



The 14th International Conference on

Sustainable Built Environment -2023



The Kandy Conference

PROGRAM BOOK

The 14th International Conference on Sustainable Built Environment (ICSBE) 2023

Vision

To drive innovative research for tomorrow's development

Mission

To meet colleagues, experts and friends in the field and to exchange ideas and those
About research development work, concepts and practical ideas in structural,
Construction and management

15th – 17th December, 2023, Kandy, Sri Lanka

PREFACE

It is with great pleasure that we present the proceedings of the 14th International Conference on Sustainable Built Environment (ICSBE) 2023. This is the fourteenth consecutively organized conference following a series of international conferences since 2010, keeping its tradition of adhering to engineering excellence. Taking a step forward from the last thirteen events, the coverage of specialty areas in this conference has been diversified. This book contains the abstracts of research work from many different sub-specialties. We expect that all these abstracts will be presented at parallel sessions from 16th to 17th December 2023. We would like to express our appreciation to all keynote speakers for their valuable contributions to the development of a sustainable world. We are also very grateful to the authors for contributing research papers of high quality. The abstracts in this proceeding book have been reviewed by a panel of academic and professional experts who have vast expertise in their respective fields. The enormous work carried out by these reviewers is gratefully appreciated as well. We are also pleased to acknowledge the advice and assistance provided by the members of the local and international advisory committee and members of the co-chairs committee along with many others who volunteered to assist to make this very significant event a success. Furthermore, we acknowledge the financial sponsorship provided by many organizations that have been extremely supportive of the success of this international conference. It is the earnest wish of the editors that this proceeding book would be used by the research community and practicing engineers/scientists who are directly or indirectly involved in studies related to sustainable built environments.

Editors

Prof. Ranjith Dissanayake
Dr. Pradeep Gajanayake

A MESSAGE FROM THE VICE-CHANCELOR, UNIVERSITY OF PERADENIYA

I am delighted to share a message marking the 14th International Conference on Sustainable Built Environment (ICSBE) 2023.

I commend the Conference for maintaining consistently high academic standards throughout its history. Over the past 14 years, it has provided an exceptional platform for engineers, scientists, and researchers to showcase advancements in research and development, as well as the practical application of new tools and technologies.

In line with its established legacy, the Conference is expanding its focus by embracing new areas, particularly technical and industrial collaborations. The technical sessions of the Conference, centered around the theme "Building Sustainable Nations," directly align with the university's current developmental plans. The University has initiated an ambitious plan aiming for significant advancements in all aspects by its centenary year in 2042. Central to these developmental plans is our dedication to sustainability, aligning with the specific goals outlined by the United Nations. I am confident that participants from the university will utilize the insights from the conference to refine and adapt our developmental strategies accordingly.

I extend my heartfelt congratulations to the organizing committee of ICSBE – 2023 and convey my sincere wishes for a successful, impactful, and inspiring conference.

Thank you.

Prof. M. D. Lamawansa
Vice Chancellor
University of Peradeniya

MESSAGE FROM THE CONFERENCE CO-CHAIRS

It is a pleasure for us to welcome all the participants to the 14th International Conference on Sustainable Built Environment (ICSBE) 2023 in Kandy, Sri Lanka. We, the co-chairs would gratefully like to mention the previous successful conference, which was held for thirteen consecutive years in Kandy, Sri Lanka. The theme selected for the conference Sustainable Built Environment is extremely relevant to today's world. With the vision of promoting innovative and sustainable research for tomorrow's development. We organize this conference as a meeting place of talents, knowledge, and dedication. Therefore, we trust that the conference will produce great ideas from a variety of research and exchange the knowledge of experts, colleagues, and friends who are working for the world's sustainable development. The conference focuses on the different sub-topics in the sustainable built environment: such as sustainable construction, sustainable infrastructure development & planning, urban green infrastructure & planning, sustainable cities and villages, waste & wastewater management for enhanced sustainability, advanced water & wastewater technology, rainwater harvesting, water conservation, solar energy, bio-energy, wind, and hydro-power energy, alternative clean energy, green advanced computations & communication, green energy economics, policy, financing & business practice, sustainable materials, material flows & industrial ecology, high-performance concrete, remove, recycle, repair of materials, building automation, indoor environmental quality, indoor plants, impacts of climate change, climate change & reducing greenhouse emissions, carbon footprint, impacts of sustainable bio-fuel, social impact & human behavior, climate risk management & mitigation, global climate model and landscaping. The best-selected papers will be published in Springer Nature as lecture notes in civil engineering. Other full papers (which are presented at the conference) are published as conference proceedings with ISSN number. The host city of the conference, Kandy, is a world heritage city famous for its unique architecture, culture, nature, beauty, and climate. We hope that you will enjoy your time in Kandy during the conference. We, the conference co-chairs express our sincere thanks to our guests, keynote speakers, authors, members of the international advisory committee, members of the editorial committee, sponsors, and many others who volunteered to assist to make this very significant event a success.

Prof. Ranjith Dissanayke
Prof. Priyan Mendis
Prof. Chintha Jayasinghe
Prof. Sudhira De Silva
Prof. Upul Attanayake
Prof. Chaminda Konthesingha
Prof. D. A. R. Dolage
Dr. Ajith Thambo
Dr. Balasubramaniam Janarathnan
Eng. Shiromal Fernando

MESSAGE FROM THE CHIEF GUEST

Dear friends and colleagues,

It is an honor and a privilege for me to pen this brief message, as the Chief Guest, on the occasion of the 14th International Conference of The Sustainable Built Environment, although this year's theme is much more - on the multi-disciplinarity of sustainability.

First, I wish to congratulate the organizing committee ably led by Professor Ranjith Dissanayake for 'sustaining' this 'Kandy Conference' for over 14 years, which is no mean task by any measure. As an academic who has worked in all five continents as a clinician, teacher, and an executive Dean, I am well aware of the energy and the unremitting tenacity required for maintaining the vigor of such a conference series.

The theme of this year's conference is multi-disciplinarity of sustainable development, and is built on the 17 sustainable Millennium Development Goals (SDGs) set in 2000, that were formally adopted by all 193 member states of the UN in September 2015, aiming at ending extreme poverty, protecting the planet and ensuring prosperity for all by 2030 (UN, 2015). The SDGs expanded the agenda to include issues such as climate change, sustainable consumption, but also quality education requiring all countries to take action including those with high levels of development.

The goal of education for sustainable development (UN, 2015, p. 21) entails that 'that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, education for sustainable development and sustainable lifestyles, human rights, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and its contribution to sustainable development.

I am proud to say as a Sri Lankan we have embraced this ethos of quality education for a very long period and what's more with virtually free provision of quality education to all, despite being a developing nation, still facing many hurdles. This is exemplified by our 17 universities and the global diaspora of graduates in varying professions. Incidentally I hope many of you who are here today will have the opportunity to visit one of the most beautiful campuses in the world, a few miles away – our University.

of Peradeniya Campus, built in 1942, along the lines of Cambridge University, UK, and adorned by the undulating Mahaweli river.

Although Sri Lanka and many other jurisdictions have some way to go before achieving the foregoing erudite goals 'of education for sustainable development' conferences such as these help nurture the ethos and popularise these goals, particularly when held under the auspices of a tertiary education institute.

In closing this short message, I wish you all a wonderful and a productive conference with many networking opportunities, whilst at the same time enjoying the breath-taking vistas and cuisine Sri Lanka has to offer.

Prof. Lakshman Samaranayake

Professor Emeritus and Immediate-Past Dean, Faculty of Dentistry
University of Hong Kong, Hong Kong

16th December 2023

Room 1 (Hybrid)/ Session 01

Tall Building Session

Join Zoom Meeting	https://us06web.zoom.us/j/88101147875?pwd=S2qhrrM0Aa40PR7tH3UoxOZUic1xK.1		
	Meeting ID: 881 0114 7875 Passcode: 672369		
Session Chair 1	Prof. Priyan Mendis	Session Coordinator 1	Mr. Chamath Pigerera
Session Chair 2	Eng. Shiromal Fernando	Session Coordinator 2	Mr. Hashan Thilakarathna
09.00 – 09.10 hrs	Welcome Address	Eng. Shiromal Fernando - CTBUH Sri Lanka	
09:10 - 09:30 hrs	Key Lecture 01	Dr. Damith Mohotti	Predicting transient along wind pressure over a tall building using machine learning
09.30 – 09.45 hrs	Key Lecture 02	Arct. Nirodha Gunadasa	Modern Design Technology of Tall Buildings
Time	Paper ID	Title	
09.45 – 10.00 hrs	ICSBE_401	ARTIFICIAL INTELLIGENCE APPLICATION IN ARCHITECTURE AND ENGINEERING <i>R.M.H Liyanage, Shiromal Fernando, Priyan Mendis</i>	
10.00 – 10.15 hrs	ICSBE_295	COMPARATIVE STUDY OF WIND LOADING COMBINATIONS FOR TALL BUILDINGS INCLUDING TORSION: A CFD APPROACH <i>B. Kiriparan, J. A. S. C. Jayasinghe, U. I. Dissanayake, W. J. B. S. Fernando</i>	
10.15 – 10.30 hrs	ICSBE_176	EVALUATION OF EARTHQUAKE DESIGN RESPONSE SPECTRA FOR SRI LANKA CONSIDERING SHORT PERIOD EFFECTS <i>H.A.D.S. Buddika, N.S. Peiris, B.R.D. Peiris</i>	
10.30 – 10.45 hrs	ICSBE_271	IDENTIFICATION OF NATURAL FREQUENCY AND DAMPING RATIO OF TALL BUILDINGS IN SRI LANKA USING AMBIENT WIND VIBRATION DATA <i>H.A.D. Samith Buddika, U.G.K. Prabodya, T.A. Madusanga</i>	
10.45 – 11.00 hrs	ICSBE_282	NUMERICAL STUDY ON EXTERNAL PRESSURE VARIATION OF TALL-BUILDINGS DUE TO INTERFERING EFFECTS <i>E. M. R. Ekanayake, H. M. A. I. Herath, J. A. S. C. Jayasinghe and A. J. Dammika</i>	

16th December 2023

Room 1 (Hybrid)/ Session 02

IESL Speical Session

Join Zoom Meeting	https://us06web.zoom.us/j/88101147875?pwd=S2qhrrM0Aa40PR7tH3UoxOZUic1xK.1	
	Meeting ID: 881 0114 7875 Passcode: 672369	
Time	Description	Facilitator
11.30 - 11.40 hrs	Key Lecture	Prof. Ranjith Dissanayake - President IESL
11.40 – 11.50 hrs	Lecture 01	Eng. (Dr.) Kamal Laksiri - Immediate past president
11.50 – 12.00 hrs	Lecture 02	Prof. Priyan Mendis- University of Melbourne
12.00 – 12.10 hrs	Lecture 03	Eng. Sarath Gamini
12.10 - 12.20 hrs	Lecture 04	Prof. Janaka Ekanayaka
12.20 - 12.45 hrs	Panel Discussion	Prof. Janaka Ruwanpura (Moderator)
		Prof. Ranjith Dissanayake, Prof. Priyan Mendis, Eng. Sarath Gamini, Prof. Janaka Ekanayaka
12.45 – 12.50 hrs	Closing remarks	

16th December 2023

Room 1 (Hybrid)/ Session 03

Concrete Technology and High-Performance Concrete

Join Zoom Meeting	https://us06web.zoom.us/j/88101147875?pwd=S2qhrrM0Aa40PR7tH3UoxOZUic1xK.1		
	Meeting ID: 881 0114 7875 Passcode:672369		
Session Chair 1	Prof. Hiran yapa	Session Coordinator 1	Mr. Chamath Pigera
Session Chair 2	Dr, Dhammika Abeykoon	Session Coordinator 2	Mr. Hashan Thilakarathna
14.15 - 14.20 hrs	Introduction to Keynote Lecturer	Session Chair 01	
14.20 - 14.45 hrs	Keynote	Assoc. Prof. Sudharshan N. Raman	FEASIBILITY OF COAL BOTTOM ASH AS A SUPPLEMENTARY BINDING MATERIAL IN CEMENT-BASED COMPOSITES
Time	Paper ID	Title	
14.45 - 15.00 hrs	ICSBE_72	FUNCTIONAL EVALUATION OF IDENTIFIED RURAL CONCRETE ROADS IN SRI LANKA - A CASE STUDY <i>K. P. Arandara, S. T. Priyadarshana, G. N. Pranavithana, R. B. Mallick, R. Dissanayake</i>	
15.00 - 15.15 hrs	ICSBE_145	EFFECTS OF POROSITY AND DISTRESSES IN CONCRETE ON ULTRASONIC PULSE VELOCITY READINGS <i>M.Mayooran, J.C.P.H.Gamage, E.R.K.Chandratilaka</i>	
15.15 - 15.30hrs	ICSBE_234	DEVELOPMENT OF LIGHTWEIGHT AGGREGATE CONCRETE WITH RECYCLED HDPE PLASTIC PALLETS <i>T.D.B. Nawarathna, K.M.C. Konthesingha, S.M.A. Nanayakkara, H.M.S.C. Rathnasiri, I.R. Upasiri, W.P.H.P. Weerasinghe, P.M.W.P. Kumara, A. Branavan</i>	
15.30 - 15.45 hrs	ICSBE_10	IMPROVING MIXED CONSTRUCTION AND DEMOLITION WASTE USED AS FINE AGGREGATES IN CONCRETE PRODUCTION BY PHYSICAL PRE-TREATMENT <i>R. N. Udarika, C.K. Pathirana</i>	

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Room 1 (Hybrid)/ Session 04

Sustainable Construction and Green Building Techniques

Join Zoom Meeting	https://us06web.zoom.us/j/88101147875?pwd=S2qhrrM0Aa40PR7tH3UoxOZUic1xK.1		
	Meeting ID: 881 0114 7875 Passcode: 672369		
Session Chair 1	Dr. Ajith Thambo	Session Coordinator 1	Mr. Chamath Pigera
Session Chair 2	Arct. Nirodha Gunadasa	Session Coordinator 2	Mr. Hashan Thilakarathna
16.35 - 16.40 hrs	Introduction to Keynote Lecturer	Session Chair 01	
16.40- 17.05 hrs	Keynote by	Prof. Lu Aye	NET-ZERO CARBON AND HEALTHY BUILDINGS
Time	Paper ID	Title	
17.05 - 17.20 hrs	ICSBE_3	SIMULATION OF TIME DEPENDENT BEHAVIOUR OF RESTRAINED RC ELEMENTS <i>S.P.D. Danushka, J.M.C.I. Jayasinghe, H.D. Yapa</i>	
17.20 - 17.35 hrs	ICSBE_27	ANALYSIS OF MIDDLE INCOME HOUSING MARKET IN COLOMBO MUNICIPAL COUNCIL AREA: SOCIO-PSYCHOLOGICAL FACTORS FROM STATE SECTOR PROFESSIONALS' POINT OF VIEWS <i>R.P. Maladugala, R.G. Ariyawansa</i>	
17.35 - 17.50 hrs	ICSBE_37	IMPACTS OF SUSTAINABLE HIGHWAY CONSTRUCTION ON THE ECONOMY OF SRI LANKA: A SYSTEMATIC LITERATURE REVIEW <i>I.H.G.Y.M. Udari Yaparathne, Kavini Guruge</i>	
17.50 - 18.05 hrs	ICSBE_356	HOW GREEN IS WORLD'S GREENEST CITY? <i>Şerban Procheş</i>	
18.05 - 18.20 hrs	ICSBE_174	EXPERIMENTAL INVESTIGATION ON POROUS CONCRETE FOR SUSTAINABLE DRAINAGE SYSTEMS <i>D.R.T. Niwunhella, D.N.S. Kalpadeep, N.G.P.B. Neluwala, A.J. Dammika</i>	
18.20 - 18.35 hrs	ICSBE_77	EMISSION REDUCTION POTENTIAL AND LAND-USE IMPLICATIONS OF DECARBONISING THE POWER SECTOR IN SRI LANKA <i>Lahiru Jayasuriya, Gayan Subasinghe, Mevan Pathirathne, Thusitha Sugathapala</i>	

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Room 2 (Hybrid)/ Session 01

RMIT Sri Lanka Joint Research Session

Join Zoom Meeting	https://zoom.us/j/97144657867?pwd=dm5vZzl4c3BLRVB2bXc2QmV1MHhEZz09	
	Meeting ID: 971 4465 7867 Passcode: 816212	
Time	Description	Facilitator(s)
09.00 – 09.20 hrs	Welcome to the plenary session from Conference Chair	Prof. Ranjith Dissanayake
09.20 – 09.35 hrs	Introduction to the joint Ph.D program	Prof. Sujeeva Setunge, Associate Deputy Vice-Chancellor (Research & Innovation), STEM college, RMIT University
09.35 – 09.50 hrs	Future directions and RTP internships	Prof. Denise Cuthbert ADVC Research Training and Development, RMIT University
09.50 – 10.05 hrs	Panel Discussion Academic-Industry forum: Progress, Industry engagement and future opportunities	Panel Chairs UoP: Prof. Nadeeshani Nanayakkara UoM: Senior Prof. Chintha Jayasinghe UoR: Dr. Ruwan Appuhamy UoSJP: Prof. Chaminda Konthesingha
10.05 – 10.20 hrs		UoP: Dr. S. K. Weragoda Director/Joint Research and Demonstration Center for Water Technology (JRDC),
10.20 – 10.35 hrs		UoM: Eng. Dhammika Silva General Manager, Head of Engineering Designs & Design Department, Access Engineering PLC Design Department Head of Engineering Designs Design Department
10.35 – 10.50 hrs		UoR: Mr. Lakmal Dharmasena QA/QC Manager, SMS Holdings (Pvt) Ltd;
10.50 - 11.00 hrs		Panel Discussion and Questions from the audience, Closure of plenary session Prof Kevin Zhang, Associate Dean in Civil & Infrastructure Engineering at RMIT University

16th December 2023

Room 2 (Hybrid)/ Session 02

SECRA/ FOUNTAIN Session

Join Zoom Meeting	https://zoom.us/j/97144657867?pwd=dm5vZzl4c3BLRVB2bXc2QmVIMHhEZz09		
	Meeting ID: 971 4465 7867 Passcode: 816212		
Session Chair 1	Prof. Guttila Jayasinghe	Session Coordinator 1	Mr. Ravindra Ekanayake
Session Chair 2	Prof. Emeritus K. D. N. Weerasinghe	Session Coordinator 2	Mr. Ravindu Udara
Time	Description	Facilitator	
14.15 - 14.20 hrs	Welcome address	Prof. Roshan D. Yapa	
14.20 - 14.35 hrs	Key Lecture 01	Mr. Migara Amithodhana	
Time	Paper ID	Title	
14.35 - 14.50 hrs	ICSBE_297	SPATIAL AND TEMPORAL VARIABILITY OF RAINFALL TRENDS TO INDICATE THE CLIMATE CHANGE AND EXTREME WEATHER EVENTS FOR PAST THREE DECADES – A STUDY IN GALLE DISTRICT FROM 1992 TO 2022 <i>P L C Perera, M Ranagalage , G Y Jayasinghe</i>	
14.50 - 15.05 hrs	ICSBE_283	INVESTIGATING HOW GREEN INFRASTRUCTURE AFFECTS PARTICULATE MATTER CONCENTRATIONS IN URBAN STREET ENVIRONMENTS <i>H.A.T.N. Perera, K.G.N.H. Weerasinghe, R.U. Halwatura, G.Y. Jayasinghe</i>	
Time	Description	Facilitator	
15.05 - 15.20 hrs	Key Lecture 02	Prof. Ranjith Dissanayake	
15.20 - 15.35 hrs	Key Lecture 03	Eng. Shiromal Fernando	
15.50 - 16.05 hrs	ICSBE_300	AN ASSESSMENT OF ENTREPRENEURIAL RESILIENCE AMONG WOMEN ENTREPRENEURS IN SRI LANKA <i>D.P.Lokuwithana, K.Hemachandra, P.B.R.Dissanayake</i>	
Time	Description	Facilitator	

16.35 hrs - 16.50 hrs	Key Lecture 04	Prof. Roshan D. Yapa
Time	Paper ID	Title
16.50 - 17.05 hrs	ICSBE_302	FINANCIAL INSTITUTIONS' READINESS TO SUPPORT SMES AMIDST THE ECONOMIC CRISIS - PERCEPTIONS OF GROUND-LEVEL OFFICERS: A CASE STUDY FROM SRI LANKA <i>S.M.S.N. Senanayake, P.A.N.P. Pandipperuma, J.M.H.M. Upulwehera, P.B.R. Dissanayake, R.P.I.R. Prasanna</i>
17.05 - 17.20 hrs	ICSBE_308	INNOVATION ECOSYSTEMS: SUSTAINING UNIVERSITY-INDUSTRY HARMONY IN THE ASIAN EDUCATIONAL LANDSCAPE <i>S.M.S.N. Senanayake, T.S. Ukwatte, G. Y. Jayasinghe, P.A.N.P. Pandipperuma, J.M.H.M. Upulwehera, M.C. Karunadasa, K.M.C. Tharupath, P.B.R. Dissanayake, Lahiru N. Dissanayake, C. S. Bandara</i>
Time	Description	Facilitator
17.20 - 17.35 hrs	Key Lecture 05	Mr. Chamath Kandambi
Time	Paper ID	Title
17.35 - 17.50 hrs	ICSBE_291	REVISITING LAND USE PLANNING POLICIES FOR RIVERBANK SETTLEMENTS: LESSONS FROM MELAMCHI FLOOD IN NEPAL <i>Sanjaya Uprety, Barsha Shrestha</i>
17.50 - 18.05 hrs	ICSBE_303	THE IMPACT OF CLIMATE CHANGE ON FOOD SECURITY: A REVIEW OF RECENT RESEARCH <i>W.G.M Randika, S.M.T.P Suriyapperuma, G.Y. Jayasinghe</i>
Time	Description	Facilitator
18.05 - 18.30 hrs	Panel Discussion	Moderator · Prof. Roshan D. Yapa, University of Peradeniya Panelists
		Mr. Migara Amithodhana, Co-Founder and CEO MagicBit, Mr. Chamath Kandambi, Founder and CEO 360 Labs, Eng. Shiromal Fernando, Civil & Structural Engineering Consultants (Pvt) Limited
18.30- 18.35 hrs	Closing note	Prof. Chaminda Bandara

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Room 3 (Hybrid)/ Session 01

Structural Engineering Session

Join Zoom Meeting	https://zoom.us/j/97717785708?pwd=QU5FMnpUNk44e1BhWUhsVGVVoZWJ3Zz09		
	Meeting ID: 977 1778 5708 Passcode: 182599		
Session Chair 1	Prof. Upul Attanayake	Session Coordinator 1	Mr. Dilan Danushka
Session Chair 2	Prof. Thishan Jayasinghe	Session Coordinator 2	Mr. J A I D Viduranga
Time	Paper ID	Title	
09.00 – 09.15 hrs	IABMAS_181	STEEL TRUSS BRIDGE WITH BUCKLING RESTRAINED DAMPERS UNDER SEISMIC LOADING <i>E. Yamaguchi, N. Enkbold, P. Sosorburam</i>	
09.15 – 09.30 hrs	ICSBE_351	A FUZZY ANALYSIS APPROACH FOR EVALUATING THE INFLUENCE OF SUBJECTIVE APPRAISAL ON CONSTRUCTION PRODUCTIVITY DRIVERS <i>Amila Premakumara, Isuri Amarasinghe, Chandana Siriwardana</i>	
09.30 – 09.45 hrs	ICSBE_352	FINITE ELEMENT MODELLING OF FATIGUE CRACK GROWTH OF CSH SUBJECTED TO CYCLIC FLEXURAL LOADING <i>S.Abeygunasekara, J.C.P.H.Gamage, S.Fawzia</i>	
09.45 – 10.00 hrs	ICSBE_353	COMPRESSIVE STRENGTH PREDICTION OF ULTRA-HIGH PERFORMANCE FIBRE REINFORCED CONCRETE (UHPC) USING ARTIFICIAL NEURAL NETWORKS <i>R.S.S.A. Wijesundara, K.K. Wijesundara, N.M.S.H. Bandara</i>	
10.00 – 10.15 hrs	ICSBE_186	REUSABILITY OF CONCRETE STRUCTURAL ELEMENTS AFTER THE SERVICE LIFE – SRI LANKAN PERSPECTIVE <i>S.A.R.B.S. Siriwardhana, G. Tharmarajah</i>	
10.15 – 10.30 hrs	ICSBE_275	SUITABILITY ASSESSMENT OF COMPOSITE CROSSARMS <i>S Bandara, P Rajeev, E Gad</i>	

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Room 3 (Hybrid)/ Session 02

Sustainable Agriculture Session

Join Zoom Meeting	https://zoom.us/j/97717785708?pwd=QU5FMnpUNk44e1BhWUhsVGVoZWJ3Zz09		
	Meeting ID: 977 1778 5708 Passcode: 182599		
Session Chair 1	Prof. Guttila Jayasinghe	Session Coordinator 1	Mr. Dilan Danushka
Session Chair 2	Prof. Champa Nawarathne	Session Coordinator 2	Mr. J A I D Viduranga
Time	Paper ID	Title	
11.30 - 11.45 hrs	ICSBE_84	EVALUATION OF ANTIMICROBIAL AND ANTIOXIDANT EFFECTS OF CHITOSAN-BASED EDIBLE, BIODEGRADABLE FILMS CONTAINING CINNAMON (<i>Cinnamomum zeylanicum</i>) ESSENTIAL OIL FOR FOOD PACKAGING <i>K.G. Kaushani, N.P. Katuwavila, R.A. Jayasinghe, A.H.L.R. Nilmini, G. Priyadarshana</i>	
11.45 - 12.00 hrs	ICSBE_52	DESIGN AND DEVELOPMENT OF A HEAVY-DUTY DRONE FOR PEST CONTROL AND NON-HEALTHY TREE IDENTIFICATION IN NUTMEG CULTIVATION IN THE CENTRAL PROVINCE OF SRI LANKA <i>J.K.R.L. Weerawardhana, W.M.H.M. Aththnayaka, M.L. Rankothge</i>	
12.00- 12.15 hrs	ICSBE_254	SUSTAINABLE TEA PLANTATION: A STUDY CONDUCTED ON THE SUSTAINABLE STRATEGIES UNDERTAKEN TO OVERCOME THE IMPACT OF ECONOMIC RECESSION IN WELIMADA TEA ESTATES <i>N. M. S. U. Nissanka</i>	
12.15- 12.30 hrs	ICSBE_219	GREEN FINANCING AS A MEASURE TO BUILD RESILIENCE AMONG FISHERIES COMMUNITIES IN SRI LANKA <i>M.M.S.C. Senevirathne, D.A.M. De Silva, M.Esham, C.N. Pupulawaththa</i>	
12.30 - 12.45 hrs	ICSBE_220	BUSINESS CONTINUATION MECHANISM FOR TEA SMALLHOLDERS: BUILDING RESILIENCE ON CLIMATE-INDUCED DISASTERS <i>M.G.D.N.M. Wijerathne, D.A.M. De Silva</i>	
12.45 - 13.00 hrs	ICSBE_217	SMALL-SCALE FISH PROCESSING ESTABLISHMENTS AND THEIR VULNERABILITY TO CLIMATE HAZARDS <i>W.B.G.S. Welihinda, D.A.M. De Silva</i>	
13.00-13.15 hrs	ICSBE_358	DEVELOPMENT OF LIGHTWEIGHT EXPANDED CLAY AGGREGATES FORMED USING SLUDGE DISCHARGED FROM THE DRINKING WATER TREATMENT PROCESS <i>Sajani H. Kolambage, Dimalka R.M.N, Chathura Sanjeewa W., Pradeep Gajanayake</i>	
13.15-13.30 hrs	ICSBE_65	CHARACTERISTICS OF ESSENTIAL OIL EXTRACTED FROM SPOUTED BED DRIED BLACK PEPPER <i>G.K. Jayatunga, B.M.W.P.K. Amarasinghe</i>	

16th December 2023

Room 3 (Hybrid)/ Session 03

Fire Safety Engineering Session

Join Zoom Meeting	https://zoom.us/j/97717785708?pwd=QU5FMnpUNk44eIBhWUhsVGVoZWJ3Zz09		
	Meeting ID: 977 1778 5708 Passcode : 182599		
Session Chair 1	Prof. Priyan Mendis	Session Coordinator 1	Mr. Dilan Danushka
Session Chair 2	Dr. Pasindu Weerasinghe	Session Coordinator 2	Mr. J A I D Viduranga
Time	Paper ID	Facilitator	Title
14.15 - 14.30 hrs	Key lecture 01	Dr. Pasindu Weerasinghe	Introduction to SFPE Sri Lanka
14.30 - 14.50 hrs	Key lecture 02	Prof. Priyan Mendis	MACHINE LEARNING BASED FRAMEWORK FOR PREDICTING THE FIRE-INDUCED SPALLING IN CONCRETE TUNNEL LININGS
14.50 - 15.05 hrs	ICSBE_287	HIDDEN DANGERS OF FIRE SAFETY IN MODULAR CONSTRUCTIONS <i>R.L.P. Godakandage, K. T. Q. Nguyen, T.G.P.L Weerasinghe1, J.C.P.H. Gamage</i>	
15.05 - 15.20 hrs	ICSBE_36	REVIEW OF FIRE RESCUE RESOURCES AND PUBLIC AWARENESS ON THE FIRE SAFETY OF HIGH-RISE BUILDINGS IN SRI LANKA <i>THTN Premanath, KMC Konthesingha, IR Upasiri, HMSC Rathnasiri, WPHP Weerasinghe, THTN Premanath, KMC Konthesingha, IR Upasiri, HMSC Rathnasiri, WPHP Weerasinghe</i>	
15.20 - 15.35 hrs	ICSBE_284	INVESTIGATE THE THERMAL RESPONSE OF DIFFERENT INSTALLATION FORMS OF GLASS PANELS UNDER FIRE LOADING: A NUMERICAL APPROACH <i>R. G. S. S. Perera, J. H. A Ruwanmali, T. Thevega, J. A. S. C. Jayasinghe</i>	
15.35- 15.50 hrs	ICSBE_400	ACTIVE AND PASSIVE FIRE SAFETY SIMULATION FOR OFFICE BUILDINGS <i>R.A.D.M.Kahatapitiya, W. J. B. S. Fernando, Priyan Mendis</i>	
15.50- 16.05 hrs	ICSBE_296	FIRE PERFORMANCE OF POLYMER IN COMPOSITE MATERIALS FOR BUILDING CLADDINGS: A NUMERICAL APPROACH <i>T. Thevega, J. A. S. C. Jayasinghe, D. Robert, C. S. Bandara, E. Kandare, S. Setunge</i>	

16th December 2023

Room 3 (Hybrid)/ Session 04

**An Investigation of the Applicability of the Biomimicry Concept for
DRR and Social Enterprises**

Join Zoom Meeting	https://zoom.us/j/97717785708?pwd=QU5FMnpUNk44e1BhWUhsVGVvZWJ3Zz09		
	Meeting ID: 977 1778 5708 Passcode : 182599		
Session Chair 1	Dr. Nuwan Dias	Session Coordinator 1	Mr. Dilan Danushka
Session Chair 2	Dr. Chethika Abeynayake	Session Coordinator 2	Mr. J A I D Viduranga
Time	Description	Facilitator	
16.35 - 16.40 hrs	Welcome address	Prof. Ranjith Dissanayake	
16.40 - 16.55 hrs	Keynote	Prof. Janaka Ruwanpura	
16.55 - 17.10 hrs	Key Lecture 01	Dr. Kinkini Hemechandra	
17.10 - 17.25 hrs	Key Lecture 02	Dr. Nuwan Dias	
Time	Paper ID	Title	
17.25 - 17.40 hrs	ICSBE_403	AN INVESTIGATION OF THE APPLICABILITY OF BIOMIMICRY CONCEPTS IN SOCIAL ENTERPRISES' (ES) RESILIENCE <i>G.R.S.D. Gamage, K. Hemachandra, P.B.R. Dissanayake, D. Amaratunga, R. Haigh</i>	
17.40 - 17.55 hrs	ICSBE_404	REVIEW OF NATURE INSPIRED SOLUTIONS FOR DISASTER RISK REDUCTION <i>Panchali Dias . Nuwan Dias . Ranjith Dissanayake</i>	
17.55 - 18.10 hrs	ICSBE_170	A NATURE-INSPIRED SOLUTION FOR ENHANCED IMPACT RESISTANCE OF STRUCTURES <i>H.M.T. Sajana, P.L.N. Fernando</i>	
18.10 - 18.50 hrs	Panel Discussion 01	Moderate: Dr. Nuwan Dias/ Dr. Chethika Abeynayake Panellists: Prof. Sarath Kotagama Prof. Janaka Ruwanpura Dr, Nimal Wijenayake	
18.50 – 18.55 hrs	Closing Note	Dr. Nuwan Dias	

16th December 2023

Room 6 (Hybrid)/ Session 01

Construction Management Session

Join Zoom Meeting	https://zoom.us/j/97241148173?pwd=WGpPY2dXRlZ4RURJWFVhRW5rUWIBQT09		
	Meeting ID: 972 4114 8173 Passcode: 123782		
Session Chair 1	Prof. Ajith Dolage	Session Coordinator 1	Ms. Sajani Kolombage
Session Chair 2	Dr. Kamal Karunananda	Session Coordinator 2	Ms. Vishmi Gunathunga
Time	Paper ID	Title	
09.00 – 09.15 hrs	ICSBE_151	STRATEGIES TO OVERCOME COMMUNICATION DEFICIENCIES IN MANAGEMENT CONTRACTS IN SRI LANKAN CONSTRUCTION INDUSTRY <i>M. Dinujanth, I.S. Gamage, B.C.T.M. Karunaratne</i>	
09.15 – 09.30 hrs	ICSBE_157 dag	EFFECT OF CURRENT ECONOMIC CRISIS ON CONSTRUCTION CONTRACTORS IN SRI LANKA: AN EXPLORATORY STUDY ON SMALL-SCALE CONTRACTORS <i>M. T. D. Perera, K. A. N. Gunarathna, B.C.T.M. Karunaratne</i>	
09.30 – 09.45 hrs	ICSBE_244	CONSTRUCTION CONTRACTUAL ISSUES AND PROSPECTS APPLYING OF ALTERNATIVE DISPUTE RESOLUTIONS IN SRI LANKA <i>HN Hikkaduwa</i>	
09.45 – 10.00 hrs	ICSBE_17	STRATEGIC ASSET MANAGEMENT FRAMEWORK FOR CENTRAL ENGINEERING CONSULTANCY BUREAU (CECB) <i>B. H. J. Bulathsinhala, K. K. K. Sylva</i>	

16th December 2023

Room 6 (Hybrid)/ Session 02

Construction Management Session

Join Zoom Meeting	https://zoom.us/j/97241148173?pwd=WGpPY2dXR1Z4RURJWFVhRW5rUWIBQT09		
	Meeting ID: 972 4114 8173 Passcode: 123782		
Session Chair 1	Dr. Lasitha Rathnayake	Session Coordinator 1	Ms. Sajani Kolombage
Session Chair 2	Dr. Chathurani Chandrasiri	Session Coordinator 2	Ms. Vishmi Gunathunga
Time	Paper ID	Title	
11.30 - 11.45 hrs	ICSBE_347	UNLEASHING POTENTIAL WITH GLASS WASTE IN MASONRY <i>O.M. Hasaranga, C. Jayasinghe, K.P.I.E. Ariyaratne</i>	
11.45 - 12.00 hrs	ICSBE_342	THE INTEGRATION OF CIRCULAR ECONOMY PRINCIPLES WITH BIM-ENABLED MATERIAL PASSPORTS FOR SUSTAINABLE CONSTRUCTION <i>J.M.P.M. Jayawardane, I.H.N. Chathuranga, C.S.A. Siriwardana, Wajiha Shahzad</i>	
12.00- 12.15 hrs	ICSBE_277	DEVELOPMENT OF A CRACK SEVERITY-BASED DAMAGE ASSESSMENT MATRIX FOR MASONRY BUILDINGS <i>Wickramathilake G G T D, Jayasinghe C, Ariyaratne I E</i>	
12.15- 12.30 hrs	ICSBE_227	WHAT DEMOTIVATES HOMEOWNERS TO RETROFIT THEIR HOUSES: A SYSTEMATIC REVIEW <i>C, Panakaduwa, S,P, Coates, M, Munir</i>	
12.30 - 12.45 hrs	ICSBE_348	BEST PRACTICES OF OFF-SITE MANUFACTURING: LESSONS FROM AUSTRALIAN PREFAB MANUFACTURERS <i>J. Jayawardana, J. A. S. C. Jayasinghe, A. K. Kulatunga, M. Sandanayake, G. Zhang</i>	
12.45 - 1.00 hrs	ICSBE_276	ASSESSING THE READINESS FOR DIGITAL TECHNOLOGIES ADOPTION FOR ENHANCING PRODUCTIVITY IN THE SRI LANKAN CONSTRUCTION INDUSTRY <i>I.H.N. Chathuranga, C.S.A. Siriwardana, I.E. Ariyaratne</i>	

16th December 2023

Room 6 (Hybrid)/ Session 03

Construction Management Session

Join Zoom Meeting

<https://zoom.us/j/97241148173?pwd=WGpPY2dXRlZ4RURJWFVhRW5rUWIBQT09>

Meeting ID: 972 4114 8173 Passcode :123782

Session Chair 1

Dr. Chathurangane Jayakody

Session Coordinator 1

Ms. Sajani Kolombage

Session Chair 2

Dr. Sahan Bandara

Session Coordinator 2

Ms. Vishmi Gunathunga

Time

Paper ID

Title

14.15 - 14.30 hrs

ICSBE_187

HIDDEN ASPECTS OF PUBLIC OPEN SPACES WHEN MAKING CITIES SUSTAINABLE
R.R.J.C Jayakody

14.30 - 14.45 hrs

ICSBE_74

IMPACTS OF URBAN SPRAWL ON WETLAND LAND COVER DYNAMICS: A SPATIAL AND TEMPORAL ANALYSIS FOR THE CASE OF COLOMBO
Christeen S.K.P, Jayasooriya V.M

14.45 - 15.00 hrs

ICSBE_133

FLEXIBILITY TO INCORPORATE CIRCULAR ECONOMIC PRACTICES WITHIN BUILT ENVIRONMENT PROCUREMENT CONTRACTS IN SRI LANKA
R. R. M. M. K. Wadugodapitiya, K. K. K. Sylva, S. M. Dissanayake

15.00 - 15.15 hrs

ICSBE_168

NEW WORK STRATEGIES TO OVERCOME THE IMPACT OF UNFORSEEN DISRUPTIVE EVENTS FOR CONSTRUCTION CONSULTANTS
S Hettiarachchi, C Allis, Y.K Delpachitra

15.15 - 15.30 hrs

ICSBE_225

A STUDY ON THE MISSED OPPORTUNITIES THROUGH THE SRI LANKAN CONSTRUCTION INDUSTRY TOWARDS A SUSTAINABLE ECONOMIC GROWTH
WDBJ Jeewananda, SD Jayasooriya

15.30- 15.45 hrs

ICSBE_113

ECONOMIC AND ENVIRONMENTAL FEASIBILITY OF PRECAST CONCRETE WALLING SYSTEMS IN MULTI-STORY BUILDING CONSTRUCTION – A LIFE CYCLE PERSPECTIVE
B. Rathnayake, C. Jayasinghe, P. Perera

15.45- 16.00 hrs

ICSBE_158

A BIM-BASED ROAD MAP TO IMPLEMENT LEAN CONSTRUCTION PRINCIPLES TO MINIMIZE WASTE IN CONSTRUCTION PROJECT
M.G.D.M.Y. Wickramasinghe, H. Bandara, U.S. Perera, R.M.K. Sandama

16.00 – 16.15 hrs

ICSBE_109

AWARENESS AND PERCEPTION OF QUANTITY SURVEYORS TOWARD THE SMART CONSTRUCTION CONCEPTS
R. S. V. Rajapaksha, K. Devapriya, M. L. S. S. Fernando

16th December 2023

Room 5 (Physical)/ Session 01

Sustainable Transport Session

Session Chair 1	Dr. Tissa Liyanage	Session Coordinator 1	Mr. Kumudu Prabodya
Session Chair 2	Dr. Ganga Samarasekara	Session Coordinator 2	Mr. H A S Malshan
Time	Description	Facilitator	Title
09.00 – 09.20 hrs	Key Lecture 01	Dr. Thissa Liyanage	EFFECTIVE USE OF EXISTING TRANSPORT ASSETS AND MANAGING IMPROVED TRANSPORT SYSTEMS TO REGAIN THE ECONOMIC SUSTAINABILITY FOR SRI LANKA
09.20 – 09.40 hrs	Key Lecture 02	Dr. Ganga Samarasekara	REGIONAL TRENDS OF CYCLING IN SRI LANKA
Time	Paper ID	Title	
09.40 – 09.55 hrs	ICSBE_324	USE OF GEOSYNTHETICS FOR SUSTAINABLE, ECONOMICAL, AND DURABLE ROAD PAVEMENT STRUCTURES <i>C. Gallage, K. Wimalasena , A. Pathirana</i>	
09.55 – 10.10 hrs	ICSBE_285	A PRICING POLICY FOR VEHICLES AND FUEL FOR SRI LANKA <i>L.S.M. Silva, A.S. Kumarage, M. Mavin De Silva</i>	
10.10 – 10.25 hrs	ICSBE_288	COMPARATIVE ANALYSIS OF THE EFFECT OF CIRCULAR AND HORSESHOE UNDERGROUND TUNNEL SHAPES ON THE REQUIRED SUPPORT PRESSURE IN THE GENERAL GEOLOGICAL CONTEXT OF KANDY CITY <i>M.A.K.V Warnakulasooriya, B. Fernando</i>	
10.25 – 10.40 hrs	ICSBE_289	SRI LANKAN VEHICULAR EMISSION ANALYSIS USING BIG DATA <i>Avishka Lakshan, Amal S. Kumarage, M. Mavin De Silva</i>	
10.40 – 10.55 hrs	ICSBE_270	DEVELOPMENT OF THE TRANSPORTATION SUSTAINABILITY TRADING SYSTEM FOR ROAD CONSTRUCTION PROJECTS IN SRI LANKA <i>C.N.J Samaranyake1*, G.N Samarasekara, K.M.C Konthesingha, W.M.N.R Weerakoon, R.S.M Samarasekara1, R. Dissanayake</i>	
10.55 – 11.10 hrs	ICSBE_406	CELLULAR AUTOMATA MODELING APPROACH TO FORECAST LAND USE CHANGES IN KATUNAYAKE AIRPORT CITY <i>K.D. Herath, P.C.P. De Silva , P.K.S. Mahanama</i>	

16th December 2023

Room 5 (Physical)/ Session 02

Artificial Intelligence for Sustainable Development: Challenges and Opportunities

Session Chair 1	Prof. Janaka Ekanayake	Session Coordinator 1	Mr. Kumudu Prabodya
Session Chair 2	Prof. Roshan Godaliyadda	Session Coordinator 2	Mr. H A S Malshan
Time	Description	Facilitator	
14.15- 14.30 hrs	Key Lecture 01	Prof. Roshan Godaliyadda	
Time	Paper ID	Title	
14.30 – 14.45 hrs	ICSBE_286	TRANSFORMING HOUSING RETROFIT: THE POTENTIAL IMPACT OF ARTIFICIAL INTELLIGENCE <i>C, Panakaduwa, S,P, Coates, M, Munir</i>	
14.45 - 15.00 hrs	ICSBE_260	ENHANCING THE FLOOD MODELING ACCURACY UNDER VARYING SPATIAL SCALE FINER RESOLUTION WEATHER DATA <i>Susantha Wanniarachchi, Ranjan Sarukkalige</i>	
15.00 - 15.15 hrs	ICSBE_205	DEVELOPING A MATHEMATICAL MODEL AND MOBILE APP FOR GREENHOUSE MONITORING AND CONTROL USING SENSOR INTEGRATION <i>M.T.U.D.Mallikarathne, A.M.H.M.Abeysinghe, A.P. Wijayawantha</i>	
15.15 - 15.30 hrs	Panel discussion	Prof. Janaka Ekanayake (Moderator)	
		Prof. Roshan Godaliyadda	

16th December 2023

Room 7 (Physical)/ Session 01

Sustainable Construction and Green Building Techniques

Session Chair 1	Prof. Chintha Jayasinghe	Session Coordinator 1	Ms. Isuri Sewwandi
		Session Coordinator 2	Ms. Sadeepa Gamage
Time	Paper ID	Title	
09.00 - 09.15 hrs	ICSBE_38	DEVELOPMENT OF GEOPOLYMER PASTE USING BOTTOM ASH AND POTASSIUM HYDROXIDE AS THE PRIMARY POLYMERIZATION MATERIALS <i>G.G.R.N. Ranasinghe, K.M.C. Konthesingha, A. Branavan, I.R. Upasiri, P.M.W.P. Kumara</i>	
09.15 - 09.30 hrs	ICSBE_54	INVESTIGATING SUBSTRATE AMENDMENTS OF EXTENSIVE GREEN ROOFS FOR WATER SENSITIVE URBAN DESIGN <i>B.P.S.A. Premachandra, S. Himanujahn, B.C.L. Athapattu</i>	
09.30 - 09.45 hrs	ICSBE_57	MITIGATING URBAN HEAT ISLAND USING COOL PAVEMENT STRATEGY: A CASE STUDY IN COLOMBO, SRI LANKA <i>D.M.A.M.S.R. Andradi, S. Himanujahn, R.A.K.K. Perera, B.C.L. Athapattu</i>	
09.45 - 10.00 hrs	ICSBE_68	CIRCULAR ECONOMIC APPLICATIONS IN SRI LANKAN ROAD CONSTRUCTION INDUSTRY <i>A.M.U.D.Palukadawala, S. M. Dissanayaka</i>	
10.00 -10.15 hrs	ICSBE_70	BIO-CEMENTATION OF DEMOLITION WASTES AND RECYCLED AGGREGATES FOR SUSTAINABLE PRODUCTION OF PAVING BLOCKS <i>H. N. Muhanna, R. K. M. Niras, U. N. C. Prasadini, S. Gowthaman, T. H. K. Nawarathna, M. Chen, S. Kawasaki</i>	
10.15 -10.30 hrs	ICSBE_91	FLEXURAL RESPONSE OF CEMENT MORTAR WITH ELECTRICAL CABLE WASTE <i>K.D.Y.G. Perera, Y.L.F. Ahamed, H.M.C.C. Somarathna</i>	
10.30 -10.45 hrs	ICSBE_199	OPTIMIZING SOLAR ENERGY HARVESTING THROUGH AI BASED DUAL-AXIS SOLAR TRACKING SYSTEM WITH REMOTE MONITORING <i>M.T.U.D. Mallikarathne, A.M.H.M. Abeyasinghe, W.P.Madhushani Perera G.A.H.K.M. Gamlath</i>	

16th December 2023

Room 7 (Physical)/ Session 02

Sustainable Construction and Green Building Techniques

Session Chair 1	Prof. Chaminda Bandara	Session Coordinator 1	Ms. Isuri Sewwandi
Session Chair 2	Dr. Supun Jayasinghe	Session Coordinator 2	Ms. Sadeepa Gamage
Time	Paper ID	Title	
11.30 - 11.45 hrs	ICSBE_93	MANUFACTURING SUSTAINABLE PAVING BLOCKS USING POLYMER MODIFIED BIO-CEMENTATION <i>N.M. Mustak, H.R.H. Haseeb, R.M.P. Madushanka, A.M.G.G.G. Thilakarathna, T.H.K. Nawarathna, S. Gowthaman</i>	
11.45 - 12.00 hrs	ICSBE_96	A STUDY ON ENHANCING AIR QUALITY AND THERMAL COMFORT USING NATURAL VENTILATION IN A LARGE AUDITORIUM <i>L. K. Gurusinghe, J. S. Manawasinghe, P. B. Boyagoda</i>	
12.00- 12.15 hrs	ICSBE_143	FLEXURAL BEHAVIOUR OF REINFORCED RUBBERIZED CONCRETE BEAM <i>A.P.I Jayanath, J.C.P.H Gamage, E.R.K Chandrathilakae</i>	
12.15- 12.30 hrs	ICSBE_153	FRAMEWORK TO DECIDE ON THE APPROPRIATENESS OF RECYCLED CONCRETE AGGREGATES AS A CONSTRUCTION MATERIAL IN DIFFERENT CONSTRUCTION PROJECTS IN SRI LANKA: WITH AN INSIGHT OF THE COST BENEFIT ANALYSIS <i>A. M. M. Hiranya, T. Wijesinghe, B. K. C. Perera</i>	
12.30 12.50 hrs	ICSBE_407	SUSTAINABLE CONSTRUCTION WITH HEMP – TOWARDS NET ZERO 2050 <i>Chathushika Ekanayake, Priyan Mendis, Shiromal Fernando, Massoud Sofi</i>	

16th December 2023

Room 7 (Physical)/ Session 03

Sustainable Construction and Green Building Techniques

Session Chair 1	Dr. Samith Buddhika	Session Coordinator 1	Ms. Isuri Sewwandi
Session Chair 2	Dr. Kamal Karunananda	Session Coordinator 2	Ms. Sadeepa Gamage
Time	Paper ID	Title	
14.15 - 14.30 hrs	ICSBE_154	IMPACT ON LARGE-SCALE BUILDERS OF THE CONSTRUCTION INDUSTRY IN SRI LANKA IN THE FACE OF THE CURRENT ECONOMIC CRISIS <i>K. U. Ranjith, K. A. N. Gunarathna, J.U. Kumarathunga</i>	
14.30 - 14.45 hrs	ICSBE_245	A STUDY ON THE SENSE OF COMMUNITY AND BEHAVIOUR PATTERNS OF INHABITANTS IN NUGEGODA COMMERCIAL STREETS <i>M.A.G. Medonza, M.G.P. Manelgama, J. Wijewardana</i>	
14.45 - 15.00 hrs	ICSBE_354	MECHANICAL PROPERTIES OF GREEN CONCRETE CONTAINING POLYPROPYLENE PLASTIC WASTE <i>T. Abirami, K. G. D. I. H. Thilakarathna, W. A. R. U. Weragama, C. S. Bandara, H. D. Yapa, P. B. R. Dissanayake</i>	
15.00 - 15.15 hrs	ICSBE_345	RESETTLEMENT STRATEGIES AND SUSTAINABLE DEVELOPMENT: A CASE STUDY OF THE MORAGOLLA HYDROPOWER PROJECT <i>N. W. Bulathge, C K S Handagama, E M T K Ekanayake</i>	
15.15 - 15.30 hrs	ICSBE_265	HIGHWAY SOLARISATION IN SRI LANKA: A GIS-BASED EVALUATION OF SOLAR ENERGY POTENTIAL ON THE SOUTHERN EXPRESSWAY <i>W.M.S.S. Dias, W.B.M.R.S. Basnayaka</i>	
15.30- 15.45 hrs	ICSBE_214	EFFECT OF THE FLEXURAL STRENGTH ON FINGER-JOINTED WOOD WITH 25mm FINGER LENGTH AND 19 mm FINGER LENGTH <i>C.K. Muthumala, K.D.A. Abeysekara, P.L.A.G. Alwis, Sudhira de Silva , K.K.I.U. Arunakumara</i>	
15.45 – 16.00 hrs	ICSBE_71	A COMPARATIVE STUDY OF THE GOLDEN RATIO AND THE BUDDHIST ARCHITECTURAL PROPORTIONS IN SRI LANKAN RITUAL SPACE <i>C Abeywardana, C Palliyaguru, P Rathnayaka</i>	

16th December 2023

Room 7 (Physical)/ Session 03

Sustainable Construction and Green Building Techniques

Session Chair 1	Dr. Chandana Siriwaradana	Session Coordinator 1	Ms. Isuri Sewwandi
Session Chair 2	Dr. Damith Mohotti	Session Coordinator 2	Ms. Sadeepa Gamage
Time	Paper ID	Title	
16.35 - 16.50 hrs	ICSBE_164	ASSESSMENT OF THERMAL COMFORT LEVELS IN TYPICAL SCHOOL BUILDINGS IN THE SOUTHEASTERN REGION OF SRI LANKA <i>M.N. Nifal, A.M.M. Zeeras, J.A. Thamboo, A.M.A. Saja</i>	
16.50 - 17.05 hrs	ICSBE_188	INVESTIGATION OF PROPERTIES OF CONCRETE RELEVANT TO EARLY-AGE THERMAL CRACKING <i>R.M.S.S. Karunaratna, S.M.A. Nanayakkara</i>	
17.05 - 17.20 hrs	ICSBE_202	KITHUL WOOD REBARS FOR LIGHTLY LOADED ONE-WAY SLABS <i>H.L.I.D. Premathilake, I.S.K. Wijayawardane</i>	
17.20 - 17.35 hrs	ICSBE_235	BALANCING APPROACH BETWEEN CONSTRUCTION INDUSTRY AND ENVIRONMENTAL PROTECTION <i>KNKR Kodithuwakku</i>	
17.35 - 17.50 hrs	ICSBE_210	STRUCTURAL FEASIBILITY OF PRECAST FIBER-REINFORCED LIGHTWEIGHT CONCRETE WALL PANELS <i>S.B.M. Subasinghe, I.S.K. Wijayawardane</i>	

16th December 2023

Room 4 (Online)/ Session 01

Coastal Engineering Session

Join Zoom Meeting	https://zoom.us/j/98561175011?pwd=L0JpdVhtay9Dbk40VFMxd3JkZlN6Zz09		
	Meeting ID: 985 6117 5011 Passcode : 979488		
Session Chair 1	Mr. Daham Dias	Session Coordinator 1	Mr. Anjana Indunil
Session Chair 2	Dr. Balasubramaniam Janarthanan	Session Coordinator 2	Mr. J A R Kavinda
Time	Paper ID	Title	
09.00 – 09.15 hrs	ICSBE_101	EXTREME WAVE ANALYSIS WITHIN A CONFINED HARBOR BASIN: A CASE STUDY OF COLOMBO PORT <i>D. P. C. Laknath, I.G.I. K. Kumara, S.S.D.S Gunasekara</i>	
09.15 – 09.30 hrs	ICSBE_102	NUMERICAL MODELLING OF COASTAL PROCESSES FOR ENHANCED NAVIGATION THROUGH NATURALLY FORMED SUBMERGED REEFS <i>D. P. C. Laknath, I.L. Abeygoonasekara, D.E.N. Senarathne, K.K.P.P. Ranaweera</i>	
09.30 – 09.45 hrs	ICSBE_106	HARBOUR DEVELOPMENT IN BALAPITIYA: INSIGHTS FROM NUMERICAL MODELING OF COASTAL PROCESSES <i>D. P. C. Laknath, D.E.N. Senarathne, I.L. Abeygoonasekara, K.K.P.P. Ranaweera</i>	
09.45 – 10.00 hrs	ICSBE_196	CHANGE DETECTION FROM 2017-2022 OF MANGROVE AREA AROUND THAMPALAGAMAM BAY AND ESTIMATION OF CARBON DIOXIDE ABSORPTION OF MANGROVES IN A SELECTED AREA USING GIS AND REMOTE SENSING TECHNIQUES. <i>Jeyapalu Jathushan, V.P.A. Weerasinghe</i>	
10.00 – 10.15 hrs	ICSBE_259	BASIN RESONANCE STUDY FOR COLOMBO SOUTH HARBOR THROUGH LONG-WAVE STUDIES FOR ENHANCED PORT OPERATIONS <i>D. P. C. Laknath, I.G.I. K. Kumara, S.S.D.S Gunasekara</i>	

16th December 2023

Room 4 (Online)/ Session 02

Climate Change Session

Join Zoom Meeting	https://zoom.us/j/98561175011?pwd=L0JpdVhtay9Dbk40VFMxd3JkZIN6Zz09		
	Meeting ID: 985 6117 5011 Passcode :979488		
Session Chair 1	Dr. H. K. B. S. Chamara	Session Coordinator 1	Mr. Anjana Indunil
Session Chair 2	Dr. Danushika Manathunga	Session Coordinator 2	Mr. J A R Kavinda
Time	Paper ID	Title	
11.30 - 11.45 hrs	ICSBE_75	SPATIO-TEMPORAL ANALYSIS OF MODIS-BASED LAND SURFACE TEMPERATURE USING GOOGLE EARTH ENGINE (GEE) IN AMPARA DISTRICT <i>Nuskiya, M.H.F., Zahir, I.L.M., Mohamed Thariq, M.G, Sunethra Thennakoon, Iyoob, A.L, Ameer, M.L.F.</i>	
11.45 - 12.00 hrs	ICSBE_194	ESTIMATION OF ANNUAL ENERGY PRODUCTION AND DEVICE PARAMETER OPTIMISATION IN SRI LANKAN WAVE CLIMATIC CONDITIONS <i>B.H.B.P.D. Baddegamage , R.L.K. Lokuliyana , S.D.G.S.P. Gunawardane, Y.H. Lee</i>	
12.00- 12.15 hrs	ICSBE_267	CLIMATE CHANGE AND PADDY CULTIVATION OF SRI LANKA <i>P.K Hitige, L.Y Hitige</i>	
12.15 - 12.30 hrs	ICSBE_33	ANALYSIS OF THE IMPACT OF THE CLIMATE CHANGE ON STORM SURGES AND GLOBAL EXTREME EVENTS IN THE 21 st CENTURY <i>B. Premaratne, F. Inam</i>	

16th December 2023

Room 4 (Online)/ Session 03

Sustainable Construction and Green Building Techniques

Join Zoom Meeting	https://zoom.us/j/98561175011?pwd=L0JpdVhtay9Dbk40VFMxd3JkZIN6Zz09		
	Meeting ID: 985 6117 5011 Passcode: 979488		
Session Chair 1	Ms. K. A. G. G. K. Kumarasinghe	Session Coordinator 1	Mr. Anjana Indunil
Session Chair 2	Ms. Kamani Sylva	Session Coordinator 2	Mr. J A R Kavinda
Time	Paper ID	Title	
14.00 - 14.15 hrs	ICSBE_85	EFFICACY OF GREEN BUILDING RATING SYSTEMS TO PROTECT BIODIVERSITY OF SRI LANKA <i>S.U. Navimanager, S.N.C.M Dias, S. Manawadu</i>	
14.15 - 14.30 hrs	ICSBE_103	EFFECT OF ENERGY DEMAND AND THERMAL COMFORT OF LOW INCOME HOUSES; CASE OF MONARAGALA DISTRICT <i>KSKNJ Kudasinghe, H Munasinghe</i>	
14.30 - 14.45 hrs	ICSBE_116	LIFE CYCLE COST ANALYSIS OF GREEN BUILDING PROJECTS IN SRI LANKA <i>CV Rajasekara, DVH Dodangoda, WN Kawmudi</i>	
14.45 - 15.00 hrs	ICSBE_144	DEVELOPMENT OF A NOVEL WASTE BASED INSULATED PLASTER WITH WATER PROOFING ABILITY FOR ROOF SLABS <i>D.D. Weerakkody, J.C.P.H. Gamage, E. R. K. Chandrathilaka, Kajan Selvaranjan</i>	
15.00 - 15.15 hrs	ICSBE_211	EFFECTIVENESS OF IMPLEMENTING SUSTAINABLE PUBLIC PROCUREMENT (SPP) PRACTICES IN THE SRI LANKAN CONSTRUCTION INDUSTRY <i>E. M. P. G. A Ekanayake, C Jayasinghe, K. P. H Perera, K. V. J. P Ekanayake</i>	
15.15 - 15.30 hrs	ICSBE_231	STUDY ON THE EFFECT OF JOINT THICKNESS ON COMPRESSIVE STRENGTH OF BLOCK MASONRY WALLS CONSTRUCTED WITH MANUFACTURED SAND MORTAR <i>P.L.L.T.D. Alwis, D. Nanayakkara</i>	
15.30 - 15.45 hrs	ICSBE_343	THE EXPRESSION OF HOME AND ITS ARCHITECTURAL MANIFESTATION IN THE SRI LANKAN CONTEXT <i>D.M.C.S.Pieris, J Wijesundara</i>	

16.00 – 16.30 hrs	Tea Break		
Session Chair 1	Dr. Shyanaka Dhananjaya Rathnayake	Session Coordinator 1	Mr. Anjana Indunil
Session Chair 2	Dr. Chamila Gunasekara	Session Coordinator 2	Mr. J A R Kavinda
16.00 - 16.15 hrs	ICSBE_167	FRAGMENTATION ANALYSIS OF PERI-URBAN NATURAL ECOSYSTEM; THE CASE OF BAHIRAWAKANDA TERRAIN, KANDY, SRI LANKA. <i>K.Y.M.Sirimewan , J.H.Dharmasena</i>	
16.15-16.30 hrs	ICSBE_264	UTILIZING MODULARIZATION TO ACHIEVE SUSTAINABLE CONSTRUCTION <i>P.T.P. Jayathunga, B. Edirisooriya, P.C.O. Fernando, N. Herath, K.K. Jayasinghe</i>	
16.40-16.55 hrs	ICSBE_15	TOWARDS SUSTAINABLE BUILDINGS: A REVIEW ON BUILDING MATERIAL SELECTION <i>S. V. Gurupatham, C. Jayasinghe, P. Perera, R. Lepakshi</i>	
16.55 - 17.10 hrs	ICSBE_34	CLIMATE SMART ROOFING MATERIALS AND TECHNOLOGIES IN SRI LANKAN CONSTRUCTION INDUSTRY: SPECIAL ATTENTION TO EASTERN PROVINCE <i>R. Sathurshan, K.B.A. Silva</i>	
17.10 - 17.25 hrs	ICSBE_272	ANALYSING THE DAYLIGHT DISSEMINATION IN HIGH-RISE INTERIORS: A ZONE-SPECIFIC CASE STUDY AT SAINTGITS <i>C. Punnya Brahmanand, M. Dhanyasree, Sajan Thomas, Joselin Herbert, Jacob Thottathil Varghese, Basil George Thomas, Arjun Venugopal, Siju K</i>	
17.25 - 17.40 hrs	ICSBE_228	EXPLORING URBAN WALKABILITY: AN ASSESSMENT OF SIDEWALKS AND PEDESTRIAN FACILITIES IN PUBLIC TRANSPORT DISTRICTS; IN ACCORDANCE WITH THE GREEN SL® RATING SYSTEM FOR SUSTAINABLE CITIES -THE CASE OF PETTAH, SRI LANKA <i>S.R. Dharmasena, K.D.S. Nimashi</i>	
17.40 - 17.55 hrs	ICSBE_223	SUITABILITY OF PLASTIC MODIFIED ASPHALT CONCRETE (PMAC) IN SRI LANKAN CONTEXT <i>N. M. R. S. P. Nawela, Dr. J. Samaranayake</i>	
17.55 – 18.10 hrs	ICSBE_273	THE CURRENT GROWTH OF GREEN ENERGY AND ITS DEVELOPMENT IN INDIA <i>Er. Aditya Singh</i>	

17th December 2023

Room 1 (Hybrid)/ Session 01

Innovations in Building Materials Session

Join Zoom Meeting	https://us06web.zoom.us/j/88101147875?pwd=S2qhrrM0Aa40PR7tH3UoxOZUic1xK.1		
	Meeting ID: 881 0114 7875 Passcode: 672369		
Session Chair 1	Prof. Chinth Jayasinghe	Session Coordinator 1	Mr. Chamath Piger
Session Chair 2	Dr. P. B. G. Dissanayake	Session Coordinator 2	Mr. Hashan Thilakarathna
Time	Description	Facilitator	
09.00 - 09.05 hrs	Introduction to keynote Lecturer	Session Chair 01	
09.05 - 09.25 hrs	Keynote Lecture	Prof. Chinth Jayasinghe	
Time	Paper ID	Title	
09.25 – 09.40 hrs	ICSBE_229	THE SUCCESS OF SUSTAINABLE MATERIALS IN CREATING SUSTAINABLE BUILT ENVIRONMENT: AN INSIGHT FROM LOCAL CONSTRUCTION PRACTICES <i>G.W.J.K.K. Wijesundara</i>	
09.40 – 09.55 hrs	ICSBE_120	THE USE OF WIRE MESH-FLEXIBLE CEMENTITIOUS POLYMER COMPOSITE FOR STRENGTHENING REINFORCED CONCRETE BEAMS <i>M.A.V.H.M. Arachchi, S.P.R.S. Jayasinghe, H.M.C.C. Somarathna, D. Mohotti</i>	
09.55 – 10.10 hrs	ICSBE_131	SYNERGISTIC EFFECTS OF GRAPHENE OXIDE - SILICA NANOHYBRIDS ON THE PROPERTIES OF CEMENT MORTAR <i>Suganthiny Ganesh, S. V. T. Janaka Perera, Charitha Thambiliyagodage, R. K. N. D. Rajapakse</i>	
10.10 – 10.25 hrs	ICSBE_142	BEHAVIOR OF DAMAGED REINFORCED RUBBERIZED CONCRETE BEAMS STRENGTHEN WITH CARBON FIBER REINFORCED POLYMERS <i>R.K.S. Maleesha, J.C.P.H. Gamage, E.R.K. Chandrathilaka</i>	
10.25 – 10.40 hrs	ICSBE_117	ENHANCEING IMPACT RESISTANCE OF MASONRY STRUCTURES WITH FLEXIBLE CEMENTITIOUS POLYMERS COATINGS <i>T.V. Muthukumarana, P.L.D.C. Liyanage, H.M.C.C. Somarathna, S.N. Raman</i>	
10.40 – 10.55 hrs	ICSBE_241	GYPSUM BOARD REINFORCED WITH PINEAPPLE LEAF FIBER <i>T.P. Jagoda, K.M.C. Konthesingha, S.M.A. Nanayakkara, P.M.W.P. Kumara, H.M.S.C. Rathnasiri, I.R. Upasiri, W.P.H.P. Weerasinghe, A. Branavan</i>	
10.55 – 11.10 hrs	ICSBE_119	FEASIBILITY OF USING PALMYRA STRIPS AS REINFORCING MATERIAL IN LIGHTLY LOADED CONCRETE BEAMS <i>R.C. Dissanayake, S. Lusiyashtharsikka, H.M.C.C. Somarathna, B. Kiriparan</i>	

17th December 2023

Room 1 (Hybrid)/ Session 02

**Bridge Design Construction and Maintenance
(Organized by the IABMAS Sri Lanka Group)**

Join Zoom Meeting	https://us06web.zoom.us/j/88101147875?pwd=S2qhrrM0Aa40PR7tH3UoxOZUic1xK.1	
	Meeting ID: 881 0114 7875 Passcode: 672369	
Time	Description	Facilitator
11.30 - 11.40 hrs	Welcome Address	Prof. Ranjith Dissanayake
11.40 – 11.45 hrs	Introduce Keynote 01 Speaker	
11.45 – 12.10 hrs	Keynote 01	Prof. Mitsuyoshi Akiyama
12.10 – 12.15 hrs	Introduce Keynote 02 Speaker	
12.15 – 12.40 hrs	Keynote 02	Prof. Upul Attanayake
12.40 – 12.50 hrs	Vote of Thanks	Prof. Chaminda Bandara

17th December 2023

Room 1 (Hybrid)/ Session 03

**Bridge Design Construction and Maintenance
(Organized by the IABMAS Sri Lanka Group)**

Join Zoom Meeting	https://us06web.zoom.us/j/88101147875?pwd=S2qhrM0Aa40PR7tH3UoxOZUic1xK.1		
	Meeting ID: 881 0114 7875 Passcode: 672369		
Session Chair 1	Prof. Chaminda Bandara	Session Coordinator 1	Mr. Chamath Pigera
Session Chair 2	Dr. Dammika Abeykoon	Session Coordinator 2	Mr. Hashan Thilakarathna
Time	Paper ID	Title	
14.15 - 14.30 hrs	IABMAS_73	ROTATIONAL FLEXIBILITY OF DOUBLE-ANGLE RIVETED BRIDGE CONNECTIONS <i>B Imam, N Burud, M K Chryssanthopoulos</i>	
14.30 - 14.45 hrs	IABMAS_182	LOAD TESTING AND RATING OF A PC BRIDGE WITHOUT STRUCTURAL PLANS <i>C. Hutchinson, A. Peiris, I. Harik</i>	
14.45 - 15.00 hrs	IABMAS_148	POSTTENSION MODELLING TECHNIQUES FOR A TIE GIRDER OF A NETWORK TIED ARCH BRIDGE <i>B. M. K. L. K. Basnayake, U. B. Attanayake</i>	
15.00 - 15.15 hrs	IABMAS_191	DEVELOPMENT OF EARTHQUAKE RESISTANT DESIGN GUIDELINES FOR BRIDGES IN SRI LANKA <i>M.A.C. Kumara, C.S. Lewangamage</i>	
15.15 - 15.30 hrs	IABMAS_247	A COMPARATIVE STUDY ON APPROACHES TO ESTIMATE LATERAL DISTORTIONAL BUCKLING STRENGTH IN STEEL-CONCRETE COMPOSITE BEAMS <i>W. M. A. D. Wijethunge, A. J. Dammika, C. S. Bandara, J. A. S. C. Jayasinghe</i>	
15.30- 15.45 hrs	IABMAS_257	FINITE ELEMENT MODELLING OF DUCTILE FRACTURE BEHAVIOUR OF THICK-WALLED STEEL HOLLOW BOX PIERS UNDER LATERAL CYCLIC LOADINGS <i>A. C. D. Pigeera, M. Jenothan , J. A. S. C. Jayasinghe, C. S. Bandara, A. J. Dammika</i>	
15.45- 16.00 hrs	IABMAS_132	EVALUATION OF THE DEGREE OF UNCERTAINTY IN ASSESSING DETERIORATED PC I-BEAM END CAPACITY <i>S. K. Bhowmik, Y. Hu1, U. B. Attanayake</i>	
16.00 - 16.15 hrs	IABMAS_134	ULTIMATE LOAD CAPACITY OF SUSPENSION BRIDGE AT MALIBADA, SRI LANKA <i>R.C.S. Jinadasa, P.A.K. Karunananda</i>	
16.15 - 16.30 hrs	IABMAS_135	ADDRESSING SUSTAINABILITY THROUGH INNOVATIVE MIX DESIGNS AND IMPLEMENTATION OF ACCELERATED BRIDGE CONSTRUCTION TECHNIQUES <i>B. M. K. L. K. Basnayake, U. B. Attanayake, M. LaViolette, P. Pakala4, R. Goniwiecha</i>	

16.15 - 16.30 hrs	IABMAS_362	ENGINEERED CEMENTITIOUS COMPOSITE BEAMS IN IMPACT DAMAGE MITIGATION FOR BRIDGE PIERS <i>Kasun Wijesooriya, Shiyao Zhu, Sanket Rawat, Chi-King Lee, Damith Mohotti</i>
16.30-16.45 hrs	IABMAS_361	EXPERIMENTAL INVESTIGATION OF DYNAMIC BEHAVIOR OF PRESTRESSED CONCRETE BRIDGE GIRDERS <i>G.B. Dissanayake, A.J Dammika, C.S. Bandara, J.A.S.C Jayasinghe, P.B.R. Dissanayake</i>

17th December 2023

Room 2 (Hybrid)/ Session 01

Water Pollution and Water Treatment Technologies Session

Join Zoom Meeting	https://zoom.us/j/97144657867?pwd=dm5vZzl4c3BLRVB2bXc2QmV1MHhEZz09		
	Meeting ID: 971 4465 7867 Passcode :816212		
Session Chair 1	Prof. Ayantha Gomes	Session Coordinator 1	Mr. Ravindra Ekanayake
Session Chair 2	Dr. Lahiru Lindamulla	Session Coordinator 2	Mr. Ravindu Udara
Time	Paper ID	Title	
09.00 - 09.15 hrs	ICSBE_86	SIMULTANEOUS ELECTROCOAGULATION AND ELECTROCHEMICAL OXIDATION FOR REMOVING NATURAL ORGANIC MATERIALS FROM WATER <i>B. U. Kaushalya, P. V. Kahawearachchi, H. G. S. S. U. Priyankara, K. G. N. Nanayakkara</i>	
09.15 - 09.30 hrs	ICSBE_110	MODELLING SIMULATION OF ELECTROCHEMICAL CELLS FOR WