

**DRAFT**



**WESTERN SYDNEY**  
UNIVERSITY



**International Conference on Advancements in  
Engineering Education (iCAEED-2019) 24-28 Nov 2019  
Sydney, Australia**

**5<sup>th</sup> 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 Computing, Engineering and Mathematics*

*Western Sydney University*

and

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

## Day 1 – Sunday 24 Nov 2019

Time	Event	Remark
6:00 - 8:00 pm	Registration, Refreshments and Networking (Room EA.G.32)	<p>Conference General Chair: Prof Ataur Rahman</p> <p><b>Conference Chairs:</b>  Prof Yang Xiang  Prof Richard Yang  A/Prof Mahmood Nagrial  Prof Gu Fang</p> <p><b>Conference Co-Chairs:</b>  A/Prof Ming Zhao  Dr Rafiqul Islam  A/Prof Surendra Shrestha  A/Prof Olivia Mirza  A/Prof Sarah Zhang  A/Prof Bahman Javadi</p> <p><b>Conference Secretaries:</b>  Dr Ranjith Liyanapathirana  Dr Rezaul Bashar  Dr Ee Loon Tan  Dr Leo Zhang</p> <p><b>Co-Secretary:</b>    Mr Balbir Singh</p> <p><b>Catering:</b>  Dr Hasan Rahman</p> <p><b>Exhibition Area:</b>  Dr Tosin Famakinwa</p> <p><b>IT Services:</b>  Dr Rezaul Bashar</p> <p><b>Conference Management Coordinator:</b>  Ms Jenis Islam</p>

## Day 2 – Monday 25 November 2019

Time	Session
8:00 – 9:00 am	<b>Registration</b> Parramatta South Campus, Building EA Room EB.G.02 Desk in-charge: Ms Jenis Islam
9:00 – 9:30 am	<b>Conference Opening</b> Room EA.G.18, Parramatta South Campus <b>Moderator:</b> Prof Ataur Rahman, Chair, GCSTMR <b>Acknowledgement of Indigenous owners of the land:</b> Prof Ataur Rahman <b>Opening:</b> Professor Denise Kirkpatrick, Acting Vice-Chancellor, Western Sydney University <b>Speech:</b> The Lord Mayor, Parramatta City Council <b>Speech:</b> Prof Deborah Sweeney, Deputy Vice-Chancellor and Vice-President, Western Sydney University <b>Speech:</b> Prof Simeon Simoff, Dean, SCEM, Western Sydney University <b>Speech:</b> Prof Yang Xiang, Chair (iCAEED) <b>Speech:</b> Prof Richard Yang, Chair (iCMMERP) <b>Speech:</b> A/Prof Mahmood Nagrial, Chair (iCEERP) <b>Speech:</b> A/Prof Bahman Javadi, Chair (iCIOTRP) <b>Housekeeping:</b> Prof Ataur Rahman
9.30-10.00 am	<b>Plenary Session 1- Chair: Prof Yang Xiang (Room EA.G.18)</b>
9.30-10.00 am	<b>Plenary 1: Advanced Technologies to Engineering a Better Sustainable World</b> , Dr Marlene Kanga, President, World Federation of Engineering Organisations (WFEO), UK
10:00 –10:30 am	<b>Panel Discussion – Sustainability in Education, Moderator A/Prof Sarah Zhang (Room EA.G.18)</b>
10:30-11:00 am	<b>Morning Tea (Room EB.G.02)</b>

<b>11:00 am-12:30pm</b>	<b>Plenary Session 2 - Chair: A/Prof Bahman Javadi and Prof Richard Yang (Room EA.G.18)</b>
11:00-11:30	Plenary 2: <b>Micro-service for the convergence of IT technologies</b> , Prof Massimo Vallari, University of Messina, Italy
11:30-12:00	Plenary 3: <b>Electrical Engineering and Tensors</b> , Prof Godfrey Lucas, Former Dean of Engineering, Western Sydney University, Australia
12:00-12:30	Plenary 4: <b>Augmenting Laboratories: improved linking of theory and reality</b> , Prof David Lowe, The University of Sydney, Australia
<b>12:30 -1:30 pm</b>	<b>Lunch (Room EA.G.02)</b>
<b>1:30-3:00 pm</b>	<b>Plenary Session 2 – Chair: A/Prof Mahmood Nagrial (Room EA.G.18)</b>
1:30-2:00	Plenary 5: <b>Blockchain for the Internet of Things: Challenges and Solutions</b> , Prof Salil Kanhere, University of New South Wales, Sydney, Australia
2:00 – 2:30	Keynote 1: <b>Power System Planning: The Art of Raising a Phoenix</b> Dr Nalin Pahalawaththa, Senior Technical Director, Power Systems, GHD Pty Ltd, Australia
2:30 -3:00	Keynote 2: <b>Emerging trends in communications: 5G and beyond</b> , Dr Nikhil Sharma, LNMIIT, India
<b>3:00 -3.30 pm</b>	<b>Afternoon Tea (Room EA.G.02)</b>
<b>3:30 – 5:00 pm</b>	<b>Plenary Session 3 – Chair: A/Prof Surendra Shrestha and A/Prof Sarah Zhang (Room EA.G.18)</b>
3:30 – 4:00	Plenary 6: <b>Curriculum Innovation of Undergraduate Engineering Courses: A Practice on Sustainability Embedment</b> , Prof Richard Yang, Western Sydney University, Australia
4:00-4:30	Keynote 3: <b>Engineering Education in Bangladesh</b> , Prof Muhammed Alamgir, University Grants Commission, Bangladesh
4:30-5:00	Plenary 7: <b>Fusion Bonding and Consolidation of 3D Printed Continuous Carbon Fibre Reinforced Polyamide Composites</b> , Prof Lin Ye, The University of Sydney, Australia
5:00 -5:30	Keynote 4: <b>Nonlinear behaviours of wave-induced fluid oscillations</b> in the gap between two fixed barges, Prof Lin Lu, Dalian University of Technology, China

### Day 3 – Tuesday 26 Nov 2019

Time	Session
8:00 – 9:00 am	<b>Registration</b> , Parramatta South Campus (Room EA.G.02)
9:00-10:30 am	<b>iCAEED 2019: Education paper Session 1 (Room-EB.G.35)</b> Chair: Assoc Prof Sarah Zhang
9:00 – 9:30	Keynote: <b>Engineering Education in Australia</b> : Current Trends <i>Prof Roger Hadgraft, University of Technology Sydney, Australia</i>
9:30 – 9:50	First year in the university: A case study in Sydney, Australia (19) [Sumya Rahman, Sahir Mahmud, Tarek Rahman, Kamal Mahmud and Aatur Rahman]
9:50 – 10:10	From Research to Learning and Teaching: Reflection on Experience with Postgraduate Students (9) [Quang Vinh Nguyen and Surendra Shrestha]
10:10-10:30	Civil Engineering Curriculum Reform: Balance among Employability, Innovation and Academic View (2) [Li Jing and Ji Jing]
<b>10:30 – 11:00 am</b>	<b>Morning Tea (Room EA.G.02)</b>
11:00 am–12:20 pm	<b>iCAEED 2019: Education paper 2 (Room-EB.G.35)</b> Chair: Assoc Prof Olivia Mirza
11:00-11:30	Comparative Study on the Civil Engineering Education in Australia and China (11) [Yx Zhang and Lei Zhang]
11:30-11:50	Exploration and Practice on Cultivation of Internationalized Talents of Civil Engineering Based on English-Taught Major Development (10) [Jing Ji, Ying Liu, Chaolu Zhuang, Jing Li and Jianrong Pan]
11:50-12:10	Gender equality in the Australian engineering industry and the recommendation for progressive industrial change to represent and retain women in the industry (3) [Danielle Kirby and Olivia Mirza]
12:10-12:30	Implementation of Student-focused Pedagogical Approach for Improving Engineering Student Satisfaction (1) [Susanna Lin]
<b>12:30-1:30 pm</b>	<b>Lunch (Room EA.G.02)</b>
1:30-3:00 pm	<b>iCAEED 2019: Technical Session 1 (Room-EB.G.35)</b> Chair: Assoc Prof Surendra Shrestha
1:30-1:50	Trends in annual maximum and minimum temperature data in New South Wales, Australia (15) [Orpita Urmi Laz and Aatur Rahman]

1:50-2:10	A Scoping Review of Solar Stills Technology for Drinking Water Production (16) [Elizabeth Myina Nomor, Rafiqul Islam and Ataur Rahman]
2:10-2:30	Design and experimentation of Permeable Pavement Systems at Western Sydney University (7) [Upeka Kuruppu, Ataur Rahman and Arumugam Sathasivan]
2:30-2:50	Sydney Metro Northwest Viaduct Type 1 Track Slab (5) [Thy Pham]
<b>3:00-3:30 pm</b>	<b>Afternoon Tea (Room EA.G.02)</b>
<b>3:30-5:00 pm</b>	<b>iCAEED 2019: Technical Session 2 (Room-EB.G.35)</b> <b>Chair: Dr Ragbir Bhathal</b>
3:30-3:50	A preliminary study of light pollution in Sydney and the surrounding suburbs (20) [Eresha Chandrathilake and Ragbir Bhathal]
3:50-4:10	Flood Data Preparation in Eastern Australia: A Project Based Learning Exercise (8) [Laura Rima, Abhishek Gurung, Khaled Haddad and Ataur Rahman]
4:10-4:30	Study on Steel-Concrete Composite Structure Incorporating BubbleDeck Slab (24) [Rahul Varma, Ee Loon Tan and Balbir Singh]
4:30-4:50	Addressing the Sustainable Development Goals: Roof Harvested Rainwater use in Household & Village Agriculture for increased nutrition and education in Developing Nations: A case study of a Kenyan Orphanage (22) [Caleb Amos, Ataur Rahman, Fazlul Karim and John Gathenya]
<b>7:30 – 9:30 pm</b>	<b>CONFERENCE DINNER (For the CONFERENCE DINNER ticket holders)</b>

### Day 4: Wednesday 27 Nov 2019

Time	Event
8:00 – 9:00	<b>Registration</b> Parramatta South Campus, Building EA Room EA.G.02
<b>9:00-10:30</b>	<b>iCAEED 2019: Education paper 3 (Room-EB.G.35)</b> <b>Chair: Dr Baki Billah</b>
9:00-9:30	Plenary: <b>Neuromorphic Engineering and Intelligent Sensors</b> , <i>Prof Andre van Schaik, Director,</i> <i>International Centre for Neuromorphic Systems (ICNS), Sydney,</i> <i>Australia</i>
9:30-9:50	Art of teaching biostatistics – a case study from Monash University (21) [Md Baki Billah]
9:50-10:10	Life style, its elements and their universal relevance to wellbeing (30) [Vojislav Ilic]

10:10-10:30	Understanding the General Framework for Teaching Semantics and Syntaxes of Visual Languages to Computer Education Students Based on a Notion of Abstract Visual Syntax Graphs (13) [Nicholas Ude Eze and Samuel Onyekaozulu Aniobi]
<b>10:30-11:00 am</b>	<b>Morning Tea (Room EA.G.02)</b>
<b>11:00 – 12:30</b>	<b>iCAEED 2019: Education paper 4 (Room-EB.G.35)</b> <b>Chair: Dr Ee loon Tan</b>
11:00-11:30	Incorporating Sustainability Aspects in Teaching of Fluid Mechanics: A Case Study in Western Sydney University, Australia (17) [Ataur Rahman, Rafiqul Islam and Jenis Islam]
11:30-11:50	Research-based education for industrial development: Experiences of Kathmandu University in turbine technology (4) [Biraj Singh Thapa, Bhola Thapa, Ole Gunnar Dahlhaug and Surendra Shrestha]
11:50-12:10	Student- centred approach: understanding engineering students from disadvantaged backgrounds (14) [Marina Belkina]
12:10-12:30	Multidisciplinary Student-Led Project-Based Learning in Engineering (18) [Ali Hellany, Mahmood Nagrial and Jamal Rizk]
<b>12:30-1:30 pm</b>	<b>Lunch (Room EA.G.02)</b>
<b>1:20 – 2:50</b>	<b>iCAEED2019: Education paper 5 (Room-EB.G.35)</b> <b>Chair: Assoc Prof Olivia Mirza</b>
1:20-1:40	Girls in STEM: Building the future (25) [Olivia Mirza, Deslie Jameson and Alicja Knedl]
1:40-2:00	Comparison of Bachelor of Civil Engineering Curriculum of Khulna University of Engineering & Technology and Western Sydney University (27) [Kazi Abm Mohiuddin, Quazi Sazzad Hossain and Ataur Rahman]
2:00-2:20	PARTNERSHIP PEDAGOGY PATHWAYS FOR THE FIRE PROTECTION INDUSTRY INTO MAINSTREAM POST-GRADUATE PROGRAMS (31) [Swapan Saha]
2:20-2:40	Addressing The Future Imbalance of Gender Diversity In Engineering Caused By Misconception: Observations Of A Female Millennial Engineer In The Civil Space (26) [Adriana Assey Assey]
2:40-3:00	Study of 1st Year Engineering Pathway Programs at WSU: Diverse Learners (12) [Benjamin Kelley, Chunhui Yang and Ragbir Bhathal]
<b>3:00-3:30 pm</b>	<b>Afternoon Tea (Room EA.G.02)</b>
<b>3:30-5:00</b>	<b>iCAEED 2019: Education/Technical Session 3 (Room-EB.G.35)</b> <b>Chair: Dr Md Abdul Alim</b>
3:30-3:50	A Young Engineers Perspective on the Construction Industry (28) [Yiana Pallis]
3:50-4:10	A Review of Rainwater Harvesting in South East Asia (23) [Que Thanh Trinh, Ataur Rahman and Md Abdul Alim]

4:10-4:30	Rainwater harvesting for drinking purposes in rural areas: A case study in Western Sydney (29) [Md Abdul Alim]
4:30-4:50	<i>TBA</i>
4:50 – 5:00 5:00-5:30	<i>TBA</i> <i>Conference Closing and Awards (Room EA.G.18)</i>

### Day 5: Thursday 28 Nov 2019: Sight Seeing

Sight Seeing	Eligibility	Remark
10:00 am to 4:00 pm	Who have registered and paid for the sight visit.  Contact: <i>Ms Jenis Islam</i> ( <i>jenisislam04@gmail.com</i> )	The bus will depart from Western Sydney Parramatta South Campus (Bus loop in front of Building EA) at 10:00 am and return the delegates to Western Sydney Parramatta South Campus at 4:00 pm ■



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