

Technical Session Schedule

Time	Technical Sessions		
8.30-10.00	Inaugural Ceremony and Keynote Address 1 <i>Seminar Room</i>		
10.00-10.30	Refreshments at the Lobby		
10.30-12.00	Technical Session 1		
	Session A1 Structures & Building Materials- SBMI <i>Seminar Room</i>	Session B1 Construction and Project Management/ Highway and Transport Engineering- CPM&HTE <i>Audio Visual Center</i>	Session C1 Geotechnical Engineering-GE <i>Board Room</i>
12.00-13.00	Lunch at the Faculty Guest House		
13.00-13.30	Keynote Address 2 <i>Seminar Room</i>		
13.30-15.00	Technical Session 2		
	Session A2 - Hybrid (Structures & Building Materials-SBMII) <i>Seminar Room</i>	Session B2 Environmental Engineering & Management - EEM <i>Audio Visual Center</i>	
15.00-15.30	Refreshments at the Lobby		
15.30-17.30	Technical Session 3		
	Session A3 - Hybrid River Engineering & Hydroinformatics - REH <i>Seminar Room</i>	Session B3 Structures & Building Materials-SBMIII <i>Audio Visual Center</i>	
18.30 ~	Symposium Dinner at Faculty the Guest House		

Technical Session 1

Technical Session A1 – Seminar Room (10.30-12.15) Title of the Session- <i>Structures and Building Materials-I (SBMI)</i>		
Time	Title of the Paper	Page
10.30-10.45	<i>ACEPS2023-525</i> Improvement of intra-porosity and water retention properties of pervious concrete block using recycling aggregate and industrial by-products in Vietnam <i>Ngo Kim Tuan, Phan Quang Minh, Nguyen Hoang Giang, Nguyen Tien Dung and Ken Kawamoto</i>	5
10.45-11.00	<i>ACEPS2023-5455</i> Mechanical properties of rice husk ash and bottom ash incorporated paving blocks <i>B.G.N.G. De Silva and G.H.M.J. Subashi De Silva</i>	6
11.00-11.15	<i>ACEPS2023-4529</i> Effects of vein graphite-based graphene oxide on mechanical performance of Concrete <i>A. Gunasekara and D.D.T.K. Kulathunga</i>	7
11.15-11.30	<i>ACEPS2023-4027</i> Properties of rubberized concrete at low-level replacement ratio with smaller rubber particle: An experimental investigation <i>B.G.V. Sanjaya, A.N.H. Mohamed, J.M.R.S. Appuhamy, W.M.K.R.T.W. Bandara, S. Venkatesan and R.J. Gravina</i>	8
11.30-11.45	<i>ACEPS2023-6618</i> Mathematical model to predict the compressive strength of pervious concrete <i>Sathushka Heshan Wijekoon, P. Janotha, T. Shajeefpiranath, D.N. Subramaniam and N. Sathiparan</i>	9
11.45-12.00	<i>ACEPS2023-2634</i> Natural fiber substitutes for asbestos in fiber cement composites in Sri Lanka: A review <i>D.G.I.S. Deegoda, H.A.D.S. Buddika and H.D. Yapa</i>	10
12.00-12.15	<i>ACEPS2023-3831</i> An investigation on the shape factors of aggregates <i>D.H.H.P. Dassanayake, N. Ahilash, A.J.M.S.D. Premasiri, H.G.H.N. Jayasekara and D.N. Subramaniam</i>	11

Technical Session 1

Technical Session B1 – Audio Visual Room (10.30-11.45)

Title of the Session- Construction and Project Management/ Highway and Transport Engineering- CPM&HTE

Time	Title of the Paper	Page
10.30-10.45	<p><i>ACEPS2023-6418</i></p> <p>Use of Delay Analysis Techniques (DAT) to minimize the time overrun in construction projects <i>S.A.D.I. Bandara, S.N. Malkanthi and A.A.D.A.J. Perera</i></p>	46
10.45-11.00	<p><i>ACEPS2023-3215</i></p> <p>Lateritic soil partially added with shredded waste tire for the construction of the road base/subbase <i>S.P.M.T.C. Ilangasinghe, D.M.P. Pathmalal and A. Anburuvel</i></p>	47
11.00-11.15	<p><i>ACEPS2023-1726</i></p> <p>Suitability of wastewater-recovered rubber and dried sludge in hot mix asphalt for light traffic highways <i>Terrance Rengarasu, W.M.K.R.T.W. Bandara, Chamara Gunathilaka and Jagodage Dammika</i></p>	48
11.15-11.30	<p><i>ACEPS2023-4465</i></p> <p>Critical factors affecting construction project planning and monitoring <i>S.T.D. Gallage and A.A.D.A.J. Perera</i></p>	49
11.30-11.45	<p><i>ACEPS2023-814</i></p> <p>Circular economy applications in the construction industry: Case studies of renovation of old buildings in Sri Lanka <i>M.A.A. Haq, Sudhira De Silva and S.M.K. Samarakoon</i></p>	50

Technical Session 1

Technical Session C1 – Board Room (10.30-12.15) Title of the Session- <i>Geotechnical Engineering-GE</i>		
Time	Title of the Paper	Page
10.30-10.45	<i>ACEPS2023-4488</i> Failure of Gravel Compaction Pile Improved Embankment – Case study <i>Nekasiny Thayananthan and N.H. Priyankara</i>	33
10.45-11.00	<i>ACEPS2023-216</i> Soil-gas diffusivity and permeability based characterization of landfill cover soils: A case study <i>T.M.D. Thilakarathne, M.M.T. Lakshani and T.K.K. Chamindu Deepagoda</i>	34
11.00-11.15	<i>ACEPS2023-9383</i> Optimization of end bearing capacity of bored piles on rock based on field measurements <i>B.A.C. Danushka, N.H. Priyankara, A.M.N. Alagiyawanna and K. Senevirathe</i>	35
11.15-11.30	<i>ACEPS2023-5404</i> Gas diffusivity-based characterization of paddy top soils <i>M.M.T. Lakshani and T.K.K. Chamindu Deepagoda</i>	36
11.30-11.45	<i>ACEPS2023-1552</i> Numerical analysis on deformation behavior of soil – cement columns supported pipes <i>D.P.L.N.Y.M Perera, and N.H. Priyankara</i>	37
11.45-12.00	<i>ACEPS2023-9554</i> Paving blocks by partial replacement of crushed plastic as aggregates <i>G.L. Jayathunga and D.de.S.Udakara</i>	38
12.00-12.15	<i>ACEPS2023-3669</i> Numerical modeling of gravel compaction piles in soft soil under drain condition <i>T.K.S. Fernando and N.H. Priyankara</i>	39

Technical Session 2

Technical Session A2 (Hybrid) – Seminar Room (13.30-15.00) Title of the Session- <i>Structures and Building Materials-I I(SBMII)</i>		
Time	Title of the Paper	Page
13.30-13.45	<i>ACEPS2023-5603</i> Assessing the effect of curing exposure on properties of bentonite concrete <i>S. Suriarachchi, D.D.T.K. Kulathunga and M.L.C. Surangi</i>	12
13.45-14.00	<i>ACEPS2023-8140</i> Application of generative design approach for the optimization structural members in post-tensioned bridges <i>B.D.K.L Premasiri, Sudhira De Silva and S.M.K Samarakoon</i>	13
14.00-14.15	<i>ACEPS2023-715 (Virtual)</i> An integrated workflow for design-informed structural optimization <i>I.T. Amarasinghe, H.M.S.T. Herath and H.M.Y.C. Mallikarachchi</i>	14
14.15-14.30	<i>ACEPS2023-5692 (Virtual)</i> Evaluation of bond strength of Strain Hardening Cementitious Composites (SHCC) in patch repair of concrete with the different interface treatments <i>M.F. Ejaz and Y. Luan</i>	15
14.30-14.45	<i>ACEPS2023-8182 (Virtual)</i> Parametric modeling and analysis of tensegrity structures <i>S.K.S.R. Samarawickrama, H.M.S.T. Herath and I.R.A. Weerasekera</i>	16
14.45-15.00	<i>ACEPS2023-9429 (Virtual)</i> Adsorption of precast hollow core panels for external walls of multi-storey buildings <i>R. Subakaran, H.M.S.T. Herath and M.T.R. Jayasinghe</i>	17

Technical Session 2

Technical Session B2 – Audio Visual Room (13.30-15.15) Title of the Session- <i>Environmental Engineering & Management - EEM</i>		
Time	Title of the Paper	Page
13.30-13.45	<i>ACEPS2023-650</i> Characterization of arsenic adsorption onto of laterite grains by batch experiments in Vietnam <i>Kengo Nakamura, Akihiro Matsuno, Ken Kawamoto, Thi Viet Nga Tran and Nguyen Hoang Giang</i>	26
13.45-14.00	<i>ACEPS2023-9169</i> Modelling and economic analysis of recovering acetonitrile from wastewater using adsorption and membrane pervaporation <i>Aymmugan Aynkaran, Shazni Ahamed and Dilhara Sethunga</i>	27
14.00-14.15	<i>ACEPS2023-4326</i> Treatment of groundwater in CKDu prevailing areas of Sri Lanka using Nano filtration <i>I.W.S.S. Dayananda, A.M.U.N.K. Alahakoon, J. Ketharani, D.R. Samarajeewa and K.B.S.N. Jinadasa</i>	28
14.15-14.30	<i>ACEPS2023-346</i> Use of recycled autoclaved aerated concrete as absorbent for phosphorus recovery from domestic wastewater in Vietnam <i>Nga Tran Thi Viet, Son Tran Hoai, Giang Nguyen Hoang and Ken Kawamoto</i>	29
14.30-14.45	<i>ACEPS2023-6546</i> Recycling Polyethylene Terephthalate waste using chemical hydrolysis and possible applications: A review <i>S.M.D.V. Suraweera, Champika Ellawala, Sudhira De Silva and Chamila Gunasekara</i>	30
14.45-15.00	<i>ACEPS2023-7074</i> Towards an integrated approach in applying SEA and EIA in Sri Lanka <i>I. Madhushainie, S.W. Seneviratne and W.K.C.N. Dayanthi</i>	31
15.00-15.15	<i>ACEPS2023-486</i> Dispersed oil sorption capacity of granular autoclaved aerated concrete in Vietnam <i>Akihiro Matsuno, Ken Kawamoto, Thi Viet Nga Tran and Hoang Giang Nguyen</i>	32

Technical Session 3

Technical Session A3 (Hybrid) – Seminar Room (15.30-17.00) Title of the Session- <i>River Engineering & Hydroinformatics – REH</i>		
Time	Title of the Paper	Page
15.30-15.45	ACEPS2023-4313 Study on probabilistic rainfall thresholds for flood forecasting in selected wet zone basins in Sri Lanka <i>G.P.Y.R. Ganegoda and R.L.H.L. Rajapakse</i>	40
15.45-16.00	ACEPS2023-1173 Water resources assessment by soil conservation service curve number loss method in continuous-based runoff simulation <i>D.M.K.P. Dissanayake and T.N. Wickramaarachchi</i>	41
16.00-16.15	ACEPS2023-1389 Methods and applications for climate change vulnerability assessment in Kalu and Kirindi Oya river basins and impact on surface water - groundwater interaction <i>R.N. Mudalige and R. L. H. L. Rajapakse</i>	42
16.15-16.30	ACEPS2023-5706 Review on impact of sand mining on local scour around bridge piers. <i>A.W. Thembiliyagoda, P.K.C. De Silva and T.M.N. Wijayarathna</i>	43
16.30-16.45	ACEPS2023-2988 Microplastics detected in marine waters using spectroscopic analytical techniques: A review on the current state of knowledge <i>H.C.S. Jayawardhana and W.B. Gunawardana</i>	44
16.45-17.00	ACEPS2023-4642(Virtual) Impact of influential parameters on the formation of alternate bars <i>S.P.S. Meegahakumbura, K. Jeiroshan, K. Rajendran, T. Mathuwanthy and D.D. Dias</i>	45

Technical Session 3

Technical Session B3 – Audio Visual Room (15.30-17.30)

Title of the Session- *Structures & Building Materials III – SBMIII*

Time	Title of the Paper	Page
15.30-15.45	<i>ACEPS2023-2325</i> Utilization of groundnut shell ash as cement replacement in stabilized earth blocks <i>S.V. Vinusha, P.A. Vithushan and N. Sathiparan</i>	18
15.45-16.00	<i>ACEPS2023-106</i> Application of recycled aggregate concrete for structural components <i>Nguyen Hoang Giang, Nghiem Ha Tan, Nguyen Thanh Quang, Tran Viet Cuong, Nguyen Ngoc Tan and Ken Kawamoto</i>	19
16.00-16.15	<i>ACEPS2023-8033</i> Waste polyethylene with Kithul fiber as a composite material. <i>S.N. Gangabadaarachchi, G.H. Galabada, P.D. Dharmarathne, S.N. Malkanthi and R.U. Halwatura</i>	20
16.15-16.30	<i>ACEPS2023-7372</i> Homogenized material property prediction of carbon fiber composites using data-driven methods <i>Vipooshan Vipulanathan, Uditha Weerasinghe, Nisal Ariyasinghe, Chinthaka Mallikarachchi and Sumudu Herath</i>	21
16.30-16.45	<i>ACEPS2023-2054</i> Rubberized concrete and strategies for improving its durable properties - A review <i>D.H.A. Maduranga, J.M.R.S. Appuhamy, W.M.K.R.T.W. Bandara and T.M. Bandula Heva</i>	22
16.45-17.00	<i>ACEPS2023-7512</i> Thermal performance of precast panel buildings <i>G.W.T.I. Madhushanka, S.S. Bandaranayaka, M.T.R. Jayasinghe and H.M.S.T. Herath</i>	23
17.00-17.15	<i>ACEPS2023-8323</i> Development of jute fiber reinforced polymer reinforcing bars for concrete structures <i>K.M.C Peries and G. Tharmarajah</i>	24
17.15-17.30	<i>ACEPS2023-7913</i> Physical and mechanical properties of treated fibre reinforced cementitious grout <i>D.J.C.Y. Goonewardena, S. Thiennoosan and G. Tharmarajah</i>	25