


WISA 2024 - TURN THE TIDE
DRAFT PROGRAMME


SUBTHEMES:	Hands on the wheel: Moving towards stronger partnerships and stakeholder engagement	Aye Aye Capt'n: Turn the tide with improved governance	Reading the charts: Effecting resilient planning and management in a changing environment
	Forging A'Head and improving municipal water and sanitation service delivery and water treatment	Tending the lookout: optimising monitoring and efficiency	Clipping new edges with innovation and Technology
VENUE:	Hall 3A Streamed live	Hall 3C Streamed live	MR 11 CDE
			MR 12 CDE
			MR 11 AB
			MR 12 AB
			MR21AB
			MR 21 C
			MR 21 DEF
			MR 22ABC
			MR 22 DEF

TUESDAY 11 June 2024	
08:00 - 16:00	Pre Conference Technical Tours - https://www.wisa2024.co.za/technical-tours/ - PLEASE MAKE SURE THAT YOU REGISTER FOR THE ONE YOU WANT TO ATTEND! Durban Water Recycling (DWR) Integrated Decentralised Wastewater Treatment System (DEWATS) and Low Flush Urine Diversion System as a Sustainable Onsite Sanitation and Resource Recovery System for Rural Schools Siza Water Re-use Plant Darvill wastewater works – Water Reclamation Plant
12:00 - 18:00	Registration
17:30 - 20:00	Welcome Function in Exhibition Hall / Opening of the Exhibition

WEDNESDAY 12 June 2024	
07:00 - 17:00	Registration Level 0 foyer
WEDNESDAY 12 June 2024 OPENING SESSION: 08:30 - 11:00	
08:30 - 11:00	Welcome by Chairperson of WISA Organising Committee (Mr Mu Mnguni) Address by Honourable Minister of the Department of Water & Sanitation Introduction of Keynote Speaker by Dr Jennifer Molwanwa (WRC CEO) Keynote by Prof Hamanah Kanan, President Elect, International Water Association: "Turning the Tide: Global perspectives for sustainable water and sanitation services delivery" PANEL DISCUSSION: Perspectives on the State of the Water Sector in South Africa and what should be done to turn the tide, Facilitator/moderator: Dr Jennifer Molwanwa (WRC CEO), Panel members are Prof Hamanah Kanan, Ms Deborah Mochotho (DWS), Mr Ashwin Seethal (CSIR), Ms Nonhlanhla Tau (COGTA), Ms Aysha Laher (AHL), AG person, Mr Simon Scruton (eThekwin), Prof Thokozani Majoi Address by Adv. S. Khuzwayo (uMngeni-uThukela Water Board Chair) - Anchor Sponsor Welcome WISA 2024 Overview by WISA Technical Committee (Prof Faizal Bux): Introduction to themes
11:00-11:30	Refreshment Break in Exhibition Hall


