



WESTERN SYDNEY
UNIVERSITY



**International Conference on Advancements in Engineering
Education (iCAEED-2018) 03-06 Dec 2018, Sydney, Australia**

3rd GCSTMR CONGRESS

**Venue: Western Sydney University, Building EA and EB, 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 03 Dec 2018

Time	Session		
08:30 – 09:30	Registration Parramatta South Campus; Building EB, Room: EB.G.02		
09:30 – 10:00	Conference Opening Building EA, Parramatta South Campus; Room: EA.G.18 (LT01)		
10:00 – 10:30	Plenary 1 – Professor Kerry London , Deputy Dean, School of Computing, Engineering and Mathematics, Western Sydney University, Australia Title: Future Challenges of Built Environment and Design Education in NSW and Beyond Chair: Associate Professor Swapan Saha, Room: EA.G.18 (LT01)		
10:35 – 11:05	Plenary 2 – Mr Sabur Khan , Chairman and Founder, Daffodil International University, Bangladesh Title: Private University Sector in Indian Sub-Continent: Success Story of Daffodil International University Chair: Associate Professor Ataur Rahman, Room: EA.G.18 (LT01)		
11:05 – 11:35	MORNING TEA Room: Building EB.G.02		
11:35 – 12:05	Plenary 3 – Professor Vivian Tam , School of Computing, Engineering and Mathematics, Western Sydney University, Australia Title: CO2 Concrete using Optimal Mix Design Chair: Dr Payam Rahnamayiezekavat, Room: EA.G.18 (LT01)		
12:05 – 12:35	Plenary 4 – Professor Firoz Alam, RMIT University, Australia Title: An Innovated Three-Step Teaching and Learning Approach for Laboratory Experiments of Thermal Fluids Courses Chair: Associate Professor Fidelis Mashiri, Room: EA.G.18 (LT01)		
12:35 – 13:20	LUNCH Room: Building EB.G.02		
13:20 – 13:50	Plenary 5 – Professor Simon Barrie , Pro Vice Chancellor, Western Sydney University, Australia Title: New developments and challenges in tertiary education: An Australian perspective Chair: Associate Professor Ataur Rahman, Room: EA.G.18 (LT01)		
13:50-14:20	Plenary 6 - Associate Professor Oliver Obst , Director of Research, Quality, and Innovation, School of Computing, Engineering and Mathematics, Western Sydney University, Australia Title: Learning recurrent neural network architectures Chair: Professor Chin Leo, Room: EA.G.18 (LT01)		
14:20-14:50	Plenary 7A - Professor Richard (Chunhui) Yang , Lead Director of Academic Program (Engineering and ID), School of Computing, Engineering and Mathematics, Western Sydney University, Australia Title: Engineering Education at WSU: Past, Present and Future Chair: Associate Professor Ataur Rahman, Room: EA.G.18 (LT01)		
14:50-15:30	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;"> Doctoral Consortium Facilitator: Associate Professor Ataur Rahman Room: EB.G.22 </td> <td style="width: 50%; vertical-align: top;"> Workshop on Construction Innovation Facilitator: Professor Vivian Tam Room: EB.G.33 </td> </tr> </table>	Doctoral Consortium Facilitator: Associate Professor Ataur Rahman Room: EB.G.22	Workshop on Construction Innovation Facilitator: Professor Vivian Tam Room: EB.G.33
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15:30 – 16:00	Afternoon Tea Room: Building EB.G.02	
16:00 – 17:50	Doctoral Consortium Facilitator: Associate Professor Ataur Rahman Room: EB.G.22	Workshop on Construction Innovation Facilitator: Professor Vivian Tam Room: EB.G.33
17:50-18:20	Plenary 7B – Prof (Sathaa) A Sathasivan , School of Computing, Engineering and Mathematics, Western Sydney University, Australia Title: Sydney Zoo - An experimental learning platform for sustainable water management Chair: Dr Md Kamrul Hassan Room: EA.G.18 (LT01)	

Day 2 – Tuesday 4 Dec 2018

Time	Session
08:00 – 09:00	Registration Parramatta South Campus Room: Building EB.G.02
09:00 – 09:35	Plenary 8 – Associate Professor Mei-Yung Leung , City University of Hong Kong, Hong Kong Title: Facilities Management Guideline for Elderly in the Care and Attention Homes Chair: Professor Vivian Tam Room: EA.G.18 (LT01)
09:40 – 11:00	iCAEED 2018: Technical Session 1A - Chair: Dr Ragbir Bhathal Room: EB.G.33
09:40-10:00	Invited Paper: Learning Hydraulic Engineering from Site Visit and Open Book Assessment A. H. M. Faisal Anwar
10:00-10:15	Developing Engineering Management Knowledge and Skills through Postgraduate Education in a Blended Learning Environment David S Thorpe
10:15-10:30	Teaching and Learning Components in a MPhil Research: Literature Review on Regional Flood Frequency Analysis Laura Rima, Ataur Rahman, Khaled Haddad
10:30-10:45	The facilitation of flipped learning within the classroom Environment Whitney Bevan
10:45-11:00	A Reflection on Master of Engineering Project – a Case Study in Western Sydney University, Australia Xiao Pan and Ataur Rahman
11:00-11:30	Morning Tea Room: Building EB.G Foyer
11:30 -12:35	iCAEED 2018: Technical Session 1B - Chair: Dr Sasha Alexander and Associate Professor Rafiqul Islam Room: EB.G.33
11:30 -11:55	Keynote paper: Importance of cybersecurity to ICT and engineering students

	and professionals Associate Professor Rafiqul Islam
11:55 -12:10	A Case Study of Diverse Learners on their First-year Undergraduate Engineering Degree Study Benjamin Kelley, Ragbir Bhathal and Richard Yang
12:10 -12:25	A Formative Approach to Construction Education Matt Stevens
12:25 -12:40	A Study of Students Conceptual Knowledge of Electricity and Magnetism R Bhathal and F E Tengasantos
12:40 -13:20	Lunch Room: Building EB.G.02
13:20-13:50	Plenary 9 – Professor Wanlei Zhou, University of Technology Sydney, Australia Title: Preserving privacy in the digital age: Differential privacy and its applications Chair: Associate Professor Rafiqul Islam Room: EA.G.18 (LT01)
13:50 -15:10	iCAEED 2018: Technical Session 1C - Chair: Professor Chin Leo Room: EB.G.33
13:50 -14:20	Keynote speech: Regional Flood Estimation in Australia: Past, present and future, Khaled Haddad, Cumberland City Council
14:20 -14:40	Invited paper: New and Emerging Developments in Power Engineering M H Nagrial
14:40 -14:55	Energy Storage: Where Should It Go And How Should Be It Priced? K Mitchell, A Vassallo, M H Nagrial
14:55 -15:10	Lifestyle, its elements and their universal relevance to wellbeing Vojislav Ilic
15:10 -15:25	Grand Water Challenges: How do We Teach Our Students – A Case for Bangladesh and Australia Mohammad A Alim, Ataur Rahman, Muhammad M. Khan and Shafiq Shirin
15:25 -15:55	Afternoon Tea Room: Building EB.G.02
	iCAEED Technical Session 1D – Chair: Engr. Caleb Amos Room: EB.G.33
15:55 -16:30	A Course Module for Creativity Training in Mechanical Engineering Yi Hu, Chao-Yang Yang, Yung Yu Chen, Amy Shumin Chen
16:30 -16:45	Engineering educational aspects from a case study based on deterioration of groundwater quality by the actions of percolation and leaching from Nala-Lai in Rawalpindi region, Pakistan Muhammad Tariq Rafiq, Shahid Ali Khan, Ataur Rahman, Kashif Aziz, Rukhsanda Aziz and Muhammad Khalid Rafiq
16:45 -17:00	Comparative Study of NI Multisim and Matlab Simulink for simulating DC/AC Inverters in Power Electronics Education Abdullah Kamal and Kevin Rogers
17:00-17:15	Writing Skill of Higher Degree Research Students: Perspectives of a Thesis Editor, Student and Supervisor Tarek Rahman, Caleb Amos and Ataur Rahman
17:15-17:30	Water Education in Australian Schools: A Case Study in New South Wales Sumya Rahman, Jenis Farzana Islam and Ataur Rahman

17:30-17:45	A bit of change in the title: 3d printed tissue for surgical simulation training Tosin Famakinwa, Scott MacKenzie and Michele Smigielski
17:45-18:00	Doctoral Supervision: A Case Study in Western Sydney University, Australia A Rahman
18:00-18:15	Algal Bloom in Australian Rivers: A Review Md Sheikh Anwar, M Ashiq Rahman, Preeti Preeti and Ataur Rahman
18:15-18:30	Building certification process: Educational aspects – A review Issa Makdissi and Ataur Rahman
19:30 – 21:30	CONFERENCE DINNER (Only for the CONFERENCE DINNER ticket holders)

Day 3 – Wednesday 5 Dec 2018

Time	Session
8:00 – 9:00	Registration Parramatta South Campus Room: Building EB.G.02
9:00 – 9:35	Plenary 10 – Associate Professor Girija Chetty, University of Canberra, Australia Title: Multimodal Medical Image Analysis Based on Machine Learning Techniques Chair: Dr Vojislav Ilic Room: EA.G.18 (LT01)
9:35 – 10:10	Plenary 11- Dr Rafiqul Islam, CEO, Solar-e-Technology, Sydney, Australia Title: Engineering Education in the perspective of People, Society and Sustainability Chair: Dr Sasha Alexander Room: EA.G.18 (LT01)
10:10 – 10:45	MORNING TEA Room: Building EB.G Foyer
10:45 –12:30	iCAEED 2018: Technical Session 1E - Chair: Associate Professor Mahmood Nagrial Room: EB.G.33
10:45-11:05	Invited Paper: Hydrology Education in Australia: Challenges & Opportunities Surendra Shrestha
11:05-11:20	Laboratory Development for Electrical Engineering Program J. Rizk, M. Nagrial and A. Hellany
11:20-11:35	Comparison of Civil Engineering Curriculum of Khulna University of Engineering & Technology, Bangladesh and Western Sydney University, Australia Kazi Abm Mohiuddin, Quazi Sazzad Hossain and Ataur Rahman
11:35-11:50	Challenges in Learning Urban Stormwater Modelling in Australia Nilufa Afrin and Ataur Rahman
11:50-12:05	Potential of Rainwater Harvesting in Greater Sydney: A Proposed Educational Tool for Sydney School Children Preeti Preeti, Sahil Jakhar and Ataur Rahman
12:05-12:20	Project-Based Learning in Engineering: Study of Renewable Energy Targets

	Ranjith Liyanapathirana, Ranjith Liyanapathirana and Daniel Painter
12:20-12:30	Qatar Rainfall and Runoff Characteristics – A New Direction of Engineering Education and Practice in Qatar Abdullah Al Mamoon and Ataur Rahman
12:30 -13:15	Lunch Room: Building EB.G Foyer
13:15-13.45	Plenary 12 – Associate Professor Adel Ali Al-Jumaily, University of Technology, Sydney Title: Real life challenges application for computational intelligence in biomedical applications Chair: Dr Rezaul Bashar Room: EA.G.18 (LT01)
13:45 –15:50	iCAEED 2018: Technical Session 1F – Chair Associate Professor Surendra Shrestha and Dr Rafiqul Islam Room: Room: EB.G.33
13:45-14:05	Invited paper: Challenges in teaching of geotechnical engineering at WSU Chin Leo
14:05-14:25	Invited paper: Teaching and Learning Aspects of Literature Review as a Component of Doctoral Study: A Case in Western Sydney University Caleb Christian Amos, Ataur Rahman, Fazlul Karim and John Mwangi Gathenya
14:25-14:40	Challenges in Teaching Environmental Engineering: A Case Study in Australia Sajeeve Hussain Latif, Mohammad A Alim and Ataur Rahman
14:40-14:55	Evaluation of 40 Credit Points Honours Thesis in Western Sydney University, Australia Ataur Rahman
14:55-15:10	Student engagement in online delivery of courses Fidelis Mashiri
15:10-15:25	Lessons learnt from modelling end-of-pipe bioretention systems in MUSIC Gayani Chandrasena
15:20-15:35	Hydrology Teaching in Australian Universities: An Example of Student Learning Using Flood Frequency Analysis Mohiuddin Ahsan, Mohammed Fazlur Rahman and Ataur Rahman
15:35 -15:45	CONFERENCE CLOSING SESSION Best Paper Award Room: EA.G.18 (LT01)