# Under the High Patronage of His Majesty King Mohammed VI







#### XIX WORLD WATER CONGRESS

International Water Resources Association (IWRA)

Marrakech, Morocco 1-5 December 2025



# Programme Book



# Welcome Message Minister of Equipment and Water of the Kingdom of Morocco, Mr. Nizar Baraka



It is a great honor for me to welcome IWRA's XIX World Water Congress to Marrakech, a historical crossroads of cultures and exchanges. On behalf of the Ministry of Equipment and Water of the Kingdom of Morocco, co-host of this prestigious event, I extend my warmest greetings to the experts, researchers, policymakers, and professionals from around the world who will gather to share their experiences and advancements on the pressing challenges related to water–particularly under uncertainties brought about by climate change and beyond.

Water is intrinsically connected to many essential systems, including energy, land, food, health, and ecosystems. Solving water-related challenges requires a comprehensive approach that considers these interconnections. As climate change accelerates and water resources come under increasing pressure, the 19<sup>th</sup> edition of the World Water Congress, under the theme "Water in a Changing World: Innovation and Adaptation" provides an excellent platform for collaboration, the establishment of strategic partnerships, and the advancement of sustainable development–aligned with key international objectives related to water and climate. Participants will have the opportunity to engage in dynamic discussions, gain valuable insights from leading experts, and actively contribute to global initiatives aimed at achieving the Sustainable Development Goals (SDGs), with a particular emphasis on SDG 6: Clean Water and Sanitation.

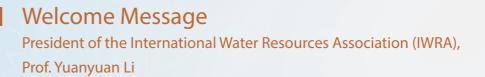
Morocco boasts a rich hydraulic heritage and a long-standing tradition of water resource management, shaped by centuries of ingenuity and adaptation to climatic challenges. Since ancient times, civilizations that thrived on Moroccan soil have developed sophisticated infrastructures to efficiently capture, store, and distribute water. Among these ancestral structures, the khettaras, described as a Persian invention dating back more than 2,500 years to the Almoravid era, stand as a testament to the remarkable expertise of local communities in harnessing groundwater, particularly in arid regions. The khettara system played a crucial role in sustaining agriculture and supplying oases, ensuring the resilience of populations in the face of climatic variability.

Likewise, the historic Agdal and Menara gardens in Marrakech exemplify the ingenuity of ancient Moroccans in hydraulic engineering and water management. Building on this millennia-old tradition, the Kingdom, under the guidance of His Majesty King Mohammed VI, has modernized its water policy while drawing inspiration from its heritage, developing a network of large dams, water transfer infrastructures, and efficient irrigation systems; mobilizing non-conventional water resources such as desalination and wastewater reuse; and improving water demand management, thereby strengthening its expertise in integrated water resources management, especially at the basin level.

We cordially invite you to join us in the Red City of Marrakech from December 1<sup>st</sup> to 5<sup>th</sup>, 2025, to engage in insightful discussions, share best practices, and work together towards a future where water remains a driver of prosperity for our planet.

I look forward to welcoming you to Marrakech!







Dear Colleagues,

On behalf of the International Water Resources Association (IWRA), I am delighted to invite you to the XIX World Water Congress, taking place in Marrakech, Morocco, December 1-5, 2025.

IWRA is a professional international network of multi-disciplinary and multi-sectorial experts committed to advancing research, building capacity, and promoting science-based policy solutions and practices for the sustainable management of water resources. For over five decades, IWRA has been bridging the gap between science, policy, practice, driving innovation, and shaping water and sustainable development agendas, while advocating for meaningful progress. While IWRA has accomplished remarkable achievements over the past five decades, we acknowledge that considerable work remains to address future water resource challenges. We will continue to build on and expand our activities to adhere to the needs and possibilities of the future, including thematic congresses, master classes, webinars, policy briefs, geographic chapters, and task forces, as well as collaboration with key partners.

Most importantly, we will continue to promote the World Water Congress as a key activity.

The World Water Congress, IWRA's flagship event since 1973, is one of the most prestigious platforms for sharing groundbreaking research, building partnerships, and influencing water governance from local to global scales. In its 19<sup>th</sup> edition, the Congress will focus on the theme: "Water in a Changing World: Innovation and Adaptation".

This theme reflects the growing need for innovative solutions and adaptive strategies to manage water resources in the face of climate change, environmental degradation, and increasing societal and economic as well as ecological demands. Together with the Moroccan government, we are proud to convene policymakers, researchers, practitioners, the private sector, and industry leaders from around the world. This Congress will provide an opportunity to exchange knowledge, showcase innovations, and co-create actionable solutions for the complex challenges of global water governance, security, and sustainability.

Building on the success of the XVIII World Water Congress in Beijing and aligning with major events like the UN Water Conference and the 10<sup>th</sup> World Water Forum, the XIX World Water Congress aims to foster collaboration, dialogue, and innovative solutions in addressing todays and tomorrow's pressing water issues.

As President of IWRA, I extend my heartfelt gratitude for your support and participation. I look forward to welcoming you in Marrakech in 2025 to engage in this crucial conversation and collectively shape the future of water resource management!









#### Introduction

The XIX IWRA World Water Congress will take place in Marrakech, Morocco, December 1-5, 2025. Under the theme of Water in a Changing World: Innovation and Adaptation, this Congress will explore innovative solutions and adaptive strategies and approaches for water resources in an increasingly changing world. The Congress will provide a platform for experts, practitioners, researchers, policymakers, civil society, and the private sector to exchange knowledge, showcase groundbreaking research, build partnerships, and co-develop actionable solutions that aim to address the complex challenges of global water governance, security, and sustainability.

The global water system is complex and both impacts and is impacted by several interacting systems, including land, energy, food, health, and ecosystems among many others. The water community, including the International Water Resources Association (IWRA), has been a leader in supporting a "system approach" for addressing how these interrelated and interdependent schemes interact with resources management. Climate change has shown that many water challenges are societal and that innovative and adaptive solutions cut across many systems and actors, both inside and outside the water community.

Both IWRA and the Ministry of Equipment and Water of Morocco, are committed to exploring and expanding knowledge about system level approaches through education and mobilization of knowledge products that are targeted to the science community, public sector, private sector, and civil society.

To build on and further enhance the system approach, as well as existing efforts focused on global water access, sustainability, and security, the Congress will connect with broader international water and Sustainable Development Goals initiatives and objectives, as well as upcoming major global events, such as:

- United Nations 2026 Water Conference, addressing global water issues with a focus on achieving SDG 6: Clean Water and Sanitation;
- IWRA's 2nd Islands Water Congress in 2026, addressing water resource challenges in island contexts;
- World Water Forum in 2027, providing a platform for political and technical discussions on water resources and climate action:
- Upcoming COPs for climate change, biodiversity, and other relevant global efforts in terms of adaptation and sustainability in the water sector.

These connections ensure that the Congress acts as a key contributor to the ongoing and critical global dialogue on water, particularly in relation to climate change, water access, water security, and sustainable development.

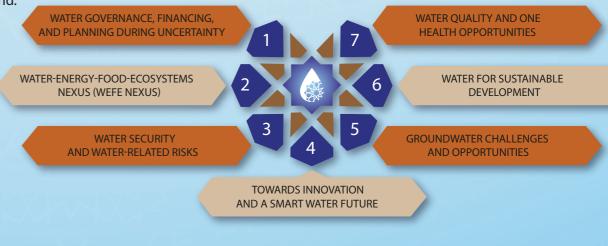
In addition, the Congress builds on previous critical global water events, including the UN 1977 Water Conference, UN 2023 Water Conference, ten World Water Forums, 29 UN Climate Change Conferences of the Parties, 16 Biological Diversity Conferences of the Parties, and 18 IWRA World Water Congresses. Most notably, the Congress expands on the work done at the VII World Water Congress, which was held in Rabat, Morocco, in 1991 under the theme of "Water for Sustainable Development in the 21st Century." That event marked a significant early discussion about growing water demands and the need to manage water resources sustainably, and serves as a critical foundation upon which the forthcoming Congress will be developed.



Theme: Water in a Changing World: Innovation and Adaptation

The overarching theme of the XIX World Water Congress focuses on addressing the dynamic interconnections linking water, natural ecosystems, energy, agriculture, and other human activities during a time of global challenges such as climate change, humanitarian and environmental crises, and political upheavals.

By emphasising the need for innovation in managing water resources, the ability to adapt to shifting environmental, societal and economic demands, and the importance of ensuring resilience in water usage, governance, and infrastructure, this Congress will explore and highlight how these key elements can be integrated to create sustainable, long-term solutions for water management in an increasingly changing world.





# Overview of the Congress Programme

XIX	WORLD WATER CONGRESS
	1-5 DECEMBER 2025
	Programme

	Time	Duration	1st Day (01 Dec)	2nd Day (02 Dec)	3rd Day (03 Dec)	4th Day (04 Dec)	5th Day (05 Dec)	6th Day (6 Dec)
IN DAY	08:30 - 10:00 am	90 mins	9:00-10:00 Opening Ceremony (60 mins)	8:30 - 9:30 IWRA Awards Ceremony 9:30 - 10:00 Bridging Science and Policy	Regular Session 3	Regular Session 5	Special Session 8	
	10:00 -10:15 am	15 mins	Break	Break	Break	Break	Break	
	10:15 - 11:45 am	90 mins	HLP 1 (ATLAS 1) Interconnectivity and Systems Thinking in Water Management: Bridging Sectors for Resilience	HLP 2 (ATLAS 1) The Future of Water: Gaps, Opportunities, and Global Commitments Beyond 2030	HLP 3 (ATLAS 1) Global Water Governance in a Changing World: Strengthening Institutions & Multilateral Cooperation	HLP 4 (ATLAS 1)  Accelerating Innovation in theWater Sector from NBS to AI	Special Session 9	
	11:45 - 12:00 am	15mins	Exhibition Opening Break	Break	Break	Break	Break	
N. W.	12:00 - 1:00 pm	60 mins	Special Session 1	Special Session 3	Special Session 5	Regular Session 6	Closing Ceremony (90mins)	
	1:00 - 2:30 pm	90mins	Poster Sessions 1 / lunch	Poster Sessions 2 / lunch	Poster Sessions 3 / lunch	Poster Sessions 4 / lunch	(1:30 pm) Lunch	Tech & Cultural visits
	2:00 - 4:30 pm	150 mins	Ministerial Roundtable by invitation only			8 776		
	2:30 - 4:00 pm	90 mins	Regular Session 1	Regular Session 2	Regular Session 4			
	4:00 - 4:15 pm	15 mins	Break	Break	Break	Break		
	4:15 - 5:45 pm	90 mins	Special Session 2	Special Session 4	Special Session 6	Special Session 7	Visit to the Mohammed VI Museum	
	6:00- 7:00 pm	90 mins		XILX	IWRA General Assembly (Palmeraie)		of Water Civilization	
	6:00 - 9:00 pm	120 mins	(7:00-9:00 pm) Welcome Reception	Early Career Lightning Talk for Posters (Diamant)	<del></del>	Gala Dinner (8:00 pm)		



# Programme Overview: Day 1 - 1 December

9: 00 -10: 00 am						ng Ceremony				
10: 00 -10:15 am				10 1414		ffee break		(1)		
10:15 -11: 45 am			High L	evel Panel 1 Intercon	nectivity and Systems Thinkir	•	Bridging Sectors for F	Resilience (Atlas 1)		
11: 45 -12: 00 am						Opening / Break				
12: 00 - 01: 00 am	Ol:		A.I			tial Session 1		D. I.		C II
Room	Oliveraie		Atlas 1		Roseraie	Orangeraie		Palmeraie		Grenadier
	Just Transitions for V Security: Climate-se futures built on water- foundations	cure MEN	erent Water-Foo IA's Rural Resilio from Egypt and	od Policies for Re ence: Insights	Governing Groundwater sources Under Uncertainty: Comparative National oundwater Governance and Regulations	Nature-based Solution security – Overcom implementation ch	ing the Res	Future of Water-E od-Health (WEFH) I earch: Emerging T enges, and Oppor	Nexus for rends, soc	Climate Forums: Lessons the Water Sector from a io-political approach to climate change.
01: 00 - 02:30 pm						Poster Session 1 / Lunch				
02:00 – 04:30 pm					Ministerial Round	Itable (by invitation only)				
02:30 - 04: 00	Special Sess	Special Session Regular Session 1								
Room	Grenadi	er		Oliveraie	Ora	ngeraie	Rose	raie		Palmeraie
	Morocco at a critica opportunities for imp governance. Part 1: t institutional framew gender mainstr	proved water the legal and vork; part 2:	(WEFE Nexu	gy-Food-Ecosystems s): 2.1 Expanding Inte ources Management (I	grated Groundwate (WRM) Opportunities	r Challenges and : 5.1 Groundwater essment	Water for Sustainabl Rights to Water	•	Opportu Prevei	uality and One Health nities: 7.1 Monitoring, nting, Treating, and ting Established Pollutants
04: 00 - 04:15 pm					Co	ffee break				
04:15 - 05: 45					Spec	cial Session 2				
Room	Atlas 3	Oliver	aie	Opale	Orangeraie	Atlas 1	Grenadi	er	Roseraie	Palmeraie
	The future of transboundary aquifer management under legal uncertainty. What next?	Civil society a at the Heart Governance: Innovation Mobiliza	of Water Advocacy, & Citizen	Making Africa more resilient to hydro- climatic extremes	Leveraging innovative finance to strengthen South-South and Triangular water cooperation.	Desalination: Opportunities and Challenges	Surface Wo Management Regions: Integ Restoration Innovation (IW	in Arid Glob gration, Issu , and Wate	al Water Security es Series No. 6 – r and Biodiversity	Bridging the UN Water Conferences and the 11th World Water Forum
05:45 - 07:30 pm 07: 00 - 09: 00 pm					Welcome Rece	ption (in the pool area)				
07.00 03.00 pili						ption (in the poorarea)				

Translation available in French, English and Arabic in the following rooms: Atlas 1, Palmeraie, Orangeraie and Diamant







# Programme Overview: Day 2 - 2 December

MAN			<u> </u>								
8: 30 - 9:30 am						eremony (Atlas 1)					
9:30 - 10:00 am					Bridging Science	and Policy (Atlas 1	1)				
10: 00 -10:15 am						break					
10:15 -11: 45 am			High Level Par	nel 2 The Future of \	Nater: Gaps, Opportu	nities, and Globa	l Commitments Bey	ond 2030 (Atlas 1)			
11: 45 -12: 00 am					Br	eak					
12: 00 - 01: 00pm					Special	Session 3					
Room	Atlas 3	Grenadier	Orangeraie	Oliveraie	Opale	<b>!</b>	Atlas 1	Palmeraie	Ro	seraie	Diamant
	Resilient Communities Through Water-Energy- Food-Health Nexus	Enhancing Water Security Through Non-Conventional Resources: Economic, Technical, and Social Dimensions	Adapting to Water Challenges in Urban Planning, Development and Housing	Enhancing wat reuse in the ME region using A Earth Observati and advanced d analytics	NA Networks T N, Improved S on, Water-Energ	oward Catal oil and II y-Food S n So	niversities as lysts for Water nnovation: ustainable lutions for a silient Future	Advanced Data Science for Water Resource Analysis and Managemen	WEF Asse Innova Manag Transf	E Nexus essment:	The post-2025 Africa Water Vision and Policy: a strategic framework towards inclusive and climate resilient water security on the continent
01: 00 - 02:30 pm	Knowledge Wall: Poster Session 2 / Lunch										
02:30 - 04: 00 pm						Session 2					
Room	Oliveraie	Grenadier	Palmerai	e C	)rangeraie	Diamant	Ro	oseraie	Atlas 1	1	Atlas 3
	Water Governance, Financing, and Planning During Uncertainty	Water-Energy-Food Ecosystems Nexus (WEFE Nexus)	Water Securit Water-related ri Water Disas Manageme	isks: 3.1 and a	rds Innovation a Smart Water Future	Groundwate Challenges an Opportunitie	nd Water to		Water Quality Health Oppor 7.2 Detectin Mitigatii Contamina Emerging Co	tunities: Fin ng and Du ng Wa nts of oncern	Water Governance, ancing, and Planning Iring Uncertainty: 1.4 Iter Governance at All Levels
04: 00 - 04:15 pm					Coffee	e break			(3233)		
04:15 - 05: 45 pm						Session 4					
Room	Roseraie	Atlas 1	Grenadier	Opale	Oliveraie	Orangeraie	Atlas 3	Palme	eraie	Diamant	Coupole Menara
	Water under fire – the role of partnerships in preventive action	Value of Water at National Level: Saudi Experience	supporting productive water	Promoting Gender mainstreaming in he Water Sector for Inclusive and Sustainable Water Management	Disruptive Innovation of Water Management with the Digital Technologies	Smart Water Management Innovations, challenges, and strategic path t digital transformation	Innovating the Transbound to Water Cooper through SDG n Monitorin	a Changing Integra g Resilient, ation Innovative 6.5.2 Suctain	g Climate: ating Nat Flexible Wa g and P Tools for nable	tural – Economy- iter (NEW) Nexus: Philosophy and Practice	Groundwater Management in Arid Regions: From Overuse to Resilience
06: 00 - 09: 00pm					Early-Career Lightr	ing Talk for Poste	ers				

Translation available in French, English and Arabic in the following rooms: Atlas 1, Palmeraie, Orangeraie and Diamant







# Programme Overview: Day 3 - 3 December

8: 30 -10: 00 am					Regular	Session 3				Special Session
Room	Oliveraie	Grenac	dier	Atlas 1		neraie	Roseraie	Dia	mant	Coupole Menara
	Water Governance, Financ and Planning During Uncertainty: 1.3 Resiliend and Adaptation Strategic and Plans	Ecosystems Ne	exus (WEFE iculture and	ater Security and Water related risks: 3.1 Water Disaster Management	r- Opportu Participatory	Challenges and unities: 5.3 Groundwater gement	Water for Sustaina Development: 6.1 Rig Water and Sanitat	able Opportuniti ghts to Related Wat ion Climate Cha	and One Health es: 7.3 Health- er Issues & 7.4 nge and Water Resilience	Empowering Women in Research: Advancing Citizen Science and Vocational Training for social Inclusive, Evidence-Based Data and research
10: 00 -10:15 am					Coffe	e break				
10:15 -11: 45 am	High	Level Panel 3 Global V	Water Governance i	n a Changing World:	Strengthening Inst	itutions & Multila	ateral Cooperation / A	nnouncement of Lighti	ning Talk Winners	(Atlas 1)
11: 45 -12:00 am						reak				
12: 00 - 01: 00 pm						Session 5				
Room	Coupole Menara	Atlas 1	Atlas 3	Oliveraie	e Orar	ngeraie	Palmeraie	Roseraie Collaborative	Opale	Diamant
	A manifesto for the	Large water projects for adaptation to climate & water risks in MENA: Learnings from Morocco, Egypt and GCC countries experiences	Quantifying Ecolog Drought – From Hydrological Monitoring to th Assessment of Impacts on Aquat Ecosystems	n productivity th sustainable irri e practices: Anal the impact of	gation Showca gation Nexus lyzing Appro f the Studies ation Mana	Systems ach Case	Scaling Up Nature- Sustainable Water Management	Decision-Making in Watershed Management Using SWAT: Leveraging the EVAL Framework for Sustainable	Halfway to 2075: years of Wate International	
01: 00 - 02:30 pm				K	Knowledge Wall: Po	ster Session 3 / L	_unch	Outcomes.		
02:30 - 04: 00 pm					Regular	Session 4				
Room		meraie		Orangeraie			Atlas 1			iamant
	Water-Energy-Food-E Nexus): 2.4 Agri	cosystems Nexus (WEI iculture and Water		Security and Water-re ation to Droughts and		Water for Su	stainable Developmer Economics	nt: 6.3 Water & Wat	•	e Health Opportunities: 7.5  npacts on Biodiversity
04: 00 - 04:15 pm						e break				
04:15 - 05: 45 pm	D. I.	A.I. 2	01:	D: 1	<u> </u>	Session 6	6	0 1		C
Room	in Arid Climates: Global Challenges, Strategic Tools, and	strategies for Ma integrated Ma roundwater and surface water anagement for a A	anagement and  Monitoring  Technology	FORS: I DOSI	Wastewater and Environmental Surveillance (WES) under One Health: Innovation for Global Health Security	Scaling Wate Resilience in t MENA Regio Rethinking Governance a Financing Mechanism	er the n: Voices Shaping Water Future and World Water En	The impOrtance North to South Our water research ar E: Innovation	Technologio nd Water Managemo Adoption, Et	sion es in A Transboundary Multi-Stakeholder Platform & Dynamic Basin-wide
06:00-07:30 pm					IWRA General A	Assembly (Palme	eraie)			
N/M ) IV		$ <$ $N/N_{\rm A}$	7							









# Programme Overview: Day 4 - 4 December

8: 30 -10: 00 am				Regular Session 5				
Room	Oliveraie	Grenadier	Atlas 1	Palmeraie	Roseraie	Orangera	aie	Diamant
	Water Governance, Financing, and Planning During Uncertainty: 1.4 Water Governance at All Levels	Nexus): 2.4 Agriculture and	Water Security and Water- related risks: 3.2 Adaptation to Droughts and Climate Risks	Towards Innovation and a Smart Water Future: 4.2 Desalination, Wastewater Reuse and Recycling Technologies and Methodologies	Groundwater Challer	5.4 Water for Sust /ater Development: 6.	3 Water & Sma	rds Innovation and a rt Water Future: 4.5 ative Water Concepts
10: 00 -10:15 am				Coffee break				
10:15 -11: 45 am			High Level Panel 4 Accel	erating Innovation in the Wat	er Sector from NBS to AI (A	tlas 1)		
11: 45 -12: 00 am				Break				
12: 00 - 01: 00 pm				Regular Session 6				
Room	Orang		Palmeraie		Diamant		Atlas 1	
	Water Governance, Financing, and Planning During Uncertainty: 1.4 Water Governance at All Levels  Water Security and Water-related risks: 3.4  Opportunities and Feasibility of Unconventional Water Resources (& 3.5 Circular Economy Approaches)  Water Security and Water-related risks: 3.3  Towards Innovation and a Smart Water Fundament of Concepts  Desalination Development in Arid Regions  Innovative Water Concepts							
01: 00 - 02:30 pm 02:30 – 04:00 pm			Kr	owledge Wall: Poster Session -	4 / Lunch			
04: 00 - 04:15 pm				Coffee break				
04:15 - 05: 45 pm				Special Session 7				
Room	Grenadier	Atlas 3 Orangeraie	Palmeraie Oli	veraie Atlas 1	Coupole Menara	Roseraie	Diamant	Opale
	Circular Food Prac Systems and Wa Agroecology – E Global South and Eco North (WE perspectives	fining Best ctices in the Capacity ater-Food- building: Energy- Vocational cosystems training to EFE) Nexus: improve water management diterranean	Participatory Solution	Collaborative Learning School Hackathon Moro Practical field-ba science to polic experiences with career research from Africa and I	Water Frontiers: Exploring Sed Opportunities and Risks of Alternative Pearly Sources for Agriculture and	Revolutionizing Water Management: Empowering Rural Communities with Solar- Powered Water Systems and Participatory Governance/ Solarization of Agriculture: A Global Synthesis	Total Solution Packages to Achieve SDGs Covering All Urban Water Management Sectors toward Smart Water City	Water resources and climate change: an environmental and humanitarian crisis
08: 00 pm				Gala Dinner				







# Programme Overview : Day 5 - 5 December

8: 30 -10: 00 am					Special	Session 8				
Room	Oliveraie	Atlas 1	Grenadier	Atlas 3	Coupole Menara	Palmeraie	Orangeraie	Roseraie	Opale	Diamant
	The human right to water and vital human needs in water: implementation at the domestic and transboundary levels	Advancing Water Across Sectors as a Priority for the Arab Region in Preparation for the 2026 United Nations Water Conference	SDG6 and Water – Case Studies at National to Local Scales	Enhancing Water and Biodiversity Protection through Environmental Justice: Lessons from Nature- Based Solutions for Water Security in Europe and South America	Looking Forward: 2050 Youth Water Visions	Contaminants on Emerging Concern under EU Urban WW Directive: Monitoring and Quaternary Treatment Methods	From ground to orbit: combining in-situ and satellite monitoring of water to improve basin management	Invisible Peril: Unraveling the Impact of Microplastic Contamination in Drinking Water on Human Health and Water Quality in Indonesia through Youth Programme	World Café: Amplifying Youth Voices in Water Governance	Harnessing Non- Conventional Water Resources for Sustainable Agriculture and Food Security
10: 00 -10:15 am					Coffe	e break				
10:15 -11: 45 am	Special Session 9									
Room	Oran	geraie	Dia	mant	Oliv	eraie	Grenadier		Palmeraie	
	Bridging Innovation and Policy:  Collaborative Solutions for Climate  Resilience  A Water-Soil-Agriculture A SDGs: Seven Strategic Mes					lable Nature-Based ogy and Strategies anagement	An Islands Freshwater Perspective to Traditional Knowledge and Nature Based Solutions: Possible New Lens to Navigate an Increasingly Polarised World?		Drought Risk Management in Morocco: Optimal Water Allocation through Reservoir Inflow Prediction Using Al	
11: 45 -12: 00 am					Br	eak				
12:00-01:30 pm					Closing	Ceremony				
01:30-3:00 pm	•									
3:00-6:00 pm	Museum Visit to the Mohammed VI Museum for the Civilization of Water									

Translation available in French, English and Arabic in the following rooms: Atlas 1, Palmeraie, Orangeraie and Diamant







# Special Sessions : Day 1 - 1 December

#### 12:00 - 1:00 pm

Special Sessions 1								
Title	Institution	Name	Room					
Just Transitions for Water Security: Climate-secure futures built on water-secure foundations	Alliance for Global Water Adaptation (AGWA)	Danielle Gaillard-Picher	Oliveraie					
Coherent Water-Food Policies for MENA's Rural Resilience: Insights from Egypt and Morocco	The International Water Management Institute (IWMI)	Youssef Brouziyne	Atlas 1					
Governing Groundwater Resources Under Uncertainty: Comparative National Groundwater Governance and Regulations	International Association for Water Law (AIDA); International Water Resources Association (IWRA); IUCN-World Commission on Environmental Law, Water and Wetlands Law Specialist Group; UNESCO-IHP; IHE-Delft Institute for Water Education; Texas A&M University School of Law; The Groundwater Project	Gabriel Eckstein	Roseraie					
Nature-based Solutions for water security - Overcoming the implementation challenge	French Biodiversity Agency (OFB)	Andrea Ferret-Lambert	Orangeraie					
The Future of Water-Energy-Food-Health (WEFH) Nexus Research: Emerging Trends, Challenges, and Opportunities	Texas A&M University	Bassel Daher	Palmeraie					
Local Climate Forums: Lessons for the Water Sector from a socio-political approach to climate change.	Eurecat, The International Water Resources Association (Iwra) And United Nations Environment Programme (Unep) (The World Water Quality Alliance)	Richard Elelman	Grenadier					

## 4:15 - 5:45 pm

Special Sessions 2								
Title	Institution	Name	Room					
The future of transboundary aquifer management under legal uncertainty. What next?	International Association for Water Law (AIDA), International Water Resources Association (IWRA), IUCN-World Commission on Environmental Law, Water and Wetlands Law Specialist Group; UNESCO-IHP; International Groundwater Research Assessment Centre; Permanent Forum for Binational Waters; The Groundwater Project; IHE-Delft Institute for Water Education; Campus Auga, University of Vigo; Texas A&M University School of Law; Texas Water Resources Institute	Gabriel Eckstein	Atlas 3					
Civil society and Youth at the Heart of Water Governance: Advocacy, Innovation & Citizen Mobilization	International Secretariat for Water, Butterfly Effet, World Youth Parliament for Water	Coline Arnoux	Oliveraie					
Making Africa more resilient to hydro-climatic extremes	International Centre for Water Hazard and Risk Managem UNESCO, Public Works Research Institute (PWRI)	Toshio Koike	Opale					
lem:lem:lem:lem:lem:lem:lem:lem:lem:lem:	National Office of Electricity and Potable Water in Morocco (ONEE) & Islamic Development Bank (IsDB).	Imane Kamal	Orangeraie					
Desalination: Opportunities and Challenges	Ministry of Equipment and Water	Jihane Elwardi	Atlas 1					
Surface Water Management in Arid Regions: Integration, Restoration, and Innovation (IWRA, KSA)	International Water Resources Association (IWRA), Kingdom of Saudi Arabia		Grenadier					
Global Water Security Issues Series No. 6 – Water and Biodiversity	i-WSSM, UNESCO, IWRA.	Guillermo Donoso	Roseraie					
Bridging the UN Water Conferences and the 11th World Water Forum	World Water Council, Kingdom of Saudi Arabia.	Yoonjin Kim	Palmeraie					







# Special Sessions : Day 2 – 2 December

#### 12:00 - 1:00 pm

	Special Sessions 3	Special Sessions 3								
Title	Institution	Name	Room							
Resilient Communities Through Water-Energy-Food-Health Nexus	Texas A&M University, University of California San Diego, The University of Jordan, Hashemite University, Royal Scientific Society,	Rashed Albatayneh	Atlas 3							
Enhancing Water Security Through Non-Conventional Resources: Economic, Technical, and Social Dimensions	BIOAZUL S.L. and University of Malaga	Antonia María Lorenzo López	Grenadier							
Adapting to Water Challenges in Urban Planning, Development and Housing	Ministry of National Territory Planning, Urban Planning, Housing and City Policy	Jamila El Harizi	Orangeraie							
Enhancing water reuse in the MENA region using AI, Earth Observation, and advanced data analytics	International Water Management Institute	Naga Velpuri	Oliveraie							
Leveraging Networks Toward Improved Soil and Water-Energy-Food System Sustainability	Texas A&M University, USA; University of Wisconsin – Madison, USA; University of Nebraska- Lincoln, USA; Soil for Society Network; PennState University, USA; Michigan State University, USA; Stockholm Environmental Institute (SEI); SustainFood Newtork	Bassel Daher	Opale							
Universities as Catalysts for Water Innovation: Sustainable Solutions for a Resilient Future	University Cadi Ayyad Morocco	Naaila ouazzani	Atlas 1							
Advanced Data Science for Water Resource Analysis and Management	University of Cincinnati, University of California San Diego	Lilit Yeghiazarian	Palmeraie							
Harnessing AI for WEFE Nexus Assessment: Innovating Water Management for Transformative Policy and Practice	UNESCO Chair on Sustainability of the Polytechnical University of Catalonia (UPC)	Jose Luis Martin Bordes	Roseraie							
The post-2025 Africa Water Vision and Policy: a strategic framework towards inclusive and climate resilient water security on the continent	African Ministers' Council on Water (AMCOW)		Diamant							

#### 4:15 - 5:45 pm

Special Sessions 4								
Title	Institution	Name	Room					
Water under fire - the role of partnerships in preventive action	Ministry of Foreign and European Affairs of Slovenia (lead partner), International Water Resources Association (IWRA), Environmental Law Institute, Geneva Water Hub	Tanja Miskova	Roseraie					
Boosting performance of irrigation and supporting productive water use through co- designed digital innovations using WaPOR data layers	International Water Management Institute (IWMI), Food and Agriculture Organization of the United Nations (FAO)	Sander Zwart	Grenadier					
Innovating for Scalable Nature-Based Solutions: Technology and Strategies for Water Management	The Nature Conservancy	Andrea Erickson-Quiroz	Opale					
Disruptive Innovation of Water Management with the Digital Technologies	Asia Water Council	Junhan Yun	Oliveraie					
Smart Water Management: Innovations, challenges, and the strategic path to digital transformation	MAE-IA	Jihane Ouhejjou	Orangeraie					
Towards 2030: Adapting and Innovating Transboundary Water Cooperation through SDG 6.5.2 Monitoring	UNESCO- International Hydrological Programme(IHP)	Tatiana Dmitrieva	Atlas 3					
Governing Water in a Changing Climate: Integrating Resilient, Flexible Planning and Innovative Tools for Sustainable Management	Ministry of Equipment and Water	Hajar HABIB	Palmeraie					
Natural – Economy- Water (NEW) Nexus: Philosophy and Practice	General Institute of Water Resources and Hydropower Planning and Design (GIWP), Ministry of Water Resources, China ; World Bank	Mingyan Tian	Diamant					
Promoting Gender mainstreaming in the Water Sector for Inclusive and Sustainable Water Management	UNESCO i-WSSM	(i-WSSM) Sooyoung Park (sooypark@unesco- iwssm.org)/(i-WSSM) Youngsam Kim (03@unesco- iwssm.org)	Opale					
Groundwater Management in Arid Regions: From Overuse to Resilience	International Water Resources Association (IWRA), Kingdom of Saudi Arabia		Coupole Menara					
Value of Water at National Level: Saudi Experience	KSA		Atlas 1					







# Special Sessions : Day 3 – 3 December

#### 12:00 - 1:00 pm

_Title	Institution Special Sessions 5	Name	Room
A Manifesto For The Freshwater Rule Of Law	International Association for Water Law (AIDA), the IUCN World Commission on Environmental Law and the Environmental Law Institute.	Paul Kibel	Coupole Menara
Large water projects for adaptation to climate & water risks in MENA: Learnings from Morocco, Egypt and GCC countries experiences	The International Water Management Institute (IWMI)	Youssef Brouziyne	Atlas 1
Quantifying Ecological Drought – From Hydrological Monitoring to the Assessment of Impacts on Aquatic Ecosystems	French Biodiversity Agency (OFB)	Andrea Ferret-Lambert	Atlas 3
Enhancing farm productivity through sustainable irrigation practices: Analyzing the impact of the National irrigation scheme in India	Vellore Institute of Technology, Vellore, India and Anna University, Chennai, India	Annie Jenifer M	Oliveraie
Showcasing WEFE Nexus Systems Approach Case Studies in Water Management	Texas A&M University, EMBRAPA - Brazilian Agricultural Research Corporation, The Nature Conservancy , World Water Council	Aya Shigidi	Orangeraie
Scaling Up Nature-based Approaches for Sustainable Water Management	Marmara University	Nur H. Orak	Palmeraie
Collaborative Decision-Making in Watershed Management Using SWAT: Leveraging the EVAL Framework for Sustainable Outcomes.	Texas A&M University and Innovative Business Solutions	Dr. Chehrazade Aboukinane	Roseraie
Halfway to 2075: Fifty years of Water International	International Water Resources Association	James Nickum	Opale
Snow Research and Emerging Technologies for Resilient Water Management in Morocco	Cadi Ayyad University , International Water Research Institute	Abdelghani BOUDHAR	Diamant

#### 4:15 - 5:45 pm

Constitution of Constitution o			
Special Sessions 6			
Title	Institution	Name	Room
Managing Fossil and Non-Renewable Aquifers in Arid Climates: Global Challenges, Strategic Tools, and Participatory Innovations	ABHSHOD and UM6P	Mokhtar EL KANTI	Palmeraie
Innovative strategies for integrated groundwater and surface water management for a changing climate.	Mohammed VI Polytechnic University (UM6P) and National Centre for Scientific Research (CNRS)	RAFIK Abdellatif	Atlas 3
Sustainable Groundwater Management and Monitoring Technology Applications: A Global Perspective	General Institute of Water Resources and Hydropower Planning and Design, Ministry of Water Resources of the People's Republic of China (GIWP) & Danish Environmental Protection Agency (DEPA)	Ruoqi Ma	Oliveraie
Water Diplomacy in International Water Fora: Legal Frameworks for Cooperation and Policy Influence	IWRA, MEWA and UNDP Saudi Arabia	Ignacio Deregibus	Diamant
Wastewater and Environmental Surveillance (WES) under One Health: Innovation for Global Health Security	Turkish Water Institute (SUEN)	Bilge Kocamemi	Atlas 1
Scaling Water Resilience in the MENA Region: Rethinking Governance and Financing Mechanisms	Policy Center for the New South	Meryem Jirari	Orangeraie
Voices Shaping Our Water Future: World Water Envoys	International Water Resources Association (IWRA)	Lili Yu	Coupole Menara
The importance of North to South water research and Innovation cooperation between Europe and Africa	Water4All, PRIMA	Bjørn Kaare Jensen	Opale
Al and Precision Technologies in Water Management: Adoption, Ethics, and Policy Implications	Texas A&M University and AgriLife Research and Extension	Yuri Calil	Roseraie
Novel Approaches to Nexus Management in a shared river basin: A Transboundary Multi- Stakeholder Platform & Dynamic Basin-wide modelling in in the Incomati-Maputo Basin of southern Africa	International Water Management Institute (IWMI), International Food Policy Research Institute (IFPRI), Incomati and Maputo Watercourse Commission (INMACOM)	Ryan Nehring	Grenadier







# Special Sessions : Day 4 – 4 December

#### 4:15 - 5:45 pm

Special Sessions 7			
Title	Institution	Name	Room
Circular Food Systems and Agroecology –Global South and North perspectives	Australian National University, Texas A&M University, University of Nebraska The Cyprus Institute (CYI) - Mediterranean Information Office for Environment, Culture and sustaionable development (MIO-ECSDE) - Beytech Foundation - European Sustainable Energy	Henning Bjornlund	Grenadier
Defining Best Practices in the Water-Food-Energy-Ecosystems (WEFE) Nexus: Lessons from the Mediterranean	Innovation Alliance (ESEIA) - The Energy and Water Agency (EWA) - Jožef Stefan Institute (JSI) - MED CITIES (MC) - Arab Water Council (AWC) - Center of Arab Women for Training and Research (CAWTAR) - Egyptian Center for Innovation and Technology Development (ECITD) - Global Water Partnership Organisation (GWPO) - International Center for Agricultural Research in the Dry Areas (ICARDA)	Laurent Charles Tremblay Levesque	Atlas 3
Capacity building: Vocational training to improve water management	International Office for Water (OiEau)	Edouard BOINET	Orangeraie
Innovative Groundwater Governance: Scientific and Participatory Approaches to Address Climate and Water Challenges	The Ministry of Equipment & Water of Morocco, United Nations Economic and Social Commission for Western Asia(ESCWA)	TAHA ELGHAZLANI	Atlas 1
Scaling Water Solutions in a Water Scarce World	International Water Management Institute (IWMI)	Nora Hanke-Louw	Oliveraie
Collaborative Learning School Hackathon Morocco: Practical field-based science to policy experiences with early career researchers from Africa and USA	Penn State USA; Mohammed VI Polytechnic University (UM6P) Morocco; Al Moutmir Morocco. Texas A&M USA	Michael Jacobson	Palmeraie
Unlocking New Water Frontiers: Exploring Opportunities and Risks of Alternative Sources for Agriculture and Urban Use	Texas A&M AgriLife, Texas Water Resources Institute	Giovanni Piccinni	Coupole Menara
Revolutionizing Water Management: Empowering Rural Communities with Solar-Powered Water Systems and Participatory Governance/ Solarization of Agriculture: A Global Synthesis	Solar Chapter-International Water Management Institute (IWMI), Consortium of International Agricultural Research Centers (CGIAR)	Elnaya Mahadevi Pillian Shilp Verma	Roseraie
Total Solution Packages to Achieve SDGs Covering All Urban Water Management Sectors toward Smart Water City	KWater		Diamant
Water resources and climate change: an environmental and humanitarian crisis	The roundtable will be organized by the Geneva Water Hub, the Federal University of Lavras and International Association for Water Law (AIDA)	Mara Tignino	Opale

#### 8:30 - 10:00 am

Special Sessions 8			
Title	Institution	Name	Room
The Human Right To Water And Vital Human Needs In Water: Implementation At The Domestic And Transboundary Levels	International Association for Water Law (AIDA)	Gabriel Eckstein	Oliveraie
Advancing Water Across Sectors as a Priority for the Arab Region in Preparation for the 2026 United Nations Water Conference	United Nations Economic and Social Commission for Western Asia (ESCWA)	Ziad Khayat	Atlas 1
SDG6 and Water – Case Studies at National to Local Scales	University of Illinois at Urbana-Champaign, Texas A&M University,International Water Resources Association (IWRA)	Ximing Cai	Grenadier
Enhancing Water and Biodiversity Protection through Environmental Justice: Lessons from Nature-Based Solutions for Water Security in Europe and South America	German Institute of Development and Sustainability - Institute for Environmental Studies	Jean Carlo Rodriguez de Francisco	Atlas 3
Looking Forward: 2050 Youth Water Visions	International Water Resources Association (IWRA) , UNESCO Groundwater Youth Network (GWYN)	Rewa Assi	Coupole Menara
Contaminants on Emerging Concern under EU Urban WW Directive: Monitoring and Quaternary Treatment Methods	Turkish Water Institute (SUEN)-European Commision Joint Research Centre (EC JRC	Bilge Kocamemi	Palmeraie
"From ground to orbit: combining in-situ and satellite monitoring of water to improve basin management	International Network of Basin Organizations (INBO), World Meteorological Organization (WMO), French National Research Institute for Agriculture, Food and the Environment (INRAE)	Eric Tardieu	Orangeraie
Invisible Peril: Unraveling the Impact of Microplastic Contamination in Drinking Water on Human Health and Water Quality in Indonesia through Youth Programme	Asia Water Council Young Professionals (AWC YPs); World Water Council Youth Delegates (WWC YDs); Indonesia Green Action Forum (IGAF)	Aktarina Galuh Kirani	Roseraie
World Café: Amplifying Youth Voices in Water Governance	Wavemakers United	Oumaima Ouaissa	Opale
Harnessing Non-Conventional Water Resources for Sustainable Agriculture and Food Security	Food and Agriculture Organization of the United Nations (FAO)	He li	Diamant





## Special Sessions: Day 5 – 5 December

#### 10:15 - 11:45 am

Special Sessions 9			
Title	Institution	Name	Room
Bridging Innovation and Policy: Collaborative Solutions for Climate Resilience	Turkish Water Institute (SUEN)	tuğba evrim maden	Orangeraie
Innovating for Scalable Nature-Based Solutions: Technology and Strategies for Water Management	The Nature Conservancy	Andrea Erickson-Quiroz	Oliveraie
A Water-Soil-Agriculture Alliance for the SDGs: Seven Strategic Messages to Share	The French Water Partnership (FWP/PFE) and The Moroccan Water Coalition (COALMA)	Guillaume BENOIT	Diamant
An Islands Freshwater Perspective to Traditional Knowledge and Nature Based Solutions: Possible New Lens to Navigate an Increasingly Polarised World?	IWRA Islands Water Task Force; Malta Energy and Water Agency; International Union for the Conservation of Nature (IUCN) Centre for Mediterranean Cooperation; Jamaica Water Resources Authority; UN Local 2030 Islands, World Bank	Francesco Sindico	Grenadier
Drought Risk Management in Morocco: Optimal Water Allocation through Reservoir Inflow Prediction Using Al	Ibn Tofail University, Ministry of Equipment and Water (Morocco)	Moulay El Hassan charaf	Palmeraie



## High Level Panel:

Day 1	– 1s	t Dec	embei
10.15	- 112	15 (9	0 mins

Interconnectivity and Systems Thinking in Water Management:
Bridging Sectors for Resilience

#### Speakers:

Rabi H. Mohtar / Mohamed Serraj / Bilge Kocamemi / Ahmed Zniber / Bernd Manfred Gawlik Stratos Pistikopoulos / Ismahane Remonnay / Loic Fauchon / Yuanyuan Li

#### Day 2 – 2nd December 10:15 - 11:45 (90 mins)

The Future of Water: Gaps, Opportunities, and Global Commitments Beyond 2030 Rachid Mbazira / Sonja Koppel / Bruce Gordon / Mohamed Diatta / Abdelhafid Debbarh Shaima Hussain Gargash / Michel Frem / Tanja Miškova / Akissa Bahri

Speakers:

#### Day 3 – 3rd December 10:15 - 11:45 (90 mins)

Global Water Governance in a Changing World: Strengthening Institutions & Multilateral Cooperation

#### Speakers:

Eric Tardieu / Retno Marsudi / Mohamed Abdel Vetah / Mohamedou Sy / Hicham Chad Marco Rago / Askhat Orazbay / Véronique Ménez / Abou Amani

#### Day 4 – 4th December 10:15 - 11:45 (90 mins)

Accelerating Innovation in the Water Sector from NBS to Al

#### Speakers:

Kari Vigerstol / Alain Meyssonnie / Shi Qiuchi / Mohamed Amine / Mehmet Akif Balta Alexia Freigneaux / Adrian Sym / Stephanie Janssen



# Poster : Day 1 - 1 December

Theme 1: Water Governance, Financing, and Planning During Uncertainty			
Title	Authors	Presenting	
Water Resources Planning for a Resilient Gilgit-Baltistan (Ishkoman Valley) through Hydro-Climatic Modeling under Climate Change	Saba Shahzadi	Saba Shahzadi	
The national environmental communication strategy, between scientific discourse and government awareness: Impact on water use.	Siham Omari, Mohssine Benzakour	Siham Omari, Mohssine Benzakour	
Turbidity and Household Water Storage in Rural Areas: Is Water Quality Different Between Cisterns and the Point of Consumption?	Rafaella Oliveira Baracho, Mariana Feitosa Dos Santos, Leonardo Palloni Accetti Resende	Rafaella Oliveira Baracho	
Water, Sanitation, and Hygiene in Rural Areas: How Close Are We to the 2030 Agenda Goals, and Where Can We Make an Immediate Impact?	Rafaella Oliveira Baracho, Mariana Feitosa Dos Santos, Ádila Vitória Ribeiro Dourado, Carolina Gonzales Da Silva	Rafaella Oliveira Baracho	
Study on storage capacity index per unit hardened area of sponge city	Peng Li, Li Tang, Mingxiang Pan, Bei Li, Yongtao Li, Chenyu Jiang	Peng Li	
Adaptive pathways and tippingpoints in alternative watersupplyoptions as a route towardsresilience	Jibrin Ahmed		
Creating Systemic Resilience Imperatives for Water Related Governance through Water Stewardship.	Faith Lawrence, Mark Dent	Faith Lawrence	
Title: The institutions and the legal frame in the water market in Morocco	Soumaya Rkiouak	Soumaya Rkiouak	
Youth in climate governance: institutionalization's impact on youth's influence in unfccc cop negotiations	Manal Bidar	Manal Bidar	
Empowering Youth for Sustainable Water Governance: The Role of the World Union of Young Water Ambassadors (UMJAE) and STRATEAU	Jeannette Pretot, Jauad Elkaharraz, Pascal Maugis, Fatima-Zahra Tabyaoui	Jeannette Pretot, Jauad Elkaharraz, Pascal Maugis, Fatima-Zahra Tabyaoui	

Theme 2: Water -Energy -Food-Ecosystems Nexus (WEFE Nexus)		
Title	Authors	Presenting
Breaking Silos: Towards Coherent Global Governance for the Water-Food-Energy-Ecosystems (WFEE) Nexus	Hajar Habib	Hajar Habib
Water Security and Resilience in Islands - Trends, Tools, and Opportunities	Erin Derrington, Jabal Hassanali	Erin Derrington, Jabal Hassanali
Determining water requirements of Plums Using Drones and remote sensing technologies for effective irrigation management	Phumudzo Tharaga, Didintle Seleke	Phumudzo Tharaga
Water Resources Management: Towards the Attainment of the Sustainable Development Goals in Nigeria	Omobolanle Adebimpe Magbagbeola	Omobolanle Adebimpe Magbagbeola
Regulatory and Policy Implications for the Water-Energy-Food-Ecosystems Nexus: Integrating Renewable Energy, Agriculture, and Biodiversity Conservation	Ce Dr Sumanta Bhattacharya, Dr Mareve Biljohn	Ce Dr Sumanta Bhattacharya, Dr Mareve Biljohn
Simulation of future climate scenarios for Niger's Dosso region	Hammed Opeyemi Rasaq, Tatiana González Grandón	Hammed Opeyemi Rasaq
Evaluation study of desalination by reverse osmosis: Energy optimization and prospects for arid regions	Yassine Elyaakouby, Amine Tilioua	
Future Hydropower vs. Biodiversity: Can We Minimize the Trade-offs Through Life Cycle Assessment?	Sif De Visser, Martin Dorber, Francesca Verones	Sif De Visser

Theme 3: Water Security and Water -related risks

Title	Author s	Presenting
The Impact of Rainfall Variability on Population Dynamics in the Safi province	Mohammed Kasbi	Mohammed Kasbi
Analysis of Historical Climate Trends in the Oum Er Rbia Basin: Assessing Rainfall and Temperature Variability and Their Impact on Water Resources	Mounia El Azhari, Dalila Loudyi	Mounia El Azhari
Sustainable Urban Lake Restoration through Unconventional Water Resources: Feasibility and Hydrodynamic-Water Quality Insights from Tangxun Lake	Xiaomin Chen, Yingjian Chen, Shangwen Jiang, Hezhen Zheng	Xiaomin Chen
Impact of Huff Curves Developed in the Bouregreg and Chaouia Regions of Morocco on Peak Discharges	Ismail El Hassnaoui, Khalid Barkouki	Ismail El Hassnaoui
Water Harvesting in Arid Lands: A Review of Check Dam Suitability and Site Selection Criteria	Abobakar Himat, Selim Dogan	Abobakar Himat
Assessment of Climate Change Impact on Water Resources in the Ghis-Nekour Coastal Basin-qualitative and quantitative aspects	Nihad El Idrissi, Mohammed Thaiki, Zakaryae Koubaa, Khadija Kabidi, Hinde Cherkaoui Dekkaki Hinde	Nihad El Idrissi
Water disaster management in Mozambique	Jérôme-Elliot Etsong Mbang	Jérôme-Elliot Etsong Mbang
Evaluation of the effect of water diversion on the regional impact of Xinmeng River Project	Tian Chen, Wan Bi, Min Liu	Tian Chen
Access to water in insecure areas of the Sahel: the case of northern Mali	Mamadou Nientao	
Spatiotemporal evaluation of hydrological drought inthe chaouia watershed using multiple indices and grace data	Zaynab Bouhioui, Dalila Loudyi	Zaynab Bouhioui
Geospatial Analysis of Climate Change Impacts on Shoreline Dynamics and Geomorphological Change	Samya Lamhadri	
Climatic change influence on the hydrogeological interaction of Jericho complex springs	Marwan Ghanem	Marwan Ghanem
Assessing the Impact of Climate Change on Vegetation and Water Resources in the Rheris Watershed	Water Security And Water-Related Risks: 3.2 Adaptation To Droughts And Climate Risks	Oumaima El Baroudi, Jihane Ahattab, Saad Bensallam
Water reuse in the city of Es-Semara	Abdelhamide Jari Ait M'barek, Sidi Mokhtar El Kanti, Khalil Ben El Fassi	Water Security And Water-Related Risks: 3.5 Circular Economy Approaches





# Poster : Day 1 - 1 December

Theme 4: Towards Innovation and a Smart Water Future			
Title	Authors	Presenting	
THERMAL DISTILLER	El Hassan Achouyab	El Hassan Achouyab	
Nature-Based Strategies for Mitigating Sedimentation in Moroccan Reservoirs	Abdelkader Ouraini	Abdelkader Ouraini	
Smart Irrigation Systems on Climate Change: Water Managements in the face of increase loss.	Benjamin Adebisi	Benjamin Adebisi	
Turning Coffee Waste into Gold: A Sustainable Approach to Water Treatment	Souhil Imane, Belbahloul Mounir, Lghazi Youssef, El Ghoumi Younes, Msaad Asmaa, Anouar Mohamed, Azhar Oumaima, Adli Adli, Benaarif Younes, Abelhate Yazid Zaid, Elbachiri Abdelhadi, El Hammoumi Mohamed Merouane	Souhil Imane, Belbahloul Mounir, El Ghoumi Younes, Msaad Asmaa	
Web-Based Climate Data Exploration Application	Samuel Bekele, Dereje Birhanu	Samuel Bekele	
The Efficacy of Nano Bubble Technology to Achieve Sustainability in Farming at All Scales	Michael Davidson	Michael Davidson	
Hot CO <sub>2</sub> from Combustion Gases in a Bubble Column Evaporator for Water Sterilisation and Desalination	Adrian Garrido Sanchis	Adrian Garrido Sanchis	
SUSTAIN TM Water Protocol The Environmental Economical and Social benefits of the molecular structure of water.4th Phase of H20 - quantum game changer	Angie Pajak	Angie Pajak	
Research on Smart Irrigation Using Internet of Things and Consensus Algorithm	Sanghyuk Lee, Moulay-Rachid Babaa, Otman Abida	Sanghyuk Lee	
Space continuous prediction of water quality based on an innovated physical-data hybrid framework	Yinglan A, Guoqiang Wang, Baolin Xue	Yinglan A	
Turing pattern present in the equation of Mitsch-Gosselink and its instability associated with the evapotranspiration: application in the analysis of drought in the Ciénega de Santa Clara, monitoring and prediction	Alejandra Escalante Paredes	Alejandra Escalante Paredes	
Efficacy of cactus as a natural flocculant for water treatment	Oumaima Azhar, Mounir Belbahloul, Mohamed Merouane El Hammoumi, Younes El Goumi, Asmaa Msaad, Mohamed Anouar, Imane Souhil, Amal Adli, Youness Benaarif, Y.Z Abalhate, Abdelhadi El Bachiri, Youssef Lghazi	Oumaima Azhar, Mounir Belbahloul, Younes El Goumi, Asmaa Msaad	
Performance of an aerobic ceramic membrane bioreactor for textile wastewater treatment: Optimization of operating parameters using response surface methodology	Hafida Ayyoub, Houda Ouqacem, Abderrahim Jbel, Mustapha Tahaikt, Mohamed Taky	Hafida Ayyoub	

Theme 5: Groundwater Challenges and Opportunities		
Title	Authors	Prese nting
Best practices for a sustainable groundwater management: Tensift basin case	Ithar Khairallah, Mohammed Qachar, Peter Thomsen, Anders Pytlich, Jakob Lanstorp	Ithar Khairallah, Mohammed Qachar, Peter Thomsen
Comparative examination of the DRASTIC and Susceptibility Index approaches for assessing aquifer vulnerability in porous media	Cheikh Tidiane Wade, Bernadin Elegbede Manou	Bernadin Elegbede Manou
Development of Aquifer Recharge Thematic Maps for Jordan by Using Remote Sensing and GIS Techniques	Taleb Odeh, Alsharifa Hind Mohammad	Taleb Odeh
Study on Groundwater Systematic Restoration and Spatial Regulation Strategies in Haihe River Plain Area Driven by Multifactor Coupling	Lin Dong, Qiubo Song	Lin Dong, Qiubo Song
Enhancing the performance of na of Taroudant (Souss-Massa Morocco): mechanism, optimization and evolution toxicity	Abdallah Assouani, Abdelkader Dabagh, Mohamed El-Habacha, Mahmoudy Guellaa, Mohamed Chiban, Naima Alahiane, Mohamed Zerbet	Abdallah Assouani, Abdelkader Dabagh
Assessment of Groundwater Salinization processes in the coastal area of Sahel Abda Doukkala (western Morocco)	Youssef Sadik, Saliha Najib, Ahmed Fadili, Khalid Mehdi, Bendahhou Zourarah, Khalid Elkhalidi	Youssef Sadik

Theme 6: Water for Sustainable Development			
Title	Authors	Presenting	
Mutual influences between land-atmosphere interaction and vegetationchange in various topographies on the Tibetan Plateau	Chengqi Gong, Xiaohua Dong	Chengqi Gong	
Application of three-dimensional polylactic acid (pla) structuresimpregnated with graphene oxide in the adsorption of contaminants	Nicolle Ramos Dos Santos, Diana Aline Gomes, Rosangela Bergamasco, Jumara Silva, Maria Camargo, Luís Fernando Cusioli	Luís Fernando Cusioli	
Membrane bioreactor in aerobic and anoxic conditions for advanced treatment of secondary effluents for potential reuse	Mohamed Taky, Haby Mamadou Diallo, Fatima Elazhar	Mohamed Taky	
Climate change and the impact of waste water management in palestine	Inayat Salahat	Inayat Salahat	
Committed to what? The role of rural water microfranchisees' multifocal commitment on economic and social performance.	Laëtitia Gabay-Mariani, Guillaume Martin, Eva Leneveu	Guillaume Martin	
Mathematical Modeling and Mathematical Analysis for water management	Hajar Gouri	Hajar Gouri	
Recovery of Mud Materials from the Lalla Takerkoust Dam an Approach for Territorial and Social Development	Salima Salhi, Boujrouf Said, Gourfi Abdelali	Salima Salhi	
Melting glaciers and water resources	Jilali Bndriss	Jilali Bndriss	
Water positive: The water perestroika for global sustainability.	José Carlos Gil Jara	José Carlos Gil Jara	







# Poster : Day 1 - 1 December

Theme 7: Water Quality and One Health Opportunities			
Title	Authors	Presenting	
Detection and Analysis of Antimicrobial Resistance Genes in Wastewater from Border Communities in California, USA	Linda Lara Jacobo, Jesus Miramontes, Theresa Medina-Cisneros, Kai Cheng	Linda Lara Jacobo	
Wastewater-Based Oncogenic Microorganisms of the US-Mexico Border	Linda Lara Jacobo	Linda Lara Jacobo	
Phenotypic profiles of antibiotic resistant bacteria isolated from mangroves wastewater in Estuaire province, in Gabon	Davhys Tresor Kassa-Kassa, Roland Christophe Zinga Koumba, Pierre Phillipe Mbehang Nguema P, Guy-Roger Ndong Atome, Aimé Loic Bekale Obame	Davhys Tresor Kassa-Kassa	
"Pollution routing and source management as effective alternative of lake pollution management –a case study on yele mallappa shetty lake"	Rakshitha Rajashekara, Pallavi Nagaraju	Rakshitha Rajashekara, Pallavi Nagaraju	
Water Quality and one Health Opportunities for Life. Promotion of securing safe drinking water of South west coastal zone people being affected by climate change.	Habibur Rahman Talukder	Habibur Rahman Talukder	
Water Quality Supplied by Hand Pumps (PMH) in the Belier, Gbêkê, and Hambol Regions, Ivory Coast	Claon Jean Stéphane		
Water Quality Assessment of Communal Wells in the Coastal Barangays of Leganes, Iloilo Philippines	Christsam Joy Jaspe-Santander, Dahlia Pescos, Sheila Mae Pingul-Ong, Sharon Rose Dumam-Ag, Victor John Magtulis, Bernie Cangrejo	Christsam Joy Jaspe-Santander	
Occurrence of contaminants of emerging concern and potential hotspots in mixed land use zones: Case study of Berrechid aquifer in Morocco	Chifae El Meknassi, Sarah Tweed, Christine Baduel, Tuyet T.N. Nguyen, Mounia Tahiri, Tarik Bouramtane, Marc Leblanc, Ismail Mohsine, Ilias Kacimi	Chifae El Meknassi	
Optimization of conditions for the preparation of a composite clay-hydrochar: application in synergistic adsorption- photocatalytic degradation of organic pollutants	Jalila Hanyny, Zaina Izghri, Layla El Gaini, Abdelrani Yaacoubi, Abdelaziz Baçaoui	Jalila Hanyny	
Development of Al-SBA-15 and its adsorption performance on typical ppcps	Yuxi Wu, Hongguang Cheng, Jiawen Zhang, Weici Quan	Yuxi Wu	



# Poster : Day 2 – 2 December

Theme 1: Water Governance, Financing, and Planning During Uncertainty			
Title	Authors	Presenting	
Integration of water reuse projects into water management to increase water resilience and economic sustainability in the Algarve region – experience of the water operator Águas do Algarve	António Martins, Noémia Bento, Adriana Espanha, Pedro Ramos	António Martins	
Impact of Water Management Policy on Water Stress under Climate Change: The Case of Morocco – A Synthetic Control Approach	Jihane Briji, Abdelwahab Maarouf	Jihane Briji	
Climate change-adaptive water resource planning via a secure cloud-hosted simulation platform	Julien Harou	Julien Harou	
Local Knowledge and Inclusive Governance for Rural Prosperity	Fazal Rehman Kashif	Fazal Rehman Kashif	
Practices and Reflections on Water Resource Scheduling in the Taihu Lake Basin Based on Systems Thinking	Min Li, Juping Cao, Bei Li, Jingxi Yang	Min Li	
Exploration of Inter-Regional Water Rights Trading Mechanisms in the Yellow River Basin	Huijuan Yin, Wen'ge Zhang	Huijuan Yin	
Navigating flood risk governance: its contemporary relevance in times of a changing climate	Lena Junger, Peter Davids	Lena Junger, Peter Davids	
Mapping drought severity impact on arboriculture systems over Tadla and lower Tassaout plains in Morocco using Sentinel-2 data and Machine Learning Approaches	Sabir Oussaoui, Abdelghani Boudhar, Abdessamad Hadri, Youssef Lebrini, Ismaguil Hanadé Houmma, Ismail Karaoui, El Mahdi El Khalki, Jamal-Eddine Ouzemou, Christophe Kinnard	Sabir Oussaoui	
The importance of small temporary wetlands and their water in arid and semi-arid zones for local development, the case of Ferlo in Senegal	Madina Ba, Mahefa Mamy Rakotoarisoa, Awa Niang-Fall, Aude Nuscia Taibi	Madina Ba, Mahefa Mamy Rakotoarisoa, Aude Nuscia Taibi	

Theme 2: Water -Energy -Food-Ecosystems Nexus (WEFE Nexus)			
itle	Authors	Presenting	
alorization of desalination brines for remineralization of osmosed water	Khaless Khaoula, Benhida Rachid, Znibar Ahmed, Housni Lamia, Abousselham Otmane	Khaless Khaoula	
analyse de l'influence du changement climatique sur le lien entre l'eau, l'énergie et l'alimentation parmi les pays de la région MENA en étudiant le Maroc, l'Égypte et la Jordanie.	Ghizlane El Majdoubi, Houda El Ayadi	Ghizlane El Majdoubi	
lenewable Energy-Driven Wastewater Reuse for Caribbean Irrigation: Geotextile - Enhanced Vertical Flow Constructed Wetland Systems	Michelle Shah, Kiran Tota-Maharaj, Hazi Azamathulla	Michelle Shah	
stablishing climate-induced drought vulnerability to economic and mitigation actions in Balochistan Pakistan	Adnan Arshad, Muhammad Ashraf	Adnan Arshad	
nnovative Solutions for Wastewater Recovery and Energy-efficient Treatment: The A-B Process within the WEF lexus	Sumeyye Celik, Bilge Alpaslan Kocamemi	Sumeyye Celik	
an a grate design mimicking an inflow velocity profile improve hydrokinetic turbine performance?	Derya Karakaya, Şebnem Elçi	Derya Karakaya	
he Assessing the Limits of Sponsored Communities of Practice: Insights from the WEFE4MED Project	Laurent-Charles Tremblay-Levesque, Jeroen Warner, Jaime Hoogester	Laurent-Charles Tremblay-Levesque	







# Poster : Day 2 – 2 December

Theme 3: Wat er Security and Water -related risks			
	Title	Authors	Presenting
	Assessment of microplastic pollution in South Adriatic Sea	Maria Michela Dell'anna, Matilda Mali, Rosa Ragone, Valentina Petrelli, Vito Gallo, Gabriella Balacco, Pietro Mastrorilli	Maria Michela Dell'anna
	Water Conservation and Management Practices in Educational Institutions	Dr Nilesh Narayan Prasad	Dr Nilesh Narayan Prasad
	WATER and ENERGY as the BEST CONNUBIUM	Gabriele Puccetti	Gabriele Puccetti
	Critical analysis of a hydrometric data series and rainfall-runoff modeling using the GR2M model: an application to data from a hydrological station in Western Morocco	Intissar Abounki	Intissar Abounki
	Assessing the Environmental and Societal Impacts of Sand Mining in Bangladesh	Mohammad Mozumder, Petra Schneider	Mohammad Mozumder
	Mobilizing land for climate: the role of private landowners	Peter Davids	Peter Davids
	Spatiotemporal Bias Correction of Satellite Precipitation Using Convolutional Neural Networks for Rainfall-Runoff- Inundation Modeling in the Tonle Sap Lake Basin, Cambodia	Giha Lee	Giha Lee
	Hydrological Drought in Central Eastern Africa with Focus of Burundi from 2001-2022: Overview	Jean Marie Ndayiragije, Hongyuan Fang	Jean Marie Ndayiragije
	Event-driven "four pres" application in resisting salinity and guaranteeing water supply safety of the Taihu Basin	Juan Wu, Min Liu, Mei Cai, Tao Xue, Aoran Qian, Luyu Chang	Juan Wu
	Analysis of Lake Taihu Current Characteristics Based on Computational Fluid Dynamics Numerical Simulation under Typhoon Conditions	Haiping Ji, Mei Cai, Min Liu, Juan Wu, Tao Xue	Haiping Ji
	Machine learning modeling of dew water as a function of climatic parameters.	Lassana Traoré, Omkaltoume El Fatni, Belmajdoud Hanae	Lassana Traoré
	Hydro-Morphological Drivers and Transboundary Influences of the 2024 Floods in Feni and Comilla Districts, Bangladesh	Md. Tawhidul Aziz, Ahmad Shams Qadir, Sakib Mahmud, Md. Ashraful Haque	Md. Tawhidul Aziz
	Leveraging LSTM Method for Predictive Water Management in the Ahmed El Hansali Basin	Zakaria Dahbi, Aissam El Rherari, Younes Laabdi, Hassan Brirhet, Hayat Bihri, Salma Azzouzi, Moulay El Hassan Charaf	Zakaria Dahbi
	Flood risk assessment and mapping in semi-arid catchments using GIS tools: a case study in Al Haouz district, High Atlas, Morocco.	Intissar Abounki	Intissar Abounki
	Textile Pollutants Removal Using Prickly Pear Seeds Biochar In Simulated and Real Wastewater	Asma Abdedayem, Hanen Nouri, Amor Hafiane	Asma Abdedayem

Theme 4: Towards Innovation and a Smart Water Future			
Title	Authors	Presenting	
Total Solution Packages to Achieve sdgs Covering All Urban Water Management Sectors toward Smart Water City	Kwangsuop Lim, Junghwan Lee, Ignacio Deregibus, Henning Bjornlund	Kwangsuop Lim, Junghwan Lee, Ignacio Deregibus	
"Building Water Resilience through Installing Innovative Decentralized Greywater Treatment Unit at Public Schools"	Almoayied Assayed, Amjed Abed, Rana Ardah	Almoayied Assayed	
High-performance zeolite-A/polystyrene composite membrane tailored forefficient soluble dyes separation and antifouling	Ahlam Essate	Ahlam Essate	
Estimating Multi-Sectoral Water Demand for identifying wastewater reuse potential and prioritization	Mansoor Leh, Isuru Jayathissa, Naga Velpuri, Karthikeyan Matheswaran	Mansoor Leh	
"Leveraging Smart Technologies for Sustainable Water Management in Indian Urban Areas"	Suraj Maurya, Vartika Singh	Suraj Maurya	
Research on the evolutionary causes and sustainable management of the lake system in Jiuzhaigou, a UNESCO World Heritage Site.	Qin Ma, Xiaorong Huang, Fuquan Pu	Qin Ma	
Execution of Infrastructure for Elevation and Water Supply of Vilamoura WWTP	Ana Vermelhudo, Adriana Espanha, Pedro Ramos, António Martins	Ana Vermelhudo	
Innovations in Wastewater Reuse and Recycling: Policy and Technological Pathways for Sustainable Smart Water Management	CE DR Sumanta Bhattacharya, Dr Tafadzwa Maramura	Ce Dr Sumanta Bhattacharya, Dr Tafadzwa Maramura	
Circular water economy, wastewater treatment using in a membrane bioreactor system: A Case Study at Ibn Tofail	Sakina Belhamidi, haza mohamed, Yane Friede	Sakina Belhamidi, Haza Mohamed, Yane Friede	

Title	Authors	Presenting
Durabilité de l'approvisionnement en eau potable face au changement climatique dans la ville méditerranéenne de Beni Mellal (bassin d'Oum Er Rabia, Maroc)	Fabre Enola, Jourde Hervé, Tramblay Yves, Hanich Lahoucine	Fabre Enola
Optimization of the piezometric network of the Sebou hydraulic basin: application to the Fès-Meknès aquifer	Noureddine Mniouli, Mohamed Sinan, Bouchaib Magrane	Noureddine Mniouli
Downscaling GRACE Total Water Storage Data Using Machine Learning: Validation and Application Under Drought Conditions	Youssef Hamou-Ali, Ismail Mohsine, Tarik Bouramtane, Ilias Kacimi, Mounia Tahiri, Marc Leblanc	Youssef Hamou-Ali
Impact of water quality on the composition and diversity of groundwater fauna in South-East of Morocco	Abderrazzaq Boudellah, Radouane Moustaine, Nabila El Assad, Fatima Ezzahra Aroumy, Abdelmonaim Maliki, Soumia Moutaouakil, Mohamed Boulanouar, Mohamed Ghamizi, Abdelhay Elgharmali, Moulay Youssef El Hachimi	Abderrazzaq Boudellah, Nabila El Assad
Assessment of Groundwater Quality Changes in the Berrechid Basin (Morocco) Over the Last Decade: Hydrochemical and Isotopic Analysis in the Context of Climate Change	Tibari El Ghali, Mohamed Qurtobi, Radouan Saadi, Fatima Raibi, Fouad Taous, Ghassan Acil, Moncef Benmansour, Moulay Driss Hasnaoui	Tibari El Ghali
Mapping seawater intrusion in a basaltic formation using geophysical techniques. This research aims at the safe exploitation of brackish water to sustain freshwater resources.	Parvesh Balloo	Parvesh Balloo
Estimating Groundwater Recharge in Semi-Arid Regions Using Remote Sensing: A Case Study of High-Atlas Piedmont Watersheds, Morocco	Abderrahman El Farchouni, Abdessamad Hadri, Younes Fakir, Mohamed Ouarani, Azzouz Kchikach	Abderrahman El Farchouni
Assessment of Hydro-Sedimentary Dynamics and Coastal Flood Risks in the Oum-Errabia Estuary Using an Integrated Coastsat Model and DSAS.	Nouhaila Lassfar, Dalila Loudyi	Nouhaila Lassfar







# Poster : Day 2 – 2 December

Theme 6: Water for Sustainable Development			
Title	Authors	Presenting	
Water for Sustainable Life: Challenges and Strategic Pathways for Global Water Security	Qurat UI Ain Ainie	Qurat Ul Ain Ainie	
"Innovations In Alkaline Water For Humanity And Planet Earth In A Changing World"	Dr. Amos Amos, Prof. Ogbonna Okorie, Prof. Elkana Obodiah	Dr. Amos Amos, Prof. Ogbonna Okorie, Prof. Elkana Obodiah	
"Innovative Approaches to Water Governance: Legal, Financial, and Youth-Driven Strategies for Adapting to Water Scarcity in Morocco."	er Abdellah Fadlaoui, Ismail Abounaim	Abdellah Fadlaoui, Ismail Abounaim	
Integrated methodology involving the full sediment cycle for assessing dam's silting processes: state of art and perspectives of development	Naïma El Assaoui, Abdelaziz Sadok, Imane Bouchtaoui, Loubna Amzil	Abdelaziz Sadok	
AHD Nadi filter innovated locally, rewarded internationally safe drinking water for rural poor communities in Pakistan & Africa	Abdul Khurshid	Abdul Khurshid	
Water for Heritage and Resilience: Community-led Fog and Rain Harvesting near Qasr Al Mushatta, Jordan	Tala Moh'd Tayseer Taleb Khrais, Farid Abo El Sheikh	Tala Moh'd Tayseer Taleb Khrais, Farid Abo El Sheikh	
The Potential Of Rooftop Rainwater Harvesting At the University of Malawi The Polytechnic. Case Study: The Polytechnic Campus	Lameck Dube, Denis Kamwendo	Lameck Dube	
Rediscovering Hidden Gems: Conservation of Undervalued Fish Species for Ecological, Social, and Economic Sustainability	Mohammad Mozumder, Petra Schneider	Mohammad Mozumder	
Techno-economic comparison of Nanofiltration and Reverse Osmosis Membranes in the Removal of Sodium fro Drinking Water of m'rirt City (MOROCCO)	Zouhri Noureddine, Abdellah Elattar, Abdellah Lachheb, Mustapha Tahaikt, Mahacine Elamrani, Mohamed Taky	Zouhri Noureddine	
Menstrual Hygiene Management and WASH Practices: Fate of Menstruating Students in Nigeria's Universities	Itunu Ogunkoya, Enovwo Odjegba, Latifat Onagbesan, Stephen Joseph, Eunice Abe	Enovwo Odjegba	
Low-cost ceramic membrane derived from carbonate waste: Characterization and optimization through experimental design.	Soumaya Chlaih, Khadija Elataoui, Youssef El Maguana, Najat Elhadiri	Soumaya Chlaih	

Theme 7: Water Q uality and One Health Opportunities		
Title	Authors	Presenting
Assessment of surface water quality in the Oued Talambot sub-watershed, northern Morocco: Impacts of tourism activities	Nouhayla Abdi, Rachid Sammoudi, Zineb El Mouridi, Latifa Tahri, Allaa Alouahli, Oumnia Himmi	Nouhayla Abdi
Phytoplankton and zooplankton diversity in Moroccan Aquatic ecosystemc: Biliometric analysis	Ibtissam Embarek, Zainab Damsiri, Karima Khalil, Afaf Amazzal, Khalid Elkalay	Ibtissam Embarek
Ecology and biodiversity of groundwater fauna in the southern part of Anti-Atlas (Basin of Draa, Morocco)	Abderrazzaq Boudellah, Nabila El Assad, Radouane El Moustaine, Fatima Ezzahra Aroumy, Abdelmonaim Maliki, Abdelhay Elgharmali, Mohamed Boulanouar, Mohamed Ghamizi, Moulay Youssef El Hachimi	Abderrazzaq Boudellah, Nabila El Assad, Fatima Ezzahra Aroumy
Monthly Allocation Characteristics of Water Environmental Capacity and Governance Strategies for Overloaded Pollution Load in Guanlan River, Shenzhen	Lin Zhangl	Lin Zhangl
Spectroscopic Characterization of Dissolved Organic Matter in Wastewater from wwtps: Natural Lagooning Treatment vs. Activated Sludge Treatment	Omar Taoussi, Hassan Ba-Haddou, Yacine Oubelkacem, Abdelmajid El Bakkali, Mustapha Haddad, Hubert Cabana, Saadia Ait Lyazidi	Omar Taoussi
Advanced Photocatalysis for the Degradation of Organic Pollutants in Water: Optimization of Cu-tio₂ for Phenolic Compounds	Meryem Amar, Frederic Dappozze, Ouafa Tahiri Alaoui, Chantal Guillard, Gilles Berhault	Meryem Amar
Functionalization of Natural Zeolite surface with Metal Ions for Drug Removal	Marcelo Vieira, Isabella Da Silva, Gabriela Demiti	Marcelo Vieira
Microplastics in water and sediments of Lake Petén Itzá, Guatemala	Bessie Evelyn Oliva-Hernández, Francis Mariel Santos-Ruiz, Max Samuel Mérida-Reyes, Juan Francisco Perez-Sabino	Juan Francisco Perez-Sabino
Mixed-charged polyamide-4-sulfocalix [4] arene hollow fiber nanofiltration membranes for heavy metal removal under various ph	Siyum Shewakena Beshahwored	Siyum Shewakena Beshahwored
Unravelling the interplay between land use/land cover and surface water quality in Italian watersheds: insights from projected land use scenarios	Samuele Casagrande, Hung Vuong Pham, Olinda Rufo, Andrea Critto	Andrea Critto
Implementing a Water Quality Assessment Tool for Sustainable Water Resource Management	Yasmin Nassar	
The occurrence of pharmaceuticals in three different wwtps in Saudi Arabia and their potential effects on	Obaid Alharbi, Jarvis Edward, Galani Aikaterini, Thomaidis Nikolaos, Nika Maria-Christina, Deborah V. Chapman	Obaid Alharbi







# Poster : Day 3 – 3 December

Data Gaps and Facilitate Cross-border Cooperation"

Theme 1: Water Governance, Financing, and Planning During Uncertainty			
Title	Authors	Presenting	
Strengthening Governance: Water Crisis in the Paranapanema River Basin	Suraya Modaelli, Emilio Prandi	Suraya Modaelli	
Valueing water resources - why this is the key to achieving a respectful behaviour of our most vital resouce	Manfred Matz	Manfred Matz	
From Scarcity to Sustainability: Legal Pathways to Climate Adaptation and Water Governance in Morocco	Oumayma Nejjar, Halima Hatat	Oumayma Nejjar, Halima Hatat	
Participatory water management in Morocco between principle and application	Hasnaoui Moulay Driss, Zerouali Abdelaziz	Hasnaoui Moulay Driss	
Water criminal policy between international obligations and national compulsions	Kenza El Ghenam	Kenza El Ghenam	
Empowering Youth for Transboundary Water Governance in Africa's River Basins	Manal Bidar	Manal Bidar	
Research on the construction of shoreline management and protection system of rivers and lakes in Taihu Lake Basin	Yang Jingxi		
Institutional Innovation in Water Utility Governance: A Governance Mode Choice Experiment in Faisalabad, Pakistan	Shahbaz Altaf, Frank Goetzke	Shahbaz Altaf	
Valuing water supply infrastructure: A comparative study using augmented Real-Options vs discounted cash Flow methods. Case of a Morocco desalination plant.	Mustapha Hajji, Mokhtar Jaait, Hanane Benqlilou	Mustapha Hajji	
The Development and Implementation of Water Quality Management Action Plans: A Case Study of the Integrated Vaal River System, South Africa.	Joshua Rasifudi, Nokulunga Biyase, James Berkland, Hulisani Mafenya, Thandekile Mbili, Ayanda Mtetwa, Mbali Dlamini, Moloko Matlala	Joshua Rasifudi	
Youth as Catalysts for Equitable and Inclusive Water Governance Across All Levels	Manal Bidar	Manal Bidar	
Study on the formulation and implementation evaluation of annual water resources scheduling plan in Jiaoxi River Basin	Man Xin Wan	Man Xin Wan	
Negotiating the Commons: Social Practices, Modernity, and the Governance of Urban Water in Casablanca	Sara Arezki, Faouzia Borj	Sara Arezki	
Aligning Investment Opportunities through Domestic Policy Coherence: A Political Economy Analysis of Food, Land, and Water Systems in Egypt	Fayrouz Eldabbagh, Youssef Brouziyne	Fayrouz Eldabbagh	
Enhancing Water-Stress Coping Strategies in Iwo, Nigeria: Innovation and Adaptation for Sustainable Water Management	Timothy Oyebamiji Ogunbode, Ayobami Alani Oyelami, Christiana Olaide Afolabi, Victor Oyedeji Oyebamiji	Timothy Oyebamiji Ogunbode	
"Enhancing Transboundary Water Management in a Changing World: Leveraging Innovative Technologies to Bridge Data Gaps and Facilitate Cross-border Cooperation"	Paula Lady Pacheco Mollinedo	Paula Lady Pacheco Mollinedo	

Theme 2: Water -Energy -Food-Ecosystems Nexus (WEFE Nexus)			
Title	Authors	Presenting	
Evaluation of the water-energy-food nexus and its coordination level: Data analysis from China's main grain producing areas	Yuanzhuo Wu, Chun Fu	Yuanzhuo Wu	
Self-powering of the water treatment plant by production of green hydrogen from water	Mohamed Farhaoui	Mohamed Farhaoui	
From Silos to Collaborative Planning: Enhancing the Capacity of Local Governments on Gender-Responsive Water- Energy-Food-Ecosystem (WEFE) Nexus in Nepal's Rangun Watershed	Sanju Koirala, Darshan Karki, Anuj Mishra	Sanju Koirala	
Modeling of Marine Ecosystems in Morocco Towards a Sustainable Management of Aquatic Resources	Hind Aguelal	Hind Aguelal	
Integrated Watershed Water Resources Modeling with Agricultural Water Demand Optimization and Coupling with Decision Support Models	Radouane Alaoui	Radouane Alaoui	
Assessment of the development level of water-energy-environment nexus system in city clusters and identification of its influencing factors	Haoyuan Liu	Haoyuan Liu	
Climate change and the Water-Energy-Food nexus in Mozambigue: Assessment and decision-making tools	Sérgio Chilaule, Myriam Lonés, Roaventura Cuamba, Abel Solera	Sérgio Chilaule	

Title	Authors	Presenting
Hydrological disaster management and population resilience in the Senegal River basin	Coura Kane	Coura Kane
Towards Sustainable Land and Water Management Under Climate Change impacts: A Case Study of the Souss- Massa Basin, Morocco	Younes Khadiri, Abdenbi Elaloui, Mohammed El Hafyani, Mohammed Hssaissoune, Yassine Ait-Brahim, Abdelwahed Chaaou, Lhoussaine Bouchaou	Younes Khadiri
Critical analysis of a hydrometric data series and rainfall-runoff modeling using the GR2M model: an application to data from a hydrological station in Western Morocco	Intissar Abounki	Intissar Abounki
Study on the Allocation of Reclaimed Water Utilization under the Rigid Constraint of Water Resources——A Case of Xinwu District	Lijuan Mo, Junfei Yang, Xuenan Yang, Changshuo Huang	Lijuan Mo
The Future of Agriculture in Arid and Semi-Arid Zones Under Climate Change: The Case of The Draa Valley in Morocco	Ali Meskour, Jihane Ahattab, Mostafa Aachib, Moulay Driss Hasnaoui	Ali Meskour
Integration of climate information for sustainable drought management in Morocco: Towards resilient strategies in a changing climate	Meriem Alaouri, Riad Balaghi, Mouanis Lahlou	Meriem Alaouri
Response of the extreme temperature and precipitation on the atmospheric circulation and human activities in the middle and lower Yangtze River	Menghui Leng, Xiaohua Dong	Menghui Leng
Regulatory Frameworks and Policy Strategies for Water Disaster Management: Adaptive Approaches to Droughts, Climate Risks, and Circular Economy	Ce Dr Sumanta Bhattacharya, Bhavneet Kaur Sachdev	Ce Dr Sumanta Bhattacharya
Water Communities: A Circular Economy Model for Sustainable Management and Community Water Supply	Alejandra Escalante Predes	Alejandra Escalante Predes
Esimation of overflow discharge of side weirs to underground deep tunnels considering regulating gates	Yongwon Seo, Woo Chang Jeong	Yongwon Seo
Sustainable Water Management in the Kiul-Haroher Basin of South Bihar, India	Dr. Dilip Kumar, Priyanshu Kumar	Dr. Dilip Kumar, Priyanshu Kumar
Seepage Control in a Concrete Face Rockfill Dam: The Efficiency of the Flexible Diaphragm Wall	Nouhaila Eljanyani	Nouhaila Eljanyani
The use of the NDWI in monitoring and assessing water resources: the case of Moulay Youssef Dam reservoir	Abdelilah Khanniba, Moulay El Mustapha El Berjaoui	Abdelilah Khanniba, Moulay El Mustapha El Berjaoui
Enhancing Reservoir Level Forecasting in Semi-Arid Regions Using rnns: A Case Study of Morocco's Ahmed El Hansali Dam	Said Faska, Aissam El Rherari, Younes Laabdi, Hassan Brirhet, Hayat Bihri, Salma Azzouzi, Moulay El Hassan Charaf	Said Faska
Addressing the Water Crisis in the MENA: Protecting Mountains and Glaciers as Vital Water Sources	Ahmad Mahdavi	Ahmad Mahdavi



# Poster : Day 3 – 3 December

Theme 4: Towards Innovation and a Smart Water Future			
Title	Authors	Presen ting	
Membrane bioreactor in aerobic and anoxic conditions for advanced treatment of secondary effluents for potential reuse	Haby Mamadou Diallo, Fatima Elazhar, Mohamed Taky	Haby Mamadou Diallo	
Fabrication of low-cost ceramic membranes functionalised with nanoparticles for the removal of Pharmaceuticals from water	Damian Onwudiwe, Lawrence Sawunyama	Damian Onwudiwe	
Water Innovation in Action: Evaluating User Satisfaction with Drinking Water Vending Machines in Kathmandu Valley, Nepal	Dr. Sanjeev Bickram Rana, Tej Binod Pandey, Ram Chandra Poudel, Santosh Thapa	Tej Binod Pandey, Ram Chandra Poudel, Santosh Thapa	
Measurement of river surface velocity field using FMCW radar	Kwonkyu Yu, Kang Min Koo, Junhyeong Lee, Byungman Yoon	Kang Min Koo	
Arginine–polyaniline/sio₂ composites were synthesized and tested for Cr (VI) removal from water.	Zitouni Ennajih, Omar Doughmi, Rida El-Bardai El-Bardai, Sakina Mehdioui, Karim Tanji, Abdelghani Hsini, Abdelillah Shaim	Zitouni Ennajih	
Aquachain – A Smart and Decentralized Solution for Agricultural Water Optimization Using iot, Al, Blockchain, and	Rabiatou Sanda, Aladin Gaston, Ait Oualhaj Omar	Rabiatou Sanda, Ait Oualhaj Omar	

Theme 5: Groundwater Challenges and Opportunities		
Title	Authors	Presenting
Transboundary Groundwater Modeling Using GRACE Downscaling and Machine Learning	Ilya Zaslavsky, Vytautas Samalavičius, Tatiana Solovey	Ilya Zaslavsky
A Coupled AHP-Rough Set Model for Groundwater Quality Assessment: Enhancing Accuracy and Reducing Redundancy in Changing Environments	He Huang, Xiongrui Yin	He Huang
Study on the Variation Patterns of Groundwater Level Depth After the Ban on Over-exploitation in the Taihu Lake Basin Groundwater Over-exploitation Area: A Case Study of the Su-Xi-Chang Region	Tongde Ji, Xinwei Mao	Tongde Ji
Spatio-Temporal Evaluation of Land Subsidence Induced by Groundwater Overexploitation Using insar Data	Hasna Bendahmane	Hasna Bendahmane
Innovative Geochemical Signature Model for Six-Level Water Quality Classification with Seasonal Hydrological Integration in the North of Perú	Juan Jesus Costa Valencia, Dante Lucano Alarco	Juan Jesus Costa Valencia, Dante Lucano Alarco
Impact of Climate Change on Groundwater Resources and Hydrological Balance in Irrigated Agricultural Zones	Houria Dakak1, Abdelmjid Zouahri1, Rachid Moussadek2, Mouloud El Moudane3, Tarik Bahaj4, Elmustapha Azzirgue5, Ahmed Ghanimi3	Houria Dakak1, Abdelmjid Zouahri1, Rachid Moussadek2, Mouloud El Moudane3, Tarik Bahaj4, Elmustapha Azzirgue5, Ahmed Ghanimi3
Integrated Management Of Surface Water And Groundwater In The Paranapanema River Basin, Brazil.	Suraya Modaelli, Emilio Carlos Prandi	Suraya Modaelli
Use of Remote Sensing to Estimate Groundwater Use for Irrigation: The Bahira Aquifer Case (Morocco)	Taha El Ghazlani, Issam Marmar	Taha El Ghazlani

Theme 6: Water for Susta inable Development		
Title	Authors	Presenting
Gendered Inequalities in WASH: A Call for Scaling Deep	Darshan Karki, Sanju Koirala, Mamata Aryal, Sumitra Kc	Darshan Karki
Water and economics: Understanding interdependencies for sustainable management.	Hafsa Ouhbi, Abdeslam Boudhar	Hafsa Ouhbi
"Harnessing Remote Sensing and GIS for Sustainable Water Economics in Punjab, Pakistan"	Mahnoor Waqar, Qurat Ul Ain, Arzoo Malik	Mahnoor Waqar
Nutrient assessment of the Moroccan aquatic ecosystem	Zainab Damsiri	Zainab Damsiri
Water Amidst International Spillovers & Global Commons Stewardship In A Changing World: Sustainable		
Development Spillovers In European Union (Macro)Regional Cohesion Perspective Of The Baltic Sea Region And The	Denisa Čiderová, Dubravka Kovačević, Kateryna Savatieieva, Michal Hlinka	Denisa Čiderová
Danube Region		
Formulation and Reflection on Water Use Quotas for Typical Service Industries In the Yangtze River Delta Green and	Shi Danyi	Shi Danyi
Integrated Ecological Development Demonstration Zone	Sin Sury.	Sin builyi
Science-Policy-Peace Nexus: Integration of Multi-Criteria Decision Analysis-GIS Approach For Water Infrastructure	Bouran Mohammed, Henning Bjorlund, Eiman Karar	Bouran Mohammed
Development in Sudan		
The Blue Economy and Water Sustainability: Policy and Governance Frameworks for Coastal and Freshwater Systems	Ce Dr Sumanta Bhattacharya, Dr Daya Shanker	Ce Dr Sumanta Bhattacharya
Spatio-temporal analysis of Lake Andraikiba under the impact of climate change in the Vakinankaratra region	Miora Harivony Rakotondrabe, Ononamandimby Antsonantenainarivony, Felaniaina Rakotondrabe	Miora Harivony Rakotondrabe
Research on Deepening the Reform of Water use Rights: A Case Study of Jiangsu Province	Shenjun Lu	Shenjun Lu
Valorization of a natural material as a Low-Cost Adsorbent for Crystal Violet Removal: Characterization and	Fatine Lahcini, Yassmina Bakhtaoui, Moussa Ouakki, Bousalham Srhir	Fatine Lahcini
Adsorption Performance		
Remote Sensing-based River Discharge Estimation for a Small River Flowing Over the High Mountain Regions of the	Mulugeta Genanu Kebede, Lei Wang	Mulugeta Genanu Kebede
Tibetan Plateau		
Seasonality and the determinants of household water insecurity in southern Bangladesh	Chad Staddon, Fiorella Romero, Geraint Burrows	Chad Staddon







# Poster: Day 3 – 3 December

Theme 7: Water Quality and One Health Opportunities			
Title	Authors	Presenting	
Spatiotemporal Trend of PFAS in Rivers with Different Land Use Areas: The Pivotal Intermediary Role of Dissolved Organic Matter	Jiawen Zhang, Weici Quan, Yuxi Wu, Hongguang Cheng	Jiawen Zhang	
Leveraging remote sensing and machine learning for enhanced water quality monitoring for African Lakes	Seifu Tilahun, Elias Leggesse, Bantesew Enyew, Minychil Gitaw, Alemseged Haile, Abdulkarim Seid, Olufunke Cofie	Seifu Tilahun	
Emerging Pollutants in Aquatic Systems of Brazil and Argentina: Integrative assessment of Pharmaceuticals and Pesticides using environmental monitoring, in vivo bioassays, and the RISK21 tool within a One Health framework	Julio Alejandro Navoni, M. Florencia Kronberg, Mariana Manetti, Ariana A. Rossen, Sandrine Deglin, Michelle Embry, Eliana R. Munarriz	Eliana R. Munarriz	
Steroid Hormone Transport in Surface and Groundwater in Dairy Farming Systems: A New Zealand Perspective	Muhammad Majeed	Muhammad Majeed	
Assessment of surface water resources in the lksob river (essaouira, morocco):monitoring physico-chemical parameters and nutrient distribution	Youssef El Kabdani, Zainab Damsiri, Fatima Ezzahra Ait Ballagh, Khalid El Kalay, Karima Khalil	Youssef El Kabdani	
Removal of Phenolic Compounds from Olive Mill Waste Water by Adsorption on Hydroxyapatite-Sodium Alginate Composite	Rabia Benaddi, Sofyan Sbahi, Ahmed Osmane, Khadija Zidan, Naaila Ouazzani	Rabia Benaddi	
Comparative study of different domestic wastewater treatment plants in a semi-arid area	Rabia Benaddi, Sofyan Sbahi, Ahmed Osmane, Khadija Zidan, Naaila Ouazzani	Sofyan Sbahi	
State of the Waters of the Khoumane Wadi Pollution Challenges in Moulay Idriss Zerhoun, Morocco	Abdelhak Saidi	Abdelhak Saidi	
A decision support system for improved policy implementation towards water resource protection in developing countries.	Dr Stanley Nzama	Dr Stanley Nzama	
An Evaluation of Seasonal Variation on Shallow Groundwater Physicochemical Quality of the Granite Basement Complex Aquifer System of Makeni, Sierra Leone	Abdul Rahman Turay	Abdul Rahman Turay	
Evaluation of the antibacterial activity of natural zeolites functionalized with metallic particles against Escherichia coli	Rosangela Bergamasco, Anna Ribeiro, Laiza Beltran, Gabriela Demiti, Benicio Filho, Elisabete Duarte, Luis Cusioli	Rosangela Bergamasco	
Machine Learning Approaches for Predicting Water Quality in Industrially Polluted Rivers	Mirza Md Tasnim Mukarram, Quazi Umme Rukiya	Mirza Md Tasnim Mukarram	
Chemical Speciation of Arsenic in pit lakes of Zeida abandoned mine (Upper Moulouya, Morocco)	Lamiae El Alaoui, Abdelilah Dekayir, Mohamed Rouai	Lamiae El Alaoui	



# Poster: Day 4 – 4<sup>th</sup> December

	Theme 1: Water Governance, Financing, and Planning During Uncertainty	
Title	Authors	Presenting
Development of dynamic integrated socio-economic models instead of classic models currently used for the good management of water resources in watersheds in Morocco	Radouane Alaoui	Radouane Alaoui
Guiding water quality interventions with high-resolution water insecurity measures: a data-driven approach	Shamali Rewari, Saba Mundlay, Esha Gupta	Shamali Rewari
Moroccan Farmers' Social Representations of Drought: Knowledge Systems and Adaptive Strategies as keys to nclusive Water Governance	Nazih Titouani Mandri, Valérie Haas	Nazih Titouani Mandri
Closing the Loop: Performance Metrics for Adaptive Water Stewardship within Governance and Planning	Anasse Ait Lemkademe, Mia Antoni-Naidoo, Lisa Seufert	Anasse Ait Lemkademe
Fransboundary wetlands governance: bridging ecosystems, policies, and communities	Zoe Rosenblum	Zoe Rosenblum
Water access in the Philippines: Is Water upheld as a Human Right?	Robert Michael Difilippo, Michael Tiu Jr., Bea Marie Medina, Rose Valerie Pimentel, Reian Cristopher Paraguya	Bea Marie Medina
Actual Situation and Challenges of the Impact of the Corona Pandemic on the Availability of Drinking Water in Rural Cambodia	Hironori Hamasaki	Hironori Hamasaki
Analysis of hydro-rainfall variability in the Middle Valley basin of the Senegal River	Ephigenie Mackane Madioune, Waly Faye, Honoré Dacosta, Awa Niang Fall, Abdoulaye Faty	Ephigenie Mackane Madioune
Governing Water in a Changing World: Innovations and Adaptations for Sustainable Water Availability in Migori Town, Kenya	Samuel Nyandiga	Samuel Nyandiga
Watershed Cooperation in Japan: Current Status, Issues, and Future Prospects from the Perspective of the Basic Law and Plan on the Water Cycle	Hironori Hamasaki	Hironori Hamasaki
Assessment of Surface Water Potential and Demand towards Water Resource Planning: Case of Wadi Ambouli: By Asma Mohamed Farah	Asma Farah	Asma Farah
Analysis of Hydrological Variability and Attribution in the Han River Basin	Li Qianxun, Chen Yingjian	Li Qianxun
The future of a collapsing system: Trasimeno Lake, threatened by climate change, needs urgent action to restore its palance. From draining to resilient landscape, scenarios from 2030 to 2090.	Martina Natalizi, Beatrice Musa, Laura Iori	Martina Natalizi, Beatrice Musa, Laura Iori
Resilient Flood Control Planning in Tidal River Networks Under Changing Conditions: A Case Study of Taihu Basin	Yushu Shan, Chen Li, Jingjing Dai, Keqiang Liu, Li Tang	Yushu Shan
Enhancing Transboundary Water Governance in the Medjerda River Basin: BRIDGE 5 Project	Diego Pozzoli	Diego Pozzoli







# Poster : Day 4 – 4 December

Theme 2: Water -Energy -Food -Ecosystems Nexus (WEFE Nexus)		
Title	Authors	Presenting
Enhancing Evapotranspiration Estimates with Soil Moisture Constraints: A Multisite Evaluation Using High- Resolution Satellite Data	Abderrahman Liblab, Jamal Elfarkh, Abdelghani Chehbouni	Abderrahman Liblab
Sustainable Water Use in Onioin Production: Balancing Conservation with Yield and Quality in South Texas	Jose Chavez, Ayrton Laredo, Carlos Lazcano, Juan Enciso	Juan Enciso
Assessment of Irrigation Management Practices Under Changing Climate Conditions using Deficit Irrigation Toolbox in Sta. Cruz, Laguna, Philippines	Grace Maligaya, Leunell Chris Buela	Grace Maligaya
Impact of human activies on hydrological dynamics and ecosystem soustainability in the Congo Bassin: a case study of Lake Kivu and its catchment areas	Methode Musibira, Methode Musibira	Methode Musibira, Methode Musibira, Methode Musibira
Soil Water Conservation In Semi-Arid Regions Using Regenerative Agricultural Practices	Christopher Cobos, Nicholas Boogades, Joseph Burke, Wayne Keeling, Katie Lewis	Christopher Cobos
METRIC-2S: A Two-Source Model for Enhanced Partitioning of Evapotranspiration in Agricultural Landscapes	Jamal Elfarkh, Abdelghani Chehbouni	Jamal Elfarkh

Theme 3: Water Security and Water -related risks			
Title	Authors	Presenting	
Contribution To Isotopic Analysis To Characterize The Waters Of Lake Ifni And The Upper Tifnoute Valley	Kacem Lamyaa	Kacem Lamyaa	
Integrating adaptive capacity and watershed ecosystem management approach to assess and mitigate the flood hazards in the Abra River Basin	Angelito Jr Bisquera, Bumidang Marcelo	Angelito Jr Bisquera	
Groundwater depletion beneath the irrigated alluvial plain of Marrakech (Morocco). Are we running out of groundwater?	Younes Fakir, Hamza Sahraoui, Marc Leblanc, Michel Le Page, Sarah Tweed, Hamza Ouatiki, Houssne Bouimouass, Kaoutar Oukaddour, Mohammed Qachar, Abdelghani Chehbouni	Younes Fakir	
Water Policy In Morocco: Between Climate Change Challenges And Resilience Of Infrastructures	Maha Ben Tahar, Mohammed Aqil	Maha Ben Tahar	
Enhancing Rainfall Estimation in Morocco: Integrating Radar and Rain Gauge Data for Improved Water Resource Management	Zahra Sahlaoui, Awatif El Johra, Yassine Belgani, Siham Sbii	Zahra Sahlaoui, Awatif El Johra, Yassine Belgani, Siham Sbii	
Tsunami Hazard Assessment on the Shores of Morocco	Asma Baouham, Seif-Eddine Cherif, Siham Sakami	Asma Baouham	
Titanium-Based Geopolymers: Sustainable Materials for Water Depollution Applications	Chaima Assamadi, Soumia Aboul-Hrouz, Mohamed El Masloumi, Mina Oumam, Abdelaziz El Abiad, Hakima Aouad	Chaima Assamadi	
Impact Of Climate Change On The Hydraulic Risk Downstream Of The Lagdo Dam And Associated Flood Losses	Ibrahima Danladi, Fredline Ilorme	Ibrahima Danladi, Fredline Ilorme	
Investigating Runoff Generation and Concentration Mechanisms for Improved Flood Prediction in Watersheds	Yingying Xu	Yingying Xu	
How to carry out hydrological monitoring, flood forecasting and warning in basins with wide watercourses and irregular sections? – Case of the Oued Sakia El Hamra basin in southern Morocco –	Abdelghani Sybous, Moulay Driss Hasnaoui, Sidi Mokhtar El Kanti, Zakaria Boularbah, Moulay Bouttal Lambarki	Abdelghani Sybous, Moulay Driss Hasnaoui	
Study on the threshold of transverse gradient in the Gaocun-Sunkou section of the lower Yellow River	Liyu Quan	Liyu Quan	
Comprehensive Flood Vulnerability Analysis and Mapping for the Awash River Basin, Ethiopia	Abebe Legass	Abebe Legass	
The Political and Economic Importance of the Harirod River Basin in Afghanistan-Iran Relations: sustainability and development	Mujib Ahmad Azizi	Mujib Ahmad Azizi	
A lake-flood forecasting method coupling the CE-QUAL-W2 and PINN models	Shi Mingrui, Fang Hongyuan	Shi Mingrui, Fang Hongyuan	
Comprehensive benefits of reclaimed water: an economic assessment under pilot construction	Li Xuechun	Li Xuechun	

Theme 4: Towards Innovation and a Smart Water Future		
Title	Authors	Presenting
Summer 2024 Piezometric Groundwater Trend Analysis in Northern Bekaa, Lebanon	Ihab Jomaa, Simone Mereu, Matteo Funaro, Marta Debolini	lhab Jomaa
Watersmart Morocco: A smart application for real-time leak detection and water consumption optimization for a sustainable water future in Morocco	Anass Mouktaoui, Abdellah Mouktaoui	Anass Mouktaoui, Abdellah Mouktaoui
Is Decentralized Water Reuse the Future for Morocco's Rural Areas?	Kaoutar El Asri, Ehssan El Meknassi, Ali Hammani	Kaoutar El Asri
Analysing the adoption of a digital approach for non-revenue water management in African Water utilities	Ciniso Sizwe Gina	Ciniso Sizwe Gina
Exploring the prospect for the digital transformation of a household on-farm water management system	Arthur Obare	Arthur Obare
Analysis of Digital Transformation Strategies for Large-Scale Water Diversion Projects—Taking the Dianzhong Water Diversion Project as an Example	Fan Min	Fan Min
Vers un avenir intelligent de l'eau : innovations technologiques et stratégies intégrées pour une gestion durable de l'eau	Mohammed Benahmed	Mohammed Benahmed
Typical Case Study on the Integration and Application Enhancement of Provincial Hydrological Systems	Sihua Lei, Feng Hua, Yifan Chen, Jiaping Dong, Siqi Wang	Sihua Lei, Feng Hua, Jiaping Dong, Siqi Wang
Evaluation of water-saving techniques, amendments and age of argan plants on their recovery rate, growth and robustness	Hafida Zaher, Zakaria Achchabi, Amar Rabhi	Hafida Zaher
Water Resources Management And Planning In The Toudgha Oasis Using Multi-Criteria Decision-Making Analysis, Geospatial Technologies, And Ai Modeling	Lamya Ouali, Lahcen Kabiri	Lamya Ouali
Smart Edge-Enabled Leak Detection for Water Networks Using ESP32 and Federated tinyml	Mohamed El Aroussi, Rachid Saadane, Mohamed Haichar	Mohamed El Aroussi, Rachid Saadane, Mohamed Haichar
Federated Edge AI for smartirrigation and Soil Nutrient Optimization in Sustainable Agriculture	Mohamed El Aroussi, Smail Tigani, Mohamed Haichar, Rachid Saadane	Mohamed El Aroussi, Smail Tigani, Mohamed Haichar
Integrating Biochar from Lignocellulosic Biomass into Constructed Wetlands : A Sustainable Strategy for Enhanced Municipal Wastewater Treatment	Sara Mrhari Derdag, Naaila Ouazzani	Sara Mrhari Derdag







## Poster : Day 4 – 4 December

Theme 5: Groundwater Challenges and Opportunities			
Title	Authors	Presenting	
Strengthening Groundwater Data Systems: A Key to Managing Drinking Water Quality and Sustainability	Marlen Hunt, Joonas Pärn, Madis Osjamets, Elina Kuusma, Valle Raidla, Liina Hints, Andres Marandi	Marlen Hunt	
Integrating Geophysical and Hydrogeological Approaches for Deep Aquifer Management in the Dakhla Basin	Ayoub Afquir, Aicha Saad, Sidi Mokhtar El Kanti	Ayoub Afquir	
Real-Time Aquifer Response to Extreme Weather: Insights from Storm Daniel in the Pinios River Basin, Greece	Ayesha Nawaz, Maria Rosaria Alfio, Konstantinos Babakos, Anna Chatzi, Gaetano Daniele Fiorese, Andreas Panagopoulos, Vassilios Pisinaras, Gabriella Balacco	Andreas Panagopoulos	
Advancing Groundwater Monitoring through 3D Thermal Field Reconstruction in a Coastal Karst System	Maria Dolores Fidelibus, Maria Rosaria Alfio, Matilda Mali, Gabriella Balacco	Gabriella Balacco	
How to Improve Groundwater Management Capability	Jie Hou	Jie Hou	
Bridging gaps in groundwater governance: A local-level Multistakeholder platform experience from Nepal	Sumitra Kc, Anuj Mishra, Manohara Khadka, Safa Fanaian	Sumitra Kc	
Characterization of Phosphatic Aquifers in the Beni Amir Deposit: Insights from Magnetic Resonance Sounding and Electrical Resistivity Tomography for Groundwater Management and Mining Implications	Ouissal Heddoun, Majid El Baroudi, Anasse Ait Lemkademe, Mostafa Benzaazoua	Ouissal Heddoun	

Theme 6: Water for Sustainable Development			
Title	Authors	Presenting	
TED, ANOVA and RSM approach for optimizing the adsorption of phosphate ions and Malachite Green dye by copper oxide nanoparticles biosynthesized from biomass leaf extract	Abdelkader Dabagh, Fatima Zahra Erraji, Abdallah Assouani, Guellaa Mahmoudy, Mohamed Zerbet	Abdelkader Dabagh, Fatima Zahra Erraji	
Scaling Sustainable Water Solutions through Nadi Filters: Ensuring Access to Safe and Clean Drinking Water to Combat Waterborne Diseases in Rural Communities by Association for Humanitarian Development	A. Khurshid Bhatti	A. Khurshid Bhatti	
Desalination for agricultural irrigation: removal of boron and salts	Khaless Khaoula, Benhida Rachid, Znibar Ahmed, Houssni Lamia, Abousselham Otmane	Khaless Khaoula	
Water treaties and trade dynamics in Africa: implications for agri-food systems resilience	Greenwell Collins Matchaya, Lea Magne-Domgho	Greenwell Collins Matchaya	
Eco-friendly Solution to Enhance Wastewater Treatment Performance in Rural Areas: Factorial Analysis and Predictive Modeling	Sofyan Sbahi, Naaila Ouazzani, Laila Mandi	Sofyan Sbahi	
Seawater Desalination and Pipeline Integration: Ensuring Water Quality and Microbial Safety in Distribution Networks	Weici Quan, Jiawen Zhang, Yuxi Wu, Hongguang Cheng	Weici Quan	
Water consumption optimization in the cardboard industry by experimental design	Harif Soukaina, Aboulhassan Moulay Abdelazize	Harif Soukaina	
Evaluation of Industrial Water Quotas in Zhejiang Province	Bin Li		
SWAT model application for calculating ecological flow in sub-basins of the Huangshui River Basin	Xue Fang, Weijun He, Min An, Mengfei Song, Bei Wang	Xue Fang, Min An	
Effectiveness of innovative communication strategies for enhancing WASH education in Schools	Nnamdi Anosike, Jane Adizue, Jennifer Anyanti	Nnamdi Anosike, Jane Adizue	
Maintenance and revival of the Khettara system: assessment of functional value, heritage, and sustainability trends in Dray-Tafilalat Oasas	Youssef Mezane, Hassan Alkatmour	Youssef Mezane, Hassan Alkatmour	

	Theme 7: water Quality and One Health Opportunities	
Title	Authors	Presenting
Microbiological Control of Water at ONEE-Water Branch: Adaptability to Challenges and Evolution	Hamoucha El Boujnouni, Abdelillah Belhaj	Hamoucha El Boujnouni
Water quality management of micro swamp wetland based on the "source-transfer-sink" theory: A case study of Momoge Swamp Wetland in Songnen Plain, China	Jin Gao	Jin Gao
Effects of Water Quality on the Abundance of the Critically Endangered Moroccan Freshwater Mussel Pseudunio marocanus (Pallary, 1918): Preliminary Results	Fatima M'hamdi, Fatima Ezzahra Aroumy, Faycal Ait Boumallassa, Tarik Hachimi, Amílcar Teixeira, Abderrahim S'khifa, Mohamed Ghamizi	Fatima M'hamdi
Water quality assessment of Drâa river basin (Morocco)using diatom-based biomonitoring	Khawla Lazrak, Maren Nothof, Sabine Filker, Elisabeth Berger, Khadija Mouhri, Mohammed Loudiki	Khawla Lazrak
Impact of treatment and co-treatment approaches on improving surface water quality	Abdelillah Bouriqi, Naaila Ouazzani, Jean-François Deliège	Abdelillah Bourigi
Impact of Moisture Content and Chloride Ions on the Corrosion of Brass Fittings Used in ONEE Water Distribution Networks: Challenges and Adaptive Strategies	Galai Mouhsine, Mohamed Ebn Touhami, Hanane Benqlilou, Rida Allah Belakhmima	Galai Mouhsine
Bridging Policy and Practice: Community-Engaged Research on Water Quality and Public Health in South Texas Colonias	Lindsay Sansom, Garett Sansom	Lindsay Sansom, Garett Sansom
Ecological and Water Quality Assessment of the Buffalo River and its Impact on Aquatic Biota and Riparian Vegetation	Nobabalo Gaju, Malebo D Matlala	Nobabalo Gaju, Malebo D Matlala
Molecular surveillance of Hepatitis A virus and Norovirus in water sources in Morocco : epidemiology and public health impact"	Sihame El Fakir, Najia Ameur, Atika Zidouh, Latifa Tahri	Sihame El Fakir
Traitement des eaux usées Industrielles par le Chitosane et des composites de l'os de Seiche. wastewater with chitosan and cuttlebone composites	Fatima Zahra Erraji, Abdelkader Dabagh, Yassine Douski, Malika Ezzaine, Brahim El Ibrahimi, Abdelkrim El Kadib, Fatima El Baz	Fatima Zahra Erraji
Investigation of sanitary wastewater and fecal sludge management in Ardabil City and its potential impacts on the Balikhlouchay River: A case study of Ardabil City, Iran	Behnam Rahmani Ivriq, Nourollah Mirghaffari, Mohammad Nemati Varnosfaderany, Asghar Jahani Behnamiri	Behnam Rahmani Ivriq
Assessment of seasonal effect on the Groundwater Quality: Statistical Approach	Garba Ahmed	Garba Ahmed
Innovative Monitoring of Organic Micropollutants in Environmental Waters: Combining Passive Integrative Sampling and High- and Low-Resolution Mass Spectrometry	Hassan Ba-Haddou, Céline Guillemain, Marina Coquery, Saadia Ait Lyazidi, Mustapha Haddad, Christelle Margoum	Hassan Ba-Haddou
Optimization of Reagent Injection for Enhanced Remineralization in Seawater Desalination at the AI Hoceima Plant Reclaimed Water for Potabilization: Technical Feasibility, Barriers, and Future Outlook	Iman Aoueryagel, Faiza Chaouket Carmen Julia Navarro Gomez, Ruben Sanchez, David Sanchez	lman Aoueryagel Carmen Julia Navarro Gomez, David Sanchez
Monitoring pollution of aquatic ecosystems in highly polluted coastal areas	Matilda Mali, Francesco Paolo Buonocunto, Lucia Spada, Alfonsa Milia, Leonardo Damiani, Maria Michela Dell'anna, Gabriella Balacco, Santina Giandomenico	Matilda Mali
Seasonal GHG Emission From Urban Lakes: Unmasking the Roles of Eutrophication and DOM	Hongguang Cheng, Kaiming Yang, Yadi Ai, Jiawen Zhang	Hongguang Cheng
Design of a biofilter using oyster shell powders to improve access to drinking water in sub-Saharan Africa	Franck Eboa Mbonjo	Franck Eboa Mbonjo
Design of an intermittent biosand filter amended with oyster shell powders for the improvement of household water quality in sub-Saharan Africa and Madagascar	Franck Eboa Mbonjo, Pierre Hervé Ravelonandro, Suzanne Ngo Boum-Nkot, François Tchoumbougnang	Franck Eboa Mbonjo







# Opening Ceremony

#### 8:30 pm - High-Level Speakers group photo in front of plenary room 01 December 2025 Location - ATLAS 1

Introduction of Congress and Opening Ceremony Programme	5 mins	Mrs. Manal Bernoussi
Reading of verses from the Holy Quran related to Water	2 mins	
National Anthem	2 mins	the facilities of the second
XIX World Water Congress Film	2:30 mins	
Opening Remarks by the Minister of Equipment and Water	5 mins	H.E. Nizar Baraka
Speech by XVIII World Water Congress co-host (former host, explicit)	5 mins	H.E. Guoying Li, Minister of Water Resources, People's Republic of China
Opening Remarks IWRA's President	5 mins	Prof. Yuanyuan Li
Speech from United Nations Special Envoy for Water	5 mins	H.E. Ms. Retno Marsudi
Speech by the President of the World Water Council	5 mins	Mr. Loïc Fauchon
Speech by the Mayor of Marrakech	5 mins	Mrs. Fatima-Zahra Mansouri
Overview of the XIX World Water Congress by International Scientific Committee (ISC) Co-Chairs	5 mins	Prof. Rabi Mohtar and Mr. Salaheddine Dahbi
Invitation for all attendees to attend IWRA's Awards Ceremony on Tuesday, December 2 <sup>nd</sup> , 8:30am - 9:30am, in this same room, to meet the winners of the Crystal Drop (Ms. Claudia Sadoff) and Water Drop (Mr. Hassan Tolba Aboelnga) and be present for the Ven Te Chow Memorial Award and Lecture delivered by Prof. Cecilia Tortajada. AND, Special Plenary on "Bridging Science and Policy: Contributions of the IWRA World Water Congresses to National and Global Water Vision", 9:30- 10am, Tuesday, 2 December, Atlas 1 room.	5 mins	Mrs. Manal Bernoussi
Photo time with all Opening Ceremony speakers	2 mins	Mrs. Manal Bernoussi
Closing remarks & wrap up Call on stage HLP1 moderators, Rabi + Bilge	2 mins	Mrs. Manal Bernoussi



# Closing Ceremony

12:00 - 13:30 (90 mins) 05 December 2025 Location - ATLAS 1

Presenting closing ceremony Programme	5 mins	Mrs. Manal Bernoussi
Screening video (highlights of XIX Congress)	5 mins	
Lessons learned from the World Water Envoys. Reports - what	25 mins	
have they learned, who did they meet, what will they do next as a result? – 25 mins	2 mins	
- Introduction by Ignacio Deregibus, IWRA's Executive Director Report from Ally Zlatar – Canada / UAE, Artist   Scholar	7 mins	Laboratorio de Maral Companyi and Malancia Compilia
Ayend-Christ Daou – Lebanon, Hydraulic Engineer   Climate Adaptation Advocate	7 mins	Introduction by Manal Bernoussi and M. Ignacio Deregibus
Gettie Shiinda – Namibia, Water Resources Specialist   Community Innovator	7 mins	
Sakar Hada – Nepal, Civil Engineer   Nature-Based Solutions	7 mins	
XIX World Water Congress Award Announcement by the Ministry of Equipment and Water		H.E. Nizar Baraka, Minister of Equipment and Water, Morocco
2 winners - 1 for posters, 1 for oral presentations [SL to send email to MB]	5 mins	Mrs. Manal Bernoussi to announce the winners, NB to hand over awards
Congress Summary & Conclusions		
[IWRA to provide MB with talking points on Congress background in Morocco whilst tables being moved for Dec signing]	5 mins	Prof. Rabi Mohtar & Mr. Dahbi Salaheddine – ISC Co-Chairs
XIX World Water Congress Declaration Adoption	10 mins	Prof. Rabi Mohtar & Mr. Dahbi Salaheddine – ISC Co-Chairs
Türkiye handover ceremony for the following Congress with Moroccan co-hosts, IWRA & Yuanyuan Li  Speech by the host of the XX World Water Congress in Istanbul, Türkiye, in 2027  [MB - pronunciation of Türkiye]  Handing over of the IWRA flag from NB to IY + photos	10 mins	H.E. Nizar Baraka, Minister of Equipment and Water, Morocco H.E. İbrahim Yumaklı, Minister of Agriculture and Forestry, Türkiye
Speech by the host of the IWRA's 2nd Islands Water Congress in 2026 in Montego Bay, Jamaica, Mr. Peter Clarke	5 mins	Mr. Peter Clarke, Managing Director Water Resources Authority, Jamaica
Closing remarks and takeaway messages WRA President, Prof. Yuanyuan Li H.E. Nizar Baraka, Minister of Equipment and Water, Morocco	10 mins	IWRA President, Prof. Yuanyuan Li H.E. Nizar Baraka, Minister of Equipment and Water
Thank you + mention of technical trips on the Saturday (see programme for more details) Link between opening and closing	2 mins	Mrs. Manal Bernoussi
Photos time, to come to stage	5 mins	Mrs. Manal Bernoussi









# Day Tríp to Imlíl

- 07:30 Breakfast at your Hotel in Marrakech,
- 08:00 After breakfast, a 17-seats minibus will arrive at the hotel to transport the group safely to start their activities
- 08:30 Visit the Menara Gardens: Head to the Menara Gardens with a guide English-speaking, a peaceful
  oasis offering stunning views of the Atlas Mountains. You'll be able to admire the vast olive groves, the large
  reflecting pool, and the traditional pavilion. It's the perfect spot for photos and to enjoy some tranquility
- 09:30 Departure for Imlil at mini bus (17 seats): After the visit, leave for Imlil, a 1.5 to 2-hour drive from Marrakech. Along the way, enjoy the changing landscapes of the Ourika Valley and the majestic Atlas Mountains
- 10:30 Stop at Tahnaout for Restroom Break: Make a quick stop at Tahnaout, a small town on the way to Imlil, for a restroom break and a chance to stretch your legs
- 12:00 Arrival in Imlil: Arrival at Imlil
- 12:30 Traditional Lunch in Imlil : Enjoy a traditional Moroccan lunch at a local restaurant, with options such as tajines, couscous, grilled meats, or a Berber picnic if you're on a longer trek
- 14:00 Trekking to the Imlil Waterfal where a local guide English-speaking will meet the group or Village Walk: Explore the surrounding Berber villages, interact with locals, and visit artisan shops selling local crafts like carpets and pottery
- 16:30 Free Time in Imlil : Enjoy some free time to relax in the village, shop for souvenirs, or simply enjoy the views in a local café
- 17:00 Return to Marrakech : Begin the return journey to Marrakech, enjoying the scenic drive back
- 19:00 Arrival in Marrakech: Arrive at the hotel in Marrakech.







# Discovering Marrakech

- 08:00 Breakfast at your Hotel in Marrakech
- 09:00 After breakfast, a 17-seats minibus will arrive at the hotel to transport the group safely to start their activities
- 10:00 Visit the Bahia Palace: Next, visit the Bahia Palace, a masterpiece of Moroccan architecture.
   Explore its richly decorated rooms, beautiful gardens, and courtyards. The palace is a striking example of the luxury and refinement of the era.
- 11:00 Visit the Souks: Wander through the famous souks of the Medina. Explore the bustling alleys and
  discover traditional Moroccan crafts such as carpets, spices, leather goods, and metalwork. Don't forget
  to haggle and enjoy the vibrant atmosphere of the souks.
- 12:00 Visit the Ben Youssef Medersa: Visit the Ben Youssef University, one of the oldest and most prestigious Quranic schools in Morocco. This architectural gem features beautifully decorated courtyards with intricate zellige tiles and wood carvings, showcasing Andalusian and Moroccan design.
- 13:00 Lunch at Palace dar Essalam: Break for lunch at the Dar Essalam restaurant, an iconic place
  offering traditional Moroccan cuisine in a lavish setting. Enjoy a full Moroccan meal with dishes like
  couscous, tagine, or pastilla while experiencing Moroccan hospitality.
- 15:00 Visit the Majorelle Gardens: After lunch, head to the Majorelle Garden, a stunning and serene botanical garden. Explore its exotic plants, fountains, and the famous vibrant blue color, as well as the Berber Museum which showcases the history of Berber culture in Morocco.
- 18:00 Return to your hotel





# Technical visit - 1 The Marrakech Water-Treatment Station and the Khettara "BenTahar"



# 500 Dh/Person

Programme 09h30

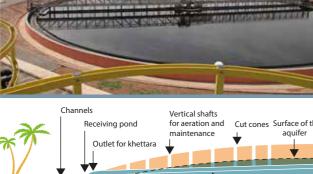
- Departure

- Visit to Marrakech Municipal Wastewater Treatment Plant

13h00-13h30 - Lunch

Price base 15 persons

14h30-18h00 - Visit to the Khettara "BenTahar"



#### Inclusions

• Transportation:

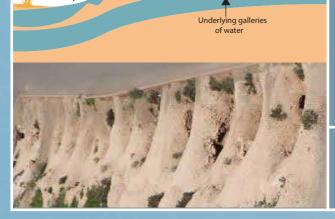
A mini bus at your service during the days with a professional English-speaking driver, including Gazoline

- Technical English-speaking guide who will provide accompaniment & assistance
- 02 Bottles of mineral water per person
- Lunch:

At a palace restaurant in Marrakech

#### Exclusions

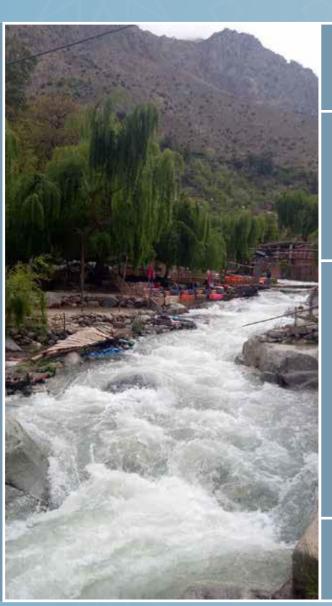
• Extras, Drinks & Tips







# Technical visit - 2 To the Ourika valley and hydrogeological site of the region



## Price base 15 persons

500 Dh/Person

#### Programme

o9h30 - Departure

- Technical visit /part 1

13h00-13h30 - Lunch

14h30-18h00 - Technical visit /part 2

#### Inclusions

• Transportation:

A mini bus at your service during the days with a professional English-speaking driver, including Gazoline

- Technical English-speaking guide who will provide accompaniment & assistance
- 02 Bottles of mineral water per person
- Lunch:

At a restaurant overlooking the Ourika valley.

#### **Exclusions**

• Extras, Drinks & Tips



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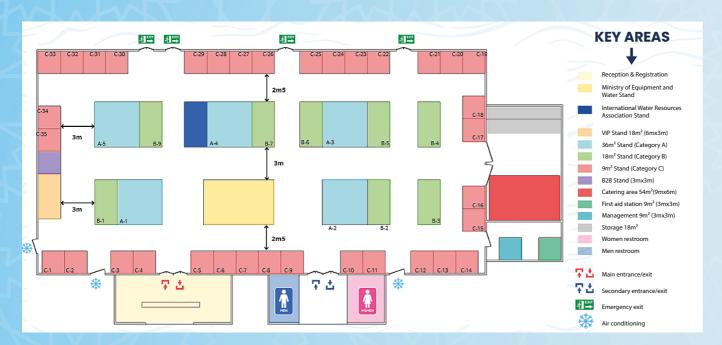






## **Exhibition Venue**

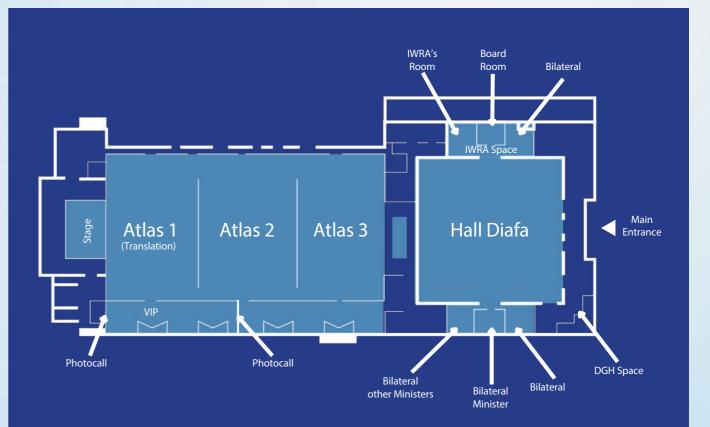
Featuring 33 exhibitors across 2,000 m<sup>2</sup> at Espace Oreon, the XIX World Water Congress exhibition showcases innovative water solutions from around the world.



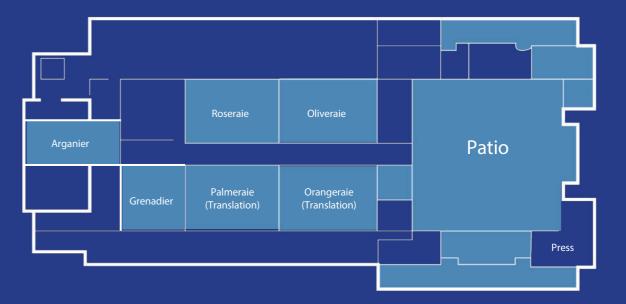
A1	ONEE	C8	BONETTO COVER BALL
A2	OCP	C9	SANAD TECH
A3+ B5	DIRECTION GÉNÉRALE DES TRAVAUX HYDRAULIQUES-TURQUIE ( DSI)	C10	NGE CONTRACTING
A4	IRZER	C11	BMCI
A5	ATNER	C12	LPEE
B1	SRM-MARRAKECH SAFI	C13+C14	EUROHINCA
B2	NOVEC	C15	MACSTEEL
B3	AMBASSADE AUTRICHE	C16	FOSTER PROCESSING
B4	RIG -INTERNATIONAL	C17	TEM COMPAGNY DANEMARK
B6	SCHIELE MAROC	C18	AIC METALLURGIE
В7	ABHT	C19	RADIO PLUS
B8	IWRA	C21+C22	MEDI 1 TV
B9	NOOR BUISNESS ADVISORY	C23	AGRIEDGE
STAND (VIP INITIALEMENT)	SAHAM BANK	C24-C25	EHTP
C1+C2	MOJAZINE	C28+C29+C27+C26	DIRECTION GÉNÉRALE DE LA MÉTÉOROLOGIE
C3+C4	WATEC	C30	STAND POUR LA PRESSE
C5	CID	C31	ESPACE B2B
C6	GIZ	C32+C33	ESPACE VIP
C7	EAUX MINÉRALES OULMESS	C34+C35	BIOUI TRAVAUX ( SBTX)



## Rooms



**Ground Floor** 



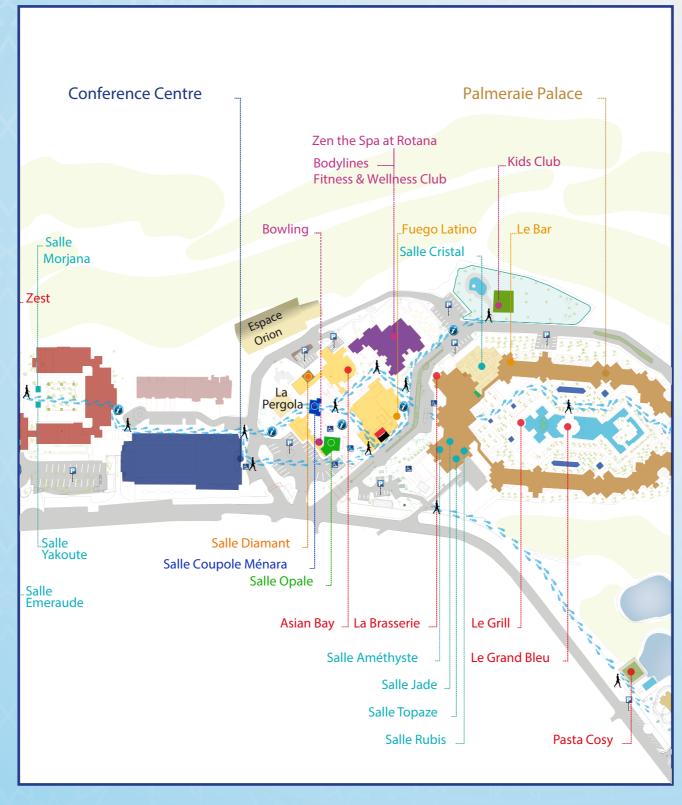
**Lower Floor** 







## Other rooms











# XIX WORLD WATER CONGRESS

International Water Resources Association (IWRA)

Marrakech, Morocco 1-5 December 2025







App QR