WEDNESDAY 12 June 2024 PARALLEL SESSIONS											
Topic	Drinking water treatment and reclaimed water reuse	Regulation 3630 for Process controllers	 WATER RESEARCH COMMISSION	Planning and IWRM	Round table discussion on reducing flood risks in Durban	Sanitation systems	Sailing International Cooperation with Blue Deal	Understanding Mining Influenced Water: An Introductory Course	The National Water Sector Scientific Forum Capacitating the Water Sector professionals and stakeholders	Efficiency and Energy	Conventional water sources: groundwater and surface water #1
Session # and Chair	Session 1 Chair: Leanne Coetsee	Session 2 Regulation 3630 Workshop	WRC Stream	Session 3 Chair: Carin Bosman	Session 4 Netherlands Embassy Workshop	Session 5 Chair: Dr Freyan Arumugam	Session 6 Blue Deal Workshop (partnerships)	Session 7 WISA MWD Workshop	Session 8 SALGA Workshop on capacitating the Water Sector	Session 9 Chair: Tshikhawango Rambau	Session 10 Chair: Dr Cornelius Ruiters
11:30 - 11:35	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome
11:35 - 11:55	Selection criteria for solid-liquid separation processes - Sedimentation and Dissolved air flotation for drinking water, Mr Muzi Sibiyi, Rand Water		Transforming water use in South Africa through research, development, and innovation to enhance water use efficiency and security Facilitator: Dr Mamohiding Thigale Contributors: Prof Sylvester Mpanzeli, Prof John Zumba, Dr Luxon Nhamo, Dr Siphiso Pillay, Dr Eunice Ubomba-Jaswa, Dr Samkelisiwe Hlophe-Ginindza Closing Remarks: Prof Nenes Kgabi (WRC Board member)	The Effect of Complexity on Water Quality Modelling Performance and Uncertainty, Mr Joshua Rasidi, Department of Water and Sanitation (S)	Wetlands as indicators of ecological impacts: risk-based assessments, Mr Tendani Mphahlele, Ekurhuleni Water Care	Whose Sht is it Anyway? Mr Richard Holden, Trans-Caledon Tunnel Authority	Cost Comparisons for Non-Sewered and Conventional Sanitation Systems in Households, Schools and Informal Settlements context, Mr Phillip Majeke, Water Research Commission	Valourisation of sewage sludge for sustainable bioenergy recovery through hydrothermal treatment, Mr Baldwin Mutwene, Durban University of Technology (S)	The National Water Sector Scientific Forum Capacitating the Water Sector professionals and stakeholders	Case Study for Water Authorities: The Economic Benefit from Alternative Energy Application and Energy Efficiency, Dr Thokozani Mncube, Umgeni-uThukela Water	Performance assessment of solar-powered groundwater pumping systems in rural areas of Greater Giyani Municipality (Limpopo), Prof Nebo Jovanovic, University of the Western Cape
11:55 - 12:15	Incorporating Potable Reuse in Big Spring, Texas – First Potable Reuse System in North America, Mr Wayne Lem, Trojan Technologies	Workshop #1									Assessment Groundwater Level Fluctuations in the Pietersburg Plateau for Improved Groundwater Management, Dr Lindela Lalumbe, Department of Water and Sanitation
12:15 - 12:35	Removal of emerging contaminants and heavy metals in wastewater reuse for potable water supply, Mr Prince Manyapa, Durban University of Technology	Workshop #2									Assessment of groundwater recovery for improved groundwater management, Dr Anu Rachel Thomas, WASH R&D Centre, University of KwaZulu-Natal
12:35 - 12:55	Building the Water360 Global Map of purified recycled water for drinking around the world, Ms Danielle Francis, Water Services Association of Australia (V)	Workshop #3									Review of Monitoring Network Performance for Effective Management of Groundwater Resources, Dr Portia Fuku, Department of Water and Sanitation
12:55 - 13:15	Questions & Answers	Workshop #4									Questions & Answers


