

8:30 AM	9:45 AM	<b>Conference Check-in</b>			DEC, Hall 2A South
10:00 AM - 11:15 AM  Opening Ceremony and Official Welcome	Opening address: <b>HE Zaki Anwar Nusseibeh</b> Chancellor, United Arab Emirates University and Conference Patron				
	Opening address: <b>Hon David Speirs</b> South Australia's Minister for Environment and Water and Conference Patron				
	Opening address: <b>HE Badran A. Al Omar</b> President, King Saud University, Saudi Arabia				
Opening address: <b>Hon Jamie Isbister</b> Australia' Ambassador for The Environment					
11:15 AM	11:30 AM	<b>Morning Tea Break</b>			
11:30 AM	12:00 PM	Keynote Speech: <b>Hon Karlene Maywald</b> South Australian Water Ambassador and Conference Co-chair The Australian Water Reform Journey, Key learnings for arid regions and where to from here?			DEC, Hall 2A South
12:00 PM	12:30 PM	Keynote Speech: <b>Prof. Sharon Megdal</b> Director of the University of Arizona Water Resources Research Center Managed Aquifer Recharge in Semi-Arid Regions			DEC, Hall 2A South
12:30 AM	2:00 PM	<b>Lunch - Transfer to technical sessions</b>			
2:00 PM - 3:30 PM Parallel sessions 1	<b>AI Maktoum Ballroom I</b> <i>D1-Track 1.2: Advanced technologies in Water Resources Management (Large scale water management, ASR, MAR, Hydroinformatics)</i> <b>Chair: Prof. Ekkehard Holzbecher</b>		<b>AI Maktoum Ballroom II</b> <i>D1-Track 2.3: Emerging Water Issues in UAE and KSA</i> <b>Chair: Prof. Mohsen Sherif</b>		<b>Meeting Room 1</b> <i>D1-Track 1.3: Climate Change and Water Resources Resilience (Risk management, water conservation, provisioning)</i> <b>Chair: Prof. Vijay Singh</b>
	2:00 PM	2:15 PM	Keynote: <b>Prof. Graham Fogg</b> Groundwater Basin Openness as A Determinant of Sustainability		Keynote: <b>Mr. Will Fargher</b> Governance and Investment Frameworks for Climate-resilient Urban Water Services: Insights from Australia for other Arid Regions
2:15 PM	2:30 PM	Ekkehard Holzbecher, Thomas Berends, Angel Garcia and Ahmed Hadidi Decision Support for Water Resources Management in Arid and Semiarid Environments, Example Oman		Keynote: <b>Prof. Basant Maheshwari</b> Sustaining the Invisible in Arid and Semi-Arid Regions: Participatory Monitoring and Management of Groundwater at the Local Level	
2:30 PM	2:45 PM	Janardhana Raju Nandimandalam, Muniratnam P and Krishna Reddy Tv Managed Aquifer Recharge (MAR) to Augment Depleted Aquifers in Water Scarcity Areas: Case Studies from Semi-Arid Regions of India		Hamed Assaf Hydroeconomic Model for Managing Groundwater Resources in Arid Regions	
2:45 PM	3:00 PM	Chuck Cullom, Orestes Morfin, and Tami Shor An Innovative Farmer – Water Utility Water Management Approach: Mechanism for Water-Efficient Agriculture and Drought Resilience		Ali Akanda and Mohammed Alotaibi Understanding Groundwater Depletion and Water Security Challenges in the Transboundary Aquifer Systems of the Arabian Peninsula	
3:00 PM	3:15 PM	Christoph Gerber et al. Applying Environmental Tracers to Study a Karstified Aquifer in Semi-arid Australia		M Peli, C Rapuzzi, E Romano, S Barontini, N Guyennon and Roberto Ranzi Irrigation Deficit and Water Management In a Semiarid Mediterranean Agricultural District	
