

2022 University of Oklahoma International WaTER Conference

START	FINISH	T	EVENT	Monday September 26, 2022		
08:30	08:45		OPENING REMARKS	Randall Kolar: Welcome Remarks		
08:45	09:30		KEYNOTE-1	Status of water stress in Africa: insights from satellite gravity missions, in-situ, teleconnections, reanalysis, and modeling Tarhule (Illinois State University)-WASH		
			SESSION 1	S1a-Wastewater-based Epidemiology-Jason Vogel	S1b-WASH-Philip Deal	S1c-Engineering With Nature-Robert Nairn
09:30	09:50			The Current and Future State of Wastewater Monitoring Diamond (The Rockefeller Foundation)	Methodology for long-term sustainability of Water, Sanitation and Hygiene services in the Savannah Region of Ghana Apambire (Desert Research Institute)	Engineering With Nature for Comprehensive Resilience Bridges (US Army Corp of Engineers)
09:50	10:10			Wastewater-based Epidemiology for Tracking Attainment of UN Sustainable Development Goals Adhikari (Arizona State University)	SaaS for Improving Water System Success and Programme Reporting Bergmann (Well Beyond Water)	Surveying Microbes from a Mine Drainage Treatment Bioreactor with Cultivation and Genetic Techniques Olson (University of Oklahoma)
10:10	10:30			Co-creating a wastewater epidemiology-based risk communication framework T.Smith (University of Louisville, School of Medicine)	A lead (Pb) Mitigation story from Madagascar: Technology Innovation, Public Health, & Social Marketing Converge for Impactful Behavior Change within an Informal Hand Pump Market, Buerck (University of South Florida)	Passive Treatment of Artesian Net Acid Mine Drainage in the Western Interior Coal Field Behum (Office of Surface Mining, Reclamation, and Enforcement)
10:30	10:45			BREAK		
10:45	11:30		KEYNOTE-2	The Colors of Water - Observing, Modeling and Understanding Precipitation Processes Across the World's Mountains Barros (University of Illinois)-Advances in Drought Monitoring, Modeling, and Prediction		
			SESSION 2	S2a-Wastewater-based Epidemiology-Jason Vogel	S2b-WASH-Philip Deal	S2c-Engineering With Nature-Robert Nairn
11:30	11:50			Challenges and Opportunities for Implementing Wastewater-Based Epidemiology with Tribal Communities Driver (Arizona State University)	Tracking Operation & Maintenance of Piped Water Systems through Custom Water Consoles, Deal and Sesay (Water4)	Using GIS to Identify Suitable Areas for Sustainable Drainage Systems for Floodplain and StreamChannel Mitigation in Stillwater, OK Seago (University of Oklahoma)
11:50	12:10			Wastewater Monitoring as a Surveillance and Outbreak Detection Tool for Foodborne Pathogens in Oklahoma Kuhn (University of Oklahoma Health Sciences Center)	Effectiveness of Uv-Disinfection Against Cercaria At Selected Wavelength Using Uv-Leds For Schistosomiasis Control Desalegn (Addis Ababa University)	Development and evaluation of a hybrid constructed wetland for greywater treatment and reuse in rural area Maiga (University of Joseph KI-ZERBO)
12:10	12:30			Multi-pathogen sanitation system surveillance in low and middle income countries: A systematic review and meta-analysis B. Smith (University of Louisville School of Medicine)	Using leaky tins to improve community health in rural Tanzania Macoloo (World Neighbors)	Conceptual passive treatment system to remediate mine drainage in a hydrologically and topographically challenging location Shepherd (University of Oklahoma)
12:30	13:00			LUNCH BREAK		
13:00	13:45		KEYNOTE-3	Water, Reconciliation and Our Common Future Phare (Centre for Indigenous Environmental Resources International Joint Commission)-Water Challenges for Underserved Populations		
13:45	14:00			BREAK		
			SESSION 3	S3a-Climate Change and Hydrology Extremes-Yang Hong	S3b-Water Challenges for Underserved Populations-Jim Chamberlain	S3c-Advances in Drought Monitoring, Modeling, and Prediction-Jeff Basara
14:00	14:20			Preparing for hydrologic extremes through anticipatory actions Block (University of Wisconsin)	Teaching Water Sustainability: Pedagogical Strategies for Higher Education Chamberlain (University of Oklahoma)	Abrupt Drought Pluvial Transitions: Patterns, Trends and Causes Zong-Liang Yang (University of Texas)
14:20	14:40			Evaluation of merging method for CHIRP satellite rainfall estimate over Wabi Shebelle River Basin, Ethiopia Tadesse (African Center for Water Excellence Management)	Deliberative Public Engagement to Address Water Resource Issues: Cases From the Southern and Southwestern United States Richards (University of Arkansas Little Rock)	Inter-seasonal relationships of land surface variables across Europe Meshesheke (University of Oklahoma)
14:40	15:00			Cross examines the precipitation products by the rain gauge, remote sensing, and WRF simulations over a South American region across the Andes Chen (University of Oklahoma)	Providing Information that Matters: An Empirical Investigation of the Impact of Different Areas of Educational Content on Recycled Water Knowledge and Acceptance Tanner (University of Oklahoma)	Flash droughts in a Changing Climate across the central United States Christian (University of Oklahoma)
15:00	15:45		KEYNOTE-4	Transforming Water and Wastewater Services in the USA Lall (Columbia University)-Aging Water and Wastewater Infrastructure Systems		
	15:45			ADJOURN FOR THE DAY		
				TRAVEL TO FIRST AMERICANS MUSEUM FOR OU INTERNATIONAL WATER PRIZE AWARD CEREMONY AND BANQUET		

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START	FINSH	EVENT	Tuesday September 27, 2022		
08:30	09:15	KEYNOTE-5	Enhancing resilience of communities to climate change through a catchment based integrated management approach in Uganda, Tindimugaya (Ministry of Water and Environment, Uganda)-Climate Change and Hydrology Extremes		
09:15	09:30		BREAK		
		SESSION 4	POSTER SESSION-Robert C. Knox		
09:30	09:37		1-Examining The Connection Between Water Security, Mental Wellness, and Resilience Among Indigenous Populations: A Scoping Review	Allison Au-yeung (Mc Master University)	
09:37	09:44		2-Sustainable Reuse of Mine Drainage Residuals for Phosphorus Management	Dayton M. Dorman (University of Oklahoma)	
09:44	09:51		3-Exploring cost, environmental impacts, and efficacy of point-of-use water disinfection technologies	Bright Carl Elijah (Georgia Southern University)	
09:51	09:58		4-Monitoring Drought through the Lens of Landsat: Drying of Rivers During the California Droughts	Shang Gao (University of Oklahoma)	
09:58	10:05		5-Trust factor as a predictor of acceptance of recycled water	Gwen Hoang (University of Oklahoma)	
10:05	10:12		6-Identifying disparities in interventions to increase public acceptance of recycled water	Dana Mahmoud (University of Oklahoma)	
10:12	10:19		7-Addition of Sorptive Amendments to Address Leachability of Trace Metals from Hard Rock Mine Drainage Passive Treatment Residual Solids	Justine I. McCann (University of Oklahoma)	
10:19	10:26		8-A Comparative Analysis of Ecosystem Service Valuation Tools For the Economic Analysis of Nature	Alissa Meek (University of Oklahoma)	
10:26	10:30		RESERVED TIME		
10:30	10:45		BREAK		
		SESSION 5	S5a-Climate Change and Hydrology Extremes-Pierre Kirstetter	S5b-Water Challenges for Underserved Populations-Jim Chamberlain	S5c-WASH-Philip Deal
10:45	11:05		Assessing the impacts of climate projections and variability on the Upper Washita River alluvial aquifer, streams (base flows), and Foss Reservoir, western Oklahoma Labriola (U.S. Geological Survey)	Sun Water - Rural African Solar-Powered Water Distribution. Three-Village Case Study: Challenges and Solutions from Cameroon Knight and Endezmo (Global Hope Network International)	The West Africa Well Owner Network (WAWON) - An Environmental Education Program for Private Well Owners in Wet Africa Mansaray (Oklahoma State University)
11:05	11:25		The US is projected to become more prone to flash floods in a high-end emissions scenario Li (University of Oklahoma)	Application of Hybrid Solar Powered Electrocoagulation and Electrooxidation System for Textile Wastewater Treatment Afsaha (Addis Ababa University)	Water Resources Management in the South-West Region of Bangladesh and the Trans-boundary Cooperation in the Ganges Basin Hoque (Bangladesh University)
11:25	11:45		Quantification of the Impacts of Non-Stationary Climate on Water Resources and Mitigation Strategies: Case-Studies Sarkar (Halff and Associates)	Explainable AI to understand drivers behind water-conserving behaviors Bedle (University of Oklahoma)	The domestic application of international development project best practices and principles Strosnider (University of South Carolina)
11:45	12:00		BREAK		
		SESSION 6	POSTER SESSION-Robert C. Knox		
12:00	12:07		9-Understanding Long-Term Effects of Dam Removal on Riparian Ecosystems: A Preliminary Engineering With Nature Study	Cheyenne Morgan (University of Oklahoma)	
12:07	12:14		10-Removal of Constituents of Emerging Concern from Secondarily Treated Wastewater Effluent using Wetland Mesocosms	Olivia Overton (University of Oklahoma)	
12:14	12:21		11-Management of Seawater Intrusion in a Coastal Aquifer: An analytical Solution for a Radial Well	Bahaa-eldin EA Elwali (University of Malaya)	
12:21	12:28		12-Classification of Iron Oxyhydroxides and Reuse for Stormwater Treatment	Samantha Taylor (University of Oklahoma)	
12:28	12:35		13-Distributed hydrologic modeling of extreme flooding under climate change in the Mvskoke (Muskogee) Nation	Theresa Tsoodle (University of Oklahoma)	

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12:35	12:42	14-Removal of Nutrients and Phenolic Compounds from Coffee Processing Industrial Effluent Using Constructed Wetland	Theoneste Twagirumuhire (Addis Ababa University)	
12:42	12:49	15-Investigate the response of food-energy-water systems to climatic extremes in Northeast and Midwest of US from the perspective of water resources	Jiaqi Zhang (University of Oklahoma)	
12:49	13:00	RESERVED TIME		
13:00	13:30	LUNCH		
13:30	14:15	KEYNOTE-6 Warrior Science, Kayanni:yo (A Good Path) of Water Security for Haudenosaunee Martin-Hill (McMaster University)-Water Challenges for Underserved Populations		
14:15	14:30	BREAK		
		SESSION 7	S7a-Advances in Drought Monitoring, Modeling, and Prediction- Jeff Basara	S7b-Water Challenges for Underserved Populations-Jim Chamberlain
14:30	14:50		Anthropogenic Drought: Definition and Modeling Frameworks AghaKouchak (University of California Irvine)	An innovative spring capture method for improved water quality Ten Pas (Calvin University)
14:50	15:10		Performance Assessment of Interpolation Techniques for Optimal Areal Rainfall-Temperature Estimation. The Case of Two Contrasting River Catchments Bati (Addis Ababa University)	Enhanced ciprofloxacin removal from aqueous solution using a chemically modified biochar derived from bamboo sawdust: Adsorption process optimization with response surface methodology Wakejo (Addis Ababa University)
15:10	15:30		Evaluation of factors affecting the quality of citizen science rainfall data in Akaki catchment Tedla (Addis Ababa University)	Assisting Small, Disadvantaged Community Water Systems in Texas- Filling the Gap with TAWWA Volunteers Walden (Texas Section AWWA)
15:30	15:45		BREAK	
		SESSION 8	S8a-Engineering With Nature-Dr. Robert Nairn	S8b-Aging Water and Wastewater Infrastructure Systems-Dr. Kendra Dresback
15:45	16:05		Nutrient mass balance for an integrated resource recovery system in Costa Rica Aldaach (West Virginia University)	Solar based water purification system for household wastewater treatment Awasthi (National Environmental Engineering Research Institute)
16:05	16:25		Ecosystem Metabolism as a Tool to Evaluate Conservation Easement Success in the Horse Creek Watershed of the Grand Lake O' the Cherokees, Oklahoma Wilcox (University of Oklahoma)	Retrofitting conventional treatment plants due to changing source water quality in India Labhasetwar (National Environmental Engineering Research Institute)
16:25	16:45		FINAL NETWORKING	
16:45			ADJOURN CONFERENCE	