



1st International Conference on Water and Environmental Engineering (iCWEE 2017), 20-22 Nov 2017, Sydney, Australia

2nd GCSTMR CONGRESS

Venue: Western Sydney University, Building EA, Parramatta South Campus, Sydney, Australia

[Corner of Victoria Road and James Ruse Drive (entrance via Victoria Road), Parramatta South, Sydney]

Organized by

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

Day 1 – Monday 20 November 2017

| Time | Session |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8:30 – 9:30 | Registration Parramatta South Campus Room: Building EA.G Foyer |
| 9:30 – 10:00 | Conference Opening Building EA, Parramatta South Campus Room: EA.G.18(LT01) |
| 10:00 – 10:45 | Plenary 1 - Professor Ian D. Moore, Queen's University, Ontario, Canada Title: Geomechanics of Trenchless Pipe Installation, Repair and Replacement Chair: Professor Chin Leo Room: EA.G.18(LT01) |
| 10:45 – 11:15 | MORNING TEA Room: Building EA.G Foyer |
| 11:15 – 12:00 | Plenary 2 – Professor Xiao-Ling Zhao, Monash University, Australia Title: Research into Hybrid Construction utilising FRP and Seawater sea sand concrete Chair: Associate Professor Fidelis Mashiri Room: EA.G.18(LT01) |
| 12:00 – 12:45 | Plenary 3 – Professor Ashish Sharma, University of New South Wales, Australia Title: Water Resources Engineering and climate change: Recent developments and future challenges Chair: Associate Professor Ataur Rahman Room: EA.G.18(LT01) |
| 12:45 – 13:45 | LUNCH Room: Building EA.G Foyer |
| | Session 1B: Water and Environmental Engineering Chair: Associate Professor Ataur Rahman Room: EA.G.26 |
| 13:45 -14:05 | Invited paper title: Advanced flood inundation modelling and wetland connectivity analysis <i>Fazlul Karim, Catherine Ticehurst, Steve Marvanek</i> |
| 14:05 - 14:25 | Invited paper title: Resilience of Sydney Water Supply System Under Changing Climate <i>Selvaratnam Maheswaran</i> |
| 14:25 – 14:40 | Solar Powered Vacuum Membrane Distillation for Greywater Treatment Preceded by Electro-Coagulation for Prevention of Wetting (Paper ID iCWE_23) <i>Mohammad Ramezani-pour, Muttucumaru Sivakumar and Ying Zhang</i> |
| 14:40 – 15:00 | Invited paper title: Economic functionality of Water Supply System Model (Wathnet) for Asset Planning <i>Golam Kibria</i> |

| | |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 15:00 – 15:15 | Evaluation of Impact of Geospatial and Climatic Input Data Resolution on Hydrological and Sediment Model Performance in a Mining Affected Watershed (Paper ID iCWEE_45) <i>Kazi Rahman, Mohamed Hantush, Alexander Hall, Souhail Al-Abid, Brian Dyson and John McKernan</i> |
| 15:15 – 15:25 | Discussion |
| 15:25 – 15:55 | AFTERNOON TEA Room: Building EA.G Foyer |
| 15:55 – 16:40 | Plenary 4 – Professor Chris Sorrell, University of New South Wales, Australia Title: Percolated Single-Crystal Mullite Fibres from Fly Ash: Vitreous Waste Material to High-Performance Refractory Chair: Dr Qinghua Zeng Room: EA.G.18(LT01) |
| 16:40 – 17:25 | Plenary 5 – Professor Junbin Gao, The University of Sydney, Australia Title: Clustering on Manifolds Chair: Dr M Rafiqul Islam Room: EA.G.18(LT01) |
| 17:25 – 18:10 | Plenary 6 – Dr M Rafiqul Islam, Charles Sturt University, Australia Title: Cumulative Timeline Analysis for Data Classification Chair: Professor Phill Kyu Rhee Room: EA.G.18(LT01) |

Day 2 – Tuesday 21 November 2017

| Time | Session |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8:00 – 9:00 | Registration Parramatta South Campus Room: Building EA.G Foyer |
| 9:00 – 9:45 | Plenary 7 – Professor Ashantha Goonetilleke, Queensland University of Technology, Australia Title: Management of Urban stormwater pollution: Progress and challenges Chair: Associate Professor Ataur Rahman Room: EA.G.18(LT01) |
| 9:45 – 10:30 | Plenary 8 - Professor Buddhima Indraratna, University of Wollongong, Australia Title: Ground Improvement for Transport Infrastructure Chair: Professor Chin Leo Room: EA.G.18(LT01) |
| 10:30 – 11:00 | MORNING TEA Room: Building EA.G Foyer |
| | Session 2B: Water and Environmental Engineering Chair: Dr Conrad Wasko Room: EA.G.26 |
| 11:00 – 11:15 | Ferrates as a new approach in drinking water treatment Petra Najmanova, Veronika Simonova, Jan Slunsky, Jan Filip ((Paper ID iCWEE_47) |
| 11:15– 11:35 | Invited paper title: Australian water supply systems: challenges and how they are resolved <i>Professor Sathaa Sathasivan</i> |
| 11:35 – 11:50 | Environmental Vulnerability of Indonesian Households: The Case of Water Scarcity (Paper ID iCWEE_27) <i>Sri Irianti and Puguh Prasetyoputra</i> |
| 11:50 – 12:05 | Single Component Adsorption of Copper (II) and Nickel (II) from Aqueous Solution using Biochar Derived from Date Seed biomass (Paper ID iCWEE_15) <i>Zainab Mahdi, Ali El Hanandeh and Qiming Yu</i> |
| 12:05 – 12:20 | Interdecadal variation in rainfall patterns in South West of Western Australia (Paper ID iCWEE_9) Priya Philip and Bofu Yu |
| 12:20 – 12:35 | Transformation Pathways and Intermediate Products for the Photocatalytic Oxidation Treatment of 2,4-Dichlorophenol in Aqueous Systems (Paper ID iCWEE_12) Zack Khuzwayo and Evans M.N. Chirwa |
| 12:40 -13:40 | LUNCH Room: Building EA.G Foyer |

| | |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 13:40 – 14:15 | <p>Plenary 9 - Professor Raman Singh, Monash University, Australia Title: Graphene Coating and Alloy Nanocrystallinity: Novel Nano Approaches for Remarkable Corrosion Resistance Chair: Associate Professor Sri Bandyopadhyay Room: EA.G.18(LT01)</p> |
| 14:15 -14:50 | <p>Plenary 10 - Professor Shams Rahman, RMIT University, Australia Title: Supply Chain Connectivity, Business Sustainability and Ethics Chair: Associate Professor Ataur Rahman Room: EA.G.18(LT01)</p> |
| | <p>Session 3B: Water and Environmental Engineering Chair: Associate Professor Ataur Rahman Room: EA.G.26</p> |
| 14:50 – 15:05 | <p>Heavy metal contamination and related risk in private and government installed handpumps. A comparative study in industrial area of Saharanpur district, India (Paper ID iCWEE_26) Vivek Gaurav and Chhaya Sharma</p> |
| 15:05 – 15:20 | <p>Precipitation and Flooding in a Warmer Climate (Extended Abstract ID iCWEE_31) Conrad Wasko and Ashish Sharma</p> |
| 15:20 – 15:35 | <p>Spatial and Temporal Variation in Rainfall Trends in Victoria (Paper ID iCWEE_42) Most. Nazneen Aktar, Nira Jayasuriya and Muhammed A Bhuiyan</p> |
| 15:35 – 15:50 | <p>Impact of Residential Irrigation Area and Roof Size on the Economics of Rainwater Harvesting Systems (Paper ID iCWEE_11) Caleb Christian Amos, Ataur Rahman and Fazlul Karim</p> |
| 15:50 – 16:20 | <p>AFTERNOON TEA Room: Building EA.G Foyer</p> |
| | <p>Session 4B: Water and Environmental Engineering Chair: Associate Professor Ataur Rahman Room: EA.G.26</p> |
| 16:20 – 16:35 | <p>An Investigation to Identify Homogenous Regions: A Case Study for New South Wales, Australia (Paper ID iCWEE_52) Ayesha Rahman and Ataur Rahman</p> |
| 16:35 – 16: 50 | <p>Changes in Rainfall in New South Wales, Australia (Paper ID iCWEE_50) Evan Hajani and Ataur Rahman</p> |
| 16:50 – 17:05 | <p>Application of Generalized Additive Models in Regional Flood Frequency Analysis: A Case Study for Victoria (Paper ID iCWEE_43) Farhana Noor and Ataur Rahman</p> |
| 17.05 – 17.20 | <p>Water, Women and Climate Change: A Review on Dhaka Metropolitan City, Bangladesh (Paper ID iCWEE_43) Samira Hossain and Ataur Rahman</p> |
| 17.20 – 17.35 | <p>Risks of Climate Change, Operation and Management on Climate Resilient Water Supply Options in the Coastal Areas of Bangladesh (Paper ID iCWEE_07) Md. Rezaul Karim and Ataur Rahman</p> |
| 17.35 – 17.50 | <p>Statistical rainfall downscaling of a CMIP5 ensemble in urban catchments: An Auckland area case study (Paper ID iCWEE_48) Akhter Muhammad Saleem, Asaad Y. Shamseldin and Bruce W. Melville</p> |
| 19:00 – 21:30 | <p>CONFERENCE DINNER (Only for the CONFERENCE DINNER ticket holders)</p> |

Day 3 – Wednesday 22 November 2017

| Time | Session |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8:00 – 9:00 | Registration Parramatta South Campus Room: Building EA.G Foyer |
| 9:00 – 9:45 | Plenary 11 – Professor Brian Uy, The University of Sydney, Australia Title: Australasian Structural Engineering Research in Steel and Composite Structures and its influence on International Design Codes Chair: Professor Zhong Tao Room: EA.G.18(LT01) |
| 9:45 – 10:30 | Plenary 12 - Professor Yinghe He, James Cook University, Australia Title: Development of innovative processes for the material recovery from spent rechargeable batteries Chair: Dr Qinghua Zeng Room: EA.G.18(LT01) |
| 10:30 – 11:00 | MORNING TEA Room: Building EA.G Foyer |
| | Session 5B: Water and Environmental Engineering Chair: Caleb Amos Room: EA.G.26 |
| 11:00 – 11:15 | Exploitation and Rejuvenation of River Ganges: policies, institutions and governance (Paper ID iCWEE_18) M Ashiqur Rahman |
| 11:15 – 11:30 | A Review on Reducing the Impacts of Urbanisation Through Greener Approaches (Paper ID iCWEE_44) Micah J Fountain and Ataur Rahman |
| 11:30 – 11:45 | Permeable Pavement as a Component of Water Sensitive Urban Design: A Mini Review (Paper ID iCWEE_44) Michael Zanuttini and Ataur Rahman |
| 11:45 – 12:00 | Selection of Best Fit Probability Distribution for Flood Frequency Analysis in South West Western Australia (Paper ID iCWEE_49) Benjamin P Brash and Ataur Rahman |
| 12:00 – 12:15 | Paper TBA |
| 12:15 – 12:30 | Paper TBA |
| 12:40 -13:40 | LUNCH Room: Building EA.G Foyer |

| | |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 13:40 – 14:15 | Plenary 13 - Professor Peter Coombes, Managing Director Urban Water Cycle Solutions , Sydney, Australia Title: Systems analysis of big data and macroeconomic history to reveal insights for water policy and markets Chair: Associate Professor Ataur Rahman Room: EA.G.18(LT01) |
| 14:15 -14:30 | CONFERENCE CLOSING SESSION Best Paper Award Room: EA.G.18(LT01) |