3:15 PM	3:30 PM	Faisal Alfaisal Model for Optimal Regional Wastewater Systems Planning with Uncertain Wastewater Treatment Capacity		Simone Stewart Adaptive Management of the Groundwater Resources on Eyre Peninsula	
3:30 PM	3:45 PM	Mohamed Dawoud, Saleh Al Aswad, H Abdel Rahman and Nahed Al Arabi Sustainable Water Resources Management Under Climate Changes in KSA		Nir Becker and Frank Ward Integrated Water Management: A Planning Tool for Israel	
3:30 PM	3:45 PM	<b>Afternoon Tea Break</b>			
3:45 PM - 5:15 PM Parallel sessions 2	<b>AI Maktoum Ballroom I</b> <i>D1-Track 1.2: Advanced technologies in Water Resources Management (Large scale water management, ASR, MAR, Hydroinformatics)</i> <b>Chair: Prof. J. Raju</b>		<b>AI Maktoum Ballroom II</b> <i>D1-Track 1.3: Climate Change and Water Resources Resilience (Risk management, water conservation, provisioning)</i> <b>Chair: Prof. Furat Al-Faraj</b>		<b>Meeting Room 1</b> <i>D1-Track 2.2: Water Resources Sustainability (SDGs, water-food-energy nexus, social and economic growth and environmental sustainability in arid regions)</i> <b>Chair: Prof. Minjie Chen</b>
	3:45 PM	4:00 PM	Keynote: <b>Prof. Furat Al-Faraj</b> Groundwater Depletion in a Changing Climate and Human-Induced Interventions: A Case Study in Arid and Semi-Arid Region		Keynote: <b>Prof. Mohamed Dawoud</b> The Future of Water and Food Security in Arab Region
4:00 PM	4:15 PM	Declan Page, J Vanderzalm, D Gonzalez, O Barron and Michael Donn Managed Aquifer Recharge for Water Security in Australia		Sarah Cerra, Hui Yang, Akram Benali and Manoj Shukla Irrigation With Brackish and Produced Waters: Benefits And Risks for Agricultural Sustainability of Arid Area	
4:15 PM	4:30 PM	Pavitra Kumar et al. Development of Long Short-Term Memory Model for Prediction of Water Table Depth in United Arab Emirates		Mahmoud Seleiman, Nasser Al-Suhaibani and Salah El-Hendawy Effects of Treated Wastewater and Synthetic Fertilizers on Productivity, Gross Energy, and Elements Analysis of Potential Bioenergy Crops	
4:30 PM	4:45 PM	Jorge Isidoro, Ricardo Martins and João de Lima Detection and Definition of the Free Surface with High Spatiotemporal Resolution Using Computer Vision		Daniel Janowitz et al. Bartering Blue Water Vs. Green Energy – Innovative Swap-Options for Cooperation Between Israel and Jordan	
4:45 PM	5:00 PM	Behalu Berehanu et al. WEAP-MODFLOW model as an integrated water management Decision Support System (DSS), a case of the Middle Awash sub-basin, Central Ethiopia		Harish Bhandary Impact Assessment of Inland Desalination Units on Groundwater Quality and Levels in Kuwait	
5:00 PM	5:15 PM	Tomy-Minh Truong et al. Fractured Rock Aquifers as A Storage Option of Desalinated Seawater for Improved Drought Resilience of Groundwater Resources		Mahmoud Elgendi et al. Improving the solar still performance using nanomaterials: A review	
5:30 PM	8:30 PM	Javed Akhtar, Ahmad Sana and Syed Mohammed Tauseef Application of Numerical Modelling to Predict the Ground Water Heads in Coastal Aquifers of Sultanate of Oman			
		Modathir Zaroug, Michael Kizza and Sowed Wamala Climate Change Adaptation at the Nile Basin Initiative		Mingjie Chen, Aliya Al-Saidi, Ali Al-Maktoumi and Azizallah Izady Numerical Simulation of CO2 Plume Geothermal Production in a Heterogeneous Reservoir Formation	
5:30 PM	8:30 PM	<b>Gala Dinner/ Cultural Event</b>			



# Conference Second Day, Thursday, 24.03.2022



9:00 AM - 10:30 AM Parallel sessions 3	<b>Al Maktoum Ballroom I</b> <i>D2-Track 1.1: Water Resources and Hydrological Processes (Rainwater harvesting, Flash Flood Prediction and Management)</i> <b>Chair: Prof. Anvar Kacimov</b>	<b>Al Maktoum Ballroom II</b> <i>D2-Track 1.3: Young Researchers (General Technical Themes)</i> <b>Chair: Dr. Hamidreza Sharifan</b>	<b>Meeting Room 1</b> <i>D2-Track 2.2: Spatial Technology, GIS, and RS in Water Resources</i> <b>Chair: Mr Steve Morton</b>	<b>Opal Boardroom</b> <i>D2-Track 2.1: Water Quality Management</i> <b>Chair: Prof. Munjed Maraja</b>
9:00 AM 9:15 AM	Giorgio Baiamonte, Carmelo Agnese and Vijay P. Singh Multiple Non-Linear Reservoirs to Model Water Balance Components in Sandy Soils	<b>Keynote: Prof. Chong-Yu Xu</b> Evaluation of 1 Hydrological Modeling Under Changing 2 Environmental Conditions	Marion Lux Castro et al. Flood Mapping and Assessment During Typhoon Ulysses (Vamco) in Cagayan, Philippines Using Synthetic Aperture Radar Images	<b>Keynote: Dr. Carl Seubert</b> Water Quality Monitoring from Space: Aquawatch Australia
9:15 AM 9:30 AM	Eran Haffi, Johnathan B. Laronne, Avshalom Babad and Tom Kaholi Measuring water velocity by LSPiV for accurate determination of water discharge and roughness coefficients in representative ephemeral streams	Mark McDonnell et al. Beach Sands as an Alternative Source of Freshwater Supply – Using Geophysics to Inform Well Design in Coastal Aquifers	Waleed Al-Zubari, Ali Al-Shaabani and Nadir Abdulhameid Upgrading Groundwater Monitoring Network in the Kingdom of Bahrain using Geostatistics and GIS	Klaus Joehnk et al. Moving from Local Monitoring to Regional and Continental Scale Early Warning and Forecasting of Water Quality Risks
9:30 AM 9:45 AM	Renato Morbidelli, Carla Saltalippi, Jacopo Dari and Alessia Flammini Temporal Aggregation of Rainfall Data and Its Influence on Trend Estimation for Annual Maximum Depths with Duration 24 Hours	Afrah Al-Shukaili, Hilal Al-Mamari and Anvar Kacimov Moisture-Vegetation Relationships of Omani Coastal Dunes; Nabkhas	Kate Williams, Eva R Rodriguez, D Woodrow, M Mattaboni, P Sheridan, D Evans, and Steven Morton Enabling Automatic Ground Water Information Collection and Aggregation through Space and IoT in Australia (SIG Water)	Hany Abd-Elhamid, Martina Zelenáková, Akbar Javadi and Khalid Qahman Assessment and Management of Seawater Intrusion In Gaza Aquifer in Response to Excessive Pumping and Sea Level Rise
9:45 AM 10:00 AM	João de Lima, S Zehszaz, J Isidoro, Isabel Lima and Ricardo Martins Using Fluorescent and Thermal Tracers to Estimate Overland Flow Velocities	Asmaa Al-Mutiri, Esra Aleisa and Mohamed Hamoda Life Cycle Assessment for Tertiary Wastewater Treatment in Kuwait	Jonathan Jacobi Satellite-based leak detection and cost benefit - Investing in existing water infrastructure	Zipho Samuel, Mike Ojemaye, Anthony Okoh and Omobola Okoh Chelating nitrogenous groups grafted onto zinc oxide nanoparticles for the adsorption of methyl violet in aqueous solution
10:00 AM 10:15 AM	Gilbert Hinge, Mohamed Mohamed and Mohamed Hamouda On The Use of Satellite Precipitation Products for Flood Application	Anwar Aljuwaisseri, Khawla Alshayji and Esra Aleisa Life Cycle Assessment for Seawater Desalination Using Reverse Osmosis in Kuwait	Travis Wiederstein, Vaishali Sharda and Jonathan Aguilar Evaluating spatial and temporal variations in sub-field level crop water demands	Garba Ahmed, Ahmed Muhd Idris and Jibrin Gambo Hydrogeochemistry to Assess the Groundwater Quality Using Multistatistical Methods
10:15 AM 10:30 AM	Sahar Abidi, N Souid, A Kamel Toubal, M Achite and Lamia Lajili-Ghezal Assessment of Soil Losses and Siltation of Sidi Salem Dam in Medjerda High Valley-Tunisia		Jorge Pena-Arancibia et al. Landsat-based 30 m monthly actual evapotranspiration for Australia: development, implementation in Google Earth Engine and examples	

## Morning Tea Break

10:30 AM 10:45 AM	<b>Al Maktoum Ballroom I</b> <i>D2-Track 1.1: Water Resources and Hydrological Processes (Rainwater harvesting, Flash Flood Prediction and Management)</i> <b>Chair: Prof. Giorgio Baiamonte</b>	<b>Al Maktoum Ballroom II</b> <i>D2-Track 1.3: Young Researchers (General Technical Themes)</i> <b>Chair: Dr. Mohamed Hamouda</b>	<b>Meeting Room 1</b> <i>D2-Track 2.2: Spatial Technology, GIS, and RS in Water Resources</i> <b>Chair: Prof. Vijay P. Singh</b>	<b>Opal Boardroom</b> <i>D2-Track 2.1: Water Quality Management</i> <b>Chair: Dr. Carl Seubert</b>
10:45 AM - 12:15 PM Parallel sessions 4	Anvar Kacimov, Yuri Obnosov and Jiri Šimůnek Subterranean holes in the arid vadose zone as perturbations of descending pore water fluxes: J. R. Philip's legacy revisited	Mark McDonnell et al. Four-Dimensional Electrical Resistivity Imaging in Monitoring Saltwater Intrusion in a Nearshore Aquifer	<b>Keynote: Prof. Rao S Govindaraju</b> Estimation of Measurement Uncertainty Due to Errors in Rainfall and Streamflow Measurements using Random Forest	Hamidreza Sharifan et al. Groundwater Contamination by PFAS Around Airports in The USA: Identification, Source and Commonality
10:45 AM 11:00 AM	Ghalda Bait Kulaib, Khawla Al-Mamari, Marwa Al-Mahdori and Ahmad Sana Statistical Analysis of Flow for Selected Rivers in Pakistan	Shoaib Ali, Mohamed Mohamed and Qasim Khan Estimating groundwater drought at spatio-temporal scale improving GRACE resolution based on machine learning approach	Sivan Isaacson, Yosef Avrahami, Stanley R. Rotman and Yael Storz-Peretz Mapping and monitoring flash floods spatial distribution and frequencies in arid regions using remote sensing spectral indices	Jasem Alkandari Effect of the Blending of Desalinated Seawater with Groundwater on the Formation of Trihalomethane Species in Drinking Water
11:00 AM 11:15 AM	Mohammed Abdel-Fattah, Sameh Kantoush, Tetsuya Sumi and Atef Badr Flood Risk Reduction in Arid and Semi Arid Regions: Case Studies from Egypt and Oman	Firas Alsilibe, Katalin Bene, Ghada Bilal and Khaled Alghaffi Validation of CHIRPS-based satellite rainfall estimates in Damascus basin, Syria	Qasem Abdelal and Abdalrhman Alayan Wireless Sensor Networks for hydrological monitoring, helpful tools for accurate models	Mohammad Faiz Alam, Karen G. Villholth and Joel Podgorski Human Arsenic Exposure Risk Via Crop Consumption and Global Trade from Groundwater-Irrigated Areas
11:15 AM 11:30 AM	Muheeb Awawdeh, Kh Al-Qudah, H Rwasdeh and Monther Jamhawi GIS-based Flood Risk Assessment in Urban Areas: Case study Amman City	Ihsanullah R Khan, Rabee Rustum, Qasim Khan and Mohamed M Mohamed Estimation of flash flood in urban area of Dubai using Hydrologic Modeling System (HEC-HMS)	Lala El Houmaldi and Abdelkader Larabi Automatic Extraction of Water Bodies from High-Resolution Remote Sensing Imagery Using Deep Learning and GIS in Dubai	Samia Saad, Akbar Javadi, Raziye Farmani and Mohsen Sherif Optimal Management of Seawater Intrusion Using Infiltration Pond
11:30 AM 11:45 AM	H El-Maghraby, A Alhumaidi, M Alnaqbi, M Sherif, F Hassan and Y Greish Development of Chemically-functionalized Galvanized Aluminum Meshes for Efficient Fog Harvesting	Halidu Abu-Bakar, Leon Williams and Stephen Hallett A framework for predicting household water consumption patterns	Marwa Ali, A Badawy, A Elmahdi, Dubravka Bojic and Domitille Vallee Implementing Water Accounting and Water Governance Analysis to Support Water – Energy- Food Nexus in the Mena Region: The Lessons Learned and the Way Forward	Rajasha Alambi, Mansour Ahmed, G Bhadrachari, Ali Al-Naser and Jibu Thomas Brine Management Using Hydrophobic Nanocomposite Membranes
11:45 AM 12:00 PM	Khalid Almheiri and Rabee Rustum The Effect of Cloud-seeding Operations on Intensity-Duration-Frequency (IDF) curves A Comparative Study on Three Meteorological Stations in Sharjah Emirate, UAE			
12:00 PM 12:15 PM				

## Lunch

## Poster Session (All themes) - Al Maktoum Ballroom I&II

1:00 PM 2:00 PM	<b>Al Maktoum Ballroom I</b> <i>D2-Track 1.1: Water Resources and Hydrological Processes (Rainwater harvesting, Flash Flood Prediction and Management)</i> <b>Chair: Dr. Mohamed Al-Rashed</b>	<b>Al Maktoum Ballroom II</b> <i>D2-Track 1.3: Young Researchers (General Technical Themes)</i> <b>Chair: Prof. Hamed Assaf</b>	<b>Meeting Room 1</b> <i>D2-Track 2.2: Spatial Technology, GIS, and RS in Water Resources</i> <b>Chair: Prof. Marion Lux Castro</b>	<b>Opal Boardroom</b> <i>D1-Track 2.1: Non-Conventional Water Resources (desalination, water recycling, water reuse)</i> <b>Chair: Prof. Rolando A. Flores Galarza</b>
2:00 PM - 3:30 PM Parallel sessions 5	<b>Keynote: Dr. John Xiaogang Shi</b> Effects of Hydroclimate Variability on Groundwater Recharge Trends for Arid Regions	Alina Buber, V Shevchenko, A Buber, Y Dobrachev and E Ratkovich Improvement of Rice Agricultural Complexes Water Supply in Conditions of Water Scarcity	Sivan Isaacson et al. Monitoring Flash Floods in Arid Environments Using Bgusat; A Single Band Nano Satellite	Daniel Bahamon, Ki Ryuk Bang, Eun Seo Cho and Lourdes F. Vega A Novel Pressure-Controlled Hybrid Graphene Oxide Membranes for Water Treatment: A Combined Experimental – Molecular Simulation Approach
2:00 PM 2:15 PM		Khalid Elhaj, Salem Issa, Dalal Alshamsi and Biruk Abera Cherkose Modeling and Prediction of Groundwater Level Fluctuations Using Geoinformatics and Artificial Neural Networks in Al Ain city, UAE	Jibrin Gambo, Ahmad Muhammad Idris, Garba Ahmed and Yusuf Ahmad A Geospatial Statistical Approach for Seasonal Comparisons of Ground Water Quality Using Interpolates Grid-Based Mapping	Abdullah Al-Mamun, Intisar Al Sulaimi and Jagdeep Kumar Nayak A Study on The Influence of Volatile Fatty Acid on Biogas Production and Pathogen Destruction Using Thermophilic Anaerobic Digestion
2:15 PM 2:30 PM		Muhagir Elkamali, Abdelgadir Abuelgasim and Ahmed Sefelnasr Monitoring of Land Surface Subsidence over Agricultural Areas in AL Ain Region UAE	Mutawakil Obeidat, Farah Al-Hantouli and Muheeb Awawdeh Soil Erosion Prioritization of Yarmouk River Basin, Jordan Using Multiple Approaches in a GIS Environment	Ahmed Yasir, Abdelbaki Benamor, Alaa Al Hawari and Ebrahim Mahmoudi Chitosan-Graphene Oxide Composite Membrane for Fouling Reduction in Ultrafiltration
2:30 PM 2:45 PM	Rachel Armoza-Zvuloni, Y Shlomi, I Abadi, R Shem-Tov and J Laronne Floodwater harvesting and sediment deposition in reservoirs, a case study from the Arava Valley, Israel	Shahad Al-Yaqoubi, A Al-Maktoumi, A Kacimov, S Ismailly and A Al-Mayahi Field Bailout Experiments, HYDRUS-2D and Analytical Modeling for Determination of Hydraulic Parameters of Porous Bed of Ephemeral Stream	Marwa Ali, Amgad Elmahdi, Ahmed Tawfik, Omar Ismail and Alaa Albably Using ICT in Agricultural Water Management: IRWI as a Case Study from Egypt	Mohd Shariq Khan, Khurshed B. Ansari and Wahid Ali Atmospheric Water Extractor and Space Cooling Unit
2:45 PM 3:00 PM	O Abudraz, N Alkaabi, H El-Maghraby, M Sherif, F Hassan and Y Greish Nano-architecture of Nanostructured Copper Oxides Decorated with Polyvinyl Alcohol as Efficient Water Harvester	Mo'ath Etoom, Ehab Aletoum, Ali Ollimat and Taha Masarweh Estimating crop evapotranspiration of dates trees based on SEBAL algorithm using Landsat 8 satellite imagery – A Case Study: Al Zarqa-Jordan	Mohsen Alarabawy, Modathir Zaroug and Sowed Wamala Enhanced River Nile River Basin Monitoring For Improved Water Resources Collaborative Management and Development	Tarik Chfadi, Mohamed Gheblawi and Rafi Ullah Tasbih Ullah An Appraisal of UAE Farmers' Perceptions and Valuation of Treated Wastewater Resources
3:00 PM 3:15 PM	Magdy Mohssen Flood Forecasting, The New Zealand Experience		Deepak Tiwari, H. L. Tiwari and V. P. Singh Flash drought assessment for India river Basins	Tapas Biswas, Klaus Joehnk and Chris Williams Growing Biofuel Crop (Arundo Donax) With Non-Conventional Saline Water in Arid Regions
3:15 PM 3:30 PM	S M Anwar Hossain, Ataur Rahman and Ouarda Taha B. M. J. Trend Analysis in Australian Flood Data: A Case Study for New South Wales Using Latest Information			

## Afternoon Tea Break

3:30 PM 3:45 PM	<b>Al Maktoum Ballroom I</b> <i>D1-Track 1.2: Advanced technologies in Water Resources Management (Large scale water management, ASR, MAR, Hydroinformatics)</i> <b>Chair: Prof. Waleed Zubari</b>	<b>Al Maktoum Ballroom II</b> <i>D1-Track 2.2: Water Resources Sustainability (SDGs, water-food-energy nexus, social and economic growth and environmental sustainability in arid regions)</i> <b>Chair: Prof. Mohamed Dawoud</b>	<b>Meeting Room 1</b> <i>D1-Track 1.1: Socio-Economic Water Studies (Governance, pricing, policy and regulation)</i> <b>Chair: Prof. Basant Maheshwari</b>	
3:45 PM - 5:15 PM Parallel sessions 6	Abhishek Goyal, Renato Morbidelli, Alessia Flammini, Corrado Corradini and Rao Govindaraju Uncertainty in estimation of field-scale variability of soil saturated hydraulic conductivity	Eric Vanweydevel What Lessons Can Remote Australia Learn from the Middle East in Terms of Water Management Solutions	Huw Pohlner and Will Fargher WaterGuide: Setting a Path to Improved Water Management and Use Under Scarcity	
3:45 PM 4:00 PM	Trudy Green et al. WaterTools: A guide to three national level platforms that support the management of Australia's scarce water resources	Bivin Pradeep and Parag Kulkarni Technology Enabled Data Driven Solution for Enhancing Efficiency of Water Use in Buildings	Khaled Alshaibani Investigating Household Consumption Patterns before and During The Covid-19 Pandemic	
4:00 PM 4:15 PM	Alexander Buber and Mikhail Bolgov Formation of Reservoir Operation Modes in Real Time Based on Long-Term Hydrological Forecast and Multicriteria Optimization Methods, "Lake Balkal - Irkutsk Reservoir" Case Study	Avshalom Babad, Ilan Stavi, Yoav Avni and Noa Aviel-Avni Native plants as indicators of soil quality in deserts: Consequences for dryland agriculture	Angus MacGregor and Glenn Shimmim Valuing Community and First Nations Voices in Restoring the Coorong, South Australia	
4:15 PM 4:30 PM	Martin Klein, Emad Al-Karablieh and Stephan Theobald Optimization of Transboundary Lake Operation and Conception of a Hydropower Plant at Lake Tiberias	Timothy Munday et al. An Interdisciplinary Approach to Groundwater Resource Assessment for Sustaining Community, Environment & Economic Development in a Remote Arid Region of S. Australia	Soe Htun Aung and Takuya Igawa Economic-Based Operation of Agricultural Water Distribution in Irrigation Districts without Water Marketing Mechanism	
4:30 PM 4:45 PM	Sebastian Schär et al. Techno-Economic Assessment of Integrated Water Resources Management Infrastructure Projects	Mohamed Ibrahim Kizhisseri and Mohamad Mostafa Mohamed Use of Decision Support System for Optimizing Long Term Water Resources Planning In Terms of Economic and Environmental Outcomes	Michael Kizza, Sowed Wamala and Mudathir Zaroug State of Basin Reporting: A Tool for Cooperative Management of Transboundary Water Resources	
4:45 PM 5:00 PM	Mariana Damova et al. ISME-HYDRO – an Integrated System for Monitoring of Water Resources for Sustainable Exploitation of Dams and Rivers	Jorge Peña Arancibia et al. Development of a drought management plan in a regulated arid basin in southern Peru	Berhanu Degefa, Elke Neumann and Mohamed Al Muhairi The Role of Hydroponic Technology in Economic Use of Water and Enhancing Productivity of Farms in the UAE	
5:00 PM 5:15 PM				
5:30 PM 6:30 PM				

## Concluding Remarks - Awards - Recommendations - Closing Ceremony - Al Maktoum Ballroom I&II



**1:00 PM      2:00 PM**      **Poster Session (All themes) - Al Maktoum Ballroom I&II**

**Chair: Dr. Mohamed Hamouda**

**Talib Butt, Munjed Maraqa, Omar Alharbi, Cara Beal and Xenia Christodoulou**  
SUDS encapsulates climate change mitigation and climate change adaptation – One stone killing two birds

**Nicolae Costin Mociu and Carmen Elena Maftai**  
The Application of Satellite Imagery And GIS Software to the Study of Waterfront Cities' Development

**Tala Maksoud, Qasim Khan and Mohamed M. Mohamed**  
Groundwater Budget Analysis in Abu Dhabi Emirate Using Modflow

**Qasim Khan and Mohamed M. Mohamed**  
Machine Learning: An interesting tool in studying groundwater

**Muhammad Abrar Faiz, Mohsen Sherif and Faisal Baig**  
Exploring the drought propagation from meteorological to hydrological and soil moisture drought using time series analysis

**Khaled Alghafli, Waleed Saeed, Warren Wood, Mohsen Sherif and Xiaogang Shi**  
Coupling Global Land Data Assimilation System (GLDAS) with In Situ Data to Monitor Groundwater Resources at Sabkha Matti, Middle East

**Assaad Kassem, Joanna Doummar and Jason Gurdak**  
Sensitivity of an Integrated Groundwater Flow Model to Model Parameters - Application to Vulnerability Assessment of Karst Aquifers

**Mohamed Elhag, Jaka Budiman, Jarbou Bahrawi, Asep Hidayatulloh and Mansour Almazroui**  
Volumetric Quantification of Flash Flood Using Microwave Data on a Watershed Scale in Arid Environments, Saudi Arabia

**Aysar Al-Shamaa and Khalid Al-Marsumi**  
Flood Water Harvesting in A Flood Prone Area Using Remote Sensing And GIS – Case Study

**Nadia Lahlou and Mohamed El Ghachi**  
The impact of flash floods on the extreme functioning of undeveloped basins: case of the Srou catchment (Février 2010 flood) (Oum Er-Rbia Basin, Morocco)

**Mishal Alsehli**  
Thermal storage system as an alternative to the brine heater in a desalination plant: An experimental study

**Juliet Nakasagga, Maha Abdelraheem Ismail and Sowed Wamala**  
Knowledge Products for the Nile Basin Initiative

**Zahra Noorisameleh, William A Gough and M. Monirul Qader Mirza**  
Spatial variability of summer droughts and heatwaves in southern Canadian

**Omer Ekmekcioglu and Mehmet Ozger**  
Advanced Soft Computing Applications for Hydraulic Efficiency Assessment of Storm Water Drain Inlets

**Eyyup Ensar Basakin and Mehmet Ozger**  
Missing Data Imputation for Solar Radiation by Deep Neural Network

**Shubham Tiwari**  
Factors Influencing the Site Selection Criteria for Efficient Aquifer Storage and Recovery (Asr) System in Saline Regions

**Eberechi Cecilia Osuagwu, Adamma Monica Uwaga and Harry Inemeawaji**  
Assessment of leachate on groundwater quality: A case study of Enyimba Open Dumpsite, Osisioma Ngwa local government area, Abia State, Nigeria

**Krishna Desai**  
Proximal sensor based water and nutrient management on corn to achieve sustainable yields and water use efficiency in semi arid regions of Karnataka, India

**Chair: Dr. Hamidreza Sharifan**

**Ali Al-Maktoumi, Anvar Kacimov and Mustafa El-Rawy**  
Managed Aquifer Recharge as a Reliable and Sustainable Water Supply In Duqm Area, Sultanate of Oman

**Dinumol Varghese, Ahmed Thaher, Fadi Alnaimat and Bobby Mathew**  
Parametric Study Analysis of A 3-D Printed Solar Reciever in A Multi-Stage Flash Desalination Plant

**Jose Manuel Murillo, Alberto Padilla, Joaquin Delgado and José Manuel Gómez-Fontalva Gómez-Fontalva**  
Recharge to Aquifers Located in Arid Zones Through the Application of the Renata Code. Distribution According to the Watershed and the Groundwater Divides

**Khaled Alghafli et al.**  
Remote Sensing Applications for Water Managements Under Data Acquisition Challenges in Transboundary Basin, Case Study: Grand Ethiopian Renaissance Dam, Ethiopia

**Abdel Azim Ebraheem et al.**  
Mapping Groundwater Potential Zones in UAE Using GIS-Based Hydrogeological Modeling

**Faisal Baig, Mohsen Sherif, Abrar Faiz, Ahmed Sefelnasr, Abdel Azim Ebraheem and Khaled Alghafli**  
Evaluation of a Conceptual Rainfall-runoff Model Using Generalized Likelihood Uncertainty Estimation Approach

**Swathi Mohandas Surekha et al.**  
Management of Seawater Intrusion in Coastal Aquifers: Past And Future Challenges

**Khouldia Nafia and Mohamed El Ghachi**  
Low flow in the Oued el Abid basin (Morocco): better understand it to better manage it (Oum Errbia Basin - Morocco)

**Michele Ferri et al.**  
Exploring the Potential of Innovative Methods for Integrated Water and Flood Risk Management in the Oriental Alpes River District: The Aqua3s Approach

**Dia El Din El Qousy**  
Lessons to learn from the Australian Water Resources Management Case Study: The Murry Darling Basin and Some Arab Countries

**C. Dionisio Pérez-Blanco and Francesco Sapino**  
Price Discrimination in Water Banks to Enhance The Effectiveness and Efficiency of Agricultural Water Buyback

**Pankaj Kumar**  
Is participatory approach including all relevant stakeholders necessary to make IWRM more effective for water resource management especially in data scarce regions? A Case Study of the Philippines

**Sangamesh Angadi, Sultan Begna, Paramveer Singh and Jagdeep Singh**  
Multiple Approaches to Sustain Ogallala Aquifer in The Southern High Plains of USA

**Monirul Mirza, William Gough and Zahra Noorisameleh**  
Characteristics and Frequency Distribution Of 24-Hour Extreme Precipitation in The Canadian Prairies

**Arjun Suresh and Tanu Jindal**  
IWAT1.0 - Web Portal for Optimization Of Irrigation Water Requirement For Selected Indian Crops In Different Agro-Climatic Zones Through Modelling of Lysimetric and Weather Station Data

**B K Desai, Santhosh U N, Satyanarayan Rao and Masthana Reddy B G**  
Tillage and establishment methods impact on land and irrigation water productivity in Tungabhadra rice command area of Southern India

**Eberechi Cecilia Osuagwu, Adamma Monica Uwaga and Harry Inemeawaji**  
Assessment of leachate on groundwater quality: A case study of Enyimba Open Dumpsite, Osisioma Ngwa local government area, Abia State, Nigeria