



Conference Program Details
3rd International Conference on Structural Engineering Research
(iCSER 2022) 20-22 Nov 2022
Western Sydney University, Parramatta South Campus, Australia



WESTERN SYDNEY
UNIVERSITY



**3rd International Conference on Structural
Engineering Research, Sydney, 2022 (iCSER- 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

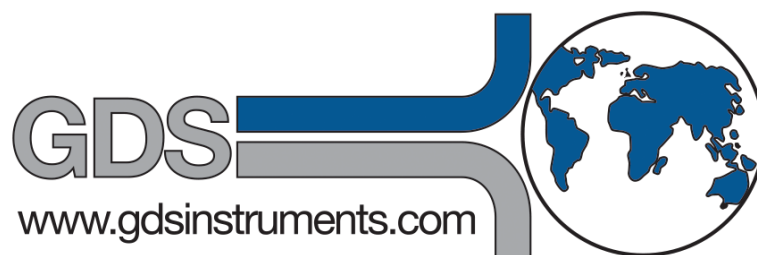
Global Circle for Scientific, Technological and Management Research (GCSTMR)

We thank our generous sponsors:



OMRON

Automation
+ Robotics



Day 1– Sunday 27 Nov 2022

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

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: Professor Ataur Rahman, Chair, GCSTMR Acknowledgment of Indigenous owners of the land</p> <p>Speech: Professor Ataur Rahman, Chair (iCWEE-2022) Speech: Assoc/Professor Fidelis Mashiri, Chair (iCSER-2022) Speech: Professor Chin Leo, Chair (iCGMGE-2022) Speech: A/Professor Qinghua Zeng, Chair (iCMEMS-2022)</p> <p>Speech: Professor 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: Professor Ataur Rahman</p>
	<p>Plenary Session 1- Chair: Professor Zhong Tao (Room EA.G.18)</p>
9.30-10.00 am	<p>Plenary 1: Structural engineering research in high performance steel and composite structures Professor Brian Uy, The University of Sydney, Australia</p>
	<p>Plenary Session 1- Chair: Professor 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>
	<p>Plenary Session 2 - Chair: Professor Henry Wong and Professor Samantha Liyanapathirana (Room EA.G.18)</p>

11:00-11:30	Plenary 3: Professor Nasser Khalili, University of New South Wales, Australia
	Plenary Session 2 - Chair: A/Professor Qinghua Zeng (Room EA.G.18)
11:30-12:00 pm	Plenary 4: Professor Michael Ferry, University of New South Wales, Australia
	Plenary Session 2- Chair: Professor 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/Professor Fidelis Mashiri (Room EA.G.18)
1:30-2:00 pm	Plenary 6: Fatigue of High Strength and Ultra-High Strength Professor Xiao-Ling Zhao, The Hong Kong Polytechnic University, Hong Kong, China
	Plenary Session 3 - Chair: Professor Chin Leo and Professor Samantha Liyanapathirana (Room EA.G.18)
2:00-2:30 pm	Plenary 7: Professor 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/Professor Qinghua Zeng (Room EA.G.18)
3:30-4:00 pm	Plenary 9: Professor. Qing Li University of Sydney
	Plenary Session 4- Chair: Professor 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: Professor Brian Uy (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: Professor Chin Leo and Professor 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 PS-EB.G.02) TBC
9:00-10:30 am	<p>iCSER 2022: Technical Session 1 (Room-EB.G.32) Chair: Professor Rebecca Gravina, University of Queensland, Australia</p> <p>IMPULSIVE LOADS AND WALL BEHAVIOUR</p>
9:00 – 9:30	Keynote: Metaconcrete Structure to Resist Impulsive Loads Professor Hong Hao, Curtin University, Australia
9:30 – 9:50	Paper: icser20220060 Seismic Performance of RC Shear Wall with New Replaceable Corner Components <i>Haozuo Wang, Tongji University</i>
9:50 – 10:10	Paper: icser20220052 Numerical simulation of tyre walls under combined compressive and out-of-plane loads <i>Yachong Xu, University of South Australia</i>
10:10-10:30	Paper: icser20220040 Study on RCC shear wall with and without opening and its effect on the stability of high-rise building A.B.M. Golam Rabbany Palash, Bangladesh
10:30 – 11:00 am	Morning Tea (Room EB.G.33)
11:00 am–12:20 pm	<p>iCSER 2022: Technical Session 2 (Room-EB.G.32) Chair: Professor Riadh Al-Mahaidi, Swinburne University of Technology, Australia</p> <p>FIBRE REINFORCED POLYMERS</p>
11:00-11:30	Keynote : Durability of FRP Strengthened Reinforced Concrete Structures Professor Rebecca Gravina, University of Queensland, Australia
11:30-11:50	Paper: icser20220075 A New Mesoscale Discrete Simulation for FRP-Concrete Interface by 3D RBSM <i>Cheng Jiang, Western Sydney University</i>
11:50-12:10	Paper: icser20220071 Influence of CFRP strip tie configurations on the behavior of GFRP bar-reinforced normal strength concrete columns under axial compression <i>M. Neaz Sheikh, University of Wollongong</i>
12:10-12:30	Paper: icser20220049 Strengthening of steel beams with Thermoplastic CFRP overwrapping using Automated fibre placement <i>Feleb N Matti, Western Sydney University</i>
12:30-1:30 pm	Lunch (Room EB.G.33)

1:30-3:00 pm	<p>iCSER 2022: Technical Session 3 (Room-EB.G.32) Chair: Professor Hong Hao, Curtin University, Australia</p> <p>EXTREME EVENTS AND STEEL STRUCTURES</p>
1:30-1:50	<p>Keynote: Enhancement of Safety of Structures under Extreme Events using Advanced Testing Techniques Professor Riadh Al-Mahaidi, Swinburne University of Technology, Australia</p>
1:50-2:10	<p>Paper: icser20220076 Monotonic and cyclic behaviour of Q620 structural steels after fire exposure <i>Hao Chen, Tsinghua University</i></p>
2:10-2:30	<p>Paper: icser20220066 Structural performance of truss steel decking formwork under construction loads <i>Dayani Kahagala Hewage, Western Sydney University</i></p>
2:30-2:50	<p>Paper: icser20220055 Analysis of normal stress distribution and mechanism of girders with corrugated webs under uniform bending <i>Guoji Zuo, Tongji University</i></p>
3:00-3:30 pm	<p>Afternoon Tea (Room EB.G.33)</p>
3:30-5:00 pm	<p>iCSER 2022: Technical Session 4 (Room-EB.G.32) Chair: TBA</p> <p>FRP AND CONCRETE TECHNOLOGY</p>
3:30-3:50	<p>Invited Paper: Recent research progress on FRP/Fibre textile-reinforced UHPC Composites Professoressor Yan Zhuge, University of South Australia, Australia</p>
3:50-4:10	<p>Paper: icser20220074 Reinforced Crumb Rubber Concrete for Residential Construction <i>Yan Zhuge, University of South Australia</i></p>
4:10-4:30	<p>Paper: icser20220061 Rehabilitation of concrete bridge deck cracking using High-Performance Fibre Reinforced Concrete (HPFRC) <i>Saman Karimi, Western Sydney University</i></p>
4:30-4:50	<p>Paper: icser20220070 Utilization of Waste Iron Slag As The Fine Aggregate (Sand) Material In Concrete Block For Low Cost Application <i>Md. Ashraful Alam, Housing & Building Research Institute, Dhaka, Bangladesh</i></p>
4:50-5:10	<p>Paper: icser20220050 A parametric study on the effect of hemp shives on compressive strength of concrete materials <i>Rahnum T. Nazmul, Deakin University</i></p>
5:10-5:30	<p>Paper: icser20220085 Effect of Rice Straw Ash on Compressive Strength of Fly Ash Based Geopolymer Mortar Cured at Elevated Temperature <i>Md. Ashraful Habib, Hajee Mohammad Danesh Science & Technology University, Bangladesh</i></p>
7:30 – 9:30 pm	<p>CONFERENCE DINNER (Only for the CONFERENCE DINNER ticket holders)</p>

Day 4 – Wednesday 30 Nov 2022

Time	Event
8:00 – 9:00	Registration Parramatta South Campus, Building EA Room PS-EB.G.02 (TBC)
9:00-10:30	iCSEr 2022: Technical Session 5 (Room-EB.G.32) Chair: TBA STRUCTURAL HEALTH MONITORING
9:00-9:30	Invited Paper: Recent developments on vehicle-assisted bridge structural health monitoring Associate Professor Xinqun Zhu, University of Technology Sydney, Australia
9:30-9:50	Paper: icser20220037 Axial load capacity of circular concrete filled double tube stiffened columns <i>Mohamed Ghannam, Mansoura University</i>
9:50-10:10	Paper: icser20220081 Knowledge Transfer for Structural Damage Detection using Fine-tuning based on FRF <i>Xutong Zhang, University of Technology Sydney</i>
10:10-10:30	Paper: icser20220082 Transfer Learning based Condition assessment for Bridges <i>Saeid Talei, University of Technology Sydney</i>
10:30-11:00 am	Morning Tea (Room EB.G.33)
11:00 – 12:30	iCSEr 2022: Technical Session 6 (Room-EB.G.32) Chair: Associate Professor Xinqun Zhu, University of Technology Sydney, Australia COMPOSITE STRUCTURES
11:00-11:30	Invited Paper: Experimental Behavior of Twin-Layer Flat Steel-Sheet Composite Wall System (TFSCWs) with Opening under In-Plane Lateral Cyclic Loading Associate Professor Dr Siti Aminah Osman, Universiti Kebangsaan Malaysia, Malaysia
11:30-11:50	Paper: icser20220067 Experimental investigation on the flexural stiffness of a composite steel decking with web voids <i>Dayani Kahagala Hewage, Western Sydney University</i>
11:50-12:10	Paper: icser20220063 Effects of elastically restrained edge on the natural frequencies of functionally graded beam <i>Saman Karimi, Western Sydney University</i>
12:10-12:30	Paper: icser20220062 Modelling Methods for Robustness Analysis of Composite Steel-Concrete Modular Buildings <i>Gaurav Swami, University of Melbourne</i>
12:30-1:20 pm	Lunch (Room EB.G.33)

1:20 – 2:50	<p>iCSER 2022: Technical Session 7 (Room-EB.G.32) Chair: TBA</p> <p>STEEL AND CONCRETE STRUCTURES</p>
1:20-1:40	<p>Paper: icser20220057 NUMERICAL INVESTIGATION OF SLIP-CRITICAL BLIND BOLTS ANCHORED IN CONCRETE-FILLED STEEL TUBULAR SECTIONS <i>Xing Gao, Tongji University</i></p>
1:40-2:00	<p>Paper: icser20220045 Effect of bolt thread on the failure mode and ultimate capacity of bolts under tension and compression <i>Md Kamrul Hassan, Western Sydney University</i></p>
2:00-2:20	<p>Paper: icser20220041 Comparative study of different analysis approach in RC structures and the consequences of performance-based design approach on the stability of a 16 storey RC structure <i>A.B.M. Golam Rabbany Palash, Bangladesh</i></p>
2:20-2:40	<p>Paper: icser20220039 Sulfate attack on recycled concrete: A case study on green concrete made with recycled brick aggregates <i>NHM Kamrujjaman Serker, Rajshahi University of Engineering & Technology</i></p>
2:40-3:00	<p>Paper: icser20220051 The structural performance of geopolymer concrete with recycled concrete aggregate: A review <i>Bahareh Nikmehr, Deakin University</i></p>
3:00-3:30 pm	Afternoon Tea (Room EB.G.33)
3:30-5:00	<p>iCSER 2022: Technical Session 8 (Room-EB.G.32) Chair: TBA</p> <p>CONCRETE TECHNOLOGY</p>
3:30-3:50	<p>Paper: icser20220073 Stress-strain behaviour of recycled aggregate concrete under triaxial compression and pore water pressure <i>Wengui Li, University of Technology Sydney</i></p>
3:50-4:10	<p>icser20220084 Effect of Rice Straw Ash on Compressive Strength of Fly Ash Based Geopolymer Mortar Cured at Elevated Temperature <i>Md. Ashraful Habib, Hajee Mohammad Danesh Science & Technology University, Bangladesh</i></p>
4:10-4:30	<p>Paper: icser20220053 Influence of discrete basalt fibres on the mechanical properties of self-compacted ambient-cured geopolymer concrete <i>Mohamed Heweidak, Deakin University</i></p>
4:30-4:50	<p>icser20220069 Studies on Anwar Ispat Waste Cement Sheet Powder (C.S.P) as Partial Replacement of Sand in Concrete Production. <i>Md. Ashraful Alam, Housing & Building Research Institute, Dhaka, Bangladesh</i></p>
5:00-5:30	Conference Closing and Awards (Room EA.G.18)

Notes: