

Under the patronage of the Custodian of the Two Holy Mosques  
**King Salman Bin Abdulaziz Al Saud**



**9th International Conference  
on Water Resources  
and Arid Environments**



29-30 March 2021

**Organizers**



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# ICWRAE 9 Conference Schedule

## Day 1: 29 March 2021

Time (GMT)	(RIYADH)	ICWRAE 9 Inaugural Ceremony – Date: 29 March, 2021 Time: 15:00-15:50 GMT (Saudi Arabia Time GMT+3)
15:00-15:50	18:00-18:50	<p><b>Abdulmalek A. Al Alshaikh</b> Director, Prince Sultan Institute for Environmental, Water &amp; Desert Research; PSIPW General Secretary <b>Presentation: PSIPW</b> Introducing the 9th Award Winners <b>H.E. Badran al-Omar</b> President, King Saud University <b>Presentation: King Saud University</b> An Introduction to KSU and its History <b>H.E. Abdulrahman Abdulmohsen A. AlFadley</b> Representative of the Custodian of the Two Holy Mosques King Salman Bin Abdulaziz Al Saud; Minister of Environment, Water and Agriculture</p>

Time		Opening Session (Guests of Honour) – Date: 29 March, 2021 Time: 15:55-16:30 GMT (Saudi Arabia Time GMT+3)
15:55-16:05	18:55-19:05	<p><b>Simonetta Di Pippo</b> Director, United Nations Office for Outer Space Affairs Space for water</p>
16:05-16:20	19:05-19:20	<p><b>Mahmoud Abou Zaid</b> President, Arab Water Council Highlights on the water-related activities of the Arab Water Council (AWC) on the Arab regional scale</p>
16:20-16:30	19:20-19:30	<p><b>Loïc Fauchon</b> President, World Water Council Global water challenges with a special focus on arid environments: underlining the risks and opportunities for the future</p>

Time (GMT)	(RIYADH)	Session (A) – Date: 29 March 2021 Time: 16:30–17:50 GMT (Saudi Arabia Time GMT+3)
16:30-16:50	19:30-19:50	<p><b>Abdul Aziz bin Muhareb Al-Shaibani</b> Deputy Minister for Water, Ministry of Environment, Water &amp; Agriculture Water sector reform in view of the 2030 vision (KSA)</p>
16:50-17:10	19:50-20:10	<p><b>Rahul Nair</b> National Graphene Institute, University of Manchester, UK Science and technology of 2D-materials-based membranes for water filtration</p>
17:10-17:30	20:10-20:30	<p><b>Benjamin Hsiao</b> Stony Brook University, New York, USA Upcycling biomass waste as effective water purification materials by nitro-oxide process</p>
17:30-17:50	20:30-20:50	<p><b>Priyanka Sharma</b> Stony Brook University, New York, USA Upcycling the biomass waste for water purification</p>

Time (GMT)	(RIYADH)	Session (B) – Date: 29 March 2021 Time: 16:39–17:50 GMT (Saudi Arabia Time GMT+3)
16:30-16:50	19:30-19:50	<p><b>Omar Yaghi</b> University of California, Berkeley Harvesting water from desert air</p>
16:50-17:10	19:50-20:10	<p><b>Tom Soo</b> Executive Director, IAHR Addressing water security through hydro-environmental engineering and research</p>
17:10-17:30	20:10-20:30	<p><b>Kristine Larson</b> University of Colorado at Boulder Water sensing with reflected GPS/GNSS signals</p>
17:30-17:50	20:30-20:50	<p><b>Soroosh Sorooshian</b> University of California, Irvine Measuring rainfall from satellite observations over the planet: An update of the PERSIANN system</p>

## Day 2: 30 March 2021

Time		Session (A) – Date: 30 March 2021 Time: 15:00-17:50 GMT (Saudi Arabia Time GMT+3)	
(GMT)	(RIYADH)		
15:00-15:20	18:00-18:20	<b>Abdul Latif Ahmad</b> Universiti Sains, Malaysia	Recycling & reclamation of water from palm oil mill effluent using integrated membrane system
15:20-15:40	18:20-18:40	<b>Peng Wang</b> King Abdullah University of Science and Technology, Thuwal, Saudi Arabia	Sustainability at the solar energy-water nexus
15:40-15:50	18:40-18:50	Break	
15:50-16:10	18:50-19:10	<b>Mansour Almazroui</b> Consultative Council of Saudi Arabia	Climate change in the Kingdom of Saudi Arabia
16:10-16:30	19:10-19:30	<b>Rong Wang</b> Nanyang Technological University, Singapore	Novel hollow fiber membrane development for water reuse: from lab study to commercialization
16:30-16:50	19:30-19:50	<b>Evelyn Wang</b> Massachusetts Institute of Technology	A scalable solar-driven water production device
16:50-17:10	19:50-20:10	<b>Ashok Gadgil</b> University of California Berkley	Technology to support the human right to safe drinking water : Stopping arsenic poisoning
17:10-17:30	20:10-20:30	<b>Mohamed Abdel Hamyd Dawoud</b> Advisor, Water Resources, Abu Dhabi Environment Agency	The future of treated wastewater reuse in the MENA region
17:30-17:50	20:30-20:50	<b>Kevin Trenberth</b> National Center for Atmospheric Research, USA	The changing water cycle

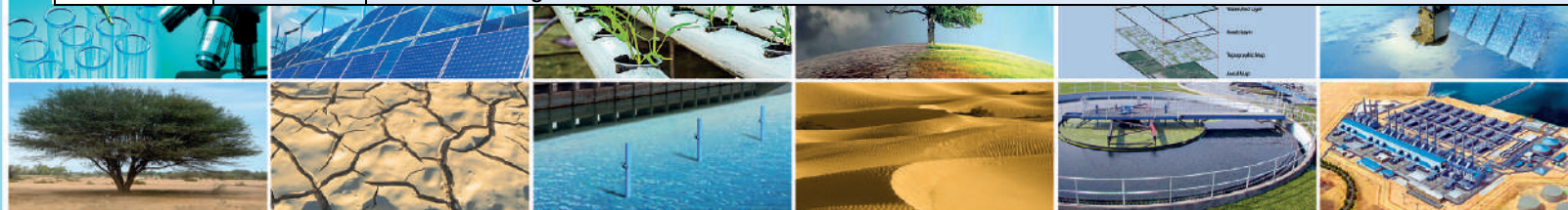
Time		Session (B) – Date: 30 March 2021 Time: 15:00-17:50 GMT (Saudi Arabia Time GMT+3)	
(GMT)	(RIYADH)		
15:00-15:20	18:00-18:20	<b>Thomas L. Crisman</b> USF Water Institute	Sustainability of the water, energy, food nexus in the humid Caribbean versus arid MENA: Projections and innovative solutions
15:20-15:40	18:20-18:40	<b>Howard Wheeler</b> University of Saskatchewan	Hydrological modelling for water resources management in arid environments
15:40-15:50	18:40-18:50	Break	
15:50-16:10	18:50-19:10	<b>Jim. W. Hall</b> Environmental Change Institute, University of Oxford	Understanding the growing challenge of water security in the Arab world
16:10-16:30	19:10-19:30	<b>Damià Barceló</b> Catalan Institute for Water Research, Girona, Spain	Microplastics pollution in mixed surface and treated wastewaters from Saudi Arabia. Can organic contaminants be absorbed by microplastic particles?
16:30-16:50	19:30-19:50	<b>Zbigniew Kundzewicz</b> Polish Academy of Sciences, Poznan	Changes in flood risk
16:50-17:10	19:50-20:10	<b>Jay R. Lund</b> University of California Davis, USA	Integrated water management portfolio analysis using hydro-economic modeling
17:10-17:30	20:10-20:30	<b>Rita Colwell</b> University of Maryland at College Park	Climate, oceans, and human health: What cholera can teach us about COVID-19
17:30-17:50	20:30-20:50	<b>Patricia Gober</b> Arizona State University	“The fusion of science and stakeholder engagement for public policy in the water sector”



## Day 3: 31 March 2021

Time		Session (A) – Date: 31 March 2021 Time: 15:00-17:35 GMT (Saudi Arabia Time GMT+3)	
(GMT)	(RIYADH)		
15:00-15:20	18:00-18:20	<b>Joyashree Roy</b> Professor of Economics at Jadavpur University, Kolkata	Water or health: Where to put the money?
15:20-15:40	18:20-18:40	<b>Sherif El-Safty</b> National Institute for Materials Science, Japan	Cost-efficient and environmentally friendly nano-porous filter medium
15:40-15:50	18:40-18:50	Break	
15:50-16:10	18:50-19:10	<b>Walid Abderrahman</b> Vice President, Arab Water Council	Advanced governance frameworks for total treatment and reuse of industrial wastewater in Saudi Arabia: A case study
16:10-16:30	19:10-19:30	<b>Polycarpus Falaras</b> National Center for Scientific Research “Demokritos”, Athens, Greece	Scale up and demonstration of innovative photocatalytic nanofiltration technology for pollutants removal and water recovery
16:30-16:50	19:30-19:50	<b>Bart Van der Bruggen</b> Katholieke Universiteit, Leuven	Resource recovery from water with ion exchange membranes: Focus on lithium
16:50-17:10	19:50-20:10	<b>Shafiqul Islam</b> Tufts University, USA	Water diplomacy: A principled pragmatic approach to resolve complex water problems
17:10-17:30	20:10-20:30	<b>Mohamed Khayet</b> University Complutense of Madrid, Spain	Robust surface modified composite flat sheet, hollow fiber, micro- and nano-fibrous membranes for desalination by membrane distillation technology
17:30-17:35	20:30-20:35	<b>ICWRAE 9 Closing Remarks</b>	

Time		Session (B) – Date: 31 March 2021 Time: 15:00-17:35 GMT (Saudi Arabia Time GMT+3)	
(GMT)	(RIYADH)		
15:00-15:20	18:00-18:20	<b>H.E. Abdullah Ibrahim Al-Abdulkareem</b> Governor, Saline Water Conversion Corporation (SWCC)	Sustainable water supply and desalination technology
15:20-15:40	18:20-18:40	<b>Jesús Carrera Ramirez</b> Institute for Environmental Assessment and Water Research, Barcelona	Recent advances in 'Enhanced Managed Artificial Recharge' to re-naturalise reclaimed water
15:40-15:50	18:40-18:50	Break	
15:50-16:10	18:50-19:10	<b>J. Jaime Gómez-Hernández</b> Universitat Politècnica de València, Spain	The importance of modeling hydraulic conductivity heterogeneity
16:10-16:30	19:10-19:30	<b>Abdulkader Larabi</b> University Mohammed V-Agdal, Morocco	Quantitative evaluation of the vulnerability to seawater intrusion in coastal aquifers using a new normalized groundwater age-based index: implications for management and risk assessments
16:30-16:50	19:30-19:50	<b>Wolfgang Kinzelbach</b> Swiss Federal Institute of Technology	A path towards sustainable aquifer management: Example - the North China Plain
16:50-17:10	19:50-20:10	<b>Martinus Theodorus van Genuchten</b> Federal University of Rio de Janeiro, Brazil	Key software tools for understanding and managing water flow and contaminant transport processes in the vadose zone
17:10-17:30	20:10-20:30	<b>Tissa Illangasekare</b> Colorado School of Mines, USA	Challenges and opportunities in experiments to improve insights and advance modeling to address emerging global problems in hydrology and the environment
17:30-17:35	20:30-20:35	<b>ICWRAE 9 Closing Remarks</b>	



# ICWRAE

The International Conference on Water Resources and Arid Environments



## المؤتمر الدولي للموارد المائية والبيئة الجافة

