IC- TWEP 2026 Program/ Wednesday, 28 October 2026

Start	End	Duration (min)	Chair Co-Chair	Room A – Digital Transformation in Water Management – Presentation	Chair Co-Chair	Room B – Innovative Technologies / Science, Education & Innovation & Regional Cooperation
08:00	08:30	30	Conference Registration			
08:30	09:00	30	Prof. Koichi Unami / Prof. Hani Shemy	**The water crisis in the MENA region: climate change impacts and adaptation strategies.** Prof. Hany Farhat Abd Elhamid Attia -Department of Environmental Engineering. Faculty of Civil Engineering, Technical University of Kosice, Slovakia.		
09:00	09:30	30		**Water resources management & climate change adaptation : The Tunisian experience** Prof. Noureddine Gaaloul – INGREF— Tunisia.		
09:30	10:00	30		**Governing Shared Scarcity: Trust, Equity, and Adaptive Cooperation in Transboundary Water Systems** Prof. Hassan Qudrat-Ullah -York University, Canada.		
10:00	10:30	30		**Flowing from land to sea: why, what to do and who to engage for water security** Dr. Siméon Kenfack - AFWASA, Cote d'ivoire		
10:30	10:45	15	Coffee break / Poster session			
10:45	11:00	15	Prof. Hany Farhat Abd Elhamid Attia / Prof. Hasbaia Mahmoud	**Optimising Coastal Aquifer Management under Seawater Intrusion.** Farmani Raziyeh — University of Exeter— UK.	Prof. Hassan Qudrat-Ullah / Prof. Kabo Bah Amos	**[2] Environmental Challenges under Climate Change: Water from Air for Sustainable Crop Production Using Green Energy.** Ahmed Al-Busaidi — Sultan Qaboos University— Oman.
11:00	11:15	15		**Modeling of sedimentary dynamics and impacts of coastal urbanization and desalination infrastructure on coastal erosion in the Mediterranean.** Faiza Hallouz — USTHB— Algeria.		**[84] Wastewater-food-health nexus: Biological treatment for safe agricultural reuse and transboundary watercourse protection.** Awoke Guadie — Arba Minch University— Ethiopia
11:15	11:30	15		**Assessing Hydrological Drought Dynamics and Groundwater Recharge in Semi-Arid Basins: A Coupled IV-ITA, SSI, and HBV-light Approach.** Fayçal Djellouli — Nour Bachir University Center—Algeria		**[233] Integrating GIS and the Analytic Hierarchy Process (AHP) for Groundwater Potential Zonation in the Arid Chott-El-Gharbi Watershed.** Abdessamed Derdour — University of Naama— Algeria

11:30	11:45	15	**Accurate Daily Reservoir Evaporation Prediction Using Advanced Boosting Machine Learning Models under Climate Variability for Sustainable Water Management.** Abderzak Moussouni — University of Mila— Algeria	**[145] Assessing Groundwater Quality for Irrigation: A Case study of Chott Saboun, northeastern Algeria.** Athamena Ali — University of Batna 2, — Algeria
11:45	12:00	15	**Implementation of the Revised Universal Soil Loss Equation Model Calculation within the Google Earth Engine Cloud Computing Environment.** Youcef Fekir — University of Mustapha Stambouli Mascara— Algeria.	**Comparative Performance Analysis of Machine Learning Models for Modeling and optimization of coagulant dosage in water treatment plants.** Mohammed Achite — Hassiba Benbouali of Chlef, Algeria.
12:00	12:15	15	**Artificial Intelligence-Based Modelling of Sediment Discharge in the Oued Mouilah Watershed, Northwestern Algeria.** Hellal Abdelkader — University Centre of Maghnia— Algeria.	**Machine Learning-Based Assessment of Nitrate Contamination in a Shallow Aquifer under Agricultural Pressure: A Decadal Study in the Mascara Basin (Algeria).** Laouni Benadela — University of Mascara— Algeria.
12:15	12.30	15	**Evaluating Future Water Security in the Moyen Cheliff Basin (Algeria) Using the WEAP Model Under Climate and Demand Scenarios.** Nourredine Touati Benali — ENSH— Algeria.	**Application of Artificial Neural Networks for Predicting the Irrigation Water Quality Index (IWQI) of the Alluvial Aquifer of the Western Middle Cheliff Plain, Algeria.** Abdelhamid Bradai — Hassiba Benbouali University — Algeria
12:30	12:45	15	**Forecasting and Source Attribution of River Water Pollution Using Machine Learning and Spatio-Temporal Graph Models: A Case Study on the River Ganga.** Varad Sabane — VIIT, India.	**AI-Driven Optimization of Toluene Removal from Oilfield Wastewater Using Machine Learning and Zinc Oxide Nanoparticles.** Imane Tiffour — University of Tissemsilt— Algeria.
12:45	13:00	15	Discussions.	
13.00	14:00	60	Lunch break	

14:00	14:30	30	Prof. Mihoubi Mustapha Kamel Prof. Boumedienne Maamar	**Géopolitique de l'eau et hydro diplomatie- Water Geopolitics and Hydro-Diplomacy.** Prof Tatah Boualem —MESRS—Algeria.		
14:30	15:00	30		**African Hydrofrontiers: Governing Shared Waters between Sovereignty, Water Security, and Climate Resilience** Prof. Meddi Mohamed – ENSH- Blida, Algeria.		
15:00	15:15	15	**Coffee break / Poster session**			
15:15	15:30	15	Prof. Chettih Mohamed Prof. Athamena Ali	**Green-Synthesized Silver Nanoparticles and Calcium Metasilicate as Novel Adsorbents for Optimized Arsenic and Selenium Removal: A Full Factorial Design Approach** Nadia Badr — Alexandria University—Egypt	Professor Noureddine Gaaloul Dr. Siméon Kenfack	**The Medjerda Climate Stress Index (MTCSI): Synchronous Aridification of a Transboundary Basin (1981–2024)** Fatima Zohra Tebbi — Batna 2 University— Algeria.
15:30	15:45	15		**GIS-Based Groundwater Potential Zone Mapping Using AHP and Random Forest Machine Learning: A Case Study of the Constantine Region, Northeastern Algeria** Nouh Rebouh — Research Centre for Regional Planning— Algeria		**Beyond Water Scarcity: Institutional Capacity and the Water Development Gap in West Africa** Ibrahim Lawal — PAUWES— Algeria
15:45	16:00	15		**Impact of water pollution and development of sustainable solutions for its monitoring and treatment** Benyahia Khadidja — ENPO-MA —Algeria.		**Sustainable Wastewater Treatment: Performance Evaluation of Prickly Pear Cactus (Opuntia ficus-indica) as a Bio-Flocculant** Racha Bouchenak Khelladi — Djilali Liabès University Sidi Bel Abbes, —Algeria.
16:00	16:15	15		**Degradation of a Binary Pollutant System (Azure B Dye and Humic Acid) by Electro-Fenton Process** Bensaad Naoual — ENPO-MA —Algeria.		**Optimising 3D directional-well trajectories for groundwater pollution management through inference from seismic, geophysical and geological models.** Dehni Abdellatif —ASAL— Algeria.
17:00	17:15	15		**Streamflow prediction using Machine Learning approach and HEC-HMS conceptual model : A Comparative Assessment** Noureddine Makhloufi — Chlef university— Algeria.		**CIAPOL: the driving force behind environmental pollution prevention in Côte d'Ivoire** Kambo Martial Atse — Pan-african Think Do African Network Of Young Researchers— Ivory Coast
17:15	17:30	15	Discussions; Closing session, 3rd day – Closing of the conference			

Workshops and round-table discussion (parallel sessions)/ Wednesday, 28 October 2026

Time	Activity	Content
10:30 – 17 :00	Workshop 1:	Flood Susceptibility Mapping Using Machine Learning and Remote Sensing
10:30 – 17 :00	Workshop 2	Part 1: AI-Driven Digital Twin & Google Earth Engine for Dam Watershed Intelligence Part 2: AI-Driven Digital Twin & Google Earth Engine for Mining Intelligence
10:30 – 17 :00	Workshop 3	Integrating Disaster Risk Reduction (DRR) into Local Development Planning
14:00 – 17 :00	Round-table discussion PAUWES— Algeria.	Education, Research and Entrepreneurship for Water and Sanitation in Africa: Empowering Youth and Advancing Gender Equality