



**3rd International Conference on Water and
Environmental Engineering, Sydney, 2022 (iCWEE-2022)
27-30 Nov 2022 Sydney, Australia**

6th GCSTMR World Congress

Western Sydney University, Parramatta South Campus, Sydney, Australia

[Corner of Victoria Road and James Ruse Drive (enter via Victoria Road), Parramatta]

Organised by:

School of Engineering, Design and Built Environment

Western Sydney University

and

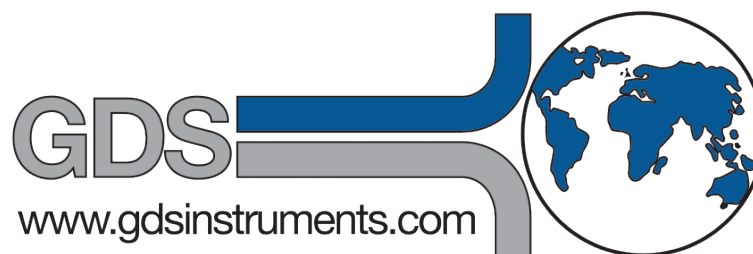
Global Circle for Scientific, Technological and Management Research (GCSTMR)

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Time: Australian Eastern Time (AEST)

Day 1 – Sunday 27 Nov 2022

Time	Event	Remark
5:30 pm - 7:30 pm	Registration, Refreshments, and Networking (Room EA.G.32)	Delegates will be welcomed by the General Chair, conference chairs, and the local organizing committee members. General Chair: Prof Ataur Rahman Conference Chairs: Prof Ataur Rahman Assoc/Prof Fidelis Mashiri Prof Zhong Tao Prof. Chin Leo Prof. Samanthika Liyanapathirana Prof. Henry Wong A/Prof Qinghua Zeng Professor Hao Ding Conference Secretaries: Dr Muhit Rahman Dr Kamrul Hassan Dr Pan Hu Dr Xuefeng Dong IT Services: Dr Rezaul Bashar Conference Management Coordinator: Ms Jenis Islam

Day 2 – Monday 28 November 2022

Time	Session
8:00 – 9:00 am	<p>Registration Parramatta South Campus, Building EA Room PS-EB.G.33 Desk in charge: Ms Jenis Islam</p>
9:00 – 9:30 am	<p>Conference Opening Room EA.G.18, Parramatta South Campus Moderator: Prof Ataur Rahman, Chair, GCSTMR Acknowledgment of Indigenous owners of the land</p> <p>Speech: Prof Ataur Rahman, Chair (iCWEE-2022) Speech: Assoc/Prof Fidelis Mashiri, Chair (iCSER-2022) Speech: Prof. Chin Leo, Chair (iCGMGE-2022) Speech: A/Prof Qinghua Zeng, Chair (iCMEMS-2022)</p> <p>Speech: Prof Mike Kagioglou Dean, School of Engineering, Design and Built Environment</p> <p>Speech: Mr Jihad Dib, MP Shadow Minister for Emergency Services, and Shadow Minister for Energy and Climate Change</p> <p>Housekeeping: Prof Ataur Rahman</p>
	<p>Plenary Session 1- Chair: A/Prof Fidelis Mashiri and Prof Zhong Tao (Room EA.G.18)</p>
9.30-10.00 am	<p>Plenary 1: Professor Brian Uy, The University of Sydney, Australia</p>
	<p>Plenary Session 1- Chair: Prof Ataur Rahman (Room EA.G.18)</p>
10.00-10.30 am	<p>Plenary 2 – Evolution of WSUD in Australia under a changing climate, Professor Dr Tony Ladson, Victoria University, Australia</p>
10:30-11:00 am	<p>Morning Tea (Room PS-EB.G.33)</p>

	Plenary Session 2 - Chair: Prof. Henry Wong and Prof Samantha Liyanapathirana (Room EA.G.18)
11:00-11:30	Plenary 3: Prof. Nasser Khalili, University of New South Wales, Australia
	Plenary Session 2 - Chair: A/Prof Qinghua Zeng (Room EA.G.18)
11:30-12:00 pm	Plenary 4: Pro Michael Ferry, University of New South Wales, Australia
	Plenary Session 2- Chair: Prof Ataur Rahman (Room EA.G.18)
12:00-12:30 pm	Plenary 5: Quantitative Precipitation Estimates and Future of Hydrologic Design and Modeling Professor Ramesh Teegavarapu, Florida Atlantic University, USA
12:30 -1:30 pm	Lunch (Room PS-EB.G.33)
	Plenary Session 3- Chair: A/Prof Fidelis Mashiri and Prof Zhong Tao (Room EA.G.18)
1:30-2:00 pm	Plenary 6: Fatigue of High Strength and Ultra-High Strength Professor Xiao-Ling Zhao, University of New South Wales, Australia
	Plenary Session 3 - Chair: Prof Chin Leo and Prof Samantha Liyanapathirana (Room EA.G.18)
2:00-2:30 pm	Plenary 7: Prof David Airey, University of Sydney, Australia
	Plenary Session 3- Chair: Dr Fazlul Karim (Room EA.G.18)
2:30: 3:00 pm	Plenary 8: Advanced wastewater treatment: past, present, and future in Australia Professor Faisal Hai University of Wollongong, Australia
3:00-3:30 pm	Afternoon Tea break (Room PS-EB.G.33)
	Plenary Session 4- Chair: A/Prof. Qinghua Zeng (Room EA.G.18)
3:30-4:00 pm	Plenary 9: Prof. Qing Li

	University of Sydney
	Plenary Session 4- Chair: Prof Ataur Rahman (Room EA.G.18)
4:00-4:30 pm	Plenary 10: WaterNSW Dr. Marlène van der Sterren, Manager Water Quality Modelling team at WaterNSW
	Plenary Session 4– Chairs: A/Prof Fidelis Mashiri and Prof Zhong Tao (Room EA.G.18)
4:30-5:00 pm	Plenary 11: Professor Jin Guan Teng Hong Kong Polytechnic University, Hong Kong
	Plenary Session 4 - Chair: Prof. Chin Leo and Prof. Henry Wong (Room EA.G.18)
5:00-5:30 pm	Plenary 12: Professor Antonin Fabbri, ENTPE, France
5:30 pm -6:00 pm	Plenary 13: Dr Suzanne van Eekelen, Deltares, Netherlands

Day 3 – Tuesday 29 Nov 2022

Time	Session
8:00 – 9:00 am	Registration, Parramatta South Campus (Room EB.G.33)
9:00-10:30 am	Technical Session 1 (Room-EA.G.32) Chair: Prof Ataur Rahman
9:00 – 9:30	Keynote Paper 1: By Prof Taha BMJ Ouarda
9:30 – 9:50	Paper ID- icwee20220049: Characterisation of satellite soil moisture drydowns using a bivariate filter - Jhiam Sinha , Ashish Sharma , Lucy Marshall , Seokhyeon Kim
9:50 – 10:10	Paper ID- icwee20220072: Spatiotemporal Variability of Compound Droughts and Hot Extremes in East Australia - Orpita Urmi Laz , Ataur Rahman
10:10-10:30	Paper ID- icwee20220052: Investigating catchment memory within a conceptual rainfall-runoff model - Thien Huy Truong Nguyen , Bree Bennett , Michael Leonard
10:30 – 11:00 am	Morning Tea (Room EB.G.33)
11:00 am–12:30 pm	Technical Session 2 (Room-EA.G.32) Chair: Dr Fazlul Karim
11:00-11:30	Keynote Paper 2: Loss models for flood hydrology: A retrospective and prospective - Bofu Yu School of Engineering and Built Environment, WSU, Australia
11:30-11:50	Paper ID- icwee20220064: Degree of Heterogeneity versus Prediction Error in Regional Flood Frequency Analysis: A Case Study for Victoria, Australia - Ali Ahmed , Tony Xiao Pan , Khaled Haddad , Ataur Rahman
11:50-12:10	Paper ID- icwee20220074: Updating Australian Rainfall and Runoff Regional Flood Estimation Database - Xiao Pan , Ataur Rahman , Khaled Haddad , Mohammed A Alim
12:10-12:30	Paper ID- icwee20220055: Modelling climate change impact on catchment runoff and groundwater level in the northwest region of Bangladesh - Fazlul Karim , Md. Tohidul Islam , Mohammed Mainuddin
12:30-1:30 pm	Lunch (Room EB.G.33)

1:30-3:00 pm	Technical Session 3 (Room-EA.G.32) Chair: Dr Abdul Alim
1:30-1:50	Paper ID- icwee20220041: The Egyptian-Ethiopian dispute over the Nile: Analysis and suggested approach against the background of international water law principles and relevant case law - Abeer Youssef , Bronwyn Howell , and Victoria Mabin
1:50-2:10	Paper ID- icwee20220042: Analysing disputes over shared watercourses using multi-framing: The case of the Egyptian-Ethiopian dispute over the Nile - Abeer Youssef , Victoria Mabin , Bronwyn Howell
2:10-2:30	Paper ID- icwee20220091: Sectoral water withdrawal changes in Europe during 1993-2017 - Kaniz Fatema Anisha , Muhammad Mizanur Rahaman , Md. Kazi Tanvir , Nabila Hasin
2:30-2:50	Paper ID- icwee20220092: National dimensions of international river basin management: Lessons from major rivers basins of Asia and Africa- Muhammad Mizanur Rahaman and M. Kamruzzaman Shehab
3:00-3:30 pm	Afternoon Tea (Room EB.G.33)
3:30-5:50 pm	Technical Session 4 (Room-EA.G.32) Chair: Dr Abdul Alim
3:30-3:50	Keynote Paper 3: Paper ID-icwee20220093: Design and manufacturing an innovative product for the sustainable management of nutrient contamination in water - Mariam Darestani , Bijan P. Markhali , Adam Farahani , Mat Duarte
3:50-4:10	Paper ID- icwee20220069: Water Quality Modelling of the Cedar Grove Constructed Wetland - Ali El Hanandeh , Kambez Akrami , Tim Hamilton
4:10-4:30	Paper ID- icwee20220045: Assessing the impact of inlet-outlet configurations on the hydraulic performance of floating treatment wetland retrofitted stormwater pond - Md Nuruzzaman , A.H.M. Faisal Anwar , Ranjan Sarukkalige
4:30-4:50	Paper ID- icwee20220081: Monthly Fluctuation of Water Quality Parameters in an Estuarine River: A Study on River Bhairab in Khulna- Quazi Hamidul Bari , Quazi Shammash Sayeed
4:50-5:10	Paper ID- icwee20220084: Assessment of Heavy Metal Contamination for the Sustainable Management of the Sundarbans Ecosystem, Bangladesh - Salma Begum , Tridib Biswas , Aaur Rahman , Mohammad Amirul Islam
5:10-5:30	Paper ID- icwee20220053: Assessment of NDVI Variations and Land Use Land Cover Changing Pattern in Responses to Climatic Factors from 2001 to 2020: A Case Study of Bangladesh - Fariha Islam Mou , Zuhayr Shahid Ishmam
7:30 – 9:30 pm	CONFERENCE DINNER (Only for the CONFERENCE DINNER ticket holders)

Day 4: Wednesday 30 Nov 2022

Time	Event
8:00 – 9:00	Registration Parramatta South Campus Room EB.G.33
9:00-12:30 am	Technical Session 5 (Room-EA.G.32) Chair: Prof Ataur Rahman
9:00-9:20 am	Paper ID- icwee20220070: Development of a windows-based tool to model RWH system - Preeti Berwal , Ataur Rahman , Khaled Haddad , Dharmappa Hagare
9:20-9:40 am	Paper ID- icwee20220077: Impact of Covid-19 On Water-Environmental Engineering Education: A Statistical Analysis from Western Sydney University- Sydney City Campus - Sharek Khan, M. Ashiqur Rahman
9:40-10:00 am	Paper ID- icwee20220076: Exploring an Innovative Automatic Disinfection System for Drinking Water Production from Harvested Rainwater - Sajeev Latif , Mohammad A Alim , Ataur Rahman
10:00-10:20 am	Paper ID- icwee20220078: Potential Formation of Artificial Rain in Australian Catchment Area - Rosanna Chim , M. Ashiqur Rahman
10:30-11:00 am	Morning Tea (Room EB.G.33)
11:00-11:20 am	Paper ID- icwee20220075: Low Flows in Annual Maximum Flood Data: Does It Matter in Flood Frequency Analysis? - Laura Rima , Ataur Rahman , Khaled Haddad , Mohammed A Alim
11:20-11:40 am	Paper ID- icwee20220087: Streamflow Data Preparation for Trend Analysis: A Case Study for Australia - S M Anwar Hossain , Ataur Rahman
11:40 am-12:00 pm	Paper ID- icwee20220065: Cost survey for Brazilian residential rainwater harvesting systems - Rodrigo Novais Istchuk , EneDir Ghisi , Ataur Rahman
12:00 pm-12:20 pm	Paper ID- icwee20220062: Water End-Uses and Financial Analysis of Rainwater Harvesting Systems in Florianopolis, Brazil - Douglas Ancelmo Freitas , EneDir Ghisi , Ataur Rahman
12:30-1:20 pm	Lunch (Room EB.G.33)
1:20 – 3:00	Technical Session 6 (Room-EA.G.32) Chair: Dr Gokhan Yildirim

1:20-1:40	Paper ID- icwee20220090: Vegetated Roof for Urban Stormwater Quality Improvement in Australia: Experimental Results (Early – Stage) - Mohammad Ataur Rahman , Prof. Ataur Rahman , Dr. Mohammad Abdul Alim , Dr. Sayka Jahan
1:40-2:00	Paper ID- icwee20220063: Changes in Precipitation Intensity-Duration-Curve: A comparison based on CMIP5 and CMIP6 - Subhra Sekhar Maity , Subharthi Sarkar , Rajib Maity , Ataur Rahman
2:00-2:20	Paper ID- icwee20220061: Characterizing Long-Term Rainfall Trends in a Sub-Catchment of Lower Mahanadi River Basin, India - Sabinaya Biswal , Madan Kumar Jha , Bhabagrahi Sahoo , Ataur Rahman
2:20-2:40	Paper ID- icwee20220059: Developing Design Curves for Rainwater Harvesting in the Coastal Region of Bangladesh - Md. Rezaul Karim , Md. Sharmon Hossain Arnob , Nazratun Nawar , Ataur Rahman
2:40-3:00	Paper ID- icwee20220060: Impact of Water-Saving Irrigation Methods on Optimal Allocation of Resources in Agriculture Dominated River Basin of India - Smaranika Mahapatra , Ayushman Kashyap , Madan Kumar Jha , Ataur Rahman
3:00-3:30 pm	Afternoon Tea (Room EB.G.33)
3:30-5:00	Technical Session 7 (Room-EA.G.32) Chair: Dr Gokhan Yildirim
3:30-3:50	Paper ID- icwee20220058: Analysis of Groundwater Quality in Dhaka Division, Bangladesh - Md. Rezaul Karim , Md Atif Arham , Md. Jahim Uddin Shorif , Ataur Rahman
3:50-4:10	Paper ID- icwee20220051: Groundwater Contamination and Remediation in Canada’s Greater Toronto Area (GTA) - Zainab H. A. Alnaser , Dr. Saidur R. Chowdhury
4:10-4:30	Paper ID- icwee20220080: Management of Paper Waste based on Circular Carbon Economy to achieve Zero Waste in king Faisal University Campus - Abdulmutaleb AlGhazal , Muhammad Muhitur Rahman , Saleh Al-Moosa , Jafar Al-Janubi , Syed Abu Shoaib , Ziad Shatnawi , Md Arifuzzaman and Ammar Al-Shayeb
4:30-4:50	Paper ID- icwee20220079: Treatment of Wastewater Generated from a Commercial Laundry - Mohammed Al-Hassan , Muhammad Muhitur Rahman , Ziad Nayef Shatnawi , Mohammed H. Alqadheeb , Hussain S. Alkhamis
5:00-5:30	Conference Closing and Awards (Room EA.G.18)

[List of Zoom IDs and password \(for online presentations\)](#)

Day 2 - Monday 28th Nov 2022

[Conference opening and plenary session \(Host Prof Ataur Rahman\)](#)

Zoom Meeting ID: 842 7785 5984
Password: 264182

Day 3 - Tuesday 29th Nov 2022

Technical Sessions (Host Prof Ataur Rahman)

Meeting ID: 889 2476 1007

Password: 290338

Day 4 - Wednesday 30th Nov 2022

Technical Sessions (Host Prof Ataur Rahman)

Meeting ID: 831 6440 5398

Password: 836716

Link to upload recorded presentation (for online presentation only):

<https://drive.google.com/drive/folders/1d2IOY2aUuPMKOb7dAcUh5siMWGTLh42T>