13:15 - 14:30 Lunch Break in the Exhibition Hall											
13:15 - 14:30 Poster session											
Topic	Disinfection and distillation	Infrastructure Report Cards	 WATER RESEARCH COMMISSION	Implementation through partnerships: Lessons learned from the Ecological Infrastructure for Water Security Project	Seminar on the water / green hydrogen nexus	Shit Flow Diagrams (SFDs)	Introduction to Treatment Technologies	Understanding Mining Influenced Water: An Introductory Course	Strategic capacity building for a Future Proof Water Sector	Monitoring for pathogens #1	Conventional water sources: groundwater and surface water #2
Session # and Chair	Session 11 Chair: Mapula Nkwilika	Session 12 SAICE Workshop	WRC Stream	Session 13 Partnerships	Session 14 Netherlands Embassy Workshop	Session 15 Chair: Richard Holden	Session 16 Introduction to Treatment Technologies Workshop	Session 17 WISA MWD Workshop	Session 18 Blue Deal Workshop (capacity building)	Session 19 Chair: Dr Esper Ncube	Session 20 Chair: Shafick Adams
14:30 - 14:35	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome
14:35 - 14:55	Practical Considerations for Applying UV Disinfection in South Africa for Municipal Wastewater Disinfection, Mr Wayne Lem, Trojan Technologies	Workshop #6	Dealing with the future water quality nexus. Facilitator: Ms Hlengiwe Cele Contributors: Dr Yazeed van Wyk, Dr Nonhlanhla Kalabaiba, Dr Bonani Madikizela, Mr Jay Bhagwan, Dr Samkelisiwe Hlophe-Ginindza Diagrams and Closing Remarks: Dr Harrison Pienaar (WRC Board Member)	Workshop #7 Implementation through partnerships: Lessons learned from the Ecological Infrastructure for Water Security Project. WRC, SANBI	Seminar on the water / green hydrogen nexus Netherlands Embassy	Strategies to recover resources from sanitation: national resource recovery based on material flows, Dr Suthir Pillay, WRC	Towards Citywide Inclusive Sanitation to improve service delivery: A Southern Africa case study, Ms Wendy Shozi, Borda South Africa	Establishing an Ascaris suum infection in pigs and harvesting eggs for research and testing purposes, Dr Danica Naidoo, WASH R&D Centre, University of KwaZulu-Natal	Strategic capacity building for a Future Proof Water Sector	Linking wastewater surveillance and epidemiology with socio-economic indicators: the power of multisectoral approaches, Ms Gillian Maree, Gauteng City-region Observatory	Investigating the groundwater and surface water exchange in the Umgeni catchment, Ms Thobeka Mngose, University of KwaZulu-Natal (S)
14:55 - 15:15	Solar absorbing polystyrene blended hydrophobic membranes for effective vapour passage during distillation, Ms Ndamulelo Nancy Phosha, Unisa, Institute for Nanotechnology and Water Sustainability (S)	Workshop #8									An integrated geospatial approach and the factors required to delineate irrigation suitability areas, Dr Luxon Nhamo, Water Research Commission
15:15 - 15:35	Analyzing Chlorination and Operational Parameters in Antiretroviral Drugs Degradation in Water, Dr Nhlanhla Hlongwa, Durban University of Technology (V)	Workshop #9									Statistical analysis of hydrochemical data to assess aquifer-stream connectivity during Managed Aquifer Recharge operations: Limpopo, SA, Dr Samson Sanya Senore, University of Pretoria (V)
15:35 - 15:45	Questions & Answers	Workshop #10									Questions & Answers

15:45 - 16:10 Tea break in the exhibition hall											
Topic	Activated sludge: membranes and drying	Non-Revenue Water and Water Demand Management initiatives at Rand Water	 WATER RESEARCH COMMISSION	Water Consumption Monitoring	Wetskills - Finals	Innovative Technology	Effective Management and Maintenance of waterworks in the municipal environment	Understanding Mining Influenced Water: An Introductory Course	Academia-Industry Gaps in WASH	ISO 17025 accreditation	Monitoring for pathogens #2
Session # and Chair	Session 21 Chair: Alison Chapman	Session 22 Rand Water Workshop	WRC Stream	Session 23 Chair: Dr Ismail Banoo	Session 24 Netherlands Embassy Workshop	Session 25 Chair: Dr Manjusha Sunil	Session 26 Waterworks Management & Maintenance Workshop	Session 27 WISA MWD Workshop	Session 28 WISA KZN Branch	Session 29 WASH R&D Centre Workshop	Session 30 Chair: Prof Faizal Bux
16:10 - 16:15	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome
16:15 - 16:35	Pitfalls of Membrane Solids-Liquid Separation for Biologically Enhanced Phosphorous removal in Activated Sludge Systems, Mr Markus Johannes Albertus Slabbert, Bigen Africa	Workshop #12	Dealing with the future water quality nexus Continue	Results of a study of the business cases for technology-based water demand management in facilities, Prof Kevin Wall, University of Pretoria	Workshop #13 Wetskills - Finals Netherlands Embassy	Use of scanning solutions to develop 3D and VR models of existing water treatment assets, Mr Ranish Singh, Rand Water	Application of remote sensing and environmental data to quantify water in Limpopo province, South Africa, Mr Phumlani Zwane, Sol Plaaste University	Effective Management and Maintenance of waterworks in the municipal environment, and enhancing service delivery by effective project management Mr Stefanus Weyers	Bridging the Academia-Industry gaps in the WASH Sector - A Framework WISA KZN Branch	Successes and lessons from method optimisation, from conceptualisation, development, testing, standardisation and ISO 17025 accreditation. WASH R&D Centre	Impact of storage conditions and enhancement strategies on viral biomarker recovery for WBE applications, Ms Sueyanka Subroyen, Institute for Water and Wastewater Technology
16:35 - 16:55	Evaluation of two novel Solar Thermal Drying Systems for Sludge Treatment, Pareashin Naidoo, University of KwaZulu-Natal	Workshop #14									Antibiotic resistance profile analysis of ESKAPE bacteria from Gauteng wastewater treatment plants, Mr Nkagamelelo Mkhomoana, University of South Africa, Florida State Campus, Jhb, Inanow (S)
16:55 - 17:15	Methods to disrupt bound moisture in faecal sludge and faeces to improve dewatering and drying, Pareashin Pather, University of KwaZulu-Natal	Workshop #15									Identification of Priority Pathogenic Fungus in Wastewater and Surface Water Using Shotgun Metagenomics, Dr Nonhlanhla Precious Hlongwa, Durban University of Technology (V)
17:15 - 17:30	Questions & Answers	Workshop #16									Questions & Answers
17:45	Questions & Answers	Workshop #17									Questions & Answers

THURSDAY 13 June 2024											
07:00 - 17:00 Registration Level 0 foyer											
THURSDAY 13 June 2024 OPENING SESSION 08:30 - 10:30											
08:30 - 08:40	Chair (Prof Faizal Bux): Introduction										
08:30 - 09:15	Plenary Keynote 1: Ms Alana Potter, "Turning the tide to ensure that the right to water is realised"										
09:10 - 09:50	Plenary Keynote 2: Prof Loretta Feris, DVC Academic, Pretoria University: "How can we improve water governance from a transdisciplinary regulatory perspective?"										
10:00 - 10:30	Questions and Discussion										
10:30-11:00 - Refreshment Break in exhibition Hall											
THURSDAY 13 June 2024 PARALLEL SESSIONS											

Topic	Membranes	Governance and Regulation	 WATER RESEARCH COMMISSION	Sanitation Standards Workshop	SDG 6 and Partnerships	Infrastructure condition	Urban water systems	Wastewater based surveillance for communicable diseases	Circular Economy	Streams and rivers #1	Climate, floods and drought #1
Session # and Chair	Session 31 Chair: Dr Buysile Khlosia	Session 32 Chair: Dr Harrison Pienaar	WRC Stream	Session 33 WISA Sanitation Standards Workshop	Session 34 Chair: Lungi Zuma-Biyela	Session 35 Chair: Siphiso Sithole	Session 36 Chair: Aysha Laher	Session 37 National Institute for Communicable Diseases/ DUT	Session 38 Chair: Dr Thokozani Mncube	Session 39 Chair: Bonani Madikizela	Session 40 Chair: Dr Brilliant Peja
11:00 - 11:05	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome
11:05 - 11:25	Minimizing Fouling on Ultrafiltration Membrane by Inline Coagulation and Air Scouring, Mr Calvin Mkgadise, Rand Water	Workshop #18	Driving Empowerment of Stakeholders through Innovation and expert advisory support Facilitator: Ms Shama Nienaber Contributors: Dr Valerie Naidoo, Ms Zanele Sifundza, Ms Ednan Mambaoko, Dr Manjusha Sunil, Mr Philip Majeke and Mr John Dini Water Innovators	A Pilot Initiative for Establishing the Interlinkages between SDG 6.3 and the other SDGs, Mr Molefi Makizuko, Department of Water and Sanitation	Future-Forward Alliances: Pioneering Public-Private Collaborations, Ms Chiedza Mnguni, Anglo American Platinum	Trends in the Condition of South Africa's Water and Sanitation Infrastructure, Mr Abri Vermeulen, ACV Water	Optimal placement of tanks in water distribution networks for improved reliability, Mr Aaron Kolonji Kapata, Witwatersrand University	Co-digestion of sludge for potential energy generation - A Darvill case study policy review, Dr Sinyo Ndlovu, Umgeni-uThukela Water	Comparative Analysis: Batch Reactor and Single-Chamber Microbial Fuel Cells for Treating Synthetic Acid Mine Drainage, Ms Tsimiyah Ismail, Durban University of Technology	Impact of different pollution sources on Microplastics in the Msunduzi river, Ms Nomalile Malambule, Durban University of Technology (S)	Developing a web-based app with hydrometeorological indices to support decision-making across South Africa, Dr Sarah Roffe, Agricultural Research Council
11:25 - 11:45	Fouling Resistance Improvement in Membrane-Based Municipal Wastewater Treatment: A Focus on Surface Modifications, Mr Godwill Kasongo, Cape Peninsula University of Technology (S)	Workshop #19									Assessment of users' needs for weather and climate information in the South African water sector, Dr Sarah Roffe, Agricultural Research Council
11:45 - 12:05	Pathogenic bacteria and dissolved organic matter removal from lake water using microporous polyether sulfone-4-hydroxybenzoic acid membranes, Ms Phumile Pretty Mamba, Unisa (S)	Workshop #20									Impact of different pollution sources on plasmidborne microbe in aquatic ecosystems, Nomalile Malambule, WWTW, DUT
12:05 - 12:25	Development of nitrogen-doped graphene/MOF nanocomposites towards adsorptive removal of Cr(VI) from the wastewater streams, Ms Thireletso M Madumo, University of Johannesburg (maybe V)	Workshop #21									The use of drought operating rules to improve water security in South Africa, Mr Hlulani Rananga, Department of Water and Sanitation (S)
12:25 - 12:45	Questions & Answers	Workshop #22									Assessment of Long-Term Water Demand for the Algen System Considering Demographic and Dry Climate Periods, Mr Vernon Nagan, Civil Engineering (V)

12:45 - 14:00 Lunch Break in the exhibition hall											
12:45 - 14:00 Poster Session											
Topic	Sanitation Standards Workshop	Capacity building and Stakeholders	 WATER RESEARCH COMMISSION	Sanitation Standards Workshop	Drinking water quality #1	#BreakingSilos - Empowering Youth for Transformative Change	Digital and Circular Water Transformation as part of Water Service Delivery Climate Responses	The Future of Water Reuse in South Africa	Climate, floods and drought #2	Streams and rivers #2	
Session # and Chair	Session 41 WISA Sanitation Standards Workshop	Session 42 Chair: Mbali Sibiyi	WRC Stream	Session 43 Chair: Teboho Letsoalo	Session 44 YWP Workshop	Session 45 Topic: WISA Innovation Workshop	Session 46 WISA Water Reuse Division/ CSIR Workshop	Session 47 Chair: Abri Vermeulen	Session 48 Chair: Lindwe Nkabane	Session 49 Chair: Dr Leana Esterhuizen	
14:00 - 14:05	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	
14:05 - 14:25	More than just training: rethinking capacity development in the water sector, Mr Derick du Toit, Association for Water and Rural Development	Workshop #23	Assessing the interconnection between water security, adaptation, and resilience for sustainable water management. Facilitators: Dr Mamohiding Thigale and Dr Shafick Adams Contributors: Dr Brilliant Peja, Mr Wandile Nompuzhu, Dr Samkelisiwe Hlophe-Ginindza, Mr Yazeed van Wyk, Dr Roderick Juba, Ms Virginia Molose, Ms Lesego Gaegane	Introducing Public-Private Partnerships (PPPs) in the Municipal water services sphere, Mr Arthur Douglass, SA Water Works Utilities (Pty) Ltd / a Sulaumani	Vibrio cholerae risk management from source water to tap in Rand Water, Ms Yvonne Lee, Rand Water	Occurrences and Implications of Pathogenic and Antibiotic-Resistant Bacteria in Different States of DWTPs and DWDS, Mr Khuthazo Mudau, Department of Water and Sanitation (S)	Assessing Heavy Metal Pollution Impact on Drinking Water Quality in Mining Areas in Ghana, Mr Jacob Amengor, Ghana Water Company Limited	Digital and Circular Water Transformation as part of Water Service Delivery Climate Responses WISA Innovation Workshop	Assessment of climate change flood risk in the lower isipingo Catchment - Ethekehuni Municipality, Ms Zinhle Nzuza, Royal Haskoningdhv	Livable Urban Waterway Programme in the City of Cape Town, Mr Andrew McDonald, COCT	
14:25 - 14:45	How standards can aid in developing resilient sanitation systems in Southern Africa	Workshop #24									
14:45 - 15:05	How standards can aid in developing resilient sanitation systems in Southern Africa	Workshop #25									
15:05 - 15:15	Questions & Answers	Workshop #26									

15:15 - 15:45 Tea break in the Exhibition Hall											
Topic	Procurement Strategies for Strengthening the Adoption of Water Innovations by Municipalities	Capacity building and Stakeholders #2	 WATER RESEARCH COMMISSION	Drinking water quality #2	WetsNext - From Innovation to Implementation	Anaerobic sludge, are we on track, and is it an investment option?	Development and implementation of water reuse and reclamation compliance legislation framework.	Monitoring for metals and microbes	Water scarcity and climate resilience #1.		

Session # and Chair	WRC Stream	Session 49 WRC, SALGA, DSI	Session 50 Chair: Eustathia Bofilatos	Session 51 Chair: Lelethu Bungu	Session 52 Wetskills Foundation Workshop	Session 53 WISA Anaerobic Sludge Division	Session 54 Topic: WISA Reuse Division Workshop	Session 55 Chair: Shalene Janse van Rensburg	Session 56 Chair: Prof Kevin Wall
15:45 - 15:50		Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome
15:50-16:10	Navigating the interconnection between water security, adaptation, and resilience for sustainable water management. (continue)	Workshop #22 Procurement Strategies for Strengthening the Adoption of Water Innovations by Public Sector Institutions: The opportunity of Non-Sewered Sanitation WRC, SALGA, DSI	Stakeholder Driven Approach in the development of interim Catchment Management Strategy for Pongola-Umzimkulu CMA, Mr Nkosinjani Mkhize, Department of Water and Sanitation	Water and society: how social survey data can help inform responses to water security, Ms Gillian Maree, Gauteng City-region Observatory	Workshop #23 WetsNext – From Innovation to Implementation Wetskills Foundation	Workshop #24 Anaerobic sludge, are we on track, and is it an investment option? WISA Anaerobic Sludge Division	Workshop #25 Development and implementation of water reuse and reclamation compliance legislation framework. WISA Water Reuse Division	The Determination of Arsenic in Contaminated Sites in South Africa using a Triple Quadrupole ICP-MS, Mr Sibusiso Mnguni, Rand Water	Intersection of water scarcity and women/girls' socio-economic exclusion: Insights from three selected villages (Phatome, Malawi), Prof Lobina Palamuleni, North West University
16:10-16:30			Evaluating Corporate Social Investments by Platinum Mining Companies in Rustenburg to improve sustainable community development, Ms Lelethu Motaung, ERWAT	Identification of faecal pollution pathways from water sources to point-of-use in Vhembe District Municipality, Ms Opele Mochware, Tshwane University Of Technology				Quantification of nitrifying microorganisms in water using Real-Time Polymerase Chain reaction, Ms Lutendo Vele, Rand Water	Just add water!: Planning for rural livelihoods and economic activities, Mr Derrick du Toit, Association for Water and Rural Development
16:30-16:50			Can Common Natural Resource Management be Sustainable at a National Scale? Ms Karen King, RoyalhaskoningDHV (S)	Do polymeric coagulants used in drinking water plants have an effect on human health? Dr Rahzia Hendricks, Rand Water				Ferric Hydroxide Recovery from Iron-Rich Acid Mine Water with Calcium Carbonate and Gypsum Scale Inhibitor, Dr Tumelo Monty Mogashane, Mintek, Analytical Chemistry Division	Urban Water Resilience Plans for South Africa Cities, Ms Anya Eilers, Zutari
16:50-17:00			Questions & Answers	Questions & Answers				Questions & Answers	Questions & Answers

19:00- WISA 2024 GALA DINNER

FRIDAY 14 June 2024

07:00 - 17:00	Registration Level 0 Stage
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FRIDAY 14 June 2024 OPENING SESSION 08:30 - 10:30

08:30 - 08:40	Chair (Dr Preyan Arumugam): Introduction
08:30 - 09:10	Plenary Keynote 1: Mr Jay Bhagwan, "You, me and SANITI – sharing a journey of sanitation disruption"
09:15 - 09:55	Plenary Keynote 2: Ms Nonhlanhlahle Tau, COGTA "Governance: Focusing on Effectiveness and efficiency to turn the tide"
09:55 - 10:20	PANEL DISCUSSION: How do we Turn the Tide in Sanitation to meet the SDGs, with keynotes, Anthony Odili, University College, London, DWS Representative; facilitated by Chair
10:20 - 10:30	Questions and Discussion
10:30-11:00	Refreshment Break in exhibition Hall

FRIDAY 14 June 2024 PARALLEL SESSIONS

Topic	Water services sector support	The Revised SANS 241: Standards for drinking water quality in South Africa	Struvite recovery and microalgae	WWTW monitoring	Water Utility Best management Practice - Intercontinental Collaborations	UNESCO IHP	Costing Models	Regulation of small WWTW (<5ML/d)	Alternative water sources
Session # and Chair	Session 57 Chair: Andrew McDonald	Session 58 Topic: SANS 241 Workshop	Session 59 Chair: Dr Ismail Rawat	Session 60 Chair: Prof Sheena Kumari	Session 61 Umgeni-Uthukela Water Workshop	Session 62 Topic: UNESCO IHP Workshop	Session 63 Chair: Rajiv Paladh	Session 64 WISA Small WWTW Division. TCTA, AHL Water, SALGA	Session 65 Chair: Mpheteng Mokubung
11:00 - 11:05	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome
11:05 - 11:25	Can the era of decentralised nexus services resolve South Africa's service delivery challenges? Dr Mias Van Der Walt, Bigen	Workshop #26 The Revised SANS 241: Standards for drinking water quality in South Africa SANS - Ms Debbie Trollip	Modelling of Struvite Recovery from Anaerobically Digested Waste Activated Sludge using Response Surface Methodology, Ms Charmaine Kgomofo Funani, Vaal University of Technology (S)	Microbial diversity of bioaerosols produced in wastewater treatment plants and their potential health risks, Ms Puseletso Kumalo, Durban University of Technology (S)	Workshop #27 Water Utility Best management Practice - Intercontinental Collaborations Umgeni-Uthukela Water	Workshop #28 UNESCO IHP DWS	User-paid household sanitation services for informal settlements: A paradigm shift for sanitation service delivery, Ellen Mutsakatira, Khanyisa Projects	Workshop #29 Does the current regulatory environment achieve the best possible outcome in Small WWTW (<5 ML/d)? WISA Small WWTW Division. Trans-Caledon Tunnel Authority, AHL Water, SALGA	Solar Desalination by Black TiO ₂ and 3DPrinted Photocatalysis Mounted on Cellulose Nanocubes as Support Material, Mr Wesley Lawrence, University of Pretoria
11:25 - 11:45	Moving from "Best-Effort" Support Approach to a Structured and Responsive Municipal Support Evaluation Approach, Miss Nonhlanhlahle Tau, Misa		Development and performance of microalgal-based consortium for bioremediation of high-strength COD wastewater, Mr Siphelele Sibisi, Institute for Water and Wastewater Technology, Durban University of Technology (S)	Organic profiling of pollution incidents at a wastewater treatment plant – a case study, Mr Denver Karshagen, ERWAT					Growing Leafy Greens in Hydroponics in Cities, Miss Luyanda Sokhela, RoyalhaskoningDHV
11:45 - 12:05	Development of the DEA Based Municipal Water and Sanitation Services Infrastructure Management Efficiency Index, Ms Nonhlanhlahle Mbhele, Urban and Public Infrastructure Research Initiative (UPIRI)-UCT (S)		Microalgal cultivation in raceway pond (300,000L) using wastewater in real environment, challenges and solution, Dr Faiz Ahmad Ansari, Durban University of Technology	Phytotoxicity and Quality of Co-composted Sewage Sludge and Green Waste at Different Mixing Ratios, Dr Benton Odeno, WASH R&D University of KwaZulu Natal					A pragmatic review to alternative water supply sources for improved water security in eThekweni Municipality, Dr Ismail Banoo, UKZN
12:05-12:15	Questions & Answers		Questions & Answers	Questions & Answers					Questions & Answers

12:15 - 13:30 Lunch Break in the exhibition hall

12:15 - 13:30 Poster Session

Topic	Industrial waste and wastewater	National Sanitation Implementation Plan Workshop	Ammoniums and nitrates	Monitoring for organics	The importance of Involving Women in IWRM and WASH to ensure Water Access and Availability - SADC Perspective	Sustainable Wastewater Infrastructure and Operational Expenditure, Costing and Financing Workshop	Mining waste and wastewater	WISA Mentorship Programme	Water scarcity and climate resilience #2	
Session # and Chair	Session 66 Chair: Sibusiso Dlamini	Session 67 DWS National Sanitation Implementation Plan Workshop	Session 68 Chair: Nico van Blerk	Session 69 Chair: Dr Silhe Mngadi	Session 70 The importance of Involving Women in IWRM and WASH to ensure Water Access and Availability - SADC Perspective	Session 71 Wastewater Infrastructure Costing	Session 72 Chair: Mike de Kock	Session 73 WISA Mentorship Programme Workshop	Session 74 Chair: Dr Sarah Roffe	
13:30-13:35	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	Chair Open & Welcome	
13:35-13:55	South African Bentonite clay as inexpensive adsorbents to remove chromium(VI)-contaminated streams, Dr Nonhlanhlahle Mthombeni, Durban University of Technology	Workshop #30 National Sanitation Implementation Plan DWS	Ammonium oxidizing bacterial populations in South African activated sludge wastewater treatment plants, Mr Mfundisi Thobajane, Erwat	Analysis of Phytosanitary Products in Surface Water and Groundwater Using GCxGC-TOFMS, Dr Christina Kannigadu, LECO	Workshop #31 The importance of Involving Women in IWRM and WASH to ensure Water Access and Availability - SADC Perspective WISA KZN Branch (Mbal)	Workshop #32 Sustainable Wastewater Infrastructure and Operational Expenditure, Costing and Financing Umgeni-Uthukela and Prime Africa	Investigating Polyacrylamide as a Depressant in PGM Ore Flotation and its Effect on Tailings Dewatering, Prof Malibongwe Manono, University of Cape Town	Workshop #33 Mentorship Programme WISA HO	Assessment of climate resilience rating for non-sewered sanitation technologies using existing climate resilience framework, Mr Phillip Majete, Water Research Commission	
13:55-14:15	Assessment of nanobubble aeration performance in the treatment of poultry slaughterhouse wastewater, Mr Ephraim Kaskote, Cape Peninsula University of Technology		Exploring the potential of indigenous bacteria for complete nitrate removal in WWTW effluent in Durban, Dr Karabelo Moleaotsa, University of Kwa-Zulu Natal	Analysis of Trace Odorants in Drinking Water by HS-SPME GC- and GCxGC-TOFMS, Mr Alexander Whaley, Leco Africa (Pty)					Exploring the Use of Seawater in Cu-Ni-PGM Ore Concentrators, Prof Malibongwe Manono, University of Cape Town	Improving urban resilience through green infrastructure: a case study of the Mpumalanga Province, South Africa, Dr Ayanda Shabalala, University of Mpumalanga
14:15-14:35	Testing of rubber for use in a demineralisation plant – Eskom experience, Mrs Sumayyah Sulliman, Eskom		Up-scaling partial nitrification-anammox (PN/A) process for the treatment of anaerobic sludge digester effluent, Dr Owaes Magray, Institute for Water & Wastewater Technology	Continuous Monitoring of Active Pharmaceutical Ingredient Concentrations in Surface Waters Polluted by an Informal Settlement, Ms Kalpana Maraj, University of Cape Town					In-pit disposal of mineral residues to minimise dirty water in heavily-loaded catchments, Dr David Love, Guinea Flower (Pty) Ltd	Nelson Mandela Bay: Drought Comparison, Mr David Raymer, NMBM
14:35-14:45	Questions & Answers		Questions & Answers	Questions & Answers					Questions & Answers	

14:45-15:15 Break

FRIDAY 14 June 2024 CLOSING SESSION 15:15 - 16:45

15:15-16:15	Student Prize Ceremony
16:15-16:45	Reflection on WISA2024

17:00-18:00 Farewell Cocktail