create a world free of poverty on a liveable planet. As the largest multilateral financier for water in developing countries, it advances sustainable water security through three pillars: Water for People, Water for Food, and Water for Planet. In partnership with the government of Singapore, it established the Singapore Water Center to drive innovation, knowledge exchange, and capacity development to support the water sector across Asia and beyond.

www.worldbank.org

Supporting Organisation

Thailand Convention & Exhibition Bureau (Public Organisation) has been assigned a role to promote, support and develop the business events industry – corporate meetings, incentive trips, conventions, exhibitions, mega events and world festivals. Serving as a strategic partner, TCEB helps deliver creative ideas and solutions to bring success and fulfil the requirements of business events.

www.businesseventsthailand.com/en

Gold Sponsors

Welcome Reception Sponsor

Comcore

Comcore is a premier global digital energy technology company. Specialising in Smart Metering, Smart Power Equipment, and Renewable Energy, Comcore delivers integrated solutions across Digital Energy Metering, Smart Power Distribution, Renewable Energy Storage & Charging, Smart Micro-grids, and Comprehensive Energy Management Solutions.
Guided by its strategy of globalisation, digitalisation, and low carbonisation, Comcore is committed to continuous innovation, high-quality product development, and fostering international energy collaborations.

www.comcore.com.sg

中原环保 ZHONGYUAN EP

Zhongyuan Environmental Protection Co., Ltd. is a national high-tech enterprise, a state-controlled listed company in China. Our business covers sewage treatment, sludge treatment, reclaimed water utilisation, water supply and heating, environmental protection equipment manufacturing, photovoltaic power generation, and ecological remediation. Our operations span over 40 cities and regions across China, achieving a development pattern of deepening roots in the Central Plains region, expanding nationwide, and moving forward to the global stage.

www.zhongyuanep.com/

ANGEL

Angel is a global leader in water purification and largest professional company in China dedicated to R&D, manufacturing, and sales of drinking water equipment. With a presence in 65 countries, Angel delivers safety, health, and style in water consumption. Its portfolio includes water purifiers, dispensers, and whole-house filtration systems for residential, commercial, food service, education, and healthcare applications.

www.angelwatersolutions.com

Mobile App Sponsor

明興水務 MING HING WATERWORKS

Ming-Hing Waterworks Engineering Co., Ltd. is one of Hong Kong's largest reputable civil and waterworks contractors. Specialising in main laying, repair, and rehabilitation, MH excels in constructing and maintaining essential waterworks facilities, including water treatment works, reservoirs, and water tanks. With a steadfast commitment to quality, innovation, and robotics, MH leverages advanced technologies to boost efficiency and sustainability and delivering reliable solutions.

www.minghing.com.hk

Partner Organisations

bangchak

Bangkchak. Strengthening Energy Foundations, Expanding Sustainable Growth. A leading energy conglomerate in the Asia-Pacific region, operating across 11 countries in Refinery and Marketing, Clean Power, Bio-Based Products, and Natural Resources. We strengthen energy security and drive low-carbon growth—ensuring resilience, balance, and sustainability for future generations.

www.bangchak.co.th/en/home

MEA

The Metropolitan Electricity Authority (MEA) is a state enterprise under the Ministry of Interior, responsible for distributing reliable, safe, and affordable electricity across Bangkok, Nonthaburi, and Samut Prakan. Beyond power supply, MEA also engages in related businesses to meet customer needs while prioritising social and environmental responsibility and supporting the country's economic development.

www.mea.or.th/en

The Metropolitan Waterworks Authority (MWA), a state enterprise under the Ministry of Interior since 16 August 1967, procures raw water, produces, delivers, and distributes water in Bangkok, Nonthaburi, and Samut Prakan, and runs other businesses related or beneficial to waterworks operations.

www.mwa.co.th/en/home/

The Department of Marine and Coastal Resources (DMCR) under the Ministry of Natural Resources and Environment is responsible for the conservation, protection, restoration, research, and development for the sustainable management of Thailand's marine and coastal resources.
Vision:
Protecting, conserving, and enhancing the value of marine and coastal resources through collective social efforts for sustainable economy and livelihoods.
Mission:
Formulating policies, planning, and managing marine and coastal resources based on the principles of good governance to ensure their integrity and sustainable utilisation.

www.dmcr.go.th/detailLib/267/

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Official magazine

the Source

asian WATER

GWI GLOBAL WATER INTELLIGENCE

WWA WATER & WASTEWATER ASIA

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Reviewers make a substantial contribution to the development of the Congress programme.
At least two experts from around the world reviewed and scored all submissions.
This is critical to ensure high standards, and IWA is grateful for the reviewers' commitment.

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ZHONGYUAN EP

Zhongyuan Environmental Protection Co., Ltd. is a national high-tech enterprise, a state-owned holding listed company, and a "Double Hundred Enterprises" in the national state-owned enterprise reform. The company's stock abbreviation is "Zhongyuan Environmental Protection", and the stock code is "000544". In recent years, the company has closely focused on national strategic needs and the overall economic and social development, forming a "I+2+N" industrial layout and modern industrial system for sewage treatment, sludge treatment, recycled water utilization, water supply and heating, ecological governance, equipment manufacturing, clean energy, etc.

Main Business

sewage treatment





- Accumulated construction of 24 modern sewage treatment plants such as Wulongkou and Matougang
- Construction of the seventh million ton sewage treatment plant in the country, Zhengzhou NewArea Sewage Treatment Plant.
- Multiple projects have been awarded the "Top Ten Sewage Treatment Plants in China"
- Two sewage treatment plants in Zhengzhou New District and Matougang have been selected as the first batch of "National Green and Low Carbon Benchmark Water Plants"

sludge treatment


- Accumulated construction of 12 sludge treatment projects including Bagang and Matougang
- Innovatively opening up sludge pyrolysis gasification process route, breaking the dilemma of "sludge siege"
- Successfully constructed the first and largest pyrolysis gasification project in China

Reclaimed water utilization

- Open up four major application scenarios for recycled water in urban miscellaneous use, industrial utilization, ecological landscape, and clean energy
- assist Zhengzhou in successfully being selected as a national key city for recycled water utilization

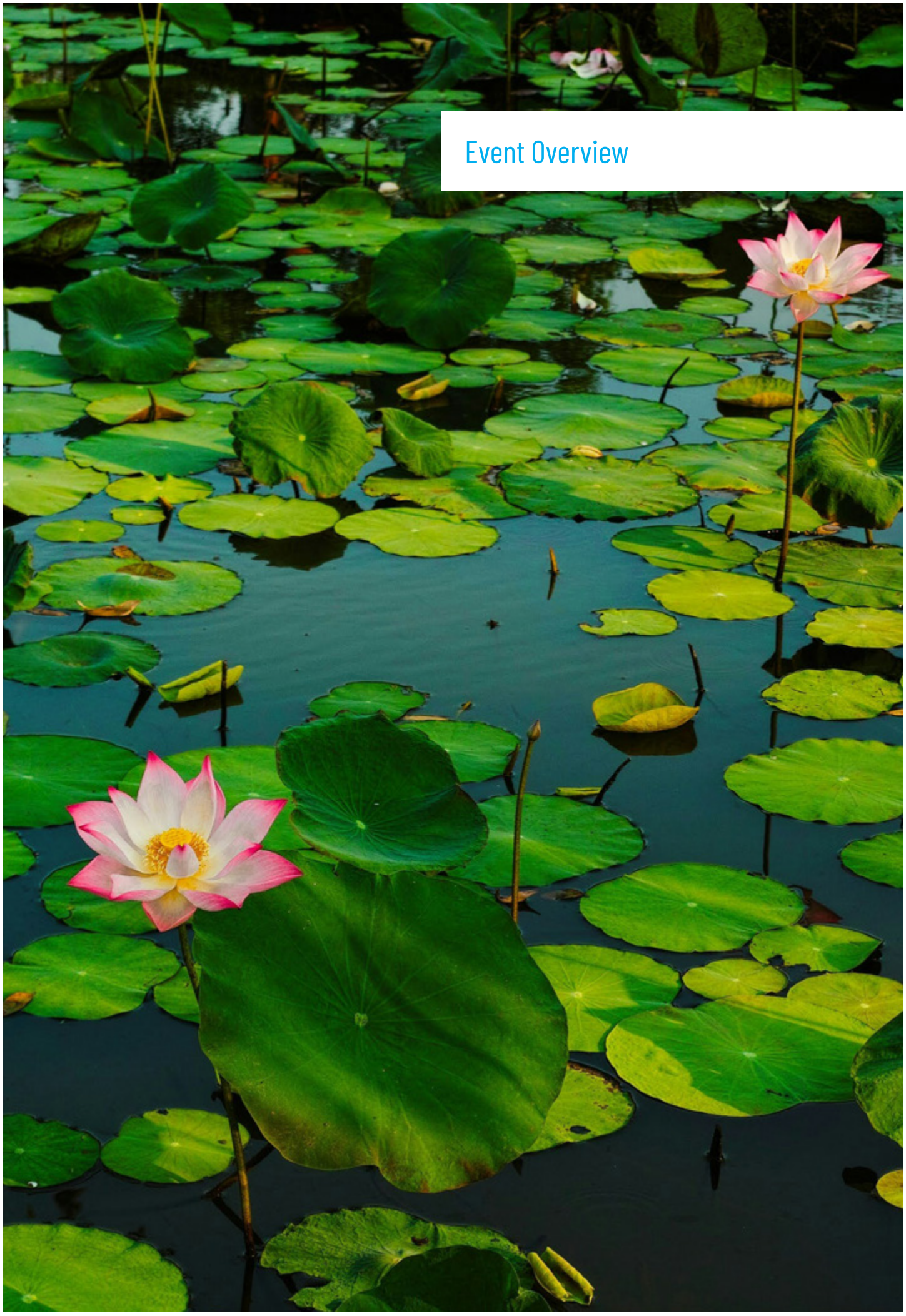
technological innovation

- The effluent is clear and transparent,with a visibility of over 5 meters
- The main effluent indicators are superior to the surface water standards of rivers, which helps promote a virtuous cycle of water resources and reaches the international leading level
- Successfully applied in Matougang, Zhengzhou City (600000 tons/day) and
- Zhengzhou New District Sewage Treatment Plant (I million tons/day)

- The cross-border use of coal chemical technology has solved the problem of finaldisposal of municipal sludge by decomposing sludge into combustible gas and slag athigh temperatures
- Effectively filling industry gaps and achieving leading domestic levels
- Successfully applied in Xi'an Fengxi (600 tons/day) and Zhengzhou New Area sludge treatment projects (1000 tons/day)

- The removal rate of volatile organic compounds reaches over 90%
- Reaching the leading level domestically
- Successfully applied to the Shuangqiao Sludge Treatment Project in Zhengzhou City

Event Overview



Programme Framework

Theme 1	Theme 2	Theme 3	Theme 4	Theme 5
ENSURE SAFE DRINKING WATER: INNOVATIVE APPROACHES FOR TREATMENT AND SUPPLY	ADVANCING WASTEWATER TREATMENT AND SANITATION SERVICES: SUSTAINABLE SOLUTIONS FOR ALL	SMART WATER MANAGEMENT: INTEGRATED APPROACHES FOR EFFECTIVE WATER MANAGEMENT AND PLANNING	ENHANCING UTILITY MANAGEMENT AND OPERATIONS FOR SUSTAINABLE GROWT	STRENGTHENING GOVERNANCE AND FINANCIAL SYSTEMS FOR LONG-TERM DEVELOPMENT

Monday 8 December	Tuesday 9 December	Wednesday 10 December	Thursday 11 December	Friday 12 December
	KEYNOTE PLENARY 09:00 — 09:45			
	BREAK 09:45 — 10:30			
	SESSION 1 10:30 — 12:00			
	LUNCH 12:00 — 13:30			
	SESSION 2 13:30 — 15:00			
	BREAK 15:00 — 15:30			CLOSING CEREMONY 15:15 — 16:45
OPENING CEREMONY 16:00 — 18:00 Followed by **Toast – Exhibition opening** (17:30-18:00)	SESSION 3 15:30 — 17:00			
	BREAK 17:00 — 17:15			
WELCOME RECEPTION 18:00 — 20:00	KEYNOTE PLENARY 17:15 — 18:00			
			GALA DINNER 19:30 – 21:30	

Monday 8 December

16:00 - 17:30	**OPENING CEREMONY | PLENARY HALL 2** Jay Bhagwan, *Executive Manager, Water Research Commission, South Africa*	17:30 - 18:00	**Exhibition Opening**	18:00 - 20:00	**Welcome Reception** *sponsored by ANGEL*

Tuesday 9 December

SCHEDULE	MR111 (A+B+C)	MR110 (A+B)	MR110 C	MR109 (A+B)	MR109 (C+D)	MR109 (G+H)	MR109 (E+F)	MR106	MR103	MR102	MR101	MR107 (A+B)
09:00 - 09:45	**KEYNOTE PLENARY | ROOM MR111 (A+B+C)** The Right Honourable Datuk Patinggi Tan Sri (Dr) Abang Haji Abdul Rahman Zohari bin Tun Datuk Abang Haji Openg, Premier of Sarawak, *Malaysia*											
SESSION 1 10:30 - 12:00	**T 2.1** Circular economy in wastewater: Innovations in energy recovery, resource reuse, and sustainable treatment	**HIGH-LEVEL SUMMIT**	**SW.1** Sanitation as source-protection infrastructure: Reframing the water–sanitation nexus	**T 2.2** Sanitation and public health: Evidence-based approaches for safe, inclusive, and standardized solutions	**W 3.1** Scaling water-sensitive urban NbS for equitable and lasting impact	**W 5.1** WASH system index tool: An opportunity to strengthen WASH service delivery	**W 1.1** Effecting improved intermittent water supply (IWS)	**T 3.1** Resilient infrastructure & tackling non-revenue water loss	**T 1.1** Sustainable technologies for safe drinking water access	**T 3.2** From data to drops: AI in smart water management	**T 2.3** Decarbonizing wastewater and sanitation: emissions, resilience, and climate action	
SESSION 2 13:30 - 15:00	**T 2.4** Advancing resource recovery in wastewater and faecal sludge management	**HIGH-LEVEL SUMMIT**	**SW.2** Workshop	**T 2.5** Wastewater surveillance and the challenge of antimicrobial resistance (AMR)	**W 3.2** A catchment-level approach for climate resilience in water systems	**W 4.1** Scaling up peer learning partnerships in water and sanitation: A capacity development approach	**W 3.3** Understanding the NRW water balance	**T 4.1** Equity & access in water distribution	**T 1.2** Cutting-edge innovations in water quality monitoring and risk assessment	**T 3.3** Connected communities: Digital platforms for inclusive engagement	**T 2.6** Disaster-ready sanitation: Safeguarding health and infrastructure in disaster prone areas	**W 3.9** Inclusive water and sanitation for circularity and climate-resilient cities
SESSION 3 15:30 - 17:00	**T 2.7** Advancing pathways to circularity and sustainability in sludge management	**HIGH-LEVEL SUMMIT**	**SW.3** Citywide inclusive sanitation, water in circular economy and resilience, and reuse	**T 2.8** Emerging contaminants and microbial and microplastic risks in wastewater: Monitoring, mitigation, and molecular insights	**W 2.1** Design sprint: building future water-sensitive cities	**W 5.2** Empowerment of women in sanitation enterprises: Innovations for inclusive governance for reaching unserved communities	**W 3.4** Nature-based Solutions for climate action: The role of water utilities	**T 5.1** Financing & economic approaches	**T 1.3** Advances in water quality and management for climate resilient cities	**T 1.4** Data-driven insights for water treatment efficiency	**T 2.9** Policy and economic tools for sustainable waste and water management	**W 1.4** HRWM workshop for pathogen risk management for drinking water consumption
17:15 - 18:00	**KEYNOTE PLENARY | ROOM MR111 (A+B+C)** Yvonne Magawa, *Executive Director, ESAWAS, Zambia*											

Wednesday 10 December

SCHEDULE	MR111 (A+B+C)	MR110 (A+B)	MR110 C	MR109 (A+B)	MR109 (C+D)	MR109 (G+H)	MR109 (E+F)	MR106	MR103	MR102	MR101	MR107 (A+B)
09:00 - 09:45	**KEYNOTE PLENARY | ROOM MR 111 (A+B+C)** Roshan Shrestha, *Gates Foundation, USA*											
SESSION 1 10:30 - 12:00	**T 4.2** Urban water resilience & infrastructure	**SW.4** Charting the course to water security: The Asian Water Development Outlook 2025	**UTILITY LEADERS FORUM**	**T 2.10** Transforming sanitation through decentralized and non-sewered systems	**IWA WATER EFFICIENT SANITATION SOLUTIONS FORUM 2025**	**W 4.2** The state of water and sanitation utilities: Utility and system-level perspectives for transformation?	**W 1.2** Ensuring rural drinking water safety in developing countries: Challenges and opportunities	**INTERNATIONAL WATER REGULATORS FORUM**	**T 1.5** Innovative water technologies	**T 2.11** Enhancing wastewater treatment through emerging technologies and artificial intelligence	**T 2.12** Cutting-edge nitrogen removal strategies in wastewater treatment	**W 5.10** Unlocking mechanisms for sustainable financing for climate resilient and inclusive WASH
SESSION 2 13:30 - 15:00	**T 4.3** Sustainable water management & circular economy	**SW.5** Trends in climate resilient water and sanitation systems in Asia and the Pacific	**UTILITY LEADERS FORUM**	**T 2.13** Decentralized sanitation innovations and scalable solutions for inclusive urban-rural wastewater management	**IWA WATER EFFICIENT SANITATION SOLUTIONS FORUM 2025**	**W 2.2** Pre-assessment for carbon finance: Evaluating wastewater & sanitation project eligibility for carbon finance	**W 1.3** Strengthening the impact of water safety plan training	**INTERNATIONAL WATER REGULATORS FORUM**	**T 1.6** Novel treatment mechanisms	**T 4.4** Data-driven water management	**T 2.14** Understanding microbial interactions for enhanced treatment performance	**W 2.6** From climate vulnerability to climate resilience: Innovation and systems change in urban sanitation
SESSION 3 15:30 - 17:00	**T 5.2** Environmental health & circular economy	**SW.6** IWA & Grundfos Youth Action for SDG6 Fellowship – Interactive discussion on enabling community-led solutions for water challenges	**UTILITY LEADERS FORUM**	**T 2.15** Decentralized and inclusive wastewater solutions: low-energy innovations for resilient sanitation systems	**IWA WATER EFFICIENT SANITATION SOLUTIONS FORUM 2025**	**W 4.3** Unlocking the power of AI to transform operational performance of water utilities	**W 2.4** Transformative water practices in the Circular Economy	**INTERNATIONAL WATER REGULATORS FORUM**	**T 1.7** New approaches for the removal of contaminants	**W 2.9** Digital tools for evidence-based decision making in CWIS	**T 2.16** Harnessing Nature-based Solutions for resilient and sustainable wastewater management	**W 2.3** Empowering communities through resource-oriented sanitation
17:15 - 18:00	**KEYNOTE PLENARY | ROOM MR111 (A+B+C)** Min Yang, *RCEES, China*											

Thursday 11 December

SCHEDULE	MR111 (A+B+C)	MR110 (A+B)	MR110 C	MR109 (A+B)	MR109 (C+D)	MR109 (G+H)	MR109 (E+F)	MR106	MR103	MR102	MR101	MR107 (A+B)
09:00 - 09:45	**KEYNOTE PLENARY | ROOM MR111 (A+B+C)** Kate Medlicott, *WHO, Switzerland*											
SESSION 1 10:30 - 12:00	**T 3.4** Navigating flood hazards: Enhancing urban resilience	**FROM LAND TO SEA FORUM**	**INCLUSIVE URBAN SANITATION FORUM**	**SW.8** Workshop on system leadership	**W 4.4** Intermittent water supply: The challenge of transitioning to 24|7	**EMERGING WATER LEADERS FORUM**	**W 5.3** Co-designing a CWIS-centric transformative GEDSI framework to advance equitable, safe and resilient WASH systems	**W 3.5** Circular economy as an innovation pathway for resilient, inclusive water and sanitation	**T 1.8** Emerging contaminants and disinfection in water treatment systems	**T 2.17** Innovative membrane and adsorptive technologies for sustainable wastewater reuse and resource recovery	**T 3.5** Rural water security through small-scale, localized & decentralized solutions	**W 5.9** Bangladesh's sanitation journey: 'Access to Safe Management' – challenges, successes, and ways forward
SESSION 2 13:30 - 15:00	**T 5.3** Climate resilience & adaptation	**FROM LAND TO SEA FORUM**	**INCLUSIVE URBAN SANITATION FORUM**	**SW.9** Beyond biology: New frontiers in household wastewater treatment	**W 1.7** Community-based rainwater for drinking: Scalable local actions, policy innovations, and technical solutions for achieving SDG 6	**EMERGING WATER LEADERS FORUM**	**W 3.6** Turning data into decisions – How utilities lead change with benchmarking and digital tools	**SW.7** Workshop	**T 1.9** Managing the safety of water services in urban and rural setups	**T 2.18** Emerging solutions for toxic metal and contaminant removal	**T 5.4** Technology & innovation	
SESSION 3 15:30 - 17:00	**T 3.6** Climate-resilient water security: Strategies for a changing world	**SW.10** Smart regulation for resilient and investable water systems	**INCLUSIVE URBAN SANITATION FORUM**	**T 2.19** Waste-to-Farm: Enhancing soil health through safe reuse practices	**W 5.4** Building bankable urban water investments: What works, what doesn't, and what needs to change?	**EMERGING WATER LEADERS FORUM**	**W 1.5** Innovative DX solutions for sustainable water supply	**W 2.5** The science you need to understand: Emissions from non-sewered sanitation	**W 4.6** Community-driven participatory monitoring for safe, equitable, sustainable and climate resilient water, sanitation, and hygiene services	**T 2.20** Tailored treatment solutions for industrial wastewater	**W 2.8** Bridging the gap: Overcoming implementation barriers to scale sustainable sanitation solutions	
17:15 - 18:00	**KEYNOTE PLENARY | ROOM MR111 (A+B+C)** Fan Zhang, *World Bank, USA*											
From 19:30	**GALA DINNER**											

Friday 12 December

SCHEDULE	MR111 (A+B+C)	MR110 (A+B)	MR110 C	MR109 (A+B)	MR109 (C+D)	MR109 (G+H)	MR109 (E+F)	MR106	MR103	MR102	MR101	MR107 (A+B)
09:00 - 09:45	**KEYNOTE PLENARY | ROOM MR111 (A+B+C)** Joel Goldenfum, *Scientific Committee on Adaptation and Climate Resilience, Brazil*											
SESSION 1 10:30 - 12:00	**T 4.5** Rural & climate-resilient solutions	**W 5.5** Come Together: The challenges of an alliance on safe sanitation	**W 5.6** Conflict or cooperation: Exploring water conflict through game theory	**T 5.5** Equitable WASH solutions	**SW.11** Digital water in emerging economy: Needs, opportunities, and challenges	**W 2.7** Development of global database for faecal sludge characteristics	**W 5.7** Strengthen institutionalization of marginalized community networks/CBOs in WASH governance systems	**T 3.7** Regenerative water management: Sustainable & circular approaches	**T 3.8** Navigating the industrial water crisis: Technologies and best practices	**W 4.7** Water operator partnerships & their tangible results	**W 4.5** Practical toolkits on gender mainstreaming in water and sanitation	**W 3.8** Introducing the new IWA Nature-based Solutions Cluster: NbS from Source to Sea
SESSION 2 13:30 - 15:00	**T 3.9** From ideas to impact: Innovating policy and governance	**SW.12** Scaling up water & sanitation? What about the critical human capital bottleneck?	**W 5.8** Driving disruptive change in public toilets: Revolutionizing operational models and user behavior across Asia and Africa	**T 5.6** Governance & policy for WASH systems	**SW.13** Integrated water management for fast-developing cities in Asian countries	**W 3.7** Toilet pit to policy pixels: Building data-driven sanitation systems in South Asia	**W 1.6** Solving water pollution through youth-led community based water solution framework	**T 3.10** Water integrity: Advanced solutions for quality preservation and pollution reduction	**T 4.6** Industrial & health risk mitigation	**SW.14** 2025 Recognition Programme of the Climate Smart Utilities	**T 1.10** Partnerships and local approaches	
15:30 - 17:00	**CLOSING CEREMONY | PLENARY HALL 2**											

Daily schedule

KEYNOTE PLENARY | 09:00 - 09:45	**SESSION 1 |** 10:30 - 12:00	**SESSION 2 |** 13:30 - 15:00	**SESSION 3 |** 15:30 - 17:00 *
BREAK | 09:45 - 10:30	**LUNCH |** 12:00 - 13:30	**BREAK |** 15:00 - 15:30 *	**KEYNOTE PLENARY |** 17:15 - 18:00 *

** Not Friday*

Business Forums

Learn about challenges and innovations

The Business Forums are a full component of the technical programme of the IWA Water and Development Congress & Exhibition and provide a series of sessions where sponsors and exhibitors present their innovations and projects that contribute to a water-wise future.

Tuesday 9 December	Wednesday 10 December	Thursday 11 December	Friday 12 December
10:30 – 11:15 SHENZHEN ANGEL DRINKING WATER INDUSTRIAL GROUP CO., LTD.	10:30 – 11:15 ZHUZHOU SOUTHERN VALVE CO.,LTD	10:30 – 11:15 ASIAN DEVELOPMENT BANK	10:30 – 11:15 RÄDLINGER PRIMUS LINE GMBH
11:15 – 12:00 COMCORE TECHNOLOGY	11:15 – 12:00 ZHEJIANG KAICHUANG ENVIRONMENTAL TECHNOLOGY CO., LTD	11:15 – 12:00 COMCORE TECHNOLOGY	
12:15 – 13:00 *(lunchbreak)* TÜV SÜD AND ANSI	12:15 – 13:00 *(lunchbreak)* WORLD BANK GROUP	12:15 – 13:00 *(lunchbreak)* SENSUS INTERNATIONAL	
13:30 – 14:15 SHINMAYWA	13:30 – 14:15 HANGZHOU LAISON TECHNOLOGY CO., LTD.	13:30 – 14:15 SHENZHEN ANSO IOT CO., LTD	13:30 – 14:15 TEAMSOLVE
14:15 – 15:00 SNV	14:15 – 15:00 WORLD BANK GROUP	14:15 – 15:00 JALCHAKRA INNOVATIONS LLP	
15:00 – 16:30 NETHERLANDS WATER PARTNERHSHIP	15:45 – 16:30 ASIAN DEVELOPMENT BANK	15:45 – 16:30 DASRA, NFSSM ALLIANCE	
16:30 – 17:15 BUSINESS CONNECT WORLD	16:30 – 17:15 DASRA, NFSSM ALLIANCE	16:30 – 17:15 DASRA, NFSSM ALLIANCE	

Information

Practical & useful

ACCOMMODATION QUERIES

For questions about accommodation, please visit https://waterdevelopmentcongress.org/accommodation/ or go to the registration desk on Level 1.

CATERING AND REFRESHMENTS

Get your morning coffee, lunch and afternoon coffee at one of the food stations, which are conveniently located around the Exhibition on QSNCC Level 1 in front of MR109 and in between MR103 and MR106.

MEDICAL ASSISTANCE

A First Aid room is available on Level 1 next to MR112 and is designed to allow people feeling ill to rest temporarily. For medical assistance, please go to the registration desk.

EMERGENCY NUMBER

In case of an emergency, dial 191 for the police, fire services and ambulance. If the operator is unable to speak English, please call 1155. For tourist police (available 24 hours) call 1155 or (+66) 2308 0333 from your mobile or landline. For Emergency Medical Service, please call 1669, which connects directly to the Emergency Medical Service for ambulance and medical assistance.

WIFI DETAILS

Wi-Fi facilities will be available at the venue. Please see details provided on site.

REGISTRATION DESK

The Registration Desk will be open on Level 1 of QSNCC from:

Monday 8 Dec — 09:00 / 19:00
Tuesday 9 Dec — 08:00 / 19:00
Wednesday 10 Dec — 08:00 / 17:00
Thursday 11 Dec — 08:00 / 17:00
Friday 12 Dec — 08:00 / 17:00

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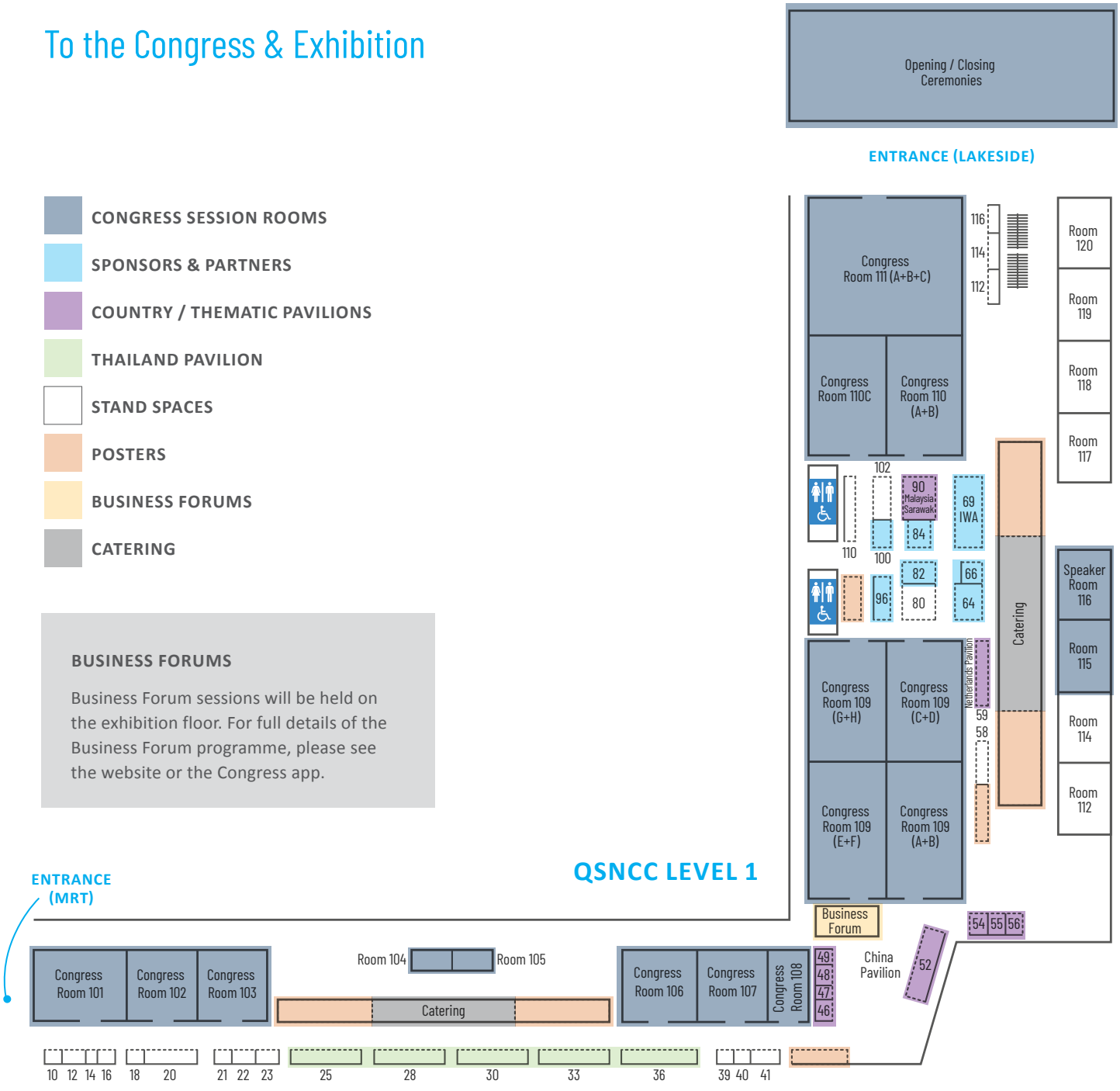
Floor Plan

To the Congress & Exhibition

- CONGRESS SESSION ROOMS
- SPONSORS & PARTNERS
- COUNTRY / THEMATIC PAVILIONS
- THAILAND PAVILION
- STAND SPACES
- POSTERS
- BUSINESS FORUMS
- CATERING

BUSINESS FORUMS

Business Forum sessions will be held on the exhibition floor. For full details of the Business Forum programme, please see the website or the Congress app.



DISCLAIMER

The information in this guide is believed to be correct at the time of publication. The organisers reserve the right to alter or remove from the programme as circumstances dictate. The organisers take no responsibility for any errors, omissions, or changes. The organisers assume no responsibility for opinions or facts expressed by contributors to the programme. Any late changes to the programme will be made available on the congress mobile app and website.

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Presenting the 2025 IWA Water and Development Congress & Exhibition

Reaching its 8th edition in 2025, the IWA Water and Development Congress & Exhibition has a track record of gathering together leading water sector practitioners, researchers, and policy makers to focus on the needs of low- and middle-income countries.

Opening Ceremony

MONDAY 8 DECEMBER, PLENARY HALL 2,
QUEEN SIRIKIT NATIONAL CONVENTION CENTER

16:00 – 17:30
The Opening Ceremony will feature a keynote by **Jay Bhagwan**, *Executive Manager, Water Research Commission, South Africa,* as well as the presentation of the **IWA Water and Development Awards**.

17:30 – 18:00
Exhibition Opening

18:00 – 20:00
Welcome Reception sponsored by *Angel*

Daily Keynote Plenary sessions with keynotes followed by panel discussion

ROOM MR111 (A+B+C)

TUESDAY 9 DECEMBER, 9:00 – 9:45
The Right Honourable Datuk Patinggi Tan Sri (Dr) Abang Haji Abdul Rahman Zohari bin Tun Datuk Abang Haji Openg, Premier of Sarawak, *Malaysia*

TUESDAY 9 DECEMBER, 17:15 – 18:00
Yvonne Magawa,
Executive Director, ESAWAS, Zambia

WEDNESDAY 10 DECEMBER, 9:00 – 9:45
Roshan Shrestha,
Gates Foundation, USA

WEDNESDAY 10 DECEMBER, 17:15 – 18:00
Min Yang,
RCEES, China

THURSDAY 11 DECEMBER, 9:00 – 9:45
Kate Medlicott,
WHO, Switzerland

THURSDAY 11 DECEMBER, 17:15 – 18:00
Fan Zhang,
World Bank, USA

FRIDAY 12 DECEMBER, 9:00 – 9:45
Joel Goldenfum, *Scientific Committee on Adaptation and Climate Resilience, Brazil*

And don't forget the Closing Ceremony on Friday 12 December at 15:30 – 17:00, also in Plenary Hall 2.

Key programme features

The week will feature a series of key programme features, most of which are invitation-only, creating forums for key segments and interests in the sector.

High-Level Summit
Tuesday 9 December 2025, 10:30–17:00, Room MR110 (A+B)

Utility Leaders Forum
Wednesday 10 December 2025, 10:30–17:00, Room MR110 C

International Water Regulators Forum
Wednesday 10 December 2025, 10:30–17:00, Room MR106

Water Efficient Sanitation Solutions Forum
Wednesday 10 December 2025, 10:30–17:00, Room MR109 (C+D)

From Land to Sea Forum
Thursday 11 December 2025, 10:30–15:00, Room MR110 (A+B)

Inclusive Urban Sanitation Forum
Thursday 11 December 2025, 10:30–17:00, Room MR110 C

Emerging Water Leaders Forum
Thursday 11 December 2025, 10:30–17:00, Room MR109 (G+H)

GET THE CONGRESS MOBILE APP

Access all the details of the IWA Water and Development Congress & Exhibition programme, including abstracts, with the official mobile app. The app offers a comprehensive guide to every workshop, technical session, presentation, Business Forum, sponsor and exhibitor. Registered participants should have received an email with access instructions for the app.

Download the Congress app by scanning the QR code on the left. Passphrase will be sent to registered delegates via email.

SOCIAL MEDIA

Are you planning to use social media while at the conference?
Join the conversation:

https://X.com/IWAHQ

www.facebook.com/internationalwaterassociation

www.linkedin.com/company/international-water-association

@iwa_network

Official Hashtags: **#WaterDevelopmentCongress #SanitAction**

Congress Focus

Congress Spotlights

Opening Ceremony, the IWA Awards, Exhibition Opening and Gala Dinner

Opening Ceremony, Monday 8 December, 16:00-18:00, QSNCC Level 1, Plenary Hall 2

KEYNOTE SPEAKER

Jay Bhagwan, *Executive Manager, Water Research Commission, South Africa*

Jay Bhagwan brings over 30 years of experience in the water and sanitation field, contributing to major global and national initiatives that shape solutions for current and future WASH challenges. He played a pivotal role in developing the IWA Development Congress, championed the global recognition of Faecal Sludge Management, and helped launch both the FSM conference series and the Faecal Sludge Management Alliance. His leadership also advanced global interest in Non-Sewered Sanitation through the creation of a specialist group. Recognised as IWA's go-to expert on sanitation, Jay is a Senior Fellow and has held influential positions, inspiring and guiding many in the sector.

The 2025 IWA Water & Development Awards

The IWA Water & Development Awards recognise excellence, leadership and innovation in the water sector, with a particular focus on contributions to the sustainable management of water in low- and middle-income countries. The awards are judged by a panel of experts and are awarded in recognition of outstanding contributions to research or practice that have led to demonstrable impact in low- and middle-income countries. There are two categories of the awards, covering practice and research:

The **IWA WATER AND DEVELOPMENT AWARD FOR PRACTICE** celebrates outstanding accomplishments in the practice of forward-thinking applications and solutions to advance clean and safe water and sanitation in low and middle-income countries. These solutions can range from specific technologies and infrastructure to innovative approaches that improve performance, efficiency, and sustainability in operations and maintenance. The award also recognises social innovation, social enterprise and social entrepreneurship.

The **IWA WATER AND DEVELOPMENT AWARD FOR RESEARCH** recognises and promotes high-quality, impactful research. Research is the powerhouse of disruptive and breakthrough innovation. This award celebrates research that is challenging existing methods and approaches to create new opportunities in the area of sustainable water and sanitation in low- and middle-income countries. It is also open to early-stage business projects that are not yet market-ready.

The 2025 IWA Water and Development Award Winners will be announced during the Opening Ceremony of the IWA Water and Development Congress & Exhibition.

Exhibition Opening / Welcome Reception | Monday 8 December, 18:00-20:00 | Foyer Area, Queen Sirikit National Convention Center

Delegates will have their first opportunity to explore the Water Development Exhibition — a dynamic hub connecting industry, business, technology, innovation, practice, and science. Throughout the week, the Exhibition Hall will serve as a key networking destination, with all lunches and coffee and tea breaks held here to encourage engagement with solution providers.

Open to all Delegates and Exhibitors, the Welcome Reception offers an ideal setting to meet and network with fellow professionals in the water sector — whether reconnecting with familiar faces or building new connections — in a relaxed and welcoming atmosphere.

Gala Dinner | Thursday, 11 December 2025, 19:30 - 21:30

The Gala Event at the IWA Water and Congress & Exhibition promises to be an outstanding evening.

With true IWA flair, the conference dinner is set to be the highlight of the social calendar, with fantastic entertainment accompanied by excellent food. Celebrate a successful week in Bangkok.

DRESS CODE: SMART CASUAL
TIME: 19:30
ADVANCE TICKET BOOKINGS

Programme highlights:

Water stands at the forefront of global challenges in the 21st century. As urbanisation accelerates, populations expand, and climate impacts intensify; the demand for sustainable water solutions becomes ever more urgent. Developing and emerging nations are particularly pivotal — facing not only the greatest risks but also holding immense potential to pioneer a resilient and equitable water future.

The 2025 IWA Water and Development Congress & Exhibition will unite international experts, innovators, and decision-makers under the theme 'Water, Sanitation, and Innovation – Pathways to Progress and a Resilient Future'. This event will act as a vibrant meeting ground for collaboration and idea-sharing, inspiring actionable strategies to strengthen global water security and climate adaptation.

Attendees will engage with an exciting programme that blends visionary keynotes, expert panels, in-depth technical sessions, and interactive workshops. Designed to foster meaningful dialogue, the Congress will also feature extensive networking opportunities that bridge disciplines and sectors, encouraging creative partnerships and breakthrough thinking.

Additional features and activities will include the Exhibition – a key part of the event – and various forums and special platforms, including a forum 'From Land to Sea: Tackling Pollutants, Protecting Health, and Restoring Ecosystems'. The programme also includes a High-Level Summit, the Utility Leaders Forum, the Regulators Forum, the Emerging Water Leaders Forum, the Inclusive Urban Sanitation Forum, and the Water Efficient Sanitation Solutions Forum.

Keynote Speakers

and Plenary Panel Discussions

The Right Honourable Datuk Patinggi Tan Sri (Dr) Abang Haji Abdul Rahman Zohari bin Tun Datuk Abang Haji Openg, Premier of Sarawak, *Malaysia*

Water: Driving Sarawak's resilient and sustainable future

TUESDAY 9 DECEMBER
ROOM MR111 (A+B+C) | 9:00 – 9:45

This keynote will review key aspects of Sarawak's water supply sector and the transformation of water supply management in the state. It will present activities on water and energy – specifically in relation to hydrogen and to renewable energy. The keynote will also cover developments in relation to wastewater management. It will conclude by looking at future opportunities and the role of innovation, covering Sarawak's Five Year Plan (2026-2030) and the contribution of strategic partnerships.

Yvonne Magawa,
Executive Director, ESAWAS, Zambia

WSS regulation at the heart of systems transformation

TUESDAY 9 DECEMBER
ROOM MR111 (A+B+C) | 17:15 – 18:00

Yvonne Magawa has over twenty years of experience in water supply and sanitation regulation, which includes previous work at the Zambian national WSS regulator and development cooperation. She has been spearheading initiatives to strengthen WSS regulation within countries across the African continent and globally. She has co-published several papers on WSS regulation and sits on several sector institutions' advisory boards and on the Strategic Council of the International Water Association (IWA).

Effective regulation and accountability systems are foundational for trusted and functional water and sanitation services. Regulators are the gyroscopes of water supply and sanitation (WSS) systems, balancing the interests of policymakers, service providers and consumers, and ensuring continued momentum and progress towards sector targets. This keynote will explore how the pathway to progress for WSS relies on well-defined regulatory frameworks, empowered regulators, robust civil society, and the judicious application of accountability and regulatory mechanisms that respond to the needs of the sector as a whole and drive systems transformation.

Panel Discussion

PANEL MODERATOR
Vivek Raman, *ADB, Philippines*

PANEL:
Pramila Devi Shakya Bajracharya, *Ministry of Water Resources, Nepal*
Norio Saito, *ADB, Philippines*
Sonia Hoque, *University of Oxford, United Kingdom*

Panel Discussion

PANEL MODERATOR
Loga Veeraiah, *SPAN, Malaysia*

PANEL:
Esper Ncube, *Rand Water, South Africa*
Rob Cunningham, *TNC, United Kingdom*
Tahmidul Islam, *WaterAid, Bangladesh*
Gustavo Saltiel, *Former Global Lead WSS, World Bank, USA*

Roshan Shrestha,
Gates Foundation, USA

Min Yang,
RCEES, China

The momentum moment: Safely managed sanitation at scale

WEDNESDAY 10 DECEMBER
ROOM MR111 (A+B+C) | 9:00 – 9:45

Dr Roshan Shrestha has over 35 years of experience transforming sanitation across the Global South. Since 2012, he has advanced non-sewered sanitation, faecal sludge management, and Citywide Inclusive Sanitation in Asia—particularly in India, Bangladesh, and Nepal. On behalf of the Gates Foundation, he led the creation of ADB's Sanitation Trust Fund, catalyzing over $3 billion in investment in sanitation, and helped establish platforms, including the Global Sanitation Graduate School, Global Water and Sanitation Center, and Global Sanitation Center of Excellence at IIT, Palakkad. Founder of ENPHO-Nepal and a former UN-Habitat Chief Technical Advisor, he serves on AIT's Board of Trustees and received the 2023 Bill Gates Sr. Award.

This keynote will explore the opportunities and pathways for redefine sanitation within a decade and the role of sector partners in this effort. It will highlight the importance of system strengthening, a key feature of city-wide inclusive sanitation.

Panel Discussion

PANEL MODERATOR
Evan Thomas, *University of Colorado, USA*

PANEL:
Linda Strande, *EAWAG. Switzerland*
Ligy Philip, *Indian Institute of Technology, India*
Mandy Mui, *AKYAS Sanitation, Jordan / Hong Kong*
Jennifer Molwantwa, *Water Research Commission, South Africa*

South-South cooperation toward a better future – Establishment of the JRDC

WEDNESDAY 10 DECEMBER
ROOM MR111 (A+B+C) | 17:15 – 18:00

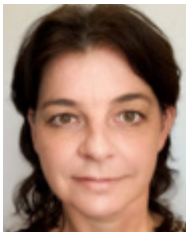
Min Yang is Professor at the Research Center for Eco-Environmental Sciences (RCEES), Chinese Academy of Sciences (CAS). Since returning to China in 1998, he has long been engaged with IWA and was elected an IWA Distinguished Fellow in 2022. His research focuses on drinking water quality, source water management, environmental antibiotic resistance, and related fields. In 2013, he founded the CAS-TWAS Centre of Excellence for Water and Environment (CEWE), which has become a key platform for advancing South-South cooperation in the water environment sector. He served as one of the lead authors for the WHO WASH-AMR Policy Brief (Water, Sanitation and Hygiene (WASH) and Antimicrobial Resistance (AMR): Preventing Infection and Preparing for a Post-Antibiotic World) (2020) and the WHO "Guidance on Wastewater and Solid Waste Management for the Manufacturing of Antibiotics" (2024).

The Joint Research and Demonstration Center (JRDC) is a flagship Sino-Sri Lankan collaboration, established by Sri Lanka's Ministry of Urban Development, Water Supply, and Drainage (MUWSD) and the Chinese Academy of Sciences (CAS) with a Chinese government grant. Boasting advanced research infrastructure and robust academic-industry synergy, the JRDC addresses two critical challenges facing Sri Lanka: Chronic Kidney Disease of Unknown Etiology (CKDu) and urgent drinking water security concerns. This keynote will explore progress on the etiological factors of CKDu, developing and demonstrating drinking water purification technologies, providing specialized technical training, and facilitating global academic and technical cooperation.

Panel Discussion

PANEL MODERATOR
Hezekiah Pireh, *UN-Habitat, Kenya*

PANEL:
Angelica Euara Manrique, *Maynilad Water Services, Philippines*
Najib Bateganya, *Gates Foundation, USA*
Suresh Rohilla, *University of Bradford, UK*
Julie Perkins, *GWOPA, Germany*



Kate Medlicott,
WHO, Switzerland

Fan Zhang,
World Bank, USA

Advancing the global water and health agenda

THURSDAY 11 DECEMBER
ROOM MR111 (A+B+C) | 9:00 – 9:45

Kate Medlicott is the sanitation and wastewater team lead within the WASH team at the World Health Organization in Geneva, Switzerland. In this role she is responsible for translating health evidence to policy and practice through WHO guidelines on sanitation and health, safe use of wastewater and recreational water quality, and for health sector collaborations where sanitation is a critical component of risk and disease control - this includes antimicrobial resistance, neglected tropical diseases and also multi-pathogen wastewater and environmental surveillance.

This keynote will explore the current global water and health agenda – updating on the latest findings from the recent Joint Monitoring Programme report and the forthcoming GLAAS report. It will highlight the major water-related health challenges – particularly ones exacerbated by climate change, such as cholera and vector-borne diseases, and the responses needed. It will also cover innovations in wastewater and environmental surveillance.

Continental drying: Understanding the global water crisis and solutions for a resilient future

THURSDAY 11 DECEMBER
ROOM MR111 (A+B+C) | 17:15 – 18:00

Fan Zhang is the Lead Economist and Global Lead for Water and Prosperity at the World Bank. She previously worked in the Offices of the Chief Economist for Infrastructure; South Asia; and Europe and Central Asia as well as in the Energy and Extractives Global Practice at the World Bank. She has led lending and advisory programmes on energy, transportation, climate, green growth, and poverty. At the Water Global Unit, she leads a multiyear research programme on water economics and directs the World Bank Global Water Monitoring Report series. She has authored several books and published widely in peer-reviewed journals; her work has been featured in major outlets such as The Economist and Bloomberg. Before joining the World Bank, she was an assistant professor at Pennsylvania State University. She holds a PhD in environmental economics from Harvard University.

Grounded in new evidence from satellite data, the World Bank's Flagship Report Continental Drying: A Threat to Our Common Future presents the first global assessment of freshwater reserves over the past two decades. The findings expose an alarming trend of continental drying: a persistent long-term decline in freshwater availability across major landmasses. This keynote will unpack the drivers of continental drying, examine its impacts on jobs, incomes, and ecosystems, and discuss practical strategies for confronting this emerging water crisis and building resilience.

Panel Discussion

PANEL MODERATOR
Sabrina Rashid Sheonty, *Tetra / Montrose Environmental, Bangladesh / Canada*

PANEL:
Kwanrawee Joy Sirikanchana, *Chulabhorn Research Institute, Thailand*
Qian Li, *Xi'an University, China*
Chotiwat Jantarakasem, *Massachusetts Institute of Technology, Thailand / USA*
Meera Mehta, *CWAS, CEPT University, India*

Panel Discussion

PANEL MODERATOR
Sangam Shrestha, *AIT, Thailand*

PANEL:
Ashton Mpofu, *AfriVolve Group, South Africa*
Viet-Anh Nguyen, *Hanoi University, Vietnam*
Tulinave Mwamila, *Water institute, Ministry of Water, Tanzania*

Joel Goldenfum,
Scientific Committee on Adaptation and Climate Resilience, Brazil

Science as an instance of governance in a post-disaster reconstruction plan

FRIDAY 12 DECEMBER
ROOM MR111 (A+B+C) | 9:00 – 9:45

Joel Goldenfum is Full Professor at the Federal University of Rio Grande do Sul and was Director of the Institute of Hydraulic Research (IPH-UFRGS) for the period 2020-2024. He currently holds the position of Executive Secretary of the Scientific Committee for Climate Adaptation and Resilience of Rio Grande do Sul, Brazil. He has experience in the field of hydrology, working mainly on the following topics: urban hydrology, water security, water-related disasters (floods and droughts), hydrological modelling, and master plans for stormwater management.
He holds a Civil Engineering degree (Federal University of Rio Grande do Sul, 1983), a Master's Degree in Water Resources and Environmental Sanitation (Federal University of Rio Grande do Sul, 1991), a PhD in Hydrology (Imperial College - University of London, 1996) and a Postdoctoral Degree in Urban Drainage (INSA-Lyon, France, 2004).

The 2024 Rio Grande do Sul floods due to heavy rain caused widespread damage in the Brazilian state of Rio Grande do Sul and in adjacent cities in Uruguay. This keynote reviews the details of the disaster and reviews the Reconstruction Plan proposed by the State of Rio Grande do Sul. It will conclude by explaining how science is incorporated into the governance of this reconstruction plan through a Scientific Committee that provides technical and scientific input for decision-making.

Panel Discussion

PANEL MODERATOR
Henk Ovink, *Global Commission on the Economics of Water, Netherlands*

PANEL:
Mónica Guzmán Rojo, *Universidad Católica - UCB Santa Cruz, Bolivia*
Stanislav Kim, *UNDP, Thailand*
Tripti Kharel, *Kathmandu Valley Water Supply Management Board, Nepal*
Cherifa Abdelbaki, *University of Tlemcen, Algeria*

Key Programme Features

Programme features are an important part of the Congress to get an in-depth understanding of current trends, latest research, guiding strategies and leading practices. For more information please visit: www.waterdevelopmentcongress.org/programme-features-and-highlights/

TUESDAY 9 DECEMBER
ROOM MR110 (A+B) | 10:30-17:00

High-Level Summit on Water Security and Resilience

The High-Level Summit on Water Security and Resilience, convened in collaboration with the Asian Institute of Technology (AIT), the Asian Development Bank (ADB), and other strategic partners, will engage political leaders and decision-makers to highlight the urgent need for coordinated action and shared progress around the Congress theme of 'Water, Sanitation, and Innovation – Pathways to Progress and a Resilient Future'.

The Summit is expected to serve as a bridge between regional priorities and global agendas, particularly focusing on practical implementation, governance, and financing mechanisms to advance water security and resilience across South and Southeast Asia. It will bring together influential voices to shape policy directions and drive commitments that extend beyond the event itself.

The Summit will centre action areas to harness the synergy between regional leadership and IWA's global network of expertise. This collaboration will enable the co-creation of actionable strategies and policy frameworks that reflect both local realities and international best practices.

The discussions will culminate in the release of The Bangkok Communiqué on Water Security and Resilience, a forward-looking statement capturing shared priorities and outlining pathways for collective action toward a more secure and resilient water future for the region.

WEDNESDAY 10 DECEMBER
ROOM MR110 C | 10:30-17:00

Utility Leaders Forum

Utilities are at the forefront of ensuring reliable water and sanitation services for all. Yet, those responsible for managing these essential systems continue to face growing pressures — from ageing infrastructure and rising demand to the urgent need for climate resilience and innovation. The 2025 Utility Leaders Forum offers a unique opportunity for these leaders to connect, exchange views, and access the collective insights of prominent peers in a setting designed by utility leaders, for utility leaders.

Curated by an international committee of experienced practitioners, the Forum is structured to foster open and interactive dialogue on some of the most pressing issues facing utilities today. Recognising the pivotal role that utilities play in securing sustainable water services, the forum will centre on how innovation can be effectively adopted, scaled, and shared across diverse contexts to deliver meaningful impact.

Through a dynamic programme that blends global perspectives with practical field experience, participants will engage in interactive discussions aimed at strengthening collaboration and mutual learning. Anchored around three core sessions — Driving Successful Adoption of Innovation through Global Cooperation, Innovation Stories from the Field, and Roundtables on Pathways to Scale — the Forum provides a distinctive space for utility leaders to learn from one another, co-create actionable solutions, and chart pathways toward more inclusive, resilient, and sustainable water futures.

WEDNESDAY 10 DECEMBER
ROOM MR106 | 10:30-17:00

International Water Regulators Forum

The International Water Regulators Forum (IWRF) is the international meeting of the global network of regulators of IWA. It gathers high-level representatives of regulatory authorities and officials of agencies with regulatory and supervisory functions over the provision of water, sanitation, and wastewater treatment services.

The 2025 edition of the International Water Regulators Forum (IWRF) marks the 10th anniversary of this high-level gathering of water, sanitation, and wastewater regulators from around the world. This 2025 edition offers a unique opportunity to explore regulatory innovation, regional cooperation, and inclusive governance under the Congress theme: 'Water, sanitation, and innovation – pathways to progress and a resilient future.'

With a focus on Southeast Asia, the 2025 IWRF will bring together diverse regulatory models, foster knowledge exchange, and help shape a roadmap toward more effective and resilient regulatory frameworks globally.

WEDNESDAY 10 DECEMBER
ROOM MR109 (C+D) | 10:30-17:00

IWA Water Efficient Sanitation Solutions Forum 2025

The IWA WESS Forum 2025 will serve as a global platform to consolidate learning, catalyse partnerships, and shape policy and financing pathways to accelerate the adoption and scaling of Water Efficient Sanitation Solutions (WESS).

Aligned with global efforts toward achieving SDG 6.2, the UN 2025 Water Action Decade Mid-Term Review, and the outcomes of the World Water Forum 2025 in Bali, the Forum will bring together leaders and experts to set a shared vision for advancing water-efficient and climate-resilient sanitation. It will showcase innovative technologies and business models from Asia, Africa, and Latin America, highlighting practical solutions that drive efficiency and resilience.

The Forum will also define enabling policies and financing mechanisms that promote public-private partnerships, efficient supply chains, and sustainable service delivery models.

By fostering knowledge exchange and capacity building, it will bridge science, technology, and policy to accelerate progress. A key outcome of the event will be the 'Bangkok Action Framework on Water Efficient Sanitation Solutions', a multi-stakeholder roadmap to guide the integration of WESS into national systems and investment portfolios, ensuring long-term, scalable impact.

THURSDAY 11 DECEMBER
ROOM MR110 (A+B) | 10:30-17:00

From Land to Sea: Tackling Pollutants, Protecting Health, and Restoring Ecosystems

This forum will explore the sources of pollutants from land and sea, their impacts on human health and marine ecosystems, and identify practical solutions to reduce these threats and promote healthier, more resilient environments.

THURSDAY 11 DECEMBER
ROOM MR109 (G+H) | 10:30-17:00

Emerging Water Leaders Forum

The IWA Emerging Water Leaders Forum is an open platform for young water professionals (18-35 years old) to connect with their peers from around the world. The forum is a place to share professional experiences and highlight the critical responsibility of Young Water Professionals (YWPs) working on solutions for the future of water.

The global water sector faces unprecedented challenges, exacerbated by climate change, population growth, and urbanisation. To address these challenges effectively, it is crucial to empower and equip the next generation of water professionals with the knowledge, skills, and networks necessary to champion the course for a climate- and water-resilient future.

The theme of the 7th Emerging Water Leaders Forum will be Future-Proofing Water – Empowering Emerging Leaders for Resilience and Impact.

The focus of the 2025 edition of the EWL Forum is on equipping the next generation to lead in the face of climate, governance, and capacity challenges, ensuring water systems are resilient, equitable, and future-ready. This theme is leadership-forward and strongly aligned with the Congress's resilience focus. It emphasises personal and institutional growth, and is ideal for showcasing future-ready skills, inclusive leadership, and big-picture strategic thinking.

THURSDAY 11 DECEMBER
ROOM MR110 C | 10:30-17:00

Inclusive Urban Sanitation Forum

The Inclusive Urban Sanitation Forum provides a platform to share lessons on advancing the Citywide Inclusive Sanitation (CWIS) approach, highlighting key findings from the recently completed CWIS Global Consultation, which gathered insights from over 50 organisations worldwide.

The Forum will also offer sector stakeholders the opportunity to reflect on progress toward the Sanitation SDG and to explore priorities beyond 2030. Participants can expect enhanced collaboration through stronger multi-stakeholder partnerships aimed at addressing urban sanitation challenges and scaling solutions for all.

The Forum will consolidate knowledge by synthesising lessons and best practices for use beyond the event, while fostering a future-oriented vision with clearer pathways to achieve SDG 6.2 and shape the post-2030 sanitation agenda. By attending, participants will gain first-hand insights from global leaders and innovators, contribute to shaping the future of inclusive urban sanitation, expand their professional networks across policy, practice, and research communities, and become part of a global movement advancing sanitation for all.

Specialist Groups

Task Groups and Clusters – Open meetings schedule

One of the unique strengths of the International Water Association (IWA) is its ability to bring together experts from across the globe and from diverse specialisations. To facilitate this, IWA members organise themselves into Specialist Groups (SGs) and Clusters, which are at the heart of the Association's mission and activities.

Members of these Groups work collaboratively on projects such as organising conferences, seminars, and workshops, as well as publishing books, reports, newsletters, and journal papers that advance knowledge and practice in the water sector.

During the IWA Water and Development Congress & Exhibition, several IWA Specialist Groups and Clusters will hold open meetings to present their ongoing work, share insights, and network with water and sanitation professionals. These sessions are open to all Congress delegates, don't miss this unique opportunity to connect with global specialists and leaders, explore potential collaborations, and stay up to date on the key issues shaping our sector.

Disinfection

TUESDAY 9 DECEMBER
09:00–11:00, ROOM MR108

Focuses on advances in disinfection processes, technologies, and by-product control for safe water supply.

Sustainability in the Water Sector

TUESDAY 9 DECEMBER
11:00-12:00, ROOM MR108

Aims to advance integrated sustainability approaches, metrics, and governance frameworks in the water sector.

Diffuse Pollution & Eutrophication

TUESDAY 9 DECEMBER
13:30–15:00, ROOM MR108

Discusses nutrient management and strategies to mitigate diffuse pollution and eutrophication in aquatic systems.

Water Loss

TUESDAY 9 DECEMBER
15:30–16:30, ROOM MR115

Addresses innovations and strategies to reduce non-revenue water and improve distribution efficiency.

Rainwater Harvesting and Management

TUESDAY 9 DECEMBER
15:30–16:30, ROOM MR108

Explores sustainable rainwater harvesting systems and their role in urban and rural water resilience.

Resource-oriented Sanitation

WEDNESDAY 10 DECEMBER
10:00–10:30, ROOM MR108

Examines circular sanitation approaches emphasising resource recovery and sustainable reuse.

Wastewater and Algal Pond Technologies

THURSDAY, 11 DECEMBER
13:30–15:00, ROOM MR115

Discusses wastewater treatment optimisation using algal and pond-based systems for nutrient and energy recovery.

Intermittent Water Supply (IWS)

THURSDAY 11 DECEMBER
13:00–14:00, ROOM MR108

Focuses on operational and management solutions for improving reliability and quality in intermittent water systems.

Non-sewered Sanitation

FRIDAY 12 DECEMBER
15:30-16:30, ROOM MR115

Focuses on decentralised sanitation technologies, standards, and inclusive service models

Technical Tours

Technical Tour 1

Water Production Plant

Metropolitan Waterworks Authority (MWA)

THURSDAY 11 DECEMBER 2025
TIME: 9:00 TO 12:00

Discover how Bangkok keeps its taps running at the Metropolitan Waterworks Authority (MWA) – the backbone of the city's water supply system. This exclusive visit offers a behind-the-scenes look at one of MWA's key operational sites, where delegates will explore the full journey of water production, treatment, and distribution.

Technical Tour 2

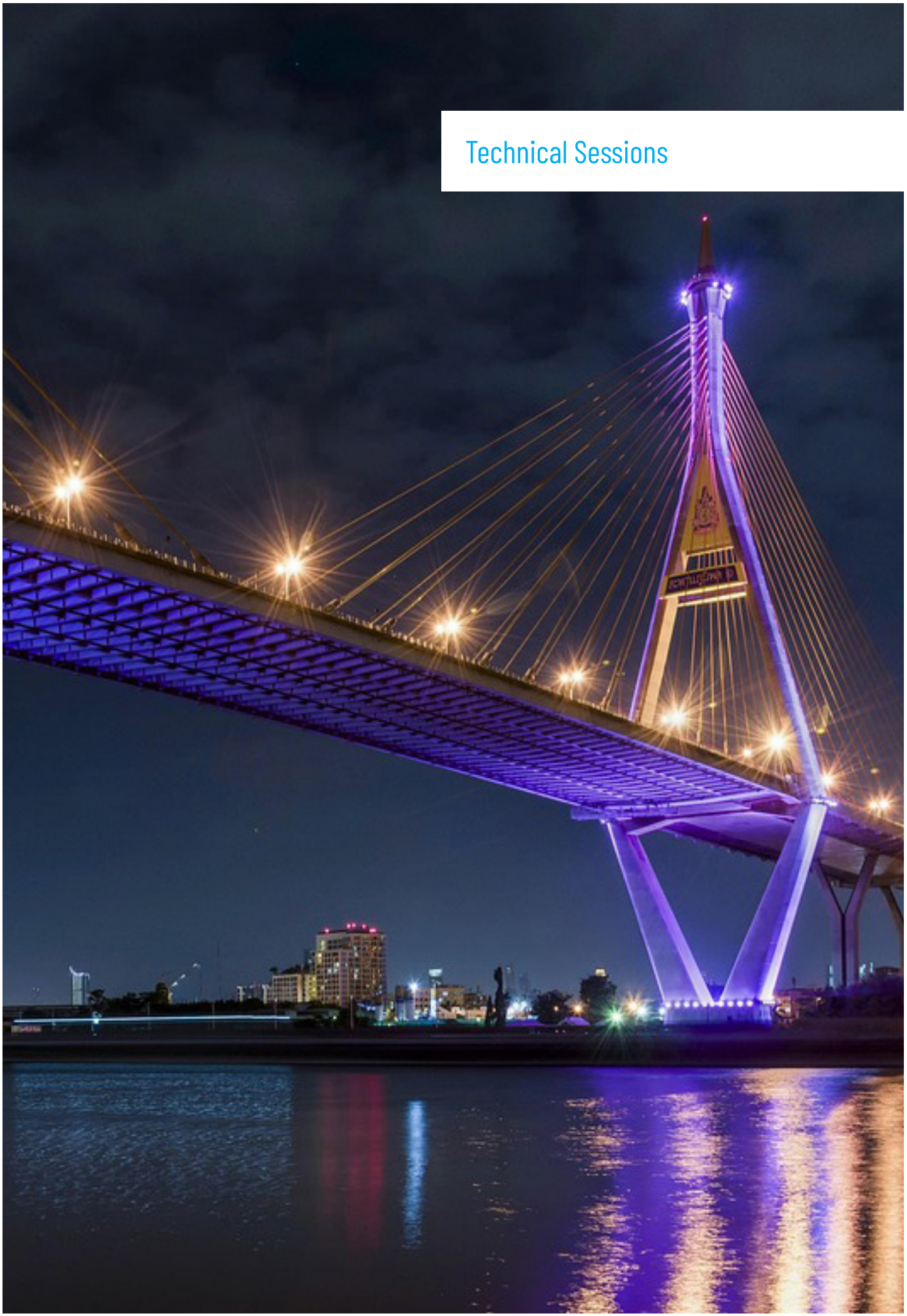
Bang Sue Water Quality Improvement Plant

Bangkok Metropolitan Administration

THURSDAY 11 DECEMBER 2025
TIME: 9:00 TO 12:00

Explore one of Bangkok's most innovative environmental infrastructures – the Bang Sue Water Quality Improvement Plant, officially known as the Bang Sue Wastewater Treatment Plant (WWTP). Located beneath Rot Fai Park, this unique underground facility plays a vital role in enhancing the water quality of Bangkok's canals by collecting and treating wastewater from the Bang Sue district and its surrounding areas.

Technical Sessions



Technical Sessions **Theme 1**

Ensure safe drinking water: innovative approaches for treatment and supply

T1.1
Session 1 | Technical

Tuesday 9 December
Room MR103

Sustainable technologies for safe drinking water access

Chair: Esper Jacobeth Ncube, *South Africa*
Co-chair: Subrata Paul, *Bangladesh*

In this session, water treatment options are presented for ensuring the safety of drinking water under different scenarios. Low cost technologies are presented and described to respond to the impact of climate change and vatiability in some examples. Other water treatment options emphasize the various ways of contaminant removal in compromised surface and ground water.

Predicting effects of groundwater elements in arsenic mobilization using machine learning algorithms: BDT, LR and RF Asef Redwan, *Bangladesh*

Sustainable wastewater treatment focused on water reuse through innovative advanced oxidation processes Marina Prisciandaro, *Italy*

Rapid, low-cost removal of Cr(VI) from California groundwater using iron electrocoagulation Andrea Naranjo-Soledad, *United States*

Low-cost manufacturing and characterization of ultrafiltration membranes: application of the phase inversion method Paola Andrea Alvizuri Tintaya, *Bolivia*

Electrochemical disinfection as a resilient solution for microbial safety in rural and remote drinking water supplies Mingyue Hu, *Australia*

Solutions in traditional knowledge: how gravity driven water filters could help reduce single-use plastics in Sub-Saharan Africa Guus Wiersma, *Netherlands*

T1.2
Session 2 | Technical

Tuesday 9 December
Room MR103

Cutting-edge innovations in water quality monitoring and risk assessment

Chair: Antonio Lastra, *Spain*
Co-chair: Stella Reichen, *France*

This session explores advanced methodologies for enhancing water quality monitoring and risk assessment across diverse contexts. Presentations focus on the integration of machine learning and real-time sensing technologies to predict and detect contaminants such as microplastics and emerging pollutants like PFAS. Case studies from Tanzania, Malaysia, and global research efforts demonstrate how data-driven tools and laboratory innovations are transforming water quality assurance and supporting evidence-based public health interventions.

Real-time detection of microplastics in water utilizing electrical sensing zone method integrated with machine learning techniques Sameera Sandaruwan Yakdehi Kankanamge, *Thailand*

Elevating public health assurance standards: Air Selangor's Laboratory strategies on per- & polyfluoroalkyl substances (PFAS) Humairah Yeoh Yee Voon, *Malaysia*

Assessing drinking water quality of a native american tribe through genomics Maria Jose Uribe Perez, *United States*

Public health risks of refilled drinking water in urban Indonesia D. Daniel, *Indonesia*

Closing the data inequity gap with context-appropriate microbial water quality testing Caetano Dorea, *Canada*

High-sensitivity patterned SWCNTs based flexible strain sensor for pipe line Shushuai Zhu, *Republic of Korea*

T1.3 Session 3 |Technical

Tuesday 9 December
Room MR103

Advances in water quality and management for climate resilient cities

Chair: Martin Knuijt, *Netherlands*
Co-chair: Devika Hemalatha Devi, *India*

This session highlights innovative approaches and technological advancements in urban water quality improvement and sustainable water management. Case studies from diverse geographic contexts—including reservoir modelling, treatment optimization, and integrated strategies for arid regions and net-zero buildings—demonstrate how cities can enhance water security and build resilience to climate change. Emphasis is placed on data-driven solutions, interdisciplinary design, and scalable practices for climate- resilient urban infrastructure.

Optimizing artificial destratification strategies for Oberon Reservoir: A modelling approach Khin July Win Thant, *Australia*

Mitigating manganese-induced discoloration in Metro Manila's tap water: a case study of La Mesa Water Treatment Plants 1&2 Guia Publico, *Philippines*

Emergent themes and knowledge gaps in river water temperature research and climate change Ali Jahanbakhshi, *Singapore*

Enhancing water security and quality: Design and implementation of an off-river storage facility in Ghana Water LTD.'s Konongo WTP Mawunyo Kofiloto, *Ghana*

Legionella contamination in South African Water Systems: Socio-economic and climatic determinants Atheesha Singh, South Africa

Implementing 24x7 water supply in high-altitude cold regions: The Gangles pilot project Ansu Cherian, *India*

T1.4 Session 3 | Technical

Tuesday 9 December
Room MR102

Data-driven insights for water treatment efficiency

Chair: Ismail Banoo, *South Africa*
Co-chair: Viktoria Yavorska, *Norway*

This session presents innovative research and analytical approaches aimed at improving water treatment performance and understanding contamination risks. Topics include simulation of sludge dynamics under high turbidity conditions, application of smart metering to analyze consumption behavior, assessment of microbial risks influenced by abstraction methods, and pesticide risk evaluation in surface water sources. Drawing from case studies in the Philippines, Nepal, and Kenya, the session highlights how data-driven strategies can enhance operational decision-making and safeguard water quality in diverse settings.

Water abstraction method shapes microbial communities and pathogen risks in Kenyan Sand Dam Aquifers Reuben Duncan, *United Kingdom*

Low-cost method for comparing turbidity data to guide drinking water distribution system interventions Roman Tijsseling, *United Kingdom*

Evaluation framework for smart predictive digital twin for water supply systems: A case study in Portugal Mariana Alão, *Portugal*

Simulation analysis of sludge accumulation in La Mesa Water Treatment Plants 1 and 2 under prolonged high turbidity Guia Publico, *Philippines*

Smart water distribution system management: Exploring digital twin simulation models Bong Seog Jung, *Republic of Korea*

Smart metering technology for determining water consumption behaviour, a case study from Nepal Surya Prajapati, *Denmark*

T1.5
Session 1 | Technical

Wednesday 10 December
Room MR103

Innovative water technologies

Chair: Cecilia Soto, *Bolivia*
Co-chair: Walter Ng'eno, *Kenya*

This session highlights innovative, energy-efficient water solutions for climate-vulnerable and rural areas. It includes solar-powered desalination, atmospheric water harvesting, selective electrodialysis, and deionization for safe drinking water. Projects also feature modular treatment plants, rainwater systems for healthcare facilities, and smart sensors for pipeline monitoring advancing SDG 6 with sustainable, low-energy technologies.

Developing innovative atmospheric water harvesting and solar desalination technologies for water production in water-stressed areas Alexandros Stefanakis, *Greece*

Performance characterization of a multi-stage air gap membrane distillation system with direct thermoelectric integration Jaber Asiri, *Saudi Arabia*

Innovative and energy-efficient flow-electrode capacitive deionization for heavy metal removal in climate-vulnerable drinking water systems Seungkwan Hong, *Republic of Korea*

Advancing SDG 6: Continuous drinking water supply via solar-powered, low-energy battery integrated selective electrodialysis for rural Sri Lanka Binghui Tian, *China*

Easy-maintenance assembled drinking water plant Chengzhi Hu, *China*

Innovative rainwater for drinking (RFD) systems for health care facilities in the Mekong Region Mooyoung Han, *Republic of Korea*

T1.6
Session 2 | Technical

Wednesday 10 December
Room MR103

Novel treatment mechanisms

Chair: Tripti Kharel, *Nepal*
Co-chair: Miles Folkes, *United Kingdom*

This session presents innovative research on novel mechanisms for treating emerging and persistent contaminants in water systems. Together, these approaches highlight promising directions for safe and sustainable water treatment.

Effects of water supply plants with ozone biological activated carbon process on the physicochemical properties of drinking water distribution systems Xin Song, *China*

Deciphering the virucidal potential of hydroxyl radicals in ozonation: Mechanistic insights and water safety implications Zhiting Liang, *China*

Clean-in-place of dense membrane systems reduces metabolic activity of biofouling layer: Implication for dissolved organic carbon (DOC) transmission Zhao Li, *Germany*

$KMnO_4$–Fe(II) pretreatment to enhance algae removal by aluminum coagulation
Jing Qi, *China*

Exploring the potential of laterite, an iron rich medium, combined with sand in iron removal from groundwater Haroun Bangura, *Sierra Leone*

T1.7
Session 3 | Technical

Wednesday 10 December
Room MR103

New approaches for the removal of contaminants

Chair: Seungkwan Hong, *Republic of Korea*
Co-chair: Andrea Veciana, *Australia*

This session will cover experimental and innovative approaches for the detection and removal of various chemical contaminants.

Highly sensitive detection of the Tetracycline resistance Gene TetA in water supply systems with an autocatalytic Deoxyribonucleic acid–based cascade circuit Yu Zhou, *China*

Modification of an electrodisinfection system for nitrate removal from groundwaters in Australian regional and remote communities Ni Made S Suliartini, *Australia*

Effectiveness of orthophosphate corrosion inhibitor in controlling Ni release from stainless steel plumbing materials in drinking water Ding Quan Ng, *Chinese Taipei*

Optimization of Diclofenac sodium removal by adsorption onto powdered activated carbon from coconut endocarp Glauber da Rocha Medeiros, *Brazil*

Physicochemical transformations of assimilable organic carbon (AOC) through ozone treatment Eric Cowan, *United Kingdom*

Direct photolysis of Ciprofloxacin and Levofloxacin under UV-LED irradiation: Influence of wavelength and light intensity Zi Bin Tang, *Chinese Taipei*

T1.8
Session 1 | Technical

Thursday 11 December
Room MR103

Emerging contaminants and disinfection in water treatment systems

Chair: Lalantha Senevirathna, *Australia*
Co-chair: Rowshan Mamtaz, *Bangladesh*

This session explores current challenges and advancements in drinking water treatment, focusing on microbial contamination, emerging pollutants, and treatment resilience. Topics include antimicrobial membrane technologies using quaternary ammonium compounds, microplastics behavior during irrigation and disinfection, and the comparative effectiveness of treatment systems across water sources. Additional studies address Legionella detection in hotel systems, biological processes for treatment plant resilience, optimization of geosmin removal using activated carbon, and quality control in packaged water production. Together, these works highlight innovations and risks shaping safe water supply strategies.

Antimicrobial polylactic acid membrane grafted with quaternary ammonium salt for effective and durable water disinfection Qingyan Chen, *China*

Experimental insights into PET and PTFE microplastic transport in soils
Mohd Faraz Khan, *India*

Detection of Legionella species in hotel water systems using culture-based and molecular methods Benya Nontaleerak, *Thailand*

Enhancing resiliency of WTPs with biological treatment of drinking water
Hayat Raza, *Canada*

Optimizing geosmin removal in drinking water treatment using powdered activated carbon Dailin Currie, *South Africa*

Bacteriological quality and heavy metal analysis of packaged water produced in Lusaka, Zambia, and associated quality control measures Rodney Banda, *Zambia*

T1.9
Session 2 | Technical

Thursday 11 December
Room MR103

Managing the safety of water services in urban and rural setups

Chair: Tanvir Ahmed, *Bangladesh*
Co-chair: Sandy Johnson, *Sierra Leone*

In this session factors that can compromised the integrity nad safety of wash services in both riral and urban set ups are discussed. This includes the nature of material used in didtribution systems, contaminants that can impact on the safety of drinking water especially the biological quality that results in waterborne diseases in marginalized communities. The need for climate resistent water services infrastructure is also presented and emphasized for the protection of vulnerable communities. Presentations are across the globe and emphasize the importance of managing risks acros the value chains.

Unveiling the corrosion of stainless steel pipe in drinking water distribution system: Interdisciplinary insights on water quality and anti-corrosion design Xinyu Pan, *China*

Stainless partially corrugated tube (SPCT): A material for sustainable and leakage resistant connection to water mains David Nicholas, *Australia*

Inclusive rural water supply services in Maharashtra: Bridging water abundance and accessibility Upsana Yadav, *India*

Association of stored tap water contamination with direct and indirect media in peri-urban Lusaka Wutyi Naing, *Japan*

Locked out of water: A reflection on WASH access in US prisons Kimberly Worsham, *United States*

Conservation in action: Assessing water quality in untreated surface water sources in Villagarzón, Putumayo, Colombia Diana Calvo, *United States*

T1.10
Session 2 | Technical

Friday 12 December
Room MR101

Partnerships and local approaches

Chair: Elina Baseri, *Malaysia*
Co-chair: Pranesh Muthuchami, *India*

Implementers and funders are identifying new models of collaboration to expand access and ensure the financial sustainability of both large and small water systems. This session highlights findings from both local case studies and global comparative studies.

Enabling PWO provision of piped water to the home: Insights from Cambodia John Stone, *United Kingdom*

Strategies for the successful legal and political integration of community-based drinking water providers in contemporary nation states Katharina Lindt, *Germany*

Climate resilience and socio-economic impact of water supply in marginalized urban communities: A case study of Cumilla City Corporation, Bangladesh Dilruba Farzana, *Bangladesh*

Revolving funds for social connections in Ghana Benjamin Wiredu, *Ghana*

From well to home: Understanding water quality changes in a Wayuu Indigenous Community Diana Calvo, *United States*

Building resilience in rural healthcare: Innovative strategies for introducing water treatment technologies in underserved communities Christabel Kambala, *Malawi*

Advancing wastewater treatment and sanitation services: Sustainable solutions for all

T2.1
Session 1 | Technical

Tuesday 9 December
Room MR111 (A+B+C)

Circular economy in wastewater: Innovations in energy recovery, resource reuse, and sustainable treatment

Chair: Ligy Philip, *India*
Co-chair: Ashton Mpofu, *South Africa*

This session highlights transformative approaches in wastewater and sludge management that align with circular economy goals. Topics include microbial fuel cells and MECs for energy generation, CO_2-to-fuel photoelectrochemical systems, and enhanced biogas production using co-digestion and biochar. Presentations also explore the reuse of biosolids for agriculture, development of sustainable disposal regulations in India, and nutrient recovery for rice cultivation. Together, these innovations demonstrate how wastewater systems can evolve into multifunctional hubs for energy, water, and resource recovery, promoting sustainability across treatment infrastructures.

Enhancing contaminant removal and chlorination byproduct control in saline sewage treatment through integrating CO_2-to-fuel conversion in a multifunctional photoelectrochemical system Dong Taoran, *Hong Kong, China*

Sustainable hydrogen production in a two-chamber MEC: Effect of synthetic and real substrate feeding on system performance Angela Marchetti, *Italy*

From waste to grain: Boosting protein-rich rice production with sludge-derived fertilizers Jittrera Buates, *Japan*

Energy recovery through co-digestion of biosolids and food waste: A microbial perspective Nirakar Pradhan, *Hong Kong, China*

Developing wastewater bio-solids (sludge) management strategies and new disposal regulations with reuse to achieve an effective circular economy – Need of the hour in India Uday Kelkar, *Japan*

Synergistic effects of digestate biochar and free nitrous acid on biogas production from sewage sludge Anish Ghimire, *Thailand*

T2.2 Session 1 | Technical

Tuesday 9 December
Room MR109 (A+B)

Sanitation and public health: Evidence-based approaches for safe, inclusive, and standardized solutions

Chair: Juliet Willetts, *Australia*
Co-chair: Sheik Mohammed Shibl Akbar Chinna Mohideen, *India*

This session presents evidence-based research and field experiences focused on the performance, safety, and standardization of sanitation systems in both urban and rural settings. Drawing on case studies from Bangladesh, Fiji, Nepal, Indonesia and India, these presentations will examine the extent and health implications of greywater and fecal contamination, risks to shallow groundwater, and pathogen exposure in non-sewered sanitation systems. Through rigorous data and field case studies, this session aims to inform the development of inclusive, safe, and performance-driven sanitation strategies, with a focus on human and environmental health.

Greywater contamination in Urban Bangladesh: Challenges and pathways to sustainable management Mostafizur Rahman, *Thailand*

Faecal contamination in latrine front-ends in Rural Fiji and Nepal: Implications and recommendations for sanitation and hygiene interventions Sabita Adhikari, *Australia*

On-site sanitation system and faecal contamination in shallow groundwater in Urban Indonesia: Assessing influence of distance and rainfall variables Gita Puri, *Australia*

Assessing the effectiveness of tiger worms at degrading Ascaris eggs in faeces Yogesh Badekar, *United Kingdom*

How effective is the sanitation intervention in Cox's Bazar Rohingya Camp? Md Azizur Rahman, *Bangladesh*

Evaluation of sludge quality of faecal sludge treatment plants in Odisha (India) for reuse Prasanta Mohapatra, *India*

T2.3 Session 1 | Technical

Tuesday 9 December
Room MR101

Decarbonizing wastewater and sanitation: Emissions, resilience, and climate action

Chair: Freya Mills, *Australia*
Co-chair: Md Sahidul Islam, *China*

This session focuses on the critical role of wastewater and sanitation systems in climate mitigation, showcasing research and field applications aimed at measuring, evaluating, and reducing greenhouse gas (GHG) emissions across both sewered and non-sewered contexts. Presentations include empirical studies on methane emissions from decentralized sanitation systems, as well as advanced treatment processes. In addition to technical approaches, the session explores institutional strategies for climate resilience, including the integration of energy audits and solar infrastructure within WASH systems. By combining emissions quantification with system-wide mitigation and adaptation strategies, this session offers a comprehensive view of how wastewater and sanitation can be decarbonized while contributing to broader sustainability and climate resilience goals.

Measuring, scaling, and reporting methane emissions from low-cost non-sewered sanitation to advance mitigation strategies Kelsey Shaw, *Canada*

Determining population equivalents for individual, non-sewered sanitation systems Linda Strande, *Switzerland*

Evaluating methane emissions and exploring potential methane capturing mechanisms across the sanitation service chain Aasim Mansuri, *India*

Greenhouse gas emission from non-sewered sanitation-a case study in Faridpur City, Bangladesh Sharmistha Debnath, *Bangladesh*

Moving towards climate resilient WASH services through energy audit and solar infrastructure Arwa Bharmal, *India*

A study on climate-resilient WASH in disasters: Addressing gaps in disaster waste management in Kerala, India Akhilesh Ramesh, *India*

T2.4
Session 2 | Technical

Tuesday 9 December
Room MR111 (A+B+C)

Advancing resource recovery in wastewater and fecal sludge management

Chair: Mbaye Mbeguere, *France*
Co-chair: Yogita Gupta, *India*

This session explores innovative approaches to resource recovery within wastewater and fecal sludge management, emphasizing solutions that promote sustainability and circularity. It highlights emerging technologies and strategies for recovering valuable resources such as nutrients and energy, and reusing treated water and biosolids. Case studies demonstrate the practical application of electrochemical methods, material reuse, and microbial analysis, while also examining the development of decision-making tools like quality indices and circular economy frameworks. Policy integration and system-level planning are also discussed to support the scalable adoption of these solutions in diverse contexts, from urban centers to island nations.

Recovery of phosphorous from anaerobic digestate using electrochemical struvite precipitation Kripa Singh, *Canada*

Faecal sludge management strategy for Fiji – A circular economy systems approach Pierre Mukheibir, *Australia*

Impact of PH and temperature on dark fermentation: A biotechnology for short chain volatile fatty acids production from sewage sludge James Manu, *United Kingdom*

Treating fecal sludge in the city – an Indian FSM success story Sasikumar Eswaramurthy, *India*

Faecal sludge management for addressing contamination in rural water systems Aakash Jain, *India*

T2.5
Session 2 | Technical

Tuesday 9 December
Room MR109 (A+B)

Wastewater surveillance and the challenge of antimicrobial resistance (AMR)

Chair: Zhugen Yang, *United Kingdom*
Co-chair: Ritu Negar Sultana, *Bangladesh*

As antimicrobial resistance (AMR) continues to pose a global health threat, its presence and persistence in wastewater systems demand urgent attention. This session examines the role of wastewater surveillance in tracking AMR and viral pathogens, focusing on both detection and mitigation strategies. Topics include the occurrence and removal of antibiotic-resistant bacteria and genes in treatment systems across various regions, from Kashmir to Southeast Asia. The session also explores advanced disinfection techniques such as ozone treatment, and how campus and rural surveillance systems have been adapted for pathogens like SARS-CoV-2 and seasonal influenza. Institutional frameworks and practical considerations for implementing surveillance in diverse settings will also be discussed, supporting broader efforts in public health and environmental protection.

Removal of antibiotic resistance genes from wastewater treatment plant and their distribution in Asian Communities Sadhana Shrestha, *Japan*

Campus source to sink wastewater surveillance of severe acute respiratory syndrome Coronavirus-2 (SARS-CoV-2) Miles Folkes, *United Kingdom*

Phenotypic antimicrobial resistance profile of *Escherichia Coli* in the water environment and sewage of Hong Kong Chu Ka Him, *Hong Kong, China*

Wastewater surveillance for seasonal influenza epidemics: Strategies and considerations for small public health units and rural regions Banu Ormeci, *Canada*

Effective viral inactivation by ozone in wastewater: Decoupling matrix effects and mechanistic insights Xiaoyuan Zhang, *China*

Reduction of indicator bacteria, somatic coliphages and antibiotic resistant genes (ARGs) from wastewater by combined disinfection processes Abidelfatah Nasser, *Israel*

T2.6
Session 2 | Technical

Tuesday 9 December
Room MR101

Disaster-ready sanitation: Safeguarding health and infrastructure in disaster prone areas

Chair: Md Azizur Rahman, *Bangladesh*
Co-chair: Meg Cummins, *Australia*

This session emphasise on disaster-ready sanitation solutions that protect public health and critical infrastructure in disaster-prone and climate-vulnerable regions. Presentations will showcase resilient sanitation technologies, emergency response systems, and adaptive infrastructure designs tailored to withstand floods, and other extreme events. Case studies will highlight successful implementations in both urban and rural settings, emphasizing rapid deployment, low-cost construction, and community engagement. The session will also explore policy frameworks, risk assessments, and capacity-building strategies essential for preparedness and recovery. By promoting resilient and inclusive sanitation systems, the session aims to reduce health risks and strengthen community resilience in the face of disasters.

When the shit hits the fan: analysing sanitation and flood risk in Kibera after the 2024 El Niño flood James Wallace, *United Kingdom*

Inclusive and sustainable sanitation intervention: a data-driven decision-making approach for marginalized urban communities in Bangladesh Dilruba Farzana, *Bangladesh*

An investigation of containment safety and risk framework for on-site sanitation back-ends: A rural context Nabeela Nasim, *Australia*

Building climate-resilient and inclusive WASH services in Bangladesh: A collaborative approach Md Habibur Rahman, *Bangladesh*

The assessing the readiness of the public health sector towards the development of a model for managing antimicrobial resistant from the wastewater treatment system in hospitals Thailand Sutchamarn Trancharoen, *Thailand*

Utilization of mobile treatment unit for faecal waste treatment in public toilets: A case study of Sabarimala, India Sheik Mohammed Shibl Akbar, *India*

T2.7
Session 3 | Technical

Tuesday 9 December
Room MR111 (A+B+C)

Advancing pathways to circularity and sustainability in sludge management

Chair: Vedala Srinivasa Chary, *India*
Co-chair: Angela Marchetti, *Italy*

This technical session highlights cutting-edge research and practical innovations aimed at enhancing the efficiency, sustainability, and economic performance of sludge treatment and management. Presentations will explore a range of topics, including the development of high-value products such as bio-asphalt from fecal sludge, improved sludge pre-treatment strategies to optimize dewatering and reduce costs, and novel thermal processes like microwave treatment to boost sludge reuse potential.The session will also feature national-level strategies such as China's path toward carbon neutrality and India's evolving regulatory frameworks to promote sustainable sludge disposal and reuse.Special emphasis will be placed on the integration of these technologies into circular economy models, with relevance for both developed and developing contexts.

Microwave treatment of sludge using a new pilot set-up to enhance its market value for reuse. Case study: A wastewater treatment plant in Mostar City, Bosnia and Herzegovina Denis Taremwa, *Uganda*

Valorization of sludge: Enhancing performance & economics with wastewater by-product pre-treatment Subham Meher, *India*

Towards the carbon neutrality of sludge treatment and disposal in China: A nationwide analysis based on life cycle assessment and scenario discovery Xue Zhou, *China*

The science of sludge dewatering: Effect of G-force on dewatering centrifuge performance: G-volume as a key metric for centrifuge scaling Dinesh Gehani, *Germany*

Recycling of sewage sludge ash to produce artificial coarse aggregate for the construction industry Md Rafiqul Islam, *Bangladesh*

Formation and operations of faecal sludge management enterprises: A case study in an informal peri-urban settlement in Lusaka, Zambia Shotaro Goto, *Japan*

T2.8
Session 3 | Technical

Tuesday 9 December
Room MR109 (A+B)

Emerging contaminants and microbial and microplastic risks in wastewater: Monitoring, mitigation, and molecular insights

Chair: Amir Gholipour, *Denmark*
Co-chair: Claudia Hledik, *Austria*

This session highlights the latest research on the fate, transformation, and health risks of emerging contaminants in wastewater systems. Presentations cover antibiotic resistance in plastispheres, microplastic contamination in sludge, and seasonal variations affecting environmental safety. Innovative monitoring tools such as nanoplate digital PCR and molecular-level EPS analysis are showcased alongside advanced treatment strategies using biochar, nanomaterials, and UV/PAA disinfection. The session also explores the impact of treatment processes like anaerobic digestion and constructed wetlands on microbial diversity and pollutant degradation. Together, these studies inform safer, smarter wastewater reuse and risk mitigation practices.

Seasonal variation of microplastics in wastewater treatment plant sludges and implications for agricultural use Banu Ormeci, *Canada*

Tracking the transformation of EPS during the UV/PAA disinfection process: A molecular-level analysis Yizhe Ding, *China*

Application of nanoplate-based five-plex digital PCR to simultaneous detection of pathogenic viruses and bacteria in wastewater Soichiro Hirai, *Japan*

Smart nanomaterials for advanced micropollutant degradation Andrea Veciana, *Australia*

Back to basics: Exploring the fundamental challenges of analysing microplastics from wastewater treatment plants Joycelyn Bempong, *United Kingdom*

T2.9
Session 3 | Technical

Tuesday 9 December
Room MR101

Policy and economic tools for sustainable waste and water management

Chair: Virtuous Igbodika, *Nigeria*
Co-chair: Akhilesh Ramesh, *India*

This session focuses on the critical role of policy frameworks and economic instruments in advancing sustainable waste and water management. Presentations will explore tools such as life cycle assessment, cost-benefit analysis, and market-based incentives that drive effective decision-making and resource allocation. Case studies from diverse governance contexts will illustrate how integrated policies and economic strategies can promote circular economy practices, improve service delivery, and ensure environmental compliance. The session aims to foster dialogue on aligning regulatory mechanisms, institutional capacity, and financial models to support resilient, inclusive, and environmentally sound waste and water management systems worldwide.

Environmental impact and economic performance analysis of two faecal sludge treatment plants in Beijing: A life cycle perspective Shikun Cheng, *China*

Ten years of THP AAD for biosolids management in Beijing – Strategies and performance Julien Chauzy, *Norway*

Strength and gap analysis using CWIS mentor city indicators for sustainable sanitation in Bangladesh Asef Redwan, *Bangladesh*

Evaluating the sustainability of a wastewater treatment facility upgrade in Metro Manila: A life cycle perspective on nutrient removal Angelica Euara Manrique, *Philippines*

Sustainable wastewater treatment in Pakistan: Advancing the reed bed system for water management Muhammad Keryo, *Pakistan*

Wastewater collection and treatment projects and a river restoration program in Hanoi City, Vietnam Viet-Anh Nguyen, *Vietnam*

T2.10
Session 1 | Technical

Wednesday 10 December
Room MR109 (A+B)

Transforming sanitation through decentralized and non-sewered systems

Chair: Karoly Kovacs, *Hungary*
Co-chair: Angelica Euara Manrique, *Philippines*

This session highlights innovative approaches and practical strategies for implementing and scaling non-sewered and decentralized sanitation systems. With growing interest in resilient and locally adaptable solutions, the presentations cover a range of topics including population-based system design, climate-adapted technologies, and data-driven monitoring techniques. Case studies from India, South Africa, and beyond explore governance frameworks, performance assessments under extreme conditions, and the role of container-based and on-site systems in improving sanitation access.

The novel in-situ pathway for carbon reduction, pollution mitigation, and efficiency enhancement in high-density urban wastewater treatment: an empirical study on the AOA-MBBR process Ma Hanqing, *China*

The resilience of container based sanitation Alison Parker, *United Kingdom*

Comparative analysis of climate-adapted on-site sanitation technologies: Performance and suitability under extreme environmental conditions Tatchai Pussayanavin, *Thailand*

Governance of decentralised water reuse in Bengaluru, India Abishek Narayan, *India*

Scaling water-efficient and non-sewered sanitation systems in South Africa: Lessons from the WRC's SASTEP demonstration programme Phillip Majeke, *South Africa*

Measuring TSS and TDS inside septic tanks to inform fecal sludge treatment plant design in Rural India Monisha Naik, *Canada*

T2.11
Session 1 | Technical

Wednesday 10 December
Room MR102

Enhancing wastewater treatment through emerging technologies and artificial intelligence

Chair: Marina Prisciandaro, *Italy*
Co-chair: Hadi Mokarizadeh, *Canada*

This session highlights advanced and cutting-edge technologies aimed at significantly enhancing the performance, sustainability, and resource recovery potential of wastewater treatment systems. The featured presentations, spans applications of artificial intelligence and machine learning for operational optimization as well as the deployment of novel treatment technologies beyond traditional frameworks. These studies demonstrate the technical feasibility and environmental relevance of next-generation treatment technologies aligned with circular economy and decarbonization goals.

Demonstration test of AI guidance technology to support advanced operation of wastewater treatment plants Yoshihiro Ishii, *Japan*

High-performance bio-digester (HPBD-2) for efficient and sustainable blackwater treatment: Optimization and performance evaluation Anurag Tomar, *India*

Efficient wastewater treatment by combined low-temperature plasma and ultrathin graphitic carbon nitride nanoflakes Frantisek Zazímal, *Czech Republic*

A machine learning approach to chemical dosing optimization in WWTPs Viktoria Yavorska, *Norway*

Integrating anaerobic membrane bioreactors with hydroponic controlled environment agriculture: Advancing urban wastewater treatment and food production Seungkwan Hong, *Republic of Korea*

AKYAS's nanobubble effluent treatment system (NETS) Ching Man Mui, *United Arab Emirates*

T2.12
Session 1 | Technical

Wednesday 10 December
Room MR101

Cutting-edge nitrogen removal strategies in wastewater treatment

Chair: Nirakar Pradhan, *Hong Kong, China*
Co-chair: Orisa Coombs, *USA*

This session highlights cutting-edge advances in nutrient removal and recovered resource use aimed at enhancing the sustainability and efficiency of wastewater treatment systems. Presentations will explore both biological and material-based innovations for optimizing nitrogen and phosphorus management. Topics include microbial competition strategies that stabilize mainstream partial nitritation-anammox systems, development of high-efficiency phosphate adsorbents from wastewater-derived magnetite, and utilization of sewage sludge–derived biochar for phosphorus removal and sludge granulation enhancement. Collectively, these studies demonstrate integrated pathways toward circular resource use, reduced environmental impacts, and improved operational performance in modern wastewater facilities.

Biochar enhanced sludge granulation and microbial growth in anammox systems: Insights from EPS and interface thermodynamics Jingwei Fu, *China*

Evaluating the sustainability of direct potable reuse from advance tertiary treatment of wastewater in Mumbai to meet United Nations SDG6 goal Ajit Savadi, *India*

Revolutionizing water and sanitation: Nanotechnology, decentralized systems, and greywater reuse Maisha Morshed, *Canada*

T2.13
Session 2 | Technical

Wednesday 10 December
Room MR109 (A+B)

Decentralized sanitation innovations and scalable solutions for inclusive urban-rural wastewater management

Chair: Aasim Mohammed Yunus Mansuri, *India*
Co-chair: Philadelphia Ngobeni, *South Africa*

This session explores transformative approaches to urban and rural sanitation through innovative technologies, system optimization, and inclusive policy models. Topics include codigestion strategies for enhanced sludge treatment, onsite urine repurposing, urban-rural sanitation convergence, and the role of locally fabricated FSM technologies. Case studies from Kenya, Nepal, and across Asia highlight efforts to standardize septic systems, scale sanitation enterprises, and reduce overflows through smart sewer infrastructure controls. Together, these initiatives offer actionable pathways for cost-effective, eco-friendly, and sustainable sanitation services in the Global South.

Impact of pretreatment on codigestion of sbr sludge and municipal solid waste
Ashish Sahu, *Norway*

Process design, system development, and performance evaluation of an integrated onsite urine repurposing technology Sangeetha Vivekanandan, *India*

Urban-rural convergence: A proactive approach to reinforce the existing sanitation situation in asian context Harshi Sirisena, *Thailand*

Optimising existing sewer infrastructure controls to reduce overflows Pascal Lang, *United Kingdom*

RCC Prefabricated septic tanks: A cost-effective and eco-friendly approach to onsite sanitation Sasikumar Easwaramurthy, *India*

Standardization of septic tanks in Mahalaxmi Municipality: An Initiative for low-cost sustainable decentralized sanitation approach in Global South for wastewater management Suban Maharjan, *Nepal*

T2.14
Session 2 | Technical

Wednesday 10 December
Room MR101

Understanding microbial interactions for enhanced treatment performance

Chair: Yongmei Li, *China*
Co-chair: Haroun Bangura, *Sierra Leone*

This session delves into the microbial and ecological processes at the heart of wastewater treatment systems. Presentations highlight the role of microbial consortia, stress responses, and spatial patterns in treatment performance across various systems and strategies. By deepening our understanding of microbial and community-level dynamics, this session supports the development of advanced and resilient treatment solutions for diverse wastewater contexts.

Microbial community dynamics and septic tank performance in Kazakhstan: A case study from a cold region Aiman Uteyeva, *United Kingdom*

Development of microalgae-bacteria consortia for the tertiary treatment of wastewater Yogita Gupta, *India*

Investigating the dynamics, formation, and degradation of sulfamate in wastewater systems and implications for treatment strategies Claudia Hledik, *Austria*

Bioaugmentation for enhanced nitrogen removal in wastewater treatment: A sustainable and cost-effective solution for climate-resilient wastewater treatment Dirk Westensee, *United Kingdom*

Evaluation of enzymatic pre-treatment coupled with expanded granular sludge bed reactor (EGSBR) for dairy wastewater remediation Moses Basitere, *South Africa*

Effect of functional microbes outcompeting NOB in mainstream nitritation-anammox systems Daehee Choi, *Republic of Korea*

T2.15
Session 3 | Technical

Wednesday 10 December
Room MR109 (A+B)

Decentralized and inclusive wastewater solutions: Low-energy innovations for resilient sanitation systems

Chair: Phillip Majeke, *South Africa*
Co-chair: Chelsea Hayward, *Cambodia*

This session presents pioneering approaches to decentralized and community-scale sanitation, combining technical innovation with social equity. Topics include solar-powered septic systems, modular phytoremediation for urban drains, humus bioreactors, and mobile septage treatment units. Papers also explore advanced processes such as sulphur autotrophic denitrification and solar photocatalysis for persistent pollutants. A case study from Indonesia links toilet access with income and education, highlighting behavioral and equity considerations. Together, these presentations offer holistic, scalable solutions to improve sanitation in resource-constrained and underserved settings across Asia and beyond.

Solar-activated tin oxide for photocatalytic treatment of oil sands process water: Degradation of naphthenic acids and toxicity reduction Hadi Mokarizadeh, *Canada*

High-performance sulphur autotrophic denitrification from low-C/N wastewater using novel suspended Bio-S0 Filters in short-process Rashmi Koju, *China*

Advancing solar septic tank technology: Performance evaluation and technical validation in Southeast Asia Tatchai Pussayanavin, *Thailand*

Modular biofilm-phytoremediation system for urban drain remediation: A low-energy solution in resource-constrained settings Ligy Philip, *India*

Innovations in sanitation for underserved communities Ednick Msweli, *South Africa*

Humus bioreactor for sustainable community wastewater treatment in Kandawara, Chikkaballapura, Karnataka, India Ansu Susan Cherian, *India*

T2.16
Session 3 | Technical

Wednesday 10 December
Room MR101

Harnessing Nature-based Solutions for resilient and sustainable wastewater management

Chair: Geetha Palayil Kumaran, *Malaysia*
Co-chair: John Pepard Rinchon, *Philippines*

This session explores the evovling role of nature-based solutions (NbS) in tackling water and wastewater management challenges, particularly in decentralized, rural, and resource-constrained environments. Through a series of diverse application, presenters will showcase innovative approaches such as macrophyte-assisted vermifiltration, bio-carrier systems using microalgae for micro/nano plastic removal. The session will also feature a case of over two decades of global implementation experience to highlight best practices and key lessons learned in designing and sustaining NbS in low- and middle-income countries. Collectively, the presentations illustrate how NbS can contribute to environmental sustainability, community resilience, and circular economy goals.

Nature-based wastewater treatment for resilient communities in Himalayan Region: A demonstration project at the District Police Line, Leh, Union Territory of India Ansu Susan Cherian, *India*

Nature-based approach to close the E-cycle and keep water safety Bruno Henriques, *Portugal*

Anabaena 418 as a bio-carrier for micro/nano plastic removal: Adsorption mechanisms and adaptive responses Baiyun Lu, *China*

Nature-based solutions for wastewater treatment in low- and middle-income countries: lLessons learnt from 25 years of IRIDRA's worldwide experience Anacleto Rizzo, *Italy*

Treatment wetlands, third edition (free open-access textbook) Jaime Nivala, *France*

T2.17
Session 1 | Technical

Thursday 11 December
Room MR102

Innovative membrane and adsorptive technologies for sustainable wastewater reuse and resource recovery

Chair: Tjandra Setiadi, *Indonesia*
Co-Chair: Ivan Hetman, *Sweden*

This session showcases cutting-edge advancements in membrane science and adsorptive materials to tackle membrane fouling, enhance wastewater treatment, and recover valuable resources. Topics include biochar-assisted fouling mitigation in high-solids AnMBRs, novel vertical green wall systems for low-cost water reuse, and membrane enhancements for biochemical recovery and lithium extraction. Emerging strategies such as limited-aeration MBRs, thermodynamic modeling, and ionic liquid membranes are also explored. Insights from CFD, material engineering, and interface thermodynamics provide a multi-scale understanding of water-energy nexus challenges and solutions.

Multi-scale mechanisms of biochar-driven membrane fouling mitigation in high-solids AnMBRs: Insights from CFD and interface thermodynamics Chengfan Jiao, *China*

Applications of novel adsorptive media in vertical green wall system (VGW) as a low-cost water reuse technology in municipal wastewater treatment systems Chawalit Chaiwong, *Thailand*

Shaking with limited air: A novel strategy for effective membrane fouling control in membrane bioreactors Jiale Wang, *China*

Enhancement of polyvinyl alcohol adsorbent membrane via crosslink with citric acid and lysin for biochemical recovery from food processing waste streams Thu Hang Duong, *Veitnam*

Design considerations and operational variations of a pond-wetland system for polishing treatment and wastewater, emergency control at a steel complex Viet-Anh Nguyen, *Vietnam*

Efficiency of constructed wetlands for microplastic removal from municipal wastewater: A lab-scale study Majed Alsubih, *Saudi Arabi*

T2.18
Session 2 | Technical

Thursday 11 December
Room MR102

Emerging solutions for toxic metal and contaminant removal

Chair: Marco Zeppilli, *Italy*
Co-chair: Maki Phindile Mahlangu, *South Africa*

This session explores emerging solutions for the removal of toxic metals and hazardous contaminants from wastewater systems. Presentations will highlight advanced treatment technologies such as adsorption using novel materials, nanotechnology-based filters, electrochemical processes, and bioremediation techniques. Case studies and experimental findings will demonstrate the effectiveness, scalability, and environmental safety of these innovative approaches in diverse settings. The session will also address the challenges of selectivity, cost-efficiency, and regulatory compliance. By showcasing cutting-edge research and practical applications, this session aims to drive forward sustainable and effective strategies for mitigating the risks associated with heavy metals and persistent environmental toxins.

Enhanced removal of heavy metals using sawdust and rice husk derived biochar from aqueous solutions Abhijit Debnath, *India*

Sorption of rare earth elements by GO-PEI: A sustainable approach for water purification, Nicole Ferreira, *Portugal*

Harnessing Fe_3O_4-modified G-C_3N_4 and BNNS for cutting-edge microplastic remediation in water treatment Riona Indhur, *South Africa*

Carbon-based electrocatalytic dual-membrane system bolsters singlet oxygen production for ultrafast water decontamination Ni Yan, *China*

*Iron biosorption assessment with Totora (*Schoenoplectus Californicus*) And Reed (*Phragmites Australis*) as potential non-conventional technology for polluted water in rural area in Bolivia* Paula Soto Rios, *Bolivia*

Biochar-mediated optimization of anaerobic membrane bioreactor: Dose-dependent membrane fouling mitigation and digestion enhancement via scouring-biological synergy Qian Li, *China*

T2.19
Session 3 | Technical

Thursday 11 December
Room MR109 (A+B)

Waste-to-Farm: Enhancing soil health through safe reuse practices

Chair: Sharmistha Debnath, *Bangladesh*
Co-chair: Abidelfatah Nasser, *Israel*

This session highlights the potential of safely reusing treated wastewater, biosolids, and organic waste in agriculture to enhance soil health and support sustainable farming. Presentations will explore innovative treatment methods, risk mitigation strategies, and nutrient recovery techniques that enable the safe application of waste-derived products to land. Case studies from diverse agroclimatic regions will demonstrate improvements in soil fertility, crop yield, and carbon sequestration. The session emphasizes the importance of regulatory frameworks, stakeholder engagement, and monitoring to ensure environmental and public health safety.

Composted sewage sludge application enhances soil health and potentially mitigates greenhouse gas emissions in rice paddies Luc Phung, *Japan*

Municipal anaerobic filter effluent treatment using advanced oxidation processes for crop production Benton Otieno, *South Africa*

Evaluating co-compost produced from integrated faecal sludge treatment plants (FSTPs) in India Shirish Singh, *Netherlands*

Turning human urine into fertilizer using reverse osmosis: A pilot study Njabulo Thela, *South Africa*

Performance assessment of soil conditioner, a byproduct from faecal sludge treatment plant (FSTP) Md Shakhawat Hossain, *Bangladesh*

Micropollutant removal in an innovative earthworm-enhanced sludge treatment reed bed Amir Gholipour, *Denmark*

T2.20
Session 3 | Technical

Thursday 11 December
Room MR102

Tailored treatment solutions for industrial wastewater

Chair: Moses Basitere, *South Africa*
Co-chair: Kripa Singh, *Canada*

This session explores innovative and tailored approaches for treating industrial wastewater, recognizing that each industry presents unique challenges and characteristics. The presentations highlight cutting-edge technologies and full-scale applications, from microbial electrochemical systems and bioremediation to electrocoagulation and selective resource recovery. Case studies cover a range of industrial sectors including textile, mining, and shale gas, demonstrating how specialized solutions can effectively address complex contaminants and support sustainable water management in industrial contexts.

Dye another day: Electrically active microbes in EULand and membranes to the rescue Tjandra Setiadi, *Indonesia*

Bioremediation of fluorinated pollutants by *Pseudomonas* Sp. strain 273 Yongchao Xie, *China*

Integrated co- treatment system for acid mine water and industrial wastewater: An innovative approach Thobeka Makhathini, *South Africa*

Treatment of the spin cycle effluent using electrocoagulation and granular activated carbon Shamik Prabhu Chodnekar, *India*

Characterization of microbial electrolysis cell's bioanode performances through potentiostatic and potentiodynamic techniques Marco Zeppilli, *Italy*

Application of Pinus Patula *biochar for enhancing palm oil industry wastewater treatment* Ainhoa Rubio-Clemente, *Colombia*

Technical Sessions **Theme 3**

Smart Water Management: Integrated approaches for effective water management and planning

T3.1
Session 1 | Technical
Tuesday 9 December
Room MR106

Resilient infrastructure & tackling non-revenue water loss

Chair: Joe Dalton, *Ireland*
Co-chair: Christina Betty Taylor Koranteng, *Ghana*

Highlights strategies for non-revenue water (NRW) reduction, infrastructure efficiency, and smart utility management.

Taiwan Water Corporation's NRW reduction journey – High road or low road?
Joe Lim, *Chinese Taipei*

24x7 water supply in Rajkot : A water security plan Prerna Jadhav, *India*

Pipe failure prediction in water transmission lines using interpretable machine learning with imbalanced data Taegon Ko, *United Kingdom*

From 54% to 12% of NRW – Strategies and tools of an excellence program of Porto to increase efficiency & sustainability Flávio Oliveira, *Portugal*

Enhancing water management efficiency through a centralized operation control center: The Semarang Water Utility success story Ardian Wiedilaksono, *Indonesia*

Leak localization in water distribution systems: A graph theory approach Raghavarshith Bandreddi, *United Kingdom*

T3.2
Session 1 | Technical
Tuesday 9 December
Room MR102

From data to drops: AI in smart water management

Chair: Murari Lal Gaur, *India*
Co-chair: Jayanga Kodikara, *Japan*

Focuses on AI, machine learning, and digital twin technologies for flood prediction, leak detection, and water system optimization.

Integrating flood risk modeling into urban digital twins: A framework for real-time assessment, decision-making and public engagement Lars Backhaus, *Germany*

A model predictive control framework for smart predictive digital twins in water supply systems Ana Luísa Reis, *Portugal*

Building resilient water systems with AI-enhanced WASH data Rajit Ojha, *Nepal*

InnoWave: The power of digital and artificial intelligence in water efficiency
Flávio Oliveira, *Portugal*

Learning-enhanced smart predictive digital twins for drinking water supply optimization António Andrade-Campos, *Portugal*

T3.3
Session 2 | Technical

Tuesday 9 December
Room MR102

Connected communities: Digital platforms for inclusive engagement

Chair: Darko Joksimovic, *Canada*
Co-chair: Narasamma Nippatlapalli, *India*

Features digital tools, public engagement, and data-driven decision-making for water management.

Collaboration between water users and water utilities using smartphone apps
Kazuya Naito, *Japan*

Wastewater masterplanning tools at settlement, regional, and global scales reduce costs to realize SGD 6 Alexandria Achieng Baraza, *Germany*

Evaluating the effectiveness of smart water management systems in enhancing the resilience and sustainability of water infrastructure in developing countries
Saravanamuthu Vigneswaran, *Australia*

Automatic fault detection in water-quality sensors using predictive machine learning models
Wedahitha Yapa, *Sri Lanka*

DREINCAM: New intelligent drainage management system in Madrid Region
Antonio Lastra de la Rubia, *Spain*

AQUAWATCH: Groundwater monitoring and data-driven decision making through advanced research Sushanta Roy, *Bangladesh*

T3.4
Session 1 | Technical

Thursday 11 December
Room MR111 (A+B+C)

Navigating flood hazards: Enhancing urban resilience

Chair: Alison Parker, *United Kingdom*
Co-chair: Thabo Ncala, *South Africa*

Addresses flood risk assessment, climate-adaptive drainage, and nature-based solutions for urban resilience.

Case study on carbon reduction in a water cycle city based on water reuse Soon Buhm Kwon, *Republic of Korea*

Resilient urban drainage systems: Towards cost-effective and climate-adaptive solutions Darko Joksimovic, *Canada*

A framework for selecting and assessing Nature-based Solutions for soil erosion control in water resource management in Addis Ababa, Ethiopia Kimberly Wang, *Netherlands*

Understanding the MNF for DMAs: How much night water consumption is contained?
Qiang Xu, *China*

A virtual reality visualization of urban flooding simulation coupled with the SWMM
Jiye Park, *Republic of Korea*

Naturalization of rivers to prevent flooding in urban areas Siti Murniningsih, *Indonesia*

T3.5
Session 1 | Technical

Thursday 11 December
Room MR101

Rural water security through small-scale, localized & decentralized solutions

Chair: Joe Lim, *Chinese Taipei*
Co-chair: Regina Souter, *Australia*

Showcases decentralized, rural, and community-led water/sanitation solutions.

The story of the Matsu Islands – Transforming for smart and resilient water systems Menghsu (Andrew) Yu, *Chinese Taipei*

Water to cherish in urban landscapes in the Global South – Nature-based Solutions for climate resilient water design in low income neighorhoods in South-Africa and Nambia Martin Knuijt, *Netherlands*

Can solar disinfection of harvested rainwater improve access to safe water in healthcare centers in Rural Malawi? Christabel Kambala, *Ireland*

Digital platforms supporting Mahalaxmi Municipality in standardizing sanitation system Irisa Shrestha, *Nepal*

Multi-layer root zone soil moisture prediction with a one-dimensional convolutional neural network and satellite data for climate-resilient irrigation Jayanga Kodikara, *Thailand*

T3.6
Session 3 | Technical

Thursday 11 December
Room MR111 (A+B+C)

Turning data into decisions – How utilities lead change with benchmarking and digital tools

Chair: Tim Marjoribanks, *United Kingdom*
Co-chair: Poly Das, *Bangladesh*

This workshop explores how water and sanitation utilities can turn data into better decisions by combining benchmarking and digital tools. Participants will gain insights into global performance trends, utility digital readiness, and real-world transformation stories from peer utilities. Through interactive polls and roundtable discussions, the session guides participants to identify their own barriers and priority actions for improving data quality, digital systems, and management practices.

Resource recovery through stormwater reuse: Enhancing water security in the Himalayan ridge town of Darjeeling Suvajit Dey, *India*

The effect of wildfires on soil hydraulic properties and groundwater recharge in San José de Chiquitos, Bolivia Mónica Guzmán-Rojo, *Bolivia*

Adaptation to water insecurity in the Vietnamese Mekong Delta: A case study of Soc Trang Province David Rodgers, *Australia*

Integrated spatial planning design with NbS for critical infrastructure protection against multiple climate driven hazards Carme Machí Castañer, *Austria*

Bridging Nature-based Solutions, smart technologies, and traditional wisdom for sustainable water management Murari Lal Gaur, *India*

T3.7
Session 1 | Technical

Friday 12 December
Room MR106

Regenerative water management: Sustainable & circular approaches

Chair: Sushanta Roy, *Bangladesh*
Co-chair: Sangeetha Vivekanandan, *India*

Explores circular economy approaches, resource recovery, and sustainable technologies for water treatment.

Sustainable approach for waste management: advancing circular economy in wastewater treatment Narasamma Nippatlapalli, *India*

Mitigate urban floods caused by extreme rainfall using Nature-based Solutions Kairong Lin, *China*

Sustainable activated carbon production from agricultural waste for climate change mitigation and water treatment Hayat Raza, *Canada*

Advancing off-grid water self-sufficiency on household level Devi Buehler, *Switzerland*

Utilising UAVs in turbidity measurement and catchment management planning Gabriel Njokaphiri, *Malawi*

T3.8
Session 1 | Technical

Friday 12 December
Room MR103

Navigating the industrial water crisis: Technologies and best practices

Chair: Loga Veeraiah, *Malaysia*
Co-chair: Noel Kwamivi, *Ghana*

Tackles industrial/mining wastewater challenges, metal recovery, and advanced monitoring.

Establishing sulfate concentration limits for integrating secondary battery wastewater to public wastewater treatment plants in South Korea Sang Yeob Kim, *Republic of Korea*

Carbon source dosage intelligent determination using a multi-feature sensitive back propagation neural network model, Aijiao Zhou, *China*

Optimizing hydropower generation in cascade reservoirs: A climate-resilient approach to achieve Indonesia's renewable energy goal Angeline Kusumaningrum, *Indonesia*

Green solutions for acidic mining waters: seaweed-based removal and recovery of critical metals Thainara Viana, *Portugal*

Messages from the electrical sensing zone (ESZ): A novel approach to characterizing particulate matter in water environment Kang Xiao, *China*

Integrating artificial intelligence for sustainable irrigation and water management in Assam's Tea Gardens Chiradip Barua, *India*

T3.9
Session 2 | Technical

Friday 12 December
Room MR111 (A+B+C)

From ideas to impact: Innovating policy and governance

Chair: Kazuya Naito, *Japan*
Co-chair: Sifiso Dhlamini, *United Kingdom*

Covers policy frameworks, governance tools, and SDG-aligned planning for water systems.

Circular economy and wastewater reuse: A comparative analysis between india and global practices Manikprabhu Dhanorkar, *India*

Ensuring safe drinking water: Climate-resilient water resource management in small island states – Lessons from Timor-Leste Mario Santos, *Timor-Leste*

GIS-driven strategies for sustainable and smart water resource management and climate adaptation Abhaye Mahajan, *India*

Application research of model-driven based adaptive scheduling in water distribution systems Dai Xiong Qi, *China*

A systemic approach to urban water and sanitation planning in heterogeneous contexts in low- and middle-income countries Simon Ross, *Australia*

Enhancing water safety in Porto: Integrating risk assessment and major strategic projects Flávio Oliveira, *Portugal*

T3.10
Session 2 | Technical

Friday 12 December
Room MR106

Water integrity: Advanced solutions for quality preservation and pollution reduction

Chair: Kwanrawee Sirikanchana, *Thailand*
Co-chair: Xinyu Pan, *China*

Investigates water pollution, contaminant detection, and remediation strategies for safe water.

Comprehensive detection of ARGs in wastewater, river, and seawater in Thailand using HT-qPCR Thitima Srathongneam, *Thailand*

Spatial assessment of microplastic and heavy metal pollution in Deepor Beel: An urban Ramsar Wetland in Northeast India Sumantra Chaudhuri, *India*

Tracing the footprints of land use land cover changes on water quality in The Delhi Stretch of the Yamuna River Neenu Neenu, *India*

Technical Sessions
Theme 4

Enhancing utility management and operations for sustainable growth

T4.1
Session 2 | Technical

Tuesday 09 December
Room MR106

Equity & access in water distribution

Chair: Yoji Matsui, *Japan*
Co-chair: Annabella Nyakaisiki, *Uganda*

The session explores equitable water access, service benchmarking, and inclusive solutions for underserved communities.

Development of an innovative water services institutional model through licensing and regulation – A South African experience Jayant Bhagwan, *South Africa*

Leveraging customer feedback for sustainable water service improvement: A case study of PDAM Semarang Ardian Wiedilaksono, *Indonesia*

Enhancing energy efficiency in water utilities: Challenges and opportunities in low-income countries Jonas Aabe-Ere, *Ghana*

Empowering urban water services through south-south collaboration: Insights from Ghana and Sierra Leone Faustina Boachie, *Ghana*

How can we improve capacity development support to urban water utilities? Learnings from multi-country implementation of a utility strengthening framework Sam Drabble, *United Kingdom*

T4.2
Session 1 | Technical

Wednesday 10 December
Room MR111 (A+B+C)

Urban water resilience & infrastructure

Chair: Denis Taremwa Kamugisha, *Uganda*
Co-chair: Maria Anjelica P. Ancheta, *Thailand*

The session addresses urban water resilience, flood prevention, digital transformation, and infrastructure management in cities.

Decentralized sewage interventions: comparative study of the water quality of two streams in the São Francisco basin in the rural area of the municipality of Ouro Branco Jackson Oliveira, *Brazil*

Improving implementation of water safety plans through policy establishment Induka Werellagama, *New Zealand*

Effect of customized LID techniques on urban flood damage reduction considering urban regeneration area characteristics – Focused on infoworks ICM simulation study GeonHo Jin, *Republic of Korea*

Predicting future surface runoff patterns under climate change using the GSSHA model Ahmed Al-Areeq, *Saudi Arabia*

Performance assessment system for monitoring urban water and sanitation service levels in India: Outcomes, achievements, and lessons learned Dhruvkumar Bhavsar, *India*

Best practices in water loss management. For improved visibility and reduced NRW, Keshvinder Singh, *Singapore*

T4.3
Session 2 | Technical

Wednesday 10 December
Room 110 (A+B+C)

Sustainable water management & circular economy

Chair: Si Tuan Vo, *Vietnam*
Co-chair: Thomas Da Jose, *Australia*

The session focuses on sustainable water management and circular economy practices like zero liquid discharge, nutrient recovery, circular economy models, and sludge management to enhance water system sustainability

Sustainable consumption towards zero liquid discharge – The case of Air Selangor Nurul Sa'dah Bahar, *Malaysia*

Innovative approach to sewage sludge anaerobic digestion for energy recovery maximization Andrea Capodaglio, *Italy*

Advanced anaerobic digestion at Polish sludge treatment center achieves high throughput and energy efficiency Ashish Kumar Sahu, *Norway*

Treated municipal wastewater fertigation for circular nutrient recovery and greenhouse gas mitigation in rice cultivation Jittrera Buates, *Japan*

The Wat(t)er FabLab: Pioneering 3D printing for a circular economy in water management Joana Fonseca, *Portugal*

A performance indicator for quantifying and benchmarking inequity in water distribution for utilities Ashish Nair, *India*

T4.4
Session 2 | Technical

Wednesday 10 December
Room MR102

Data-driven water management

Chair: Keshvinder Singh, *Singapore*
Co-chair: Steffie Bes, *Netherlands*

The session highlights data analytics, smart metering, and digital tools for efficient water utility operations and NRW reduction.

A Rosetta Stone approach to understanding inter-relationships between real loss KPIs Kate Stanton-Davies, *United Kingdom*

Optimizing pipeline management: Tackling leaks, non-revenue water, and operational challenges at Ghana Water Limited (GWL) Christina Betty Taylor Koranteng, *Ghana*

Evaluating water supply services in Pokhara, Nepal: Insights from NWASH-MIS data Noboru Ozaki, *Japan*

Development of an optimized tariff modelling in support of 'Fair Water Billing For All' within EThekwini Municipality, Durban Ismail Banoo, *South Africa*

Accountability mechanisms and initiatives for utility management Arwa Bharmal, *India*

Comparison of smart meter effectiveness through mechanical and ultrasonic meter installation in Pokhara City, Nepal Koji Nakashima, *Japan*

T4.5
Session 1 | Technical

Friday 12 December
Room MR111 (A+B+C)

Rural & climate-resilient solutions

Chair: Mónica Guzmán-Rojo, *Bolivia*
Co-chair: Jacob Amengor, *Canada*

The session covers rural water resilience, informal settlement challenges, and climate adaptation in developing regions.

Climate resilience of urban water supply and sanitation systems: A case study of urban water resources and infrastructure operations in Bangkok, Thailand Maria Anjelica Ancheta, *Thailand*

Development and piloting of the rural water supply climate-resilience monitoring tool (RWS-CRMT) in Indonesia D. Daniel, *Indonesia*

Driving climate resilience through inclusive water services Faustina Boachie, *Ghana*

Employing smart metering for climate-smart water management and resilience: A case study of Ghana Water Limited (GWL) Christina Koranteng, *Ghana*

Bridging gaps and reducing losses: How expanding water access to low-income communities strengthens utility performance Josephine Turkson, *Ghana*

T4.6
Session 2 | Technical

Friday 12 December
Room MR103

Industrial & health risk mitigation

Chair: Aiman Uteyeva, *United Kingdom*
Co-chair: Roshan Shrestha, *USA*

The session examines industrial wastewater risks, health impacts of contamination, and sanitation solutions for vulnerable groups.

Investigating WASH Systems for industrial migrant workers: The case of Surat Ishank Mishra, *India*

Evaluating simplified sewerage in Sub-Saharan Africa: A multi-case study approach Matthew Jackson-Koufie, *United Kingdom*

The servicing of container-based sanitation users and its impact on quality of life Alison Parker, *United Kingdom*

Risk analysis of fecal contamination in the residential area around a communal domestic wastewater treatment plant Andri Gumilar, *Indonesia*

Life cycle and human health risk assessment of water treatment sludge disposal alternatives Alisher Alibekov, *Kazakhstan*

Emergency response in industrial wastewater management Viet-Anh Nguyen, *Vietnam*

Technical Sessions **Theme 5**

Strengthening governance and financial systems for long-term development

T5.1
Session 3 | Technical

Tuesday 9 December
Room MR106

Financing & economic approaches

Chair: Yang Villa, *Philippines*
Co-chair: Patience Wema, *Kenya*

Explores financing mechanisms, cost recovery models, and economic strategies to achieve sustainable and inclusive WASH services.

Financial strategy for inclusive onsite sanitation in low-income communities in urban centers in Bangladesh Dilruba Farzana, *Bangladesh*

Cost of universal access to WASH services: Learning from a comprehensive WASH plan in a coastal sub-district of Bangladesh Md Golam Rasul, *Bangladesh*

Creditworthiness assessments – An approach for Indian cities Dhruvkumar Bhavsar, *India*

Investment challenges in water infrastructure: An initial policy review of public-private partnership (PPP) reforms in the Philippines John Pepard Rinchon, *Philippines*

Sustainable WASH financing for low-income households Mingma Sherpa, *Nepal*

The cost of inaction: Assessing impacts of inadequate WASH funding in Bangladesh Ramkrishna Paul, *India*

T5.2
Session 3 | Technical

Wednesday 10 December
Room 110 (A+B+C)

Environmental health & circular economy

Chair: Md Tahmidul Islam, *Bangladesh*
Co-chair: Lillian Naiga Toogo, *Uganda*

Focuses on environmental health risks, circular economy applications, and sustainable practices in WASH systems.

Multi-stakeholder dialogues for safe wastewater reuse in urban agriculture: Opportunities and limitations David Galibourg, *United Kingdom*

The hidden costs of water sachet waste Elizabeth Cullen, *United Kingdom*

The SCS SAP project actions toward land-based pollution management in the South China Sea and Gulf of Thailand Si Tuan Vo, *Vietnam*

Do household water connection procedures influence the SDG 6? Evidence from Indian municipalities Pranesh Muthuchami, *India*

Securing safe and affordable water under the economic crisis in South Sudan Ms. Jabe Jermalili, *Japan*

Towards sustainable rural water supply: efficient management of water pump operators Sangram Mane, *India*

T5.3
Session 2 | Technical

Thursday 11 December
Room MR111 (A+B+C)

Climate resilience & adaptation

Chair: Julia Gathu, *Kenya*
Co-chair: Ruchika Shiva, *India*

Addresses climate impacts on WASH systems, adaptation strategies, and resilience-building for vulnerable populations.

Impacts of long-term climate change on water- and mosquito-borne diseases: Outcomes from a global scoping review of quantitative research Jesse Limaheluw, *Netherlands*

Bridging water governance gaps in Darjeeling: Addressing Scarcity with inclusive, sustainable solutions in The Himalayas Suvajit Dey, *India*

Evidence of resilience of rural water supplies and household toilets from Southern and Western Africa Anisha Nijhawan, *United Kingdom*

Costing safely managed and climate-resilient rural sanitation systems: A life-cycle analysis in Lao PDR Jeremy Kohlitz, *Australia*

Empowering climate migrants for a resilient future: Addressing WASH challenges for climate migrants in low-income communities of Bangladesh Sonia Shahid, *India*

Tailored business models for Nature-based Solutions: Context-driven value propositions in global urban water management Carme Machí Castañer, *Austria*

T5.4
Session 2 | Technical

Thursday 11 December
Room MR101

Technology & innovation

Chair: Harrison Pienaar, *South Africa*
Co-chair: Nerea Uri Carreno, *Denmark*

Highlights the technological enhancements and innovations including use of digital tools and programmatic approaches to improve WASH service delivery.

Public awareness, trust, and readiness to adopt AI-driven WASH policies
Rathin Biswas, *India*

Strategic sanitation planning in Urban Bangladesh: Leveraging digital tools for targeted investments Sonia Shahid, *Bangladesh*

WASH systems index assessment in Bangladesh: Transformation to strengthen WASH service delivery Md Shakhawat Hossain, *Bangladesh*

Using peer learning to build local government capacity for delivering improved sanitation Paul Hutchings, *United Kingdom*

Strengthening external support for more sustainable community-based rural water systems: An analysis of PAMSIMAS program in Indonesia Cindy Priadi, *Indonesia*

Interrogating decision-making for access to sanitation in informal settlements in Bulawayo, Zimbabwe Virginia Roaf, *Germany*

T5.5
Session 1 | Technical

Friday 12 December
Room MR109 (A+B)

Equitable WASH solutions

Chair: Isha Basyal, *Thailand*
Co-chair: Bernhard Schnederle, *Austria*

Explores inclusive sanitation solution, gender equity, and approaches to address sanitation challenges in underserved communities.

Measuring urban sanitation and women empowerment: Exploring the role of governance and finance Rasia Habib, *Bangladesh*

Strategic shift to sustain operation and maintenance for public water and sanitation facilities in Bangladesh Md Azizur Rahman, *Bangladesh*

Inspiring state owned water utilities from low and middle income countries to use alternative project financing: A case study of Tanga UWASA's Green Bond Issuance
Geofrey Hilly, *Tanzania*

Assessment of marginalized populations' in leadership and participation in water and sanitation services: A case study of Hetauda Sub-Metropolitan City, Nepal Srijana Karki, *Nepal*

Bridging the sanitation divide: Innovations for inclusive and resilient urban sanitation in Nepal Hezekia Otieno Pireh, *Nepal*

Is urban governance the key to better water services in rapidly urbanising villages adjoining large cities? May Sule, *United Kingdom*

T5.6
Session 2 | Technical

Friday 12 December
Room MR109 (A+B)

Governance & policy for WASH systems

Chair: Agus Nugroho, *Indonesia*
Co-chair: Virginia Roaf, *Germany*

Focuses on governance models, policy reforms, data systems, and multi-stakeholder approaches to strengthen WASH service delivery and management.

Innovative financing options for infrastructure development in developing countries in the face of declining donor financing: A case of Uganda's National Water and Sewerage Corporation Denis Taremwa Kamugisha, *Uganda*

Sustainable, inclusive, and evidence-based sanitation governance: Lessons from strengthening public data systems in Bangladesh and Uganda Ramkrishna Paul, *India*

Advancing the evidence for water, sanitation, and hygiene (WASH) systems strengthening: A Delphi Study to define research priorities Ruth Sylvester, *United Kingdom*

Sanitation data reformation in Bangladesh: Challenges, coordination mechanisms, and sustainable solutions Shishir Biswas, *Bangladesh*

Improving water supply and sanitation access in Southeast Asia – Addressing climate, economic, and policy barriers Deepa Karthykeyan, *USA*

Navigating challenges & exploring solutions in FSM sector at Paurashavas across Bangladesh: Insights from field visit & CSDA analysis Ariful Haque, *Bangladesh*

Workshops

Workshops
Theme 1

Ensure safe drinking water: innovative approaches for treatment and supply

W 1.1
Session 1 | Workshop

Tuesday 9 December
Room MR109 (E+F)

Effecting improved intermittent water supply (IWS)

Chair: Sasikumar Eswaramurthy

Poorly managed Intermittent Water Supply (IWS) exacerbates inequitable water access, affecting both quantity and quality. Variations in supply schedules force households into coping mechanisms that impact demand and widen service disparities. While policy discussions favour Continuous Water Supply (CWS), operational challenges of IWS are often overlooked. This session will explore strategies to improve IWS by regulating water distribution, managing domestic storage, addressing resource constraints, and guiding transition to CWS. The session will offer insights from India, Bangladesh and other countries, followed by a panel discussion with experts from government, development, and private sectors.

Speakers: Suresh Kumar Rohilla; Uttam Kumar Saha; Sasikumar Eswaramurthy

W 1.2
Session 1 | Workshop

Wednesday 10 December
Room MR109 (E+F)

Ensuring rural drinking water safety in developing countries: Challenges and opportunities

Chair: Min Yang

The purpose of this workshop is to exchange and explore a drinking water treatment and water supply mode for sustainable rural development by adopting new technologies, renewable energy and IT. In view of the difficulty in supplying safe drinking water in the developing countries, particularly in the rural regions, this workshop will discuss the formation of a new model to ensure safe drinking water by including new technologies, renewable energy, It, etc., developed in recent years, combined with intelligent management and maintenance, industrialization and commercialization, and regional and national cooperation. How China can make a contribution to this will be discussed. It is aimed to assist the low-income countries to achieve SDG6.

Speakers: Kalanithy Vairavamoorthy; Siwatt Pongpiachan; Primal Jinadasa; Pramila Devi Shakya Bajracharya; Baiwen Ma; Yuangsong Wei; Yongming Wang

W 1.3
Session 2 | Workshop

Wednesday 10 December
Room MR109 (E+F)

Strengthening the impact of water safety plan training

Chair: Asoka Jayarante
Co-chair: Micheala Ka Yan Chan

This interactive workshop explores effective training and capacity building for sustainable water safety plan (WSP) implementation. Since the WSP approach was in introduced in 2004, global training efforts have provided valuable lessons. The session will highlight best practices, challenges, and opportunities in WSP training through case examples, practitioner experiences and expert insights. Participants will explore strategies for adapting training to local contexts, using mixed modalities for diverse audiences, and reinforcing knowledge post-training. Additionally, the workshop will introduce the new WHO & IWA Global WSP Training Package, equipping attendees with practical tools to enhance WSP capacity development worldwide, contributing to more resilient and safe water supply management. Participants will gain knowledge, skills and confidence to effectively localize and deliver WSP trainings, leveraging best practices and new tools for effective and sustainable training outcomes.

Speakers: Thomas Pettersson; Ty Choy; Monica Ndagire; Edna Maple Tetteh

W 1.4
Session 3 | Workshop

Tuesday 9 December
Room MR107 (A+B)

HRWM Workshop for pathogen risk management for drinking water consumption

Chairs: Kwanrawee Sirikanchana & **Daisuke Sano**

Health-Related Water Microbiology Specialist Group (HRWM SG) serves as a forum for the exchange of scientific information related to the management of human health risks caused by pathogens contaminating water and the environment. It encompasses a wide range of expertise, including environmental and clinical virology, bacteriology and parasitology, infectious diseases epidemiology, risk assessment methodologies, water treatment engineering, and environmental health practice. One of the key focus areas for HRWM SG is managing human health risks associated with pathogens in drinking water, particularly in developing countries where resources for water quality management is often limited. In this workshop, we will share the state-of-art knowledge on the types of pathogens found in drinking water and strategies for managing the associated human health risks. This will include presentations by leading researchers and a panel discussion.

Speakers: Nattawut Intorn; Sirapat Khodseewong; Takayuki Miura; Kate Medlicott; Gang Liu

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W 1.5
Session 3 | Workshop

Thursday 11 December
Room MR109 (E+F)

Innovative DX solutions for sustainable water supply

Chair: Aoki Hidetaka

This workshop will explore how digital transformation (DX) technologies such as smart metering system, satellite monitoring, and predictive analytics can enhance water infrastructure resilience. Experts will share overview approach on DX utilizing tools to analyze and identify gaps according to the Digital Architecture of water utilities. Case studies from Bangkok and others, demonstrating satellite-based leak detection, pilot study of introducing DX approach in Tanzania will be presented. Discussions will focus on challenges, successes, and the scalability of these technologies in different contexts. Participants will leave with practical insights on implementing DX solutions in water management.

Speakers: Ruman Dey; Sidonio Freitas; Aoki Hidetaka

W 1.6
Session 2 | Workshop

Friday 12 December
Room MR109 (E+F)

Solving water pollution through youth-led community based water solution framework

Chair: Chotiwat Jantarakasem
Co-chair: Federick Pinongcos

Surface water and groundwater contamination remain critical challenges in many countries, with some regions experiencing severe pollution due to heavy metal contamination. The responsibility for managing and mitigating such contamination falls on multiple stakeholders, including industrial sectors, policymakers, law enforcement agencies, local municipalities, and water supply authorities. However, the overlapping jurisdictions and fragmented accountability among these entities often result in delayed responses, leaving communities exposed to hazardous pollutants in their daily lives. To address this issue, the Youth-Led Community-Based Water Solution Framework was developed to empower local communities in mitigating water pollution. This framework equips water young professionals with alternative methods to enhance water quality management at the community level. The workshop will introduce the key steps of the framework and provide practical guidance on its implementation.

Speakers: Chotiwat Jantarakasem; Federick Pinongcos; Linda Li; Yumeng Zhao

W 1.7
Session 2 | Workshop

Thursday 11 December
Room MR109 (C+D)

Community-based rainwater for drinking: Scalable local actions, policy innovations, and technical solutions for achieving SDG 6

Chair: Mooyoung Han
Co-chair: Mam Sarith

This session aims to showcase how community-based rainwater systems can contribute to achieving SDG 6 by providing safe and sustainable drinking water solutions, particularly in decentralized settings. Through case studies like the Rain School Initiative, participants will explore technical innovations and social strategies for effective implementation. The desired output includes actionable strategies for integrating rainwater systems into schools and healthcare facilities, fostering policy support, and enhancing stakeholder collaboration. Participants will gain insights into best practices and scalable models for local adaptation.

Following the workshop, outcomes will be disseminated through knowledge-sharing platforms, policy recommendations, and collaborative initiatives. The workshop will inspire policymakers, practitioners, and researchers to adopt decentralized rainwater solutions, leading to broader implementation and strengthened partnerships for water resilience. The summarized outcomes will be published as an article in a journal, blog, Source magazine feature, or other media channels.

Speakers: Mooyoung Han; Sarith Mam; Suresh Rohilla; Tulinave Mwamila; Tanuja Ariyananda; Jin Won Yi

Workshops
Theme 2

Advancing wastewater treatment and sanitation services: Sustainable solutions for all

W 2.1
Session 3 | Workshop

Tuesday 9 December
Room MR109 (C+D)

Design sprint: Building future water-sensitive cities

Chair: Maryam Imani
Co-chair: Balaji Narasimhan

This interactive design sprint will challenge participants to develop innovative strategies for integrating Water-Sensitive Urban Design (WSUD) into city planning. Using a multi-criteria decision-making (MCDM) approach, teams will collaborate to create actionable urban water resilience plans that incorporate Blue-Green Infrastructure (BGI), Sustainable Drainage Systems (SuDS), and Nature-Based Solutions (NBS). Participants will explore real-world case studies, assess trade-offs, and propose solutions that balance flood mitigation, biodiversity, public health, and socio-economic factors. The sprint will conclude with rapid-fire presentations, peer feedback, and discussions on policy integration. Outcomes will contribute to a workshop summary report, fostering further research and potential pilot projects.

Speakers: Maryam Imani; Balaji Narasimhan; Suresh Rohilla; Bhallamudi Sreenivasa Murty (B.S.Murty); Nathalia da Mata Mazzonetto Pinto; Arun Rajasekaran Sankarbalaji; Elanchezhiyan Duraisekaran

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W 2.2
Session 2 | Workshop

Wednesday 10 December
Room MR109 (G+H)

Pre-assessment for carbon finance: Evaluating wastewater & sanitation project eligibility for carbon finance

Chair: Heinz-Peter Mang
Co-chair: Marie Reysset

This session aims to provide practical guidance on conducting an initial eligibility assessment of wastewater and sanitation projects for carbon finance. At the end of the session, the participants will be able to 1) identify main indicators and have the proper references to allow initial evaluation of their projects against main carbon finance mechanisms, 2) train the colleagues on the same.

Speakers: Martin Dilger; Heinz-Peter Mang; Marie Reysset

W 2.3
Session 3 | Workshop

Wednesday 10 December
Room MR107 (A+B)

Empowering communities through resource-oriented sanitation

Chair: Devi Buehler
Co-chair: Guenter Langergrabe

This workshop explores the potential of resource-oriented sanitation (ROS) to enhance community resilience and autonomy by decentralising water and sanitation management. Many communities face challenges due to an over-reliance on centralized infrastructure, limiting their capacity for independent action. Through short case study presentations from various global contexts, the workshop will highlight real-world experiences in implementing ROS. Participants will engage in moderated roundtable discussions to explore key themes, including opportunities, risks, operational challenges, and best practices for successful adoption. Insights from these discussions will be synthesized to inform future applications and policy recommendations.
The session is designed for water and sanitation professionals, researchers, policymakers, and community leaders interested in sustainable, decentralised solutions.

Speakers: Hideori Harada; Paula Paulo; Philip Majeke; Abishek Sankara Narayan

W 2.4
Session 3 | Workshop

Wednesday 10 December
Room MR109 (E+F)

Transformative water practices in the Circular Economy

Chair: Sandra Sikkema
Co-chair: Johann Poinapen

The workshop brings together practitioners and experts to explore innovative approaches to water reclamation, reuse, and resource recovery. It will highlight practical experiences from ongoing projects, emphasising scalable solutions and the integration of circular principles in water management. The session will address key enablers such as policy frameworks, infrastructure readiness, and digital technologies, while also tackling challenges like public perception, regulatory gaps, and institutional capacity. Through presentations and interactive discussions, participants will gain insights into fostering cross-sectoral partnerships, building public trust, and promoting inclusive stakeholder engagement. As investment in water and sanitation infrastructure grows, this workshop provides a platform to share strategies for accelerating sustainable, climate-resilient, and socially accepted water practices in the Global South.

Speakers: David Bergmann; Johann Poinapen; Jay Bhagwan; Nupur Bahadur

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W 2.5
Session 3 | Workshop

Thursday 11 December
Room MR106

The science you need to understand: Emissions from non-sewered sanitation

Co-chairs: Linda Strande; Caetano Dorea & **Barbara Evans**

A timely global discussion around greenhouse gas emissions from non-sewered sanitation is taking place, which is important for climate mitigation. However, due to the urgent nature of climate change, the cart is often coming before the horse, with published emission values coming prior to scientific understanding. In this workshop, we will explore the required science to understand greenhouse gas measurements, biological activity during storage of wastewater in containments that contributes to greenhouse gasses (aka fecal sludge in pit latrines and septic tanks), and difficulties in scaling up highly variable results to city-wide or regional scales. Direct transfer of concepts from sewer-based sanitation, such as population equivalents and anaerobic degradation, has led to misconceptions in understanding GHG emissions in urban, non-sewered sanitation.

Speakers: Kelsey Shaw; Jack Dalton; Tania Gomez Borraz; Huynh Tan Loi

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W 2.6
Session 2 | Workshop

Wednesday 10 December
Room MR107 (A+B)

From climate vulnerability to climate resilience: Innovation and systems change in urban sanitation

Chair: Juliet Willetts
Co-chair: Maria Angelica Sotomayor

The purpose of this session is to catalyse strengthened action on climate resilient sanitation (CRS), bringing together recent evidence, latest practices and integrated thinking on transformative adaptation to reduce risks and vulnerabilities, mitigation opportunities and support wider water resilience. The workshop will share research, leading examples, tools and practices to support professionals in rethinking and reconfiguring sanitation services in support of wider urban water mitigation and adaptation. It will bring together global sanitation, environmental, research, funding and development experts in expresso lightning inputs followed by a World Cafe format, to showcase and discuss diverse experiences and perspectives for scaling CRS approaches in an active and participatory way. The session will conclude with a summary of key insights and distillation of priority actions that can be assimilated into the conference Sanitation Forum, and future work of IWA and Climate Resilient Sanitation Coalition.

Speakers: Maria Angelica Sotamayor; Sanyu Lutalo; Kate Medlicott; Miller Camargo Valero; Leanne Casey; Cindy Priadi; Freya Mills; Nadira Khawaja; Jeremy Kohlitz; Dinda Fauzani

W 2.7
Session 1 | Workshop

Friday 12 December
Room MR109 (G+H)

Development of global database for faecal sludge characteristics

Chair: Konstantina Velkushanova
Co-chair: Damir Brdjanovic

The Book Methods for Faecal Sludge Analysis marked a major step in standardizing the approach of faecal sludge analysis and data generation globally, across regions and organizations. Building on this momentum, Phase 2 of this project was launched, jointly with the Global Partnership of Laboratories for Faecal Sludge Analyses (GPLFSA) comprising of over 12 laboratories worldwide. The activities of Phase 2 were focused on verifying and validating key analytical methods of the Book, across diverse geographical and contextual settings. Additionally, the project was focused on developing of an open-access global database through a web-based platform to systematically share data generated through faecal sludge analysis. Participants joining this workshop will have the opportunity to shape the faecal sludge research field, strengthening global collaborations, and contributing to a robust, open-access global database for sanitation practitioners, decision-makers, and researchers worldwide.

Speakers: Konstantina Velkushanova; Damir Brdjanovic; Thammarat Kootatep

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W 2.8
Session 3 | Workshop

Thursday 11 December
Room MR101

Bridging the gap: Overcoming implementation barriers to scale sustainable sanitation solutions

Chair: Preyan Arumugam
Co-chair: Mei Yee Chan

There have been numerous technological advances to produce and commercialise sustainable sanitation solutions globally. However, wide-scale implementation has been slow. This workshop is designed to highlight these challenges from real-world experiences, especially in South Africa, and TuVSuV expertise on regulatory and standardization barriers. The workshop will culminate in a "Sanitation Debate" where participants will gain a practical understanding of the hurdles and explore differing perspectives on potential solutions after listening to the key sanitation challenges from world-wide experts. It is anticipated that these learnings will then allow for participants to develop strategies to navigate implementation hurdles and accelerate the adoption of sustainable sanitation solutions within their respective regions.

Speakers: Tanvir Ahmed; Ligy Philip; Kartik Chandran; Meera Mehta

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W 2.9
Session 3 | Workshop

Wednesday 10 December
Room MR102

Digital tools for evidence-based decision making in CWIS

This session explores how GWSC and its partners have harnessed open-source GIS-based data, systems, and platforms to support evidence-based decision-making in designing and delivering the TAs in sanitation and data. By integrating accessible data sources with existing databases, GWSC has minimized extensive data collection efforts while enhancing municipal operations and sanitation project design. The session will highlight the efficiency and scalability of these digital tools, showcasing the geo-spatial CWIS planning tool and the Integrated Municipal Information System. These tools serve as powerful enablers for evidence-driven decision-making, facilitating the application of citywide inclusive sanitation principles and frameworks. Attendees will gain insights into overcoming challenges associated with digital platforms and learn how GWSC's innovative approaches have successfully supported sanitation planning and operations. Above all, this session aims to demonstrate how supportive digital tools can drive sustainable, inclusive, and scalable solutions in urban sanitation management.

Workshops
Theme 3

Smart Water Management: Integrated approaches for effective water management and planning

W 3.1
Session 1 | Workshop

Tuesday 09 December
Room MR109 (C+D)

Scaling water-sensitive urban NbS for equitable and lasting impact

Chair: Katharine Cross
Co-chair: Teak Seng

This workshop will explore how urban Nature-based Solutions (NbS) such as wetlands, green walls, and water-sensitive urban design can be scaled beyond pilot projects. Focusing on Laos, Cambodia, Vietnam, and Thailand, it will highlight governance, financing, and maintenance strategies needed for long-term success. Through case studies, expert insights, and interactive discussions, participants will identify barriers and co-develop actionable solutions. The session will emphasize inclusivity, ensuring NbS benefit all communities, especially vulnerable groups. Insights will inform an action agenda for integrating NbS into urban planning and climate resilience policies.

Speakers: Aksara Putthividhya; Detchphol Chitwatkulsiri; Ben Furmage; Sasiwan Wongsiriprasert; Lim Ymeng; Nguyen Hieu Trung; Souphanny Singsayyachack; Rosalind Amornpitakpun

W 3.2
Session 2 | Workshop

Tuesday 09 December
Room MR109 (C+D)

Catchment-level approach for climate resilience in water systems

Chair: Hew Merrett *(Chair and Panel Moderator)*

While water challenges are felt at a local level, their solutions often require interventions with multiple stakeholders across an entire catchment area. This session will delve into the partnerships, policies, and technologies that can address water scarcity, water quality, and climate resilience at a catchment level. The session will begin with a moderated discussion among panellists whose experiences span three continents and with backgrounds in water stewardship, urban stormwater drainage, rural water and sanitation services, and nature-based solutions. To begin the workshop session, one inspired-hypothetical case study will be introduced of a district in trouble. Participants will then engage in breakout discussion amongst their tables, guided by the panellists, to ideate technologies, policies and other catchment-level solutions for the case study. The learnings from the session can be taken up by participants to implement climate resilience solutions in their respective catchments.

Speakers: Hew Merrett *(Chair and Panel Moderator)***; Angelica Euara Manrique** *(panelist)***; Radhika Boargaonkar** *(panelist)***; Karl Zimmermann** *(panelist)***; Nathalia da Mata** *(panelist)***; Omi Kumari** *(Workshop facilitator)*

W 3.3
Session 2 | Workshop

Tuesday 09 December
Room MR109 (E+F)

Understanding the NRW water balance

Chair: Gary Wyeth
Co-chair: Kate Stanton-Davies

The Workshop will outline the measurement of Non-Revenue Water (NRW) as a whole and how it can then be broken down into its various components, through the utilisation of the IWA developed NRW Water Balance. The workshop will review each component of NRW, to understand how it is broken down, with the two main components being Commercial and Physical losses. A review will be made of how reducing one of these components, either intentionally or due to lack of data, can affect the other components, but generally not the total NRW. Completing an NRW Water Balance involves a number of estimations, and the workshop will discuss how these estimations are made, and how their uncertainty can affect the accuracy of the water balance. The workshop will also introduce the free EasyCalc NRW Water Balance software, where participants will be invited to download the software on their own laptops and go through a simulation of developing an NRW Water Balance.

Speakers: Gary Wyeth; Kate Stanton-Davies; Anna Bojko

W 3.4
Session 3 | Workshop

Tuesday 09 December
Room MR109 (E+F)

Nature-based Solutions for climate action: The role of water utilities

Chairs: Rob Cunningham & **Douglas Nyolei**

As climate change is altering the water cycle and weather patterns, extreme events are increasing in severity and frequency, posing critical risks to drinking water, wastewater, and stormwater utilities. To address these challenges, water providers must adopt innovative solutions that can complement traditional water management methods. Water utilities play an active role in watershed management and are uniquely positioned to lead advancements in nature-based solutions (NbS) at scale along the urban to rural gradient. NbS can serve as innovative approaches to address the interconnected challenges of climate change, environment degradation and biodiversity loss. They can be an efficient way to complement grey infrastructure by protecting water sources, avoiding damages caused by extreme events, optimizing the design or delaying the need for major capital expenditure while reducing related operation and maintenance.

Utilities will showcase practices in NbS, adaptation and mitigation that are actionable, equitable, and serve as a model for others.

Speakers: Gary Moys; Ardian Wiedilaksono; Alma Abrasaldo; Gijs van Nes; Günter Langergraber

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W 3.5
Session 1 | Workshop

Thursday 11 December
Room MR106

Circular economy as an innovation pathway for resilient, inclusive water and sanitation

Chairs: Avni Kumar & **Naomi Carrard**
Co-chairs: Diego Rodriguez, Dinh Van Dao & **Brooke Yamakoshi**

This workshop connects the rapidly evolving topic of circular economy water with innovation. Participants will hear from organisations at the forefront of applying circular economy principles to diverse development contexts and collaboratively chart out promising innovation pathways. In the first half, participants will learn about the relevance and potential of circular economy in diverse urban and rural contexts, and engage with frameworks to guide local application, focusing on Asia and Pacific regions. In the second half, futures thinking methods will guide participants to identify pathways for connecting circular economy to innovation and systems change. The output will be a propositional pathway for applying and scaling circular approaches that drive resilient, inclusive water and sanitation service systems. This output will inform ongoing work on circular economy, including online learning, knowledge exchange, and facilitated processes for local application.

Speakers: Diego Rodriguez; Avni Kumar

W 3.6
Session 2 | Workshop

Thursday 11 December
Room MR109 (E+F)

Data insights for better utility management: Your path to improvement?

Chair: Marco Aguero
Co-chair: Gerhardus Soppe

This workshop explores how water and sanitation utilities can turn data into better decisions by combining benchmarking and digital tools. Participants will gain insights into global performance trends, utility digital readiness, and real-world transformation stories from peer utilities. Through interactive polls and roundtable discussions, the session guides participants to identify their own barriers and priority actions for improving data quality, digital systems, and management practices.

Speakers: Monika Weber-Fahr; Guillaume Fery; Berta Macheve; Marco Aguero

W 3.7
Session 2 | Workshop

Friday 12 December
Room MR109 (G+H)

Toilet pit to policy pixels: Building data-driven sanitation systems in South Asia

Chair: Rowshan Mamtaz
Co-chair: Rajeev Munankami

Across South Asia, cities are moving from fragmented data systems toward integrated, evidence-based governance. This session combines ITN-BUET's experience with data-driven CWIS implementation (Bangladesh, Nepal) and SNV's regional data governance approach, exploring how data flows—from the toilet pit to the policy cloud—can enhance decision-making, financing, and service sustainability. The session will showcase real systems (SanBoard, IMIS, SBM dashboards) while engaging participants in interactive discussions and problem-solving challenges to design future-ready sanitation data ecosystems.

Speakers: Shishir Kumar Biswas; Rajit Ojha

W 3.8
Session 1 | Workshop

Friday 12 December
Room MR107 (A+B)

Introducing the new IWA Nature-based Solutions Cluster: NbS from Source to Sea

Chair: Rob Cunningham
Co-chair: Anacleto Rizzo

The session will be a world café style workshop covering the myriad of different scales of Nature-based Solutions applicable to IWA members. We want to dig into the details and different topic areas of whats working in NbS, what's not, and what can we do about it. A 2nd workshop submitted by [Katharine Cross] presents the state-of-the-art of NbS implementation in four South East Asian countries (i.e., Thailand, Laos, Cambodia and Vietnam).

Speakers: Guenter Langergraber; Alexandros Stefanakis

W 3.9
Session 2 | Workshop

Tuesday 9 December
Room MR107 (A+B)

Inclusive water and sanitation for circularity and climate-resilient cities

Chair: Sangam Shrestha
Co-chair: Thanapon Piman

Climate change, manifesting as "climate whiplash" with alternating extreme droughts and floods, places unprecedented stress on urban water and sanitation systems. These systems are deeply interconnected: water scarcity threatens sanitation service continuity, while conventional sanitation often wastes valuable water and nutrients, contaminating precious water resources. This linear approach creates a vicious cycle that undermines urban resilience, public health, and the potential for water circularity.

This workshop moves beyond siloed approaches to explore the critical integration of Water Resource Management (WRM) and Citywide Inclusive Sanitation (CWIS) as a foundation for circular and climate-resilient cities. We will investigate how data-driven tools like Urban Water Accounting and integrated modelling platforms (e.g., WEAP with WASH-Flows) can provide the evidence base to unify planning. The session will focus on practical strategies for designing inclusive sanitation solutions that actively contribute to water circularity—such as water reuse, nutrient recovery, and groundwater protection. By closing the loop, we can design systems that are not only equitable but also water-efficient and resilient to climate shocks, thereby safeguarding water quality and quantity for all urban residents.

Speakers: Agus Nugroho; Thanapon Piman; Chadchart Sittipunt; Kazushi Hashimoto; Anjlee Agarwal

Workshops
Theme 4

Enhancing utility management and operations for sustainable growth

W 4.1
Session 2 | Workshop

Tuesday 9 December
Room MR109 (G+H)

Scaling up peer learning partnerships in water and sanitation: A capacity development approach

Chair: Jonsson Asa
Co-chair: Vivek Raman

This workshop session explores how peer learning partnerships, such as Water and Sanitation Operators' Partnerships (WOPs/SWOPs), WOP4resilience programme can be scaled up as cost-effective capacity development approaches. Through a panel discussion, case studies, and an interactive World Cafe, participants will examine policy enablers, financial linkages, and best practices to strengthen water and sanitation service providers. The session will provide actionable insights on integrating WOPs/SWOPs into national strategies, mobilizing investments, expanding partnerships and overcoming implementation challenges. Participants will leave with practical recommendations on leveraging peer learning to enhance resilience, efficiency, and service delivery in the sector.

W 4.2
Session 1 | Workshop

Wednesday 10 December
Room MR109 (G+H)

The state of water and sanitation utilities: Utility and system-level perspectives for transformation?

Chair: John Butterworth
Co-chair: Julie Perkins

Critical reflection on the challenges facing water and sanitation utilities at provider and authority/ national levels, and inspiration from examples of solutions to scale innovations and drive performance?

W 4.3
Session 3 | Workshop

Wednesday 10 December
Room MR109 (G+H)

Unlocking the power of AI to transform operational performance of water utilities

Chair: Deepa Karthykeyan
Co-chair: Moussa Seck

From improving meter reading accuracy to enhancing leak detection with listening sticks, AI is transforming water utilities by driving productivity, cost savings, and smarter decision-making. Agentic AI models, such as Copilot, can seamlessly integrate across workflows--CRMs, asset registries, billing systems, and more--delivering richer insights. However, realizing AI's full potential depends on high-quality data to train reliable models. This requires strategic investments in people, tools, and processes to generate and manage data cost-effectively. This workshop will convene water utilities, lenders/investors, industry associations, and AI/data technology providers to identify the key investments in talent, processes, and technology needed to equip utilities for the AI revolution.

W 4.4
Session 1 | Workshop

Thursday 11 December
Room MR109 (C+D)

Intermittent water supply: The challenge of transitioning to 24|7

Chair: **Raziyeh Farmani**

Technical strategies will focus on the phased reintroduction of continuous service through metering, district metered areas (DMAs), sectorization, infrastructure rehabilitation, and advanced pressure management to ensure efficiency and sustainability. Financial strategies will emphasize restoring 24-hour water supply while ensuring cost recovery, promoting financial sustainability, and fostering a commercial mindset for efficient utility management. Transitioning to a continuous water supply often necessitates complex political and institutional decisions, which many cities are hesitant to undertake due to regulatory, governance, and stakeholder challenges. Case studies- outcomes and lessons learned from similar situations, measurable impacts (such as cost savings, efficiency improvements, or policy changes), and insights that contribute to future decision-making.

Speakers: **Raziyeh Farmani; Stuart Hamilton; Jamie Paterson**

W 4.5
Session 1 | Workshop

Friday 12 December
Room MR101

Practical toolkits on gender mainstreaming in water and sanitation

Chair: **Shobana Srinivasan**
Co-chair: **Daniela Bemfica**

Achieving equitable and sustainable WASH services requires greater gender diversity and inclusion in the workforce. Women make up only 20% of utility workers globally (World Bank, 2019) but play significant roles across the sanitation chain, often in vulnerable conditions. Over the past two decades, the WASH sector has increasingly committed to mainstreaming gender equality, integrating gender considerations into policies, implementation, and workforce balance. However, efforts have yielded varying levels of success, and challenges remain in effectively embedding gender mainstreaming across organizations. This interactive workshop will take a solution-driven approach, engaging participants in reviewing and refining existing gender mainstreaming toolkits.

Speakers: **Juliet Willets; Emmanuel Uguru; Leticia Ackun; Faustina Boache; Tahmidul Islam; Abhilaasha Nagarajan**

W 4.6
Session 3 | Workshop

Thursday 11 December
Room MR103

Community-driven participatory monitoring for safe, equitable, sustainable and climate resilient water, sanitation, and hygiene services

Chair: **Lajana Manandhar**
Co-chair: **Sashi Stephen**

The workshop aims to share best practices from 7 countries on how community involvement & their leadership role can enhance the effectiveness of WASH interventions. By actively engaging the community in joint monitoring efforts & facilitating social audits, these practices allow for a transparent review of activities, finances, & outcomes. Case studies at workshop will highlight the positive impact of participatory monitoring & regular social audits,which have helped to empower citizens to hold duty bearers accountable & ensure the efficient & ethical use of public resources. It also demonstrate how promoting collective decision-making strengthens transparency by incorporating diverse voices, leading to more inclusive & equitable outcomes that reflect the community's needs & concerns.

Speakers: **Lajana Manandhar; Sashi Stephen; Gulnaj Khan; Samira Shakya**

W 4.7
Session 1 | Workshop

Friday 12 December
Room MR102

Water operator partnerships & their tangible results

Chair: Anke Verheij
Co-chair: Asa Johnsson

With more than 200 Water Operator Partnerships (WOPs) ongoing, these solidarity-based collaborations are gaining momentum. WOPs aim to strengthen water utilities through peer-to-peer learning, technical cooperation, and capacity building. But what are the actual, measurable results of these collaborations? The purpose of this session will be to explore the tangible outcomes of WOPs, from improved service delivery and efficiency gains to enhanced resilience and financial sustainability of utilities. The first part of the session will feature presentations of concrete WOP results, showcasing case studies from different regions. These examples will highlight how partnerships have led to reduced non-revenue water, better operational performance and increased capacity.

In the second part, a panel discussion with funders and WOP enablers will reflect on these results. What worked well? Where are the gaps? How can WOPs be strengthened to achieve even greater impact? The discussion will provide insights into how to enhance WOP effectiveness even further and ensure long-term sustainability. The outcome of the session can be used to make a strong case for the need to continue with WOPs in the future and make them more effective and impactful.

Speakers: Anke Verheij; Sountala Keoxayyalath; Yudi Indarto selaku Direktur Utama; Adriaan Mels; Subekti; Asa Jonsson; Vivek Raman; Kalanithy Vairavamoorthy

Workshops
Theme 5

Strengthening governance and financial systems for long-term development

W 5.1
Session 1 | Workshop

Tuesday 9 December
Room MR109 (G+H)

WASH system index tool: An opportunity to strengthen WASH service delivery

Chair: Khairul Islam
Co-chair: Patrick Moriarty

Achieving sustainable and inclusive WASH service delivery requires an adaptive system that ensures long-term functionality, equity, and resilience. The WASH System Index (WSI) Tool provides a structured approach to assess the strengths and weaknesses of WASH systems at various levels, from local governance to national frameworks. This session will introduce the WSI tool, its methodology, and its application in measuring the effectiveness of policies, institutions, financing, service delivery mechanisms, and community engagement. Through case studies and practical insights, participants will explore how the tool can be used to inform evidence-based decision-making, drive targeted interventions, and strengthen WASH systems for sustainable service delivery.

Speakers: Marieke Adank; Md Shakhawat Hossain; Nadira Khawaja; Olivier Germain; Brian Mulenga; Shadrack Guusu; Satya Narayan Ghosh; Khairul Islam

W 5.2
Session 3 | Workshop

Tuesday 9 December
Room MR109 (G+H)

Empowerment of women in sanitation enterprises: Innovations for inclusive governance for reaching unserved communities

Chair: Eheteshamul Russell Khan
Co-chair: Uttam Kumar Saha

Despite Bangladesh's progress in sanitation and economic growth, women remain underrepresented in governance, investment, and entrepreneurship, leading to gender-blind infrastructure and inequities like the "pink tax." While Bangladesh ranks high in political empowerment, significant gaps persist in labour force participation and economic inclusion, especially for women-led SMEs. To promote women-led businesses, DPHE, with support from the Gates Foundation and IsDB, launched the "Women in Sanitation Enterprises" study. Conducted by WSUP Bangladesh in collaboration with GWSC-AIT, Thailand, it identifies barriers women sanitation entrepreneurs face and promotes inclusive policies and practical solutions for an enabling environment. This session will explore the key findings, highlighting the challenges and opportunities for women in sanitation. It will emphasize tailored support mechanisms to empower women-led sanitation SMEs and build an inclusive ecosystem.

Speakers: Roshan Raj Srestha; Dilruba Farzana; Makfie Farah

W 5.3
Session 1 | Workshop

Thursday 11 December
Room MR109 (E+F)

Co-designing a CWIS-centric transformative GEDSI framework to advance equitable, safe and resilient WASH systems

Chair: Vineeta Thapa
Co-chair: Srijana Karki

Current WASH systems exclude marginalized groups. Co-designing a CWIS-centric GEDSI framework with diverse stakeholders (sanipreneurs, policymakers, persons with disabilities, Indigenous leaders, utilities, women) prioritizes equity-driven innovations and climate-resilient partnerships. Through structured World Café discussions, participants will:

- Identify systemic barriers (e.g., gender, caste, disability) that hinder inclusive and sustainable WASH access.
- Prioritize inclusive innovations in technology, governance, and financing to advance equitable, climate-resilient water systems.
- Through panel insights and group dialogues, develop actionable strategies for embedding intersectional equity into WASH planning, policy, and service delivery.

The session's key outcome will be a shared blueprint for a CWIS-centric GEDSI framework, which will later evolve into a practical toolkit for implementation. This output will be disseminated through regional WASH networks, advocacy campaigns, and partner platforms to drive policy influence, mobilize funding for at-risk communities, and foster cross-sector partnerships for inclusive, climate-resilient WASH systems.

W 5.4
Session 3 | Workshop

Thursday 11 December
Room MR109 (C+D)

Building bankable urban water investments: What works, what doesn't, and what needs to change?

Chair: Deepa Karthykeyan

This workshop will bring together authorities, financiers/funders, and operators to design effective contracting mechanisms for delivering high-quality sanitation services in informal areas. The session will focus on identifying the challenges, needs, and opportunities for creating frameworks that balance the interests of all stakeholders, including de-risking investments, providing safe and affordable sanitation services, and ensuring accountability. Participants will discuss concrete challenges that limit investments and deployment of sanitation in informal settlements, including by critiquing example contract models and identifying concrete reforms that will catalyse investment.

W 5.5
Session 1 | Workshop

Friday 12 December
Room MR110 (A+B)

Come together: The challenges of an alliance on safe sanitation

Chair: Pramila Devi Shakya Bajracharya
Co-chair: Chiri Babu Maharjan

The Citywide Inclusive Sanitation Alliance Nepal (CWISAN) is an alliance of 22 organizations working on safe sanitation in Nepal with UN-Habitat Nepal as the Secretariat since December 2021. It is the only alliance in the region with two UN agencies as its members -- the other being UNICEF. Likewise, neighbouring Bangladesh and India have similar alliances comprising of like-minded organizations working and safe sanitation. Bangladesh's FSM Network has Practical Action Bangladesh as its Secretariat while India's has National Faecal Sludge and Septage Management Alliance (NFSSM) with dasra as its Secretariat. The session is designed with the purpose for Nepal, Bangladesh and India to share their experiences, discuss challenges and, if possible, chart out a larger network of alliances to cover the South Asia and Asia Pacific Region and beyond. Ministry of Water Supply (MoWS), Nepal will chair this session and supported by UN-Habitat Nepal as the Secretariat of CWISAN.

Speakers: Bhim Prasad Dhungana; Hezekiah Otieno Pireh; Ishrat Shabnam; Dhruv Mitter; Roshan Raj Shrestha; Kalanidhi Devkota

W 5.6
Session 1 | Workshop

Friday 12 December
Room MR110 C

Conflict or cooperation: Exploring water conflict through game theory

Chairs: Hannah Leigh & **Vivien Chow**

This interactive workshop uses a game to explore the dynamics of water conflict, demonstrating how water scarcity can drive both conflict and cooperation. Participants will represent villages that rely on a shared water source, each with unique needs and historical relationships. Villages must decide each round whether to cooperate (sharing water equitably) or compete for a greater share of resources. Decisions are influenced by strategic choices, game theory principles, and "event cards" introducing real-world challenges like climate events or external aid. While cooperation ensures collective survival, competition may bring short-term gains at the expense of others, risking the elimination of vulnerable villages. The session concludes with a debrief linking game decisions to real-world water management scenarios, exploring solutions like collaboration, innovation, governance and practical measures. This activity highlights the complexities of water access and the importance of strategic cooperation for resilience and conflict resolution in water management.

Speakers: Prabal Basnet

W 5.7
Session 1 | Workshop

Friday 12 December
Room MR109 (E+F)

Strengthen institutionalization of marginalized community networks/CBOs in WASH Governance systems

Chair: Bhawana Sharma
Co-chair: Vineeta Thapa

Workshop outcome: What are the systemic barriers that prevent marginalized communities (e.g., sanitation workers, LGBTQIA+ individuals, persons with disabilities) CBOs from receiving leadership roles in WASH governance of the city, and what are the measures that can be adopted to overcome these barriers and improve their advocacy and decision-making influence?
1. Participants will gain knowledge of various institutional avenues for mainstreaming marginalized voices in WASH governance.
2. They will understand effective participatory governance options and learn about successful upscaling strategies.
3. Development partners and mayors will become more familiar with dissemination and replication strategies so that they can implement inclusive governance models in their own cities.

Speakers: Meena Lama; Bimala Aryal

W 5.8
Session 2 | Workshop

Friday 12 December
Room MR110 C

Driving disruptive change in public toilets: Revolutionizing operational models and user behavior across Asia and Africa

Chair: Khairul Islam
Co-chair: Patricia Solorzano

This two-part workshop series, hosted by SNV and WaterAid, will delve into the operational and social dimensions of public toilet systems across Asia and Africa. The first session will focus on the operational challenges public toilets face, including financial sustainability, business models, and public-private partnerships (PPP). It will analyze case studies to understand the barriers to effective operation and discuss strategies for improving maintenance, financing, and long-term success. The second session will address the social aspects of public toilet usage, such as behavior change communication, community involvement, and sanitation etiquette. Participants will explore strategies to engage communities in the design, maintenance, and use of public toilets, ensuring sustainability. Emphasis will be placed on capacity-building initiatives that empower local populations and promote hygiene practices, contributing to healthier and more efficient public toilet systems.

Speakers: Leyla Khalifa; Hasin Jahan; Yemi Patricia Solorzano Leiva; Nadira Khawaja

W 5.9
Session 2 | Workshop

Thursday 11 December
Room MR107 (A+B)

Bangladesh's sanitation journey: 'Access to Safe Management' – Challenges, successes, and ways forward

Chair: Hasin Jahan Jahan
Co-chair: Rowshan Mamtaz

The purpose of the session is to explore Bangladesh's sanitation journey, focusing on key initiatives like Community-Led Total Sanitation (CLTS) to the "Journey to Zero" which celebrated the achievement of open defication free status. The workshop will highlight significant approaches, including the adoption of Faecal Sludge Management (FSM), City Wide Inclusive Sanitation (CWIS), and Safely Managed Sanitation (SMS), towards achieving safely managed sanitation status.
This session will highlight both the successes and challenges Bangladesh has encountered in ensuring safe and sustainable sanitation. The desired outcome is to provide valuable insights into Bangladesh's progress and the lessons learned. These findings will be shared with other countries facing similar challenges, promote the exchange of best practices and informing future sanitation strategies globally.
This session will also share key highlights and outcome from the recent Toilet Conference that was organised in Bangladesh and made a declaration for the acceleration of the attainment of SDG 6.2.

W 5.10
Session 1 | Workshop

Wednesday 10 December
Room MR107 (A+B)

Unlocking mechanisms for sustainable financing for climate-resilient and inclusive WASH

Keynote: Roshan Raj Shrestha

What will it take to mobilize sustainable finance that truly supports climate-resilient and inclusive WASH systems? This session explores how development finance institutions and funding partners are working to bridge the gaps—between climate action, gender equity, and WASH—through innovative, targeted financing. With a focus on low-income and climate-vulnerable regions, we'll look at how new partnerships, blended finance, concessional models, and results-based approaches are being used to strengthen WASH services while advancing climate resilience and social inclusion. Speakers will share on-the-ground experiences, explore challenges in aligning investment flows with climate and gender goals, and highlight what's needed to scale up impact. Policymakers, funders, and practitioners alike will find in this session a space to reflect on what's working, identify where gaps remain, and explore how we can mobilize finance that leaves no one behind.

Session Moderator: Thusitha De Silva
Panel Moderator: Isha Basyal
Panelists: Papa Sy; Massimo Petrone; Amgad Elmahdi; Ping Yean Cheah; Maggie Clout

Cross-cutting and supplementary workshops

SW. 1
Session 1 | Workshop

Tuesday 9 December
Room MR110 C

Sanitation as source-protection infrastructure: Reframing the water–sanitation nexus

Chair: Virtuous Igbodika
Co-chair: Eric Momanyi

This session reframes sanitation as core water source-protection infrastructure, drawing on new systems-modeling evidence from Kenya and Malawi. The session will demonstrate how upstream sanitation interventions directly reduce pathogen loads entering rivers and aquifers, lower water-treatment costs, and strengthen public health and economic productivity. By presenting causal loop insights and real-world experiences from utilities, regulators, and health actors, the session will highlight how siloed planning and financing undermine both water security and health outcomes.

The session will produce practical, cross-sector pathways for integrating sanitation into national and utility-level water-security plans, and identify institutional, regulatory, and financing levers that enable coordinated action. The outcomes will inform ongoing government planning processes, donor investments, and utility strategies.

Speakers: Yvonne Magawa; Kate Medlicott; Najib Bateganya; Deepa Karthykeyan; Martha Wankjiku; Joe Abah

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SW. 2
Session 2 | Workshop

Tuesday 9 December
Room MR110 C

Workshop

SW. 3
Session 3 | Workshop

Tuesday 9 December
Room MR110 C

Citywide inclusive sanitation, water in circular economy and resilience, and reuse

Chair: Gerard Soppe
Co-chair: Sanyu Lutalo

This session aims to build capacity in Citywide Inclusive Sanitation (CWIS), Water in Circular Economy and Resilience (WICER), and water reuse by exploring global and regional experiences. Participants will first be introduced to the urgency of the global sanitation crisis and the CWIS approach, which seeks to deliver equitable and sustainable sanitation services for all urban residents through inclusive planning and a mix of service models. The session will then highlight Singapore's pioneering NEWater journey, showcasing how diversification of water sources and innovative reuse strategies have contributed to water security.

Speakers: Gerard Soppe; Sanyu Lutalo; Diego Juan Rodriguez; Ryan Yuen

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SW. 4
Session 1 | Workshop

Wednesday 10 December
Room MR110 (A+B)

Charting the course to water security: The Asian water development outlook 2025

Chairs: Leyre Ibanez & **Fatima M. Bautista**

A clear and usable tool integrated into water-related planning and policy frameworks to drive meaningful actions toward achieving water security across the region and across various dimensions.

Speakers: Vivek Raman; Leyre Ibanez; Fatima M. Bautista; Lachlan Guthrie; Sonia Hoque; Karthikeyan Matheswaran; Regina Souter; William Veerbeek; Fan Zhang; Satoshi Ishii

SW. 5
Session 2 | Workshop

Wednesday 10 December
Room MR110 (A+B)

Trends in climate resilient water and sanitation systems in Asia and the Pacific

Chairs: **Massimo Petrone** & **Jitendra Singh**

A snapshot of the status of development of water and sanitation systems in the region in general and a few countries, with reflection on possibilities based on the progress in recent past; identified activities to scale up and replicate.

Speakers: **Jitendra Singh; Massimo Petrone; Jeremy Kohlitz; Sangam Shrestha; Samuel Treglown; Graziel Salazar**

SW. 6
Session 3 | Workshop

Wednesday 10 December
Room MR110 (A+B)

IWA & Grundfos Youth Action for SDG6 Fellowship - Interactive discussion on enabling community-led solutions for water challenges

Chair: **Karl Zimmermann**
Co-chair: **Ramanuj Mitra**

In this session, the IWA & Grundfos Youth Action for SDG 6 Fellows (2025-26 cohort) will facilitate mini-roundtable discussions on locally led solutions for water-related challenges. Representatives from Grundfos and C40 Cities will introduce the session with insights into their activities supporting water sustainability and sustainable urban development.

Speakers: **Hadi Mokarizadeh; Emmanuel Nketiah Ahenkorah; Patience Wema; Micheala Chan; Meg Cummins**

SW. 7
Session 2 | Workshop

Thursday 11 December December
Room MR106

Workshop

SW. 8
Session 1 | Workshop

Thursday 11 December
Room MR109 (A+B)

Workshop on systems leadership

To promote systems leadership in water and sanitation at all levels * To further develop our collaboration with the IWA community e.g. on systems level issue on topics critical to utility water supply and citywide inclusive sanitation and other themes. This could include formation of a specialist group on systems. * To promote use of the WASH systems academy and its courses (on leadership, on urban asia) and development of a community of practice around systems leadership

Speakers: **Doanh Chau; Neeta Pokhrel; Spurthi Kolipaka**

SW. 9
Session 2 | Workshop

Thursday 11 December
Room MR109 (A+B)

Beyond biology: New frontiers in household wastewater treatment

Many countries face the challenge of providing safely managed sanitation where centralized sewers are impractical or unavailable. There is growing interest in advanced household treatment systems that can meet stringent water quality standards while enabling safe water reuse and nutrient management. This workshop brings together different developers who are contributing towards two process trains that can treat household wastewater and also the sludge produced by these processes under the IWA Next Generation Sanitation Systems (NGSS) program supported by the Gates Foundation. Each system employs distinct treatment trains combining physical, chemical, and/or electrical processes to treat blackwater and greywater to ISO 30500 standards while addressing nitrogen removal.

SW. 10
Session 3 | Workshop

Thursday 11 December
Room MR110 (A+B)

Smart regulation for resilient and investable water systems

Chair: Gerard Soppe
Co-chair: Sanyu Lutalo

This session will examine the evolving landscape of global water smart regulation. Participants will explore how policymakers and regulators can foster innovation, encourage private sector participation, and attract sustainable finance to enhance resilience and sector performance. The session will also address the challenges and opportunities presented by the digital era, including data governance, cyber-security, AI regulation, and the development of new regulatory tools. Finally, the discussion will delve into the critical role of regulators in public-private partnership (PPP) models, highlighting strategies for designing performance-based frameworks, effective risk allocation, tariff and subsidy design, and ensuring transparency and accountability for long-term sustainability.

Speakers: Gerard Soppe; Sanyu Lutalo; Diego Juan Rodriguez; Ryan Yuen

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SW. 11
Session 1 | Workshop

Friday 12 December
Room MR109 (C+D)

Digital water in emerging economy: Needs, opportunities, and challenges

Chair: Soon Thiam Khu
Co-chair: Robin Wong

Digitization in the water sector has been very much spear-headed and dominated by economies and utilities that are financially well-off. This begs the question whether utilities should invest on digitization in hope of a sound return-on-investment, or whether they should take a more conservative approach. The situation is more complicated for emerging economies facing hydrological, geographical, urban development and social challenges. This session will allow invited speakers from both well-developed and emerging economies to share their experiences, highlight challenges, and demonstrate new technological advances toward digital transformation. Participants will be able to probe the minds of CTOs, senior utility managers, and leading experts on the future of digital water in emerging economies.

Speakers: Robin Wong; Cristina P Alejandro; Adam Saffian Ghazali; Malseni Binti Jamal; Soon Thiam Khu; Qixian Zou

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SW. 12
Session 2 | Workshop

Friday 12 December
Room MR110 (A+B)

Scaling up water & sanitation? What about the critical human capital bottleneck?

Chairs: Regina Souter & **Virgilio (Perry) Rivera Jr**

This workshop will create a space for utility managers to explore one of the most pressing challenges facing the sector: developing a skilled, adaptable, and sustainable workforce to support major infrastructure expansion. Participants will be introduced to frameworks that identify the full spectrum of technical, management, and leadership capabilities required to scale up water and sanitation services. Through structured dialogue and peer exchange, participants will share insights into workforce constraints and solutions, including talent recruitment, retention, and leadership development. The primary output of the session will be a set of shared challenges and practical strategies that utilities are using or considering.

SW. 13
Session 2 | Workshop

Friday 12 December
Room MR109 (C+D)

Integrated water management for fast-developing cities in Asian countries

Co-chairs: Qian Li & **Zhihua Li**

Asia is among the fast-developing regions in the world, symbolized by rapid urbanization, centralized resource/energy consumption, and heavy tasks of pollution control and eco-environmental quality upgrading. To organize a special workshop on integrated urban water management strategies and countermeasures at the IWA Water and Development Congress based on the experiences in Asian countries will support the whole world towards the SDG goals and beyond.

SW. 14
Session 2 | Workshop

Friday 12 December
Room MR102

2025 Recognition Programme of the Climate Smart Utilities

Business Forums

Business Forums
Tuesday 9 December

10:30 – 11:15 Shenzhen Angel Drinking Water Industrial Group Co., Ltd.

Angel ionic microsensor (AIMS): A rapid and economic strategy

Kai Zhao

A compact and cost-effective ionic microsensor, featuring all-solid-state ion-selective electrodes and a smart monitoring system, enables real-time water quality tracking—ensuring safety, promoting water reuse, and reducing the carbon footprint through precise sensing and dynamic visualization.

11:15 – 12:00 Comcore Technology

Detecting the undetectable: A new advanced micro-leak detection down to 0.5 L/h

Cindy Zhao

Aging pipelines and household leaks often go undetected, contributing to significant water loss. Comcore Technology's next-generation ultrasonic water meters EUW X detect micro-leaks as small as 0.5 L/h, using validated protocols, in addition to adaptive correction, bubble diagnosis for robust accuracy and improved reliability.
Each detection test is supported by visual evidence, including videos and images. This technology reduces Non-Revenue Water, minimizes customer complaints, and enables prioritized maintenance in aging pipe networks.
Drawing on 20 years of flow meter experience, studied hydraulic in Stanford University, Cindy Zhao presents a proven approach to transforming water management practices: detecting the undetectable.

12:15 – 13:00 TÜV SÜD and ANSI

Building trust in non-sewered sanitation: Leveraging standards and the SRI platform for evidence-based technology evaluation

Moderator: Chris Chan (TÜV SÜD) Panelist 1: Ms Attiya Sayyed (ANSI) Panelist 2: Mr Sun Kim (ISO 30500 Convenor) Panelist 3: Prof Kartik Chandran (University of Columbia) Panelist 4: Dr Preyan Amrumugam (University of KwaZulu-Natal)

This business forum will showcase how standards can accelerate the adoption and scaling of Reinvented Toilets and other Non-Sewered Sanitation Systems (NSSS). Through expert insights from ANSI, ISO 30500 leadership, microbiology specialists, and testing practitioners, the session highlights how standardisation supports commercialisation, ensures safety, and addresses evolving pathogen risks. Panelists will also share on-the-ground challenges and how applying full or partial standards benefits innovators. Finally the forum introduces the TÜV SÜD SRI platform as a practical tool for NGOs and philanthropic organisations to evaluate NSSS and make evidence-based investment decisions, enabling safer, more reliable sanitation solutions for underserved communities.

13:30 – 14:15 ShinMaywa

Proposal cutting-edge splutions for waste water treatment and flood control from ShinMaywa

Hisashi Toyohara

Introduction of cutting-edge technology. Energy saving Turbo blower, and Gate pump system and so on.

14:15 – 15:00 SNV

Driving sustainable water impact: SNV's approach to transforming water systems

Nicholas Tandi (Global Head of Water – SNV)
Support - Sharon Roose (Senior Water Advisor – SNV)

SNV works globally to deliver sustainable and climate-resilient water solutions that ensure water security for all by bridging policy, stakeholder engagement, technology, and finance. In this session, we will showcase how SNV supports water sector transformation through four framework approaches: Equitable Water Resource Management, Sustainable Urban Water Cycles, Climate-Resilient Rural WASH, and Sustainable Inclusive Irrigation. Attendees will gain insights into our integrated approaches for strengthening and enhancing the resilience of water systems, leveraging partnerships and finance, and scaling innovations, ultimately leading to measurable, inclusive, and lasting water impacts.

15:00 – 16:30 Netherlands Water Partnerhship

Solving water challenges together. An interactive forum with the Netherlands

Mirjam van Buchem from Netherlands Water Partnership, moderator and experts from: UN IHE Delft, SNV, PB International your filter factory, Aquatech Asia, OKRA, Desolenator, Wavesave, Bosman Water management, Technimex, Haskoning

This dynamic session brings together leading Dutch water experts and innovators to explore practical solutions to today's most pressing water challenges. Moderated by the Netherlands Water Partnership, the forum features insights from UN IHE Delft, SNV, PB International/ your filter factory Aquatech Asia, OKRA, Desolenator, WaveSave, Bosman Water Management, Technimex, Deltacontext and Haskoning. An interactive dialogue between industry, knowledge institutes, and technology providers, join us to connect with Dutch frontrunners and co-create pathways toward a resilient water future.

16:30 – 17:15 Business Connect World

Clean drinking water for all

Saurabh Chhabra

Access to safe drinking water remains one of the most urgent global challenges. Business Connect, through its partners, delivers innovative, WHO-certified water filtration technologies designed for communities without reliable infrastructure. Our portable and scalable solutions empower NGOs, governments, and corporates to provide clean water in schools, healthcare centers, disaster zones, and remote regions. By combining proven technology with sustainable program models, we create lasting impact and strengthen resilience against waterborne diseases. This presentation will showcase successful case studies and practical pathways to achieving universal access to safe drinking water.

Business Forums
Wednesday 10 December

10:30 – 11:15 Zhuzhou Southern Valve Co.,Ltd

Safe & Intelligent Driving of Water System:
• Smart Water Management – from Forecast to Operation
• Key Technologies and Products of Safe and Smart Water Supply System

Dr Min Xu, Mr Haoze Zhang

Southern Valve's presentation, titled Safe Intelligent Driving for Water Systems, explores intelligent driving solutions for enhancing the security and resilience of urban water systems. First report details key technologies for intelligent water supply management through intelligent hardware to establish a "sensing-decision-control" closed loop with AI algorithms, equipping pipelines with an "automatic brake" for precise water hammer protection and optimized scheduling. Second report introduces Urban Waterlogging Early Warning and Smart Dispatch Platform. By leveraging multi-source data integration and predictive modeling, the platform facilitates a shift in decision-making from experience-based to data-driven approaches, thereby strengthening urban resilience against water-related climate challenges

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11:15 – 12:00 Zhejiang Kaichuang Environmental Technology Co., Ltd.

Power-free ultrafiltration: Cost-saving, low-maintenance innovation for resilient safe water supply

Mikasa Tang

This speech addresses the gap between sufficient raw water and scarce safe drinking water in rural/off-grid areas, where conventional ultrafiltration is costly and power-reliant. It introduces Power-free Ultrafiltration tech, centered on self-developed Furui™ membranes. By leveraging hydraulic principles, it cuts 60% construction costs and 80% operating costs, with modular design, adaptive cleaning, and low maintenance. Cases like Lishui Jinyun and Ningbo Yuyao prove its value in ensuring safe water and smart management, strengthening resilient water systems.

12:15 – 13:00 World Bank Group

13:30 – 14:15 Hangzhou Laison Technology Co., Ltd.

Smart metering and digital solutions: Improve working efficiency and financial sustainability for water utilities

Mr. Alex Li

Water utilities worldwide face growing challenges in reducing Non-Revenue Water, improving billing efficiency, and ensuring financial sustainability. LAISON provides innovative smart metering and digital management solutions that empower utilities to monitor water usage in real time, improve revenue collection, and optimize operations. This session will showcase how utilities can leverage IoT-based smart water meters, digital metering systems, Leakage management, and mobile payment platforms to improve customer satisfaction and achieve sustainable growth. The discussion will focus on integrating technology and data-driven management for smarter, more resilient water services.

14:15 – 15:00 World Bank Group

15:45 – 16:30 Asian Development Bank

Empowering water utilities: Public-private partnership for sustainable development

Chollawan Wanichpan

This session will delve into the pivotal role of public-private partnerships (PPPs) in advancing effective and sustainable water resource management. We will highlight successful case studies from the Asian Development Bank's Private Sector Operations Department (ADB PSOD), including Vietnam's Thu Dau Mot and Maynilad's Initial Public Offering (IPO) in the Philippines, etc. These cases exemplify the transformation of water utilities from government-owned entities to private, non-sovereign organizations capable of efficiently managing resources and better serving the public. Participants will gain valuable insights into real-world strategies, best practices, and collaborative approaches that enhance water service delivery and promote environmental sustainability.

16:30 – 17:15 Dasra, NFSSM Alliance

Scaling decentralized sanitation treatment technologies for water security & public health

Prasanta Kumar Mohapatra, Sr Expert TSU-MoHUA, Gov. of India; Dr Devasena M, IIT Palakkad – GSCOE, India; Sandhya Haribal, CDD, India; Reshwin Washington, Dasra, NFSSM Alliance

This panel discussion will explore how India is advancing decentralised and non-grid sanitation solutions through innovation, R&D, and an enabling policy environment. Experts from government, academic, technical, and development sectors will discuss off-grid systems that operate without sewer infrastructure, ensure pathogen-free treatment, use minimal water, and enable recycling. How solutions are to be reimagined to be compact, and scalable—designed for diverse urban, rural, and climate-vulnerable contexts. The session will highlight India's growing ecosystem of innovation platforms, partnerships, and financing models driving closed-loop, resource-recovering, and digitally enabled sanitation systems that strengthen water security, improve public health, and advance climate-resilient development.

Business Forums
Thursday 11 December

10:30 – 11:15 Asian Development Bank

Laundry lab: Innovations for cleaner clothes, cleaner rivers

Tanya Huizer, Fatima Mabor Bautista

Laundry is more than a household chore, it's a global development issue intersecting with water, health, energy, environment, livelihoods, and dignity. In the Laundry Lab we touch on Laundry as source of water pollution, from microplastics to chemical detergents. We invite participants to help shape ADBs Laundry Transformation by sharing insights on water pollution, innovations, and behavior change. We'll explore creative ways to assess pollution, its sources, and identify behavioural and circular economy options. From rethinking detergent use to water reuse laundry systems, the floor is open for creative, cutting-edge ideas and building partnerships. Let's unlock laundry's potential for innovation in water stewardship.

11:15 – 12:00 Comcore Technology

Transforming water flow with digital solutions

Cindy Zhao

Imagine a water network that detects leaks before they become costly, monitors usage in real time, and ensures every drop is accounted for.
Comcore Technology makes this a reality. Through smart, accurate and reliable ultrasonic water meters, Advanced Metering Infrastructure (AMI), and intelligent digital platform, utilities can measure water accurately, dramatically reduce water loss, optimize operations, and improve customer service.
Our digital platform turns complex data into actionable insights, empowering utilities to make smarter, faster decisions.
By combining innovation with sustainability, Comcore helps cities and communities worldwide conserve water, enhance efficiency, and build a future where every drop counts.

12:15 – 13:00 Sensus International

The smart switch from mechanical to static metering – a local case study

Berry Drijsen or Kelvin Chee

One of Sensus' customers in the region successfully implemented iPERL static water meters, focusing on specific applications, showing the importance of understanding benefits of metering technology for various use cases. The presentation will provide more detail on the project and the progress made.

13:30 – 14:15 Shenzhen Anso Iot CO., LTD

AI-based metering terminals and leakage control systems: Practical applications

Liuxiaofang

AI-Driven Leakage Control Technologies for Water Supply Networks

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14:15 – 15:00 Jalchakra Innovations LLP

Why is NbS the most holistic approach in waterbody rejuvenation?

Vishwa Ranjan Sinha, Shekhar Ramachandran, Madhukar Swayambhu

Nature-based Solutions (NbS) represent the most holistic and future-ready approach to waterbody rejuvenation. By working with natural processes, NbS restores the ecosystem services from the Waterbodies to their respective vicinities tobuild a climate resilience. This approach rebuilds the water–soil–air linkages vital to conserve the native biodiversity as well.
This panel discussion will feature founders of leading climate-tech companies, including Mr. Shekhar Ramachandran and Mr. Madhukar Swayambhu, in conversation with Mr. Vishwa Ranjan Sinha, Senior Programme Officer, Water and Wetlands (IUCN Asia), as moderator. The dialogue will explore how NbS can deliver ecosystem services to the surrounding vicinity while building
climate resilience, driving net-zero outcomes, and ensuring long-term ecological sustainability through regenerative water management.

15:45 – 16:30 Dasra, NFSSM Alliance

Inclusive sanitation solutions for all: Pathways for scale and replication

Shreya Narain, Dasra NFSSM Alliance; Dhruv Bhavsar, Center for Water & Sanitation; Mahreen Matto, National Institute of Urban Affairs

The session will explore best practices in Inclusive Sanitation from across India focusing on technology, service delivery and policy innovations aligning with India's Viksit Bharat 2047 vision of inclusive development. The speakers will deep dive on model practices surrounding innovative governance models and enabling policy, Skill building & Sanitation Livelihoods for women & transgender groups through SHGs, community participation and digitalization for monitoring of effective service delivery Through interactive discussions, the panelists will present solutions and scalability of adapting these models in the Global South along with various tool kits, frameworks, and other knowledge assets codified by the NFSSM Alliance.
An AI based chatbot and knowledge platform will also be launched during this session to assist with cross learning and scale & replication.

16:30 – 17:15 Dasra, NFSSM Alliance

Integrating climate and sanitation: Towards sustainable and inclusive solutions

Kaveri Dhawan, Dasra, NFSSM Alliance; Aasim Mansuri, CWAS; Praveen Nagaraja, WASH Institute

This session will explore the interconnections between climate change and sanitation, focusing on how climate risks affect sanitation systems and how sanitation contributes to climate change. It will examine vulnerabilities across the sanitation value chain and showcase best practices in infrastructure, policy, and community engagement. Participants will discuss strategies for adaptation, mitigation, and resilience, along with the role of policies in addressing emerging challenges. The session will also feature the launch of the **NFSSM Alliance's Technical Paper on Climate–Sanitation Interlinkages**, which presents a comprehensive framework for climate-resilient sanitation through adaptation, mitigation, equity-driven approaches, and policy recommendations for sustainable implementation.

Business Forums
Friday 12 December

10:30 – 11:15 Rädlinger Primus Line GmbH

Non-revenue water reduction using trenchless technology

Mr. Simon Compton

Simon Compton is the Regional Business Development Manager for Asia, the Greater Bay and Middle East Regions for RÄDLINGER primus line GmbH. Simon has over 28 years experience in the field of pipeline rehabilitation and corrosion engineering & contracting. Based in the Asia Pacific region for over 23 years in the role of Regional business development including time in Hong Kong, Kuala Lumpur, Malaysia and Thailand. His involvement with the introduction & regional development of several of the better-known pipeline rehabilitation systems and corrosion coatings & linings across S.E Asia region.

13:30 – 14:15 TeamSolve

Asset management system with knowledge insights powered by AI

Alrahji Hamis

TeamSolve presents a pioneering Asset Management System with Knowledge Insights powered by Agentic AI, designed for both developed and developing utilities across any level of digital maturity. Backed by a proven global track record, it unifies asset data, work orders, manuals, and field intelligence into a living operational memory that augments the workforce. The platform standardises and streamlines field data capture and auto reporting, supported by management dashboards, local language interfaces, and explainable knowledge insights. This enables utilities to leapfrog in performance, strengthen workforce resilience, reduce downtime, and preserve expert know-how — moving from reactive fixes to proactive, insight-driven operations at scale.

Poster Presentations

Posters

Theme 1	Theme 2	Theme 3	Theme 4	Theme 5
ENSURE SAFE DRINKING WATER: INNOVATIVE APPROACHES FOR TREATMENT AND SUPPLY	ADVANCING WASTEWATER TREATMENT AND SANITATION SERVICES: SUSTAINABLE SOLUTIONS FOR ALL	SMART WATER MANAGEMENT: INTEGRATED APPROACHES FOR EFFECTIVE WATER MANAGEMENT AND PLANNING	ENHANCING UTILITY MANAGEMENT AND OPERATIONS FOR SUSTAINABLE GROWT	STRENGTHENING GOVERNANCE AND FINANCIAL SYSTEMS FOR LONG-TERM DEVELOPMENT

PS 1.01	6876336	A Case Study Of Groundwater Quality Monitoring And Preventive Measures In Selected Districts Of Bangladesh	Dalila Afroze, *Department of Public Health Engineering (DPHE), Bangladesh*
PS 1.02	6844416	A New Water Quality Assurance System For Secondary Water Supply: Intelligent Disinfection Control Via ORP Parameterization To Fortify Water Safety Defenses	Yanan Zhang, *ShenZhen LiYuan Water Design & Consultation CO.LTD., China*
PS 1.03	6978276	Application Of Xylem-Based Water Filtration Systems For Emergency Response: A Sustainable Solution For Clean Drinking Water	AHM Khalequr Rahman, *Department of Public Health Engineering, Bangladesh*
PS 1.04	6842199	Assessing The Impact Of Periodic Maintenance On Water Quality In Storage Tanks: A Case Study Of Iron And Manganese Contamination Within A Water Distribution Network	Zaheeda Bakoaso Musah, *Ghana Water Limited, Ghana*
PS 1.05	6846202	Bacteriological Quality And Heavy Metal Analysis Of Packaged Water Produced In Lusaka, Zambia And Associated Quality Control Measures	Rodney Banda, *University of Zambia, Zambia*
PS 1.06	6977917	Bridging Concepts To Reality: Uniting For Accessible Safe Water A Case From Changunarayan Municipality, Nepal	Prashanna Pradhan, *Environment and Public Health Organization (ENPHO), Nepal*
PS 1.07	6954626	Building Resilience In Rural Healthcare: Innovative Strategies For Introducing Water Treatment Technologies In Underserved Communities	Christabel Kambala, *Malawi University of Business and Applied Sciences, Malawi*
PS 1.08	6844681	Closing The Data Inequity Gap With Context-appropriate Microbial Water Quality Testing.	Caetano Dorea, *University of Victoria, Canada*
PS 1.09	6980400	Conservation In Action: Assessing Water Quality In Untreated Surface Water Sources In Villagarzón, Putumayo, Colombia	Maria Jose Uribe Perez, *Northern Arizona University, United States*
PS 1.10	6811529	Degradation Of Methylene Blue By A Visible-light-driven Photocatalyst Under 420 Nm LED Light Irradiation	Lyda Patricia Sabogal-Paz, *São Carlos School of Engineering, University of São Paulo - EESC|USP, Brazil*
PS 1.11	6844950	Direct Photolysis Of Ciprofloxacin And Levofloxacin Under UV-LED Irradiation: Influence Of Wavelength And Light Intensity	Zi Bin Tang, *China Medical University Department of Occupational Safety and Health, Chinese Taipei*
PS 1.12	6954235	Easy-Maintenance Assembled Drinking Water Plant	Chengzhi Hu, *Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, China*
PS 1.13	6845644	Electrochemical Disinfection As A Resilient Solution For Microbial Safety In Rural And Remote Drinking Water Supplies	Mingyue Hu, *The University of Queensland, Australia*
PS 1.14	6978538	Evaluating The Adoption Of A Large-Scale Rainwater Harvesting Program For Water-Vulnerable Communities	Adriana Diaz Lozano Patino, *Water and Energy Research Lab, Canada*
PS 1.15	6839802	Evaluation Of Microplastic Influence On *Escherichia Coli* Quantification Using Membrane Filtration Method	Lyda Patricia Sabogal-Paz, *University of São Paulo, Brazil*

PS 1.16	**6891735**	Exploring Managed Aquifer Recharge In Metro Manila	Naason Velasco, *Maynilad Water Services Inc, Philippines.*
PS 1.17	**6845575**	Exploring The Potential Of Laterite, An Iron Rich Medium, Combined With Sand In Iron Removal From Groundwater	Haroun Bangura, *Guma Valley Water Company, Sierra Leone*
PS 1.18	**6980054**	Fluoride Removal By Co-precipitation With Calcium And Phosphate In Presence Of Calcium Carbonate	Sanjay Singh, *National Institute of Technology Calicut, India*
PS 1.19	**6980392**	From Well To Home: Understanding Water Quality Changes In A Wayuu Indigenous Community	Maria Jose Uribe Perez, *Northern Arizona University, United States*
PS 1.20	**6811902**	G-C_3N_4 And Au-Ag/g-C_3N_4 Conjugated With Sintered Glass Filter For Nitrate Degradation In Drinking Water	Lyda Patricia Sabogal-Paz, *São Carlos School of Engineering, University of São Paulo - EESC|USP, Brazil*
PS 1.21	**6845757**	High-Sensitivity Patterned SWCNTs Based Flexible Strain Sensor For Pipe Line	Changyoon Jeong, *Yeungnam University, Republic of Korea*
PS 1.22	**6846086**	Human Health Risk Assessment Of Exposure To Trace Metals In Drinking Water From Artisanal Small-Scale Mining Within The Birim River Sub-Basin In Ghana	Jacob Amengor, *University of Calgary, Canada*
PS 1.23	**6846074**	Implementing 24x7 Water Supply In High-Altitude Cold Regions: The Gangles Pilot Project	Ansu Cherian, *Bremen Overseas Research Development Association - South Asia, India*
PS 1.24	**6811572**	Influence Of Color Near The Limit Of Human Perception On Microorganism Inactivation And Its Possible Implications	Lyda Patricia Sabogal-Paz, *São Carlos School of Engineering, University of São Paulo - EESC|USP, Brazil*
PS 1.25	**6978322**	Innovative Approaches For Making Cities Water Secure In Arid Regions Of Gujarat	Aasim Mansuri, *Center for Water and Sanitation (CWAS)-CRDF-CEPT, India*
PS 1.26	**6978168**	Innovative Rainwater For Drinking (RFD) Systems For Health Care Facilities In The Mekong Region	Mooyoung Han, *Seoul National University, Republic of Korea Republic of Korea*
PS 1.27	**6845778**	Interfacial Microstructure And Mechanical Properties Of Zinc Oxide And Carbon Nanotube-Modified Carbon Fiber Composites	Hongjun Jeong, *Yeungnam University*
PS 1.28	**6978289**	Last Mile Connectivity For Urban Water Supply In Indian Cities	Upasana Yadav & Arwa Bharmal, *Center for Water and Sanitation (CWAS)-CRDF-CEPT, India*
PS 1.29	**6839800**	Leached Carbon From Microplastics – A Hidden Risk To Light-Based Disinfection Technologies?	Lyda Patricia Sabogal-Paz, *University of São Paulo, Brazil*
PS 1.30	**6846080**	Legionella Contamination In South African Water Systems: Socio-economic And Climatic Determinants	Atheesha Singh, *University of Johannesburg, South Africa*
PS 1.31	**6842570**	Life Cycle Assessment And Economic Evaluation Of Regenerable Adsorbent-based Arsenic Removal	Károly Kovács, *Hungarian Water Partnership, Hungary*
PS 1.32	**6812195**	Locked Out Of Water: A Reflection On WASH Access In US Prisons	Kimberly Worsham, *FLUSH, United States*
PS 1.33	**6811560**	Performance Of Alternative Methods For Extracting Opuntia Cochenillifera In Turbidity Removal: A Comparative Approach	Glauber da Rocha Medeiros , *São Carlos School of Engineering, University of São Paulo - EESC|USP, Brazil*
PS 1.34	**6977726**	Physicochemical Transformations Of Assimilable Organic Carbon (AOC) Through Ozone Treatment	Eric Cowan, *Cranfield University, United Kingdom*
PS 1.35	**6977975**	Purification Of Moringa Oleifera Coagulant Extracted With Salt Solution By Simple Insolubilization	Lien Nguyen, *Ha Noi University of Civil Engineering (HUCE), Vietnam*

PS 1.36	6978607	Quantification And Treatment Of Problematic Odour-causing Compounds In Drinking Water Within Magalies Water Treatment Systems And Interrelated Catchments	Maki Phindile Mahlangu, *Magalies Water, South Africa*
PS 1.37	6978426	Renewable Energy-Driven Modular Membrane Systems For Off-Grid Water Treatment In Climate-Vulnerable Regions	Begüm Tanis, *Delft University of Technology, Netherlands*
PS 1.38	6978290	Reusing AC Condensate: A Sustainable Solution For Water Scarcity In Hot Humid Climatic Condition.	Sushanta Roy, *Department of Public Health Engineering (DPHE), Bangladesh*
PS 1.39	6977907	Sensor-based Batch Dosing System For Drinking Water Disinfection	Rajendra Shrestha, *Environment and Public Health Organization, Nepal*
PS 1.40	6845661	Smart Metering Technology For Determining Water Consumption Behaviour, A Case Study From Nepal.	Surya Prajapati, *EnviDan A/S, Denmark*
PS 1.41	6845116	Smart Water Distribution System Management: Exploring Digital Twin Simulation Models	Bong Seog Jung, *Pusan National University Republic of Korea*
PS 1.42	6844573	Solutions In Traditional Knowledge: How Gravity Driven Water Filters Could Help Reduce Single-use Plastics In Sub-Saharan Africa	Guus Wiersma, *Delft University of Technology, Netherlands*
PS 1.43	6978336	Spontaneous Ion Rejection By The Long-Range Interfacial Interaction Of Hydrophilic Surface And Water	Ying Zhang, *Fuzhou University, China*
PS 1.44	6960647	Strengthening Systems For Sustainability Of Supplementary Drinking Water Providers In Kisumu, Kenya: Learnings From A Multi-stakeholder Project	Sam Drabble, *Water & Sanitation for Urban Populations (WSUP), United Kingdom*
PS 1.45	6977574	The Intersection Of Water Scarcity And Women/girls' Socio-economic Exclusion: Insights From Three Selected Villages Phalombe, Malawi	Lobina Palamuleni, *Faculty of Natural and Agricultural Sciences, North West University, South Africa*
PS 1.46	6844367	The Secondary Water Supply Energy Efficiency Project:Dual Enhancement Of Pump Station Efficiency And Economy Via Non-Isobaric Flow Convergence Technology	Yanan Zhang, *ShenZhen LiYuan Water Design & Consultation CO.,LTD., China*
PS 1.47	6840731	The Use Of Mesocosms To Evaluate The Impact Of Pesticides And Microplastics In Aquatic Ecosystems	Evaldo Espindola, *University of São Paulo, Brazil*
PS 1.48	6844402	Upscaling Water Harvesting Systems To Improve Drought Resilience In Kenya And South Africa	Alison Parker, *Cranfield University, United Kingdom*
PS 1.49	6846644	Utility-Driven Innovations For Equitable Water Access: A Sustainable Approach For Low-Income Communities In Ghana	Obed Frempong, *Ghana Water Ltd (GWL), Ghana*
PS 1.50	6841571	Water And Sanitation Safety Plans For Urban And Rural Settings.	Priscilla Buabeng, *Ghana Water Limited, Ghana*
PS 1.51	6846303	Water Security For Vulnerable Communities: A Community-Driven Approach In Rajkot, India	Kritika V, *CEPT University, India*
PS 1.52	6977593	Water System Development In Marginalized Communities In Hetauda Sub-Metropolitan City	Meena Lama, *Hetauda Sub Metropolitian City, Nepal*
PS 2.01	6977305	A Study On Detection Of Soil-Derived Organic Substances In Wastewater For Identification Of Degraded Part Of Sewage Pipes	Yuki Nakaya, *Hokkaido University, Japan*
PS 2.02	6977880	Advancing Decentralized Wastewater Treatment In Thailand: The Role Of Performance Testing And Standardization	Kesirine Jinda, *AIT Testing Laboratory, Thailand*
PS 2.03	6844104	A Study On Climate-Resilient WASH In Disasters: Addressing Gaps In Disaster Waste Management In Kerala, India	Akhilesh Ramesh, *Water Sanitation and Hygiene Institute (WASH Institute), India*
PS 2.04	6841559	AKYAS's Nanobubble Effluent Treatment System (NETS)	Bara Wahbeh, *Akyas Environmental Consultancy, United Arab Emirates*
PS 2.05	6846188	Analysis And Applicability Of Sustainable Technologies For Water Sector Decarbonisation	Andrea G Capodaglio, *University of Pavia, Italy*

PS 2.06	6845458	Application Of Pinus Patula Biochar For Enhancing Palm Oil Industry Wastewater Treatment	Ainhoa Rubio-Clemente, *University of Antioquia, Colombia*
PS 2.07	6844246	Back To Basics: Exploring The Fundamental Challenges Of Analysing Microplastics From Wastewater Treatment Plants	Joycelyn Bempong, *Loughborough University, United Kingdom*
PS 2.08	6845238	Biochar Derived From Alien Invasives For The Removal Of The Antiretroviral Lamivudine From Surface Waters Polluted By Runoff From Informal Settlements	Kalpana Maraj, *University of Cape Town, South Africa*
PS 2.09	6821706	Biochar-mediated Optimization Of Anaerobic Membrane Bioreactor: Dose-dependent Membrane Fouling Mitigation And Digestion Enhancement Via Scouring-biological Synergy	Qian Li, *Xi'an University of Architecture and Technology, China*
PS 2.10	6846184	Bridging The Gap: Advancing Inclusive And Climate-Resilient Sanitation For Underserved Groups In Uttarakhand	Mahreen Mahto, *National Institute of Urban Affairs, India*
PS 2.11	6978231	Bridging The Rural Sanitation Data Gap In Bangladesh: An Open Data-Enhanced CWIS Framework	Bussakorn Krittanusarn, *Asian Institute of Technology, Thailand*
PS 2.12	6843306	CFD Model Of The Hydrodynamics And Particle Removal In Septic Tanks	Adhin Harum Wulaningtyas, *Imperial College London, United Kingdom*
PS 2.13	6846613	Characterization Of Microbial Electrolysis Cell's Bioanode Performances Through Potentiostatic And Potentiodynamic Techniques	Marco Zeppilli, *University of Rome Sapienza, Italy*
PS 2.14	6845803	Degradation Of The Antiviral Drug Acyclovir By UV222 Activated Peroxymonosulfate	Ming Hung Liu, *Tunghai University, Chinese Taipei*
PS 2.15	7114176	Design and Implementation of a Nature-based Solution (NbS) for Domestic Wastewater Treatment in Porto Alegre (São Tomé and Príncipe): Participatory Approach and Socioeconomic Assessment	Mercedes Díaz, *Instituto Tecnológico de Canarias (ITC), Spain*
PS 2.16	6845876	Design Considerations And Operational Variations Of A Pond-wetland System For Polishing Treatment And Wastewater Emergency Control At A Steel Complex	Viet-Anh Nguyen, *Institute of Envi. Sci. & Eng. (IESE), Hanoi Univ. of Civil Eng. (HUCE), Vietnam*
PS 2.17	6845190	Develop A High-efficiency Phosphate Adsorbent By Optimizing Magnetite Synthesis	Hyunji Son, *Chungnam national University, Republic of Korea*
PS 2.18	6977342	Developing Wastewater Bio-solids (Sludge) Management Strategies And New Disposal Regulations With Reuse To Achieve An Effective Circular Economy – Need Of The Hour In India	Uday Kelkar, *NJS Co. Ltd., Japan, Japan*
PS 2.19	6846085	Development Of Modification Of Tripikon-S To Treat Domestic Wastewater In Riverside Settlements	Prayatni Soewondo, *Institut Teknologi Bandung, Indonesia*
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PS 5.11	6891721	Skills Requirements Of Water And Sanitation Technical Personnel: Opportunities And Challenges In Industry- Academia Engagement	Mary Wambugu, *University of Leeds, United Kingdom*
PS 5.12	6978386	Tackling Stakeholder Engagement, Transformation And Social Inclusion On Crop Production In Indigenous Communities	Odwa Mtembu, *Department of Water and Sanitation, South Africa*
PS 5.13	6788301	The Effect Of Tariff Policy On Financial Performance Of A Public Water Utility	Lillian Naiga, *National Water & Sewerage Corporation - Uganda, Uganda*
PS 5.14	6817885	Water And Sanitation Challenges In South Africa's Informal Settlements: A Systematic Review	Tafadzwa Maramura, *University of The Free State, South Africa*
PS 5.15	6978376	Sustainable WASH Financing For Low-Income Households	Mingma Sherpa, *500 B Solutions Pvt. Ltd., Nepal*
PS 5.16	6977903	The Cost Of Inaction: Assessing Impacts Of Inadequate WASH Funding In Bangladesh	Ramkrishna Paul, *Athena Infonomics, India*
PS 5.17	6843979	Securing Safe And Affordable Water Under The Economic Crisis In South Sudan	Ryuji Ogata, *Japan International Cooperation Agency, Japan*
PS 5.18	6846201	Towards Sustainable Rural Water Supply: Efficient Management Of Water Pump Operators	Sangram Mane, *Indian Institute of Management (IIM), Bangalore, India, India*
PS 5.19	6977625	Empowering Climate Migrants For A Resilient Future: Addressing WASH Challenges For Climate Migrants In Low-Income Communities Of Bangladesh	Sonia Shahid, *Athena Infonomics, India*
PS 5.20	6845964	Tailored Business Models For Nature-Based Solutions: Context-Driven Value Propositions In Global Urban Water Management	Maria Wirth, *Alchemia-Nova Research & Innovation Gemeinnützige GmbH, Austria*
PS 5.21	6845984	Strengthening External Support For More Sustainable Community-based Rural Water Systems: An Analysis Of PAMSIMAS Program In Indonesia	Cindy Priadi, *Universitas Indonesia, Indonesia*
PS 5.22	6843275	Interrogating Decision-making For Access To Sanitation In Informal Settlements In Bulawayo, Zimbabwe	Virginia Roaf, *University of Leeds, Germany*
PS 5.23	6846161	Is Urban Governance The Key To Better Water Services In Rapidly Urbanising Villages Adjoining Large Cities?	Renjitha Maniyil Haridasan, *Cranfield University, United Kingdom*
PS 5.24	6977734	Improving Water Supply And Sanitation Access In Southeast Asia - Addressing Climate, Economic, And Policy Barriers	Ramkrishna Paul, *Athena Infonomics, India*
PS 5.25	6978036	Navigating Challenges & Exploring Solutions In FSM Sector At Paurashavas Across Bangladesh: Insights From Field Visit & CSDA Analysis	Fahim Ahmad, *Streams Tech Ltd, Bangladesh*

Exhibition

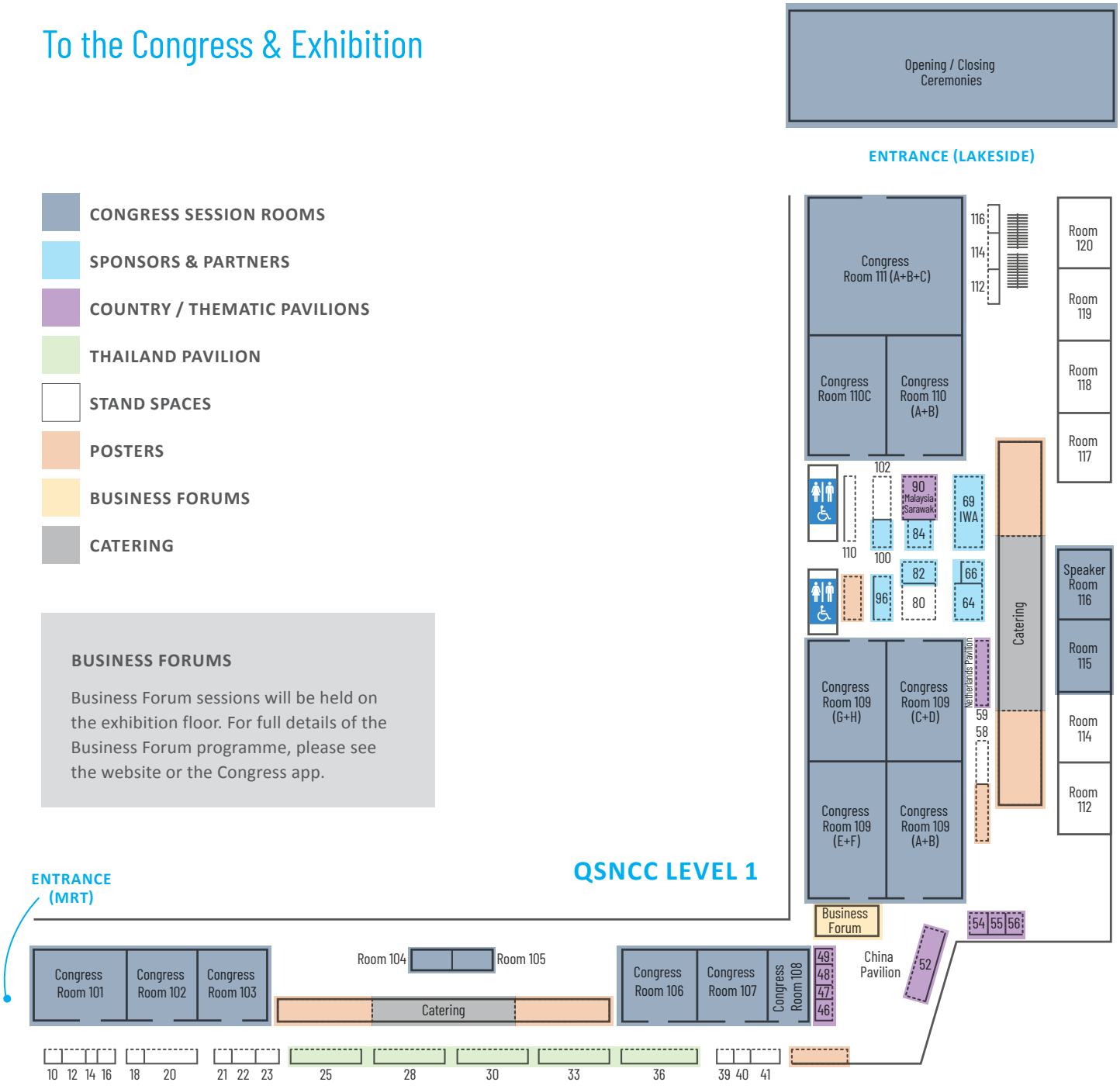
Floor Plan

To the Congress & Exhibition

- CONGRESS SESSION ROOMS
- SPONSORS & PARTNERS
- COUNTRY / THEMATIC PAVILIONS
- THAILAND PAVILION
- STAND SPACES
- POSTERS
- BUSINESS FORUMS
- CATERING

BUSINESS FORUMS

Business Forum sessions will be held on the exhibition floor. For full details of the Business Forum programme, please see the website or the Congress app.



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Exhibitor

by organisation name

Exhibitor	Stand
AKA Detection Services *Australia*	102
American National Standards Institute (ANSI) *United States*	41
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ANSO Environmental Technology and Industry Alliance *China*	56
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Asia Water *Thailand*	38
Asian Development Bank (ADB) *Philippines*	84
Asian Institute of Technology (AIT) *Thailand*	28-30
Asian Institute of Technology Bangkok (AITB) *Thailand*	40
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Association of Water and Sanitation Institutions of South Africa (AWSISA) *South Africa*	82
Bosman Watermanagement *The Netherlands*	59
Business Connect L3C *United States*	14
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EnviVac EnviroSystems Technology Co., Ltd. *China*	56
German Academic Exchange Service (DAAD) *Germany*	40
Global Sanitation Center of Excellence (GSCOE) of IIT Palakkad *India*	21
Global Sanitation Graduate School *The Netherlands*	58
Global Water and Climate Adaptation Centre – ABCD-Centre *Germany / Thailand*	40
Global Water & Sanitation Center *Thailand*	25-27

Exhibitor	Stand
Government of the Netherlands *The Netherlands*	59
Hangzhou Laison Technology Co. Ltd. *China*	54
Haskoning *The Netherlands*	59
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Idrica *Spain*	23
IHE Delft *The Netherlands*	58
Imagine H2O Asia *Singapore*	18
Indian Institute of Technology Madras (IITM) *India*	40
Informa Tech *Thailand*	38
Innovation Pavilion *Australia*	102
International Water Association (IWA) *United Kingdom*	68
Isle Utilities *Australia*	102
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IWA WWCE 2028 *Malaysia*	90
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LIHE Technology (HUNAN) Co.,Ltd *China*	56
Mahidol University *Thailand*	34
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Malaysian Water Association *Malaysia*	90
Malaysian Water Association Sarawak *Malaysia*	90
MetaMeta *The Netherlands*	59
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Netherlands Water Partnership (NWP) *The Netherlands*	59
NFSSM Alliance *India*	80
Okra *The Netherlands*	59
PB International *The Netherlands*	59
PIA Global *Australia*	102
Pipeline Inspection and Assesment (PIA) *Australia*	102
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Exhibitor	Stand
RWTH Aachen University (RWTH) *Germany*	40
SEI Thailand *Thailand*	31
Sensus Smart Metering International *Singapore*	24
SHENZHEN ANSO IOT CO., LTD. *China*	48
ShinMaywa Industries co, Ltd *Japan*	110
Singapore Water Center (SWC) *Singapore*	100
SkyJuice Foundation Inc. *Australia*	39
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South Africa Pavilion *South Africa*	82
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University of Technology (UTS) *Australia*	102
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UNU Institute for Integrated Management of Material Fluxes and of Resources (UNU-FLORES) *Germany*	40
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Your Filter Factory *The Netherlands*	59
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20	Wetsep *Hong Kong*
21	Global Sanitation Center of Excellence (GSCOE) of IIT Palakkad *India*
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38	Asia Water *Thailand*
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28-30	Asian Institute of Technology (AIT) *Thailand*
28-29	Department of Water Resources and Environmental Engineering (WREE) *Thailand*
31	SEI Thailand *Thailand*
31	Stockholm Environment Institute *Thailand*
34	Mahidol University *Thailand*
35	Wastewater Management Authority of Thailand (WMA) *Thailand*
36	Department of Marine and Costal Resources *Thailand*
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102	University of New South Wales (UNSW) *Australia*
110	ShinMaywa Industries co, Ltd *Japan*
113	Asian Water *Malaysia*
112	Water & Wastewater Asia *Singapore*

Exhibitor Profiles

Stand: 41

AMERICAN NATIONAL STANDARDS INSTITUTE

City: Washington, DC
Country: USA

LinkedIn: https://www.linkedin.com/company/american-national-standards-institute
X: https://x.com/ansidotorg
Facebook: https://www.facebook.com/ansidotorg/#

American National Standards Institute ANSI is a private, non-profit organization that administers and coordinates the U.S. voluntary standards and conformity assessment system. ANSI Sanitation supports the national adoption of non-sewered sanitation standards globally via workshops, resources, and trainings.

www.sanitation.ansi.org

Stand: 59

AQUATECH

RAI Amsterdam is a leading international exhibition and conference organiser, hosting over 500 events annually at its modern venue in Amsterdam and managing proprietary trade shows worldwide with strategic partners. Its portfolio spans a.o. water technology, mobility, maritime, horticulture and cleaning. Through the global Aquatech series—including Amsterdam, Mexico, China and the upcoming Aquatech Asia in cooperation with VNU Exhibitions in Bangkok—RAI connects water industry leaders to drive sustainable solutions for global and Southeast Asian water challenges.

www.rai.nl
www.aquatechtrade.com/asia

Stand: 40

ASIAN INSTITUTE OF TECHNOLOGY BANGKOK (AIT)

City: Bangkok
Country: Thailand

LinkedIn: https://www.linkedin.com/school/ait-asia/
X: https://x.com/aitasia
Facebook: https://www.facebook.com/AITasia/

AIT is a diverse, cosmopolitan community dedicated to developing skilled professionals who support sustainable regional development and global integration. Long a leader in sustainability aligned with the UN SDGs, AIT has strengthened its impact, ranking 101–200 globally in the Impact Rankings through its commitment to SDG-focused teaching, community engagement, and operations.

www.ait.ac.th

Stand: 56

ANSO ENVIRONMENTAL TECHNOLOGY AND INDUSTRY ALLIANCE

City: Beijing
Country: China

Under the ANSO alliance system, ANSO Environmental Technology and Industry Alliance is a thematic network organization initiated by the Ecological Environment Research Center of the Chinese Academy of Sciences and influential enterprises in the field of environment in the United Nations. Its secretariat is located at the Zhongguancun China Science Technology Development and Promotion Centre for Water Environmental Protection, Beijing, China.

Stand: 84

ASIAN DEVELOPMENT BANK

City: Mandaluyong City, Metro Manila
Country: Philippines

LinkedIn: LinkedIn
Facebook: https://www.facebook.com/ADBWater/

ADB is a leading multilateral development bank fostering inclusive, resilient, and sustainable growth across Asia and the Pacific. ADB is working to improve water security and resilience by supporting its developing member countries in achieving water-related Sustainable Development Goals, including resilience to climate change, access to basic water and sanitation, increased food security, rural revitalization, gender equality, improved health, and a better environment.

www.adb.org/who-we-are

Stand: 82

ASSOCIATION OF WATER AND SANITATION INSTITUTIONS OF SOUTH AFRICA (AWSISA)

City: Pretoria
Country: South Africa

LinkedIn: https://za.linkedin.com/company/awsisa
X: #AWSISA2025
Facebook: Afriwatersan25

The Association of Water and Sanitation Institutions of South Africa (AWSISA) is a not-for-profit organization serving as an association for coordination and collaboration amongst water and sanitation institutions in South Africa. AWSISAs strategic objectives are:

- To pursue the interests of the water / sanitation institutions across the value chain
- Provide an advisory role to the sector on Integrated Water Resources Management (IWRM)
- Stabilising the Water / Sanitation sector from a labour perspective
- Foster intra and global partnerships amongst members.

www.awsisa.org.za/

Stand: 59

BOSMAN WATERMANAGEMENT B.V.

Bosman Watermanagement B.V., founded in 1929, specialises in customised water management solutions, including pumping stations and wastewater systems.
With nearly a century of expertise, Bosman has supported major projects in Thailand, delivering high-performance pumps and comprehensive services to enhance surface water and flood control infrastructure.

www.bosmanwater.nl

Stand: 14

BUSINESS CONNECT L3C

City: Grand Rapids
Country: USA

LinkedIn: https://www.linkedin.com/company/bizconnectworld

Business Connect World directly connects innovative safe-drinking-water products with markets and institutional buyers. It bridges solution providers and demand, enabling rapid adoption of effective technologies. By facilitating deals, partnerships, and market entry, it helps expand access to clean, reliable water for communities that need it most.

www.businessconnectworld.com

Stand: 46-56

CHINA PAVILION

China will be well represented with a pavilion with several companies and stakeholders from China. The China Pavilion is organized by Wietec, IWA's co-organizer for the Chinese Market.
LAISON will highlight its smart metering solutions designed for diverse application scenarios, covering domestic, commercial & industrial, and pipeline monitoring fields. We provide a wide range of products to meet different water utility requirements, including velocity type, ultrasonic type, electromagnetic flowmeters, and various pipeline monitoring devices. By integrating multiple communication technologies such as LoRa/LoRaWAN/NB-IoT/GPRS/CAT.1, our solutions support prepayment, AMR/AMI Remote Meter Data Collection, etc. functions. Together with LAISON's self-developed Apps and Hardware and Data Management System (HDMS), utilities can achieve comprehensive smart water management.
In addition, we will present our big data-driven leakage detection and analysis solution, as well as a smart payment platform seamlessly integrated with mobile payment services, empowering water utilities to achieve digital transformation, improved operational efficiency, cost reduction, and minimized Non-Revenue Water (NRW).

Stand: 64

COMCORE TECHNOLOGY PTE. LTD.

City: Singapore
Country: Singapore

LinkedIn: www.linkedin.com/company/comcore

Comcore is a premier global digital energy technology company. Specializing in Smart Metering, Smart Power Equipment, and Renewable Energy, Comcore delivers integrated solutions across Digital Energy Metering, Smart Power Distribution, Renewable Energy Storage & Charging, Smart Micro-grids, and Comprehensive Energy Management Solutions.

www.comcore.com.sg

Stand: 80

DASRA

City: Mumbai
Country: India

LinkedIn: https://www.linkedin.com/company/dasra
X: https://x.com/dasra
Facebook: https://www.facebook.com/dasra

Dasra plays the role of a systems orchestrator in India's social sector, bringing together funders, nonprofits, governments, and communities to amplify grassroots voices and enable community-led change. We build organizational capacity, nurture leadership, and strengthen philanthropy's infrastructure to unlock knowledge, resources, and capital. Through collaborative action, we co-create solutions that shift systems and move India toward an equitable future.

www.dasra.org

Stand: 59

DEFACTO URBANISM

Defacto Urbanism is an award-winning Dutch landscape architecture and urban design firm specialising in climateadaptive, integrated urban planning. Combining research with innovative design, they deliver nature-based solutions and flood risk strategies globally, working closely with diverse stakeholders to create resilient, liveable cities and landscapes in rapidly urbanising regions.

www.defactourbanism.com

Stand: 59

DELTA CONTEXT B.V.

Delta Context B.V. is an independent Dutch consultancy specialising in resilient water management across deltas, coasts, and rivers. With over 30 years' expertise, it delivers integrated climate adaptation, flood risk management, and nature-based solutions, focusing on South and Southeast Asia, working with governments, development banks, and the private sector.

www.deltacontext.com

Stand: 82

DEPARTMENT OF WATER AND SANITATION, SOUTH AFRICA

City: Pretoria
Country: South Africa

Facebook: WaterAndSanitationRSA
Instagram: Dept. Of Water & Sanitation
X: @DWS_RSA

The Department of Water and Sanitation leads South Africa's efforts to ensure water security and universal access to sanitation. Through innovation, strategic partnerships, and sustainable infrastructure development, the Department champions inclusive growth, environmental stewardship, and the responsible management of the nation's vital water resources.

www.dws.gov.za

Stand: 59

DESOLENATOR BV

Desolenator BV vision is to secure critical business assets exposed to water risk. Our patented platform treats a variety of complex water types through a combination of solar energy and waste heat, with high value cooling and a zero brine option. Backed by industry leaders with proven, deployed technology, the company is developing high value industry propositions including for Data Centres, Energy Transition and Advanced Manufacturing

www.desolenator.com

Stand: 46-56

ENVIVAC ENVIROSYSTEMS TECHNOLOGY CO., LTD.

City: Beijing
Country: China

Email: office@envi8.com

With experience of more than 2 decades we deliver new type micro-flushing toilets, vacuum sewer/ source separation technology and full set products, sewage and waste treatment/reuse equipment, with cost-effective water saving and zero discharge concepts for buildings, communities as well industrial parks.

www.envivac.com

Stand: 40

GERMAN ACADEMIC EXCHANGE SERVICE (DAAD) - FUNDING ORGANIZATION

City: Bonn Country: Germany

LinkedIn: https://www.linkedin.com/school/daad-worldwide/
Facebook: https://www.facebook.com/DAAD.Worldwide/

The DAAD, the world's largest funding body for international academic exchange, supports cooperation in higher education. As Germany's national agency, it provides programs and financial support to over 55,000 students, researchers, and faculty each year, promotes German higher education abroad, and strengthens global institutional partnerships in research and learning.

www.daad.de

Stand: 40

GLOBAL WATER AND CLIMATE ADAPTATION CENTRE – ABCD-CENTRE

City: Aachen – Bangkok – Chennai – Dresden
Country: Germany – India – Thailand

LinkedIn: https://www.linkedin.com/company/107560077

The Global Water and Climate Adaptation Centre (ABCD-Centre) unites 5 excellent universities from 4 cities in 3 countries on 2 continents to advance water security and climate resilience. It integrates research, education, and practice across three clusters and supports exchange and knowledge transfer to empower future environmental leaders worldwide.

www.abcd-centre.org

Stand: 21

GLOBAL SANITATION CENTER OF EXCELLENCE (GSCOE) OF IIT PALAKKAD

City: Palakkad
Country: INDIA

LinkedIn: https://www.linkedin.com/company/global-sanitation-center-of-excellence-gscoe-iit-palakkad/

The Global Sanitation Center of Excellence (GSCOE) at IIT Palakkad is excited to showcase its research and development activities at the IWA Water and Development Congress & Exhibition 2025- Bangkok. Through this event and networking, we look forward to building global collaborations and partnerships, especially in the field of circular resource recovery and sustainable sanitation solutions. During the event, GSCOE will showcase its R&D potentials, state-of-the-art testing and validation services, and the lab-to-field technology translation capabilities. We believe that IWA -WDCE offers a unique platform to exchange ideas with researchers, practitioners, and industry leaders, driving collective impact for sustainable development.

www.gscoe.iitpkd.ac.in

Stand: 54

HANGZHOU LAISON TECHNOLOGY CO., LTD.

City: Hangzhou
Country: China

LinkedIn: https://www.linkedin.com/company/laisontech
X: https://x.com/laisontech
Facebook: https://www.facebook.com/laisontech

LAISON is an innovative specialist in smart water metering fields include STS Prepaid, IoT AMR/AMI Meter, E-Payment, DMA, SaaS, and Meter-as-a-Service (MaaS). Serving utilities in 30+ countries, with 800,000 pcs Smart Water Meter Online, aims to assist Water Utilities to reduce NRW and improve operational efficiency.

www.laisongroup.com

Stand: 59

HASKONING

Haskoning is an independent international consultancy specialising in engineering, design, and technology. A global leader in water, they address climate change and water scarcity, working with utilities, governments, and industries worldwide through a team of 6,800 experts across 25+ countries.

www.haskoning.com

Stand: 59

HYDROSAT

Hydrosat is a space and data analytics company developing an Earth observation constellation and software to provide unique high-resolution thermal infrared imagery.
Their mission is to deliver valuable insights for environmental monitoring, food and water security, and other vital applications worldwide.

www.hydrosat.com

Stand: 59

IHE DELFT INSTITUTE FOR WATER EDUCATION

IHE Delft Institute for Water Education is the largest international graduate water education facility in the world. Based in Delft, the Netherlands, IHE Delft confers fully accredited MSc degrees and PhD degrees in collaboration with Dutch partner universities. The Institute conducts research and supports capacity development to address the world's water challenges.

www.un-ihe.org

Stand: 21

THE INDIAN INSTITUTE OF TECHNOLOGY PALAKKAD

City: Palakkad, Kerala
Country: India

LinkedIn: https://www.linkedin.com/school/iitpkd/
X: https://x.com/PalakkadIIT
Facebook: https://www.facebook.com/IITPLKD

The Indian Institute of Technology Palakkad is a pioneering higher education institution under the Ministry of Education, Govt. of India, established in 2015 at Palakkad – the panoramic gateway near the Western Ghats of India. Guided by its motto “Nurturing minds for a better world”, IIT Palakkad emphasises blue-sky academic thinking and deep collaboration with industries to lead in cross-disciplinary areas and applied research.

www.iitpkd.ac.in

Stand: 18

IMAGINE H2O ASIA

City: Singapore
Country: Singapore

LinkedIn: https://www.linkedin.com/company/imagine-h2o/posts/?feedView=all
X: https://x.com/imagineh2o
Instagram: https://www.instagram.com/imagineh2o/

Imagine H2O Asia (IH2O) is a Singapore-based NGO that partners with utilities to de-risk and scale water innovation across APAC. IH2O’s Water Innovation Pilot Fund provides co-financing and technical assistance to design and implement water technology pilot projects. Since 2023, IH2O has supported 19 projects in 9 countries.

www.imagineh2o.org

Stand: 40

INDIAN INSTITUTE OF TECHNOLOGY MADRAS (IITM)

City: Chennai
Country: India

LinkedIn: https://www.linkedin.com/school/reachiitm/
X: https://x.com/iitmadras Facebook: https://www.facebook.com/ReachIITM

IIT Madras is internationally recognized for excellence in technical education, research, innovation, entrepreneurship, and consultancy. Its renowned faculty, motivated students, strong staff, and effective administration support its leading status. Ranked India's No. 1 engineering university and designated an Institute of Eminence, IITM continues to advance cutting-edge knowledge and impact.

www.iitm.ac.in

Stand: 102

ISLE UTILITIES

City: Melbourne
Country: Australia

LinkedIn: https://www.linkedin.com/company/isle-global/

Isle is a global consultancy, partnering across the water system to accelerate the water environmental transition.
Our services and platforms help de-risk the development, commercialisation, and adoption of technologies, creating value and accelerating innovative solutions.

www.isleutilities.com

Stand: 47

IWA CITIES OF THE FUTURE RESEARCH CENTRE (XI'AN)

City: Xi'an
Country: China

This Centre is co-established between IWA and Xi'an University of Architecture and Technology in 2023 in Xi'an, China, which aims to gather researchers from the IWA members and partners within and outside China, to carry out initiatives on building water-wise cities and integrated water management for sustainable urban development.

Stand: 46-56

LIHE TECHNOLOGY (HUNAN) CO.,LTD

City: Changsha, Hunan Province
Country: China

LinkedIn: https://hk.linkedin.com/company/lihe-technology-hunan-co-ltd Facebook: https://www.facebook.com/share/1Fku3aLsNj/

Lihe Technology (Hunan) Co., Ltd. (300800.SZ) is a leading manufacturer of environmental monitoring instruments and systems. As the supporting unit of the National Engineering Research Center for Advanced Water Environment Pollution Monitoring Technology and Equipment, Lihe provides multi-scenario air, water, and soil monitoring solutions for scientific and precise pollution control.

www.liheroglobal.com

Stand: 59

METAMETA

MetaMeta, established in 2004, is a global private enterprise delivering socially impactful and commercially viable water and land management solutions. With expertise in irrigation, agro-ecology, and climate resilience, MetaMeta operates across Asia and Africa, focusing on sustainable, scalable approaches to water and natural resource challenges.

www.metameta.nl

Stand: 80

NFSSM ALLIANCE

City: Mumbai
Country: India

LinkedIn: https://www.linkedin.com/company/nfssmalliance/
X: https://x.com/NFSSMalliance
Facebook: https://www.instagram.com/nfssmalliance/

The NFSSM Alliance is an Indian coalition of 35+ organisations advancing inclusive and climate-resilient sanitation. It builds evidence, codifies knowledge, and enables cross learning, research, and partnerships. With its diverse partner network, the Alliance aims to strengthen sanitation systems and foster future-ready innovations, driving sustainable, scalable solutions for India's evolving sanitation landscape.

www.nfssmalliance.org

Stand: 59

OKRA

OKRA is an international and interdisciplinary team in the field of landscape architecture, working from Utrecht, the Netherlands. It designs and realises resilient landscapes, healthy cities and sustainable water strategies. OKRA envisions the world of tomorrow as a place with positive impact on people and nature. It combines three decades of international experience with inventiveness and craftsmanship to provide creative and award-winning solutions to the challenges of today and tomorrow.

www.okra.nl

Stand: 59

PB INTERNATIONAL, YOUR FILTER FACTORY

Your Filter Factory is a Dutch specialist in ultrafiltration (UF) technology. Together with WIIK Water Bangkok, we supply membrane modules for decentralized drinking water systems that convert surface water into safe, clear drinking water. Our hollow fiber membranes are robust, easy to maintain, and proven in Thai conditions. We aim to partner with local integrators to scale reliable, small-community water treatment solutions across Southeast Asia.

www.yourfilterfactory.com

Stand: 102

PIPELINE INSPECTION AND ASSESSMENT (PIA)

City: Sydney
Country: Australia

LinkedIn: https://www.linkedin.com/company/pipeline-inspection-and-assessment-pia-global/?viewAsMember=true

PIA provides a unified approach to pipeline asset management with innovative solutions, technologies and strategies for the water and wastewater industries. Their focus includes pipeline condition assessment, inspection, monitoring and water loss management to improve reliability and extend asset life.

www.pia-global.com

Stand: 16

RÄDLINGER PRIMUS LINE GMBH

City: 93413 Cham
Country: Germany

LinkedIn: https://www.linkedin.com/company/r-dlinger-primus-line-gmbh/

Primus Line® technology is used for the trenchless rehabilitation of pressurised pipelines (Primus Line® Rehab) and for the construction of freely layable pipelines (Primus Line® Overland Piping). It is a safe, reliable and sustainable solution, produced in Germany and used worldwide.

www.primusline.com

Stand: 59

ROWAT WATER CONTROL

ROwat Water Control supplies durable penstocks, valves, and weirs for precise water management in wastewater treatment, pumping stations, and surface water systems. Using high-quality HDPE and low carbon stainless steel, ROwat ensures sustainable performance in demanding environments, including tropical marine and sewage treatment applications.

www.rowat-watercontrol.com

Stand: 40

RWTH AACHEN UNIVERSITY (RWTH)

City: Aachen
Country: Germany

LinkedIn: https://www.linkedin.com/school/rwth-aachen-university
Facebook: https://de-de.facebook.com/RWTHAachenUniversity

RWTH Aachen University, with 260 institutes and nine faculties, is one of Europe's leading research institutions. It hosts about 45,000 students, including over 9,000 international students from 120 countries, supported by 540 professors and 8,000 staff. The university prioritizes strong academic output, high-quality graduates, and competitive external funding.

www.rwth-aachen.de

Stand: 66

SHENZHEN ANGEL DRINKING WATER INDUSTRIAL GROUP CORPORATION

City: Shenzhen
Country: China

LinkedIn: https://www.linkedin.com/company/angel-group-global/
Facebook: https://www.facebook.com/people/ANGEL-Group-Global/100083301731014/

Established in 1987, ANGEL leads in water purification technology. For over three decades, ANGEL has aimed to deliver safety, health, and a stylish way of water consumption in household and commercial sectors. With a presence in 65 countries, our influence continues to expand, ensuring pure and accessible water worldwide.

www.angelwatersolutions.com

Stand: 48

SHENZHEN ANSO IOT CO.,LTD

City: Shenzhen
Country: China

Shenzhen ANSO IoT Co., Ltd. leverages years of deep experience in the water supply industry and has established long-term collaborations with nearly 1,000 water companies across China. As the earliest and most prolific participant in DMA leak control projects in the country, ANSO is a leading provider of smart water system solutions and proactive water loss control services.

www.ansosz.com

Stand: 110

SHINMAYWA INDUSTRIES, LTD.

City: Yokohama City
Country: Japan

Facebook: https://www.facebook.com/people/ShinMaywa-Pump-Thailand/61565594121900/

Wastewater treatment equipment manufacturer.

www.shinmaywa.co.jp/english/products/pump/

Stand: 39

SKYJUICE

Country: Australia

SkyJuice is a recognised global leader in safe water solutions. They manufacture and supply a portfolio of low cost passive safe water filtration units. The Foundation is a registered charity that has over 11,000 installations in 74 Countries. The SkyJuice SkyHydrant units utilise proven ultrafiltration technology. Installations include disaster and emergency water, IDP installation and community water plants. They are recipients of the 2025 Zayed Sustainability Prize for water and also the 2025 Global Water Prize for emergency water solutions.

www.skyjuice.org.au

Stand: 59

SNV

SNV is a global development partner, rooted in the African and Asian countries where we operate. With 60 years of experience and a team of approximately 1,600 people, it is our mission to strengthen capacities and catalyse partnerships that transform the agri-food, energy, and water systems to enable sustainable and more equitable lives for all.

www.snv.org

Stand: 102

TEAMSOLVE

City: Singapore
Country: Singapore

LinkedIn: https://www.linkedin.com/company/80030030/admin/dashboard/

TeamSolve delivers a pioneering Asset Management and work order system with workflows, powered by Agentic AI. Proven globally across developed and developing utilities, it standardises field data capture and auto reporting, provides management dashboards, local languages and knowledge insights, helping utilities leapfrog, build resilience and shift to proactive operations.

www.teamsolve.com

Stand: 59

TECHNIMEX

Technimex is a Dutch supplier of high-quality mechanical products for urban water, wastewater, and gas infrastructure. With all products manufactured in Europe to stringent standards, Technimex ensures reliable performance in municipal networks, treatment facilities, and industrial settings worldwide. Their made-to-order valves and fittings, backed by full certification, are trusted across Europe, the Middle East, and the USA for tailored engineering and consistent quality.

www.technimex.com/en

Stand: 52

TERRECO ENVIRONMENTAL SOLUTIONS LLC

City: Dover, Delaware
Country: U.S.

LinkedIn: TERRECO Environmental Solutions (linkedin.com/company/terrecoes)
Instagram: TERRECO Environmental Solutions

TERRECO Environmental Solutions is a leading provider of wastewater and solid waste solutions, delivering a comprehensive portfolio that scales from rural to urban applications. We are from Delaware and have built solid businesses across North America, Greater China, Southeast Asia, Oceania, the Middle East, and Africa.

www.terreco.net

Stand: 59

THE NETHERLANDS PAVILION

The Netherlands Pavilion is a loyal participant in the IWA Water Development Congress & Exhibition, showcasing the strength and diversity of the Dutch water sector. Together, we bring world-renowned knowledge institutions, innovative technology providers, and integrated solutions for today's water challenges.
For this edition, the Partners International Business (PIB) – Water for the Greater Bangkok Area will be present at the pavilion. We look forward to new opportunities to cooperate, share expertise, and make new connections from around the world.
The Netherlands Water Partnership (NWP) proudly coordinates the pavilion, ensuring a strong collective representation of Dutch water expertise.

Stand: 59

THE NETHERLANDS-THAI CHAMBER OF COMMERCE (NTCC)

The Netherlands-Thai Chamber of Commerce (NTCC), established in 1991, is a self-funded organisation representing Dutch business interests in Thailand. It facilitates trade, fosters partnerships, and promotes knowledge exchange between Dutch and Thai companies to strengthen bilateral commercial relations and cooperation.

www.ntccthailand.org

Stand: 40

TUD DRESDEN UNIVERSITY OF TECHNOLOGY (TUD)

City: Dresden
Country: Germany

LinkedIn: https://www.linkedin.com/school/tu-dresden
Facebook: https://www.facebook.com/TUDresden

TUD Dresden University of Technology, a German University of Excellence, is a large, dynamic institution that combines global impact with regional responsibility. The "Collaborative University" combines study and teaching with cutting-edge research and plays a leading role in technology transfer to provide solutions for challenges of the 21st century.

www.tu-dresden.de

Stand: 41

TÜV SÜD

City: Munich
Country: Germany

LinkedIn: https://www.linkedin.com/company/tuvsud
Instagram: https://www.instagram.com/tuvsud/
YouTube: https://www.youtube.com/TUVSUD

TÜV SÜD is a trusted partner of choice for safety, security and sustainability solutions. It specialises in testing, certification, auditing and advisory services. Through close to 30,000 employees across over 1,000 locations, it adds value to its customers, inspiring trust in a physical and digital world.

www.tuvsud.com

Stand: 102

THE UNIVERSITY OF NEW SOUTH WALES, SYDNEY

City: Sydney
Country: Australia

LinkedIn: https://www.linkedin.com/school/unsw/
Facebook: https://www.facebook.com/unsw

The University of New South Wales (UNSW) delivers globally recognised education, pioneering research, and industry partnerships. Its services span world leading water research, innovation in sustainable infrastructure, and international collaboration networks. UNSW equips students with employable skills, while providing governments, communities, and businesses with solutions that drive resilience, equity, and climate ready futures.

www.unsw.edu.au

Stand: 102

UNIVERSITY OF TECHNOLOGY SYDNEY (UTS)

City: Sydney
Country: Australia

LinkedIn: linkedin.com/company/166678
Facebook: https://www.facebook.com/UTSEngage

The University of Technology Sydney (UTS) combines the strengths of the Institute for Sustainable Futures, Data Science Institute, Climate Change Cluster, Centre for Technology in Water and Wastewater, and Global Big Data Technologies Centre to co-create innovative, inclusive, user-focused water solutions spanning policy, digital analytics, advanced treatment, circular economy and climate resilience.

www.uts.edu.au

Stand: 40

UNU INSTITUTE FOR INTEGRATED MANAGEMENT OF MATERIAL FLUXES AND OF RESOURCES (UNU-FLORES)

City: Dresden
Country: Germany

LinkedIn: https://www.linkedin.com/company/unuflores/
X: https://x.com/UNUFLORES
Facebook: https://www.facebook.com/unuflores

UNU-FLORES is one of 14 institutes within the United Nations University; a global think tank and postgraduate teaching organization headquartered in Tokyo. UNU advances collaborative research and education to address urgent global challenges related to human survival, development, and welfare, supporting the mission and priorities of the United Nations and its Member States.

www.unu.edu/flores

Stand: 82

WATER RESEARCH COMMISSION

City: Pretoria
Country: South Africa

LinkedIn: WRC South Africa
X: @WaterResearchSA
Facebook: Water Research Commission

The Water Research Commission (WRC) leads South Africa's water innovation and research, turning sector needs into actionable solutions. Through partnerships, applied research, and knowledge dissemination, the WRC drives sustainable water management and fosters collaboration across government, academia, industry, and communities to deliver evidence-based impact on policy, practice, and society.

www.wrc.org.za

Stand: 20

WASTE & ENVIRONMENTAL TECHNOLOGIES LTD.

City: Hong Kong
Country: Hong Kong

LinkedIn: Waste & Environmental Technologies Ltd.

WetSep is a dynamic, sustainable water treatment innovation with over 25 years of proven value. Its enduring success stems from its adaptability and evolution in maximizing water reuse and recycling. This technology is a testament to resilience and innovation.

www.wetsep.com

Stand: 96

WATER & ECOLOGY

City: Beijing
Country: China

Water & Ecology (W&E) is an open access journal launched by Research Center for Eco-Environmental Sciences(Chinese Academy of Sciences). W&E focuses on original research in the fields of water resources and science of water environments integrated with water ecology, and provides A Premier Platform for High-Quality Publications.

www.water-ecology.cn

Stand: 112

WATER & WASTEWATER ASIA

City: Singapore
Country: Singapore

LinkedIn: https://linkedin.com/company/waterwastewaterasia
Facebook: https://facebook.com/waterwastewaterasia

Water & Wastewater Asia is the region's trusted source for insights on water and wastewater trends, innovation, and sustainable treatment technologies. Read by industry leaders across Asia-Pacific, it offers credible reporting, expert perspectives, and features the official newsletter of the Singapore Water Association.

www.waterwastewaterasia.com

Stand: 56

WATERTECH

City: Shanghai
Country: China

LinkedIn: WATERTECH CHINA
Facebook: Watertech China

WATERTECH CHINA 2026, the world's largest international exhibition for process, drinking and wastewater, will be held from June 9-11 at NECC, Shanghai. With 2,385 exhibitors and 95,744 visitors in 2025, the 2026 edition will serve as a one-stop, full value chain procurement hub for the water industry, making it the go-to destination for professional buyers.

www.watertechsh.com

Stand: 100

WORLD BANK GROUP – SINGAPORE WATER CENTER

City: Singapore
Country: Singapore

The World Bank Group aims to create a world free of poverty on a livable planet. As the largest multilateral financier for water in developing countries, it advances sustainable water security through three pillars: Water for People, Water for Food, and Water for Planet. In partnership with the government of Singapore, it established the Singapore Water Center to drive innovation, knowledge exchange, and capacity development to support the water sector across Asia and beyond.

www.worldbank.org/en/topic/water/brief/SingaporeWaterCenter

Stand: 59

WaveSave

City: Eindhoven
Country: The Netherlands

LinkedIn: https://www.linkedin.com/company/wavesavecom
Facebook: https://www.facebook.com/wavesaveofficial

WaveSave delivers smart flood-resilience solutions. Our flagship SLAMDAM mobile flood barrier is rapidly deployed, reusable and modular, protecting cities, industries and critical infrastructure without permanent dikes. From emergency response to planned adaptation, we help governments and utilities worldwide keep people, assets and services dry as floods intensify.

www.wavesave.com

Stand: 23

XYLEM VUE

City: Washington, DC,
Country: United States

LinkedIn: https://www.linkedin.com/showcase/xylem-vue/

Xylem Vue transforms data into powerful insights to optimize decision-making and simplify digital integration in utilities. Xylem Vue's comprehensive portfolio of modular applications helps utilities unlock the true power of their data and address their most pressing challenges more efficiently across the entire water cycle.

www.xylem.com/en-uk/brand/vue

Stand: 46

ZHEJIANG KAICHUANG ENVIRONMENTAL TECHNOLOGY CO., LTD.

City: Hangzhou
Country: China

X: https://x.com/Creflux_Water

Zhejiang Kaichuang Environmental Technology Co., Ltd., with its brand Creflux Membrane, specializes in ISO9001-certified UF and MBR systems, and power-free ultrafiltration equipment, providing efficient and sustainable water purification solutions. Proven by the IWA award-winning Nantong ZLD Project, Kaichuang delivers innovative technologies for municipal, industrial and decentralized water applications worldwide.

www.zjkchb.com

Stand: 96

ZHONGYUAN ENVIRONMENTAL PROTECTION CO., LTD.

City: Henan Province,Zhengzhou
Country: China

Zhongyuan Environmental Protection Co., Ltd. is a national high-tech enterprise, a state-controlled listed company in China. Our business covers sewage treatment, sludge treatment, reclaimed water utilization, water supply and heating, environmental protection equipment manufacturing, photovoltaic power generation, and ecological remediation. Our operations span over 40 cities and regions across China, achieving a development pattern of deepening roots in the Central Plains region, expanding nationwide, and moving forward to the global stage.

www.zhongyuanep.com

Stand: 55

ZHUZHOU SOUTHERN VALVE CO.,LTD

City: Zhuzhou
Country: China

LinkedIn: Zhuzhou Southern Valve Co.,Ltd | Facebook: https://www.facebook.com/zhuzhousouthernvalve/

Founded in 1996, Southern Valve specializes in valve R&D and manufacturing, offering advanced smart water system solutions. Our core products and services integrate intelligent monitoring and modelling technologies for urban water supply and flood control, aiming to ensure the security and resilience of urban water supply and drainage systems.

www.nfvalve.com

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www.iwa-network.org
www.iwaconnectplus.org
water@iwahq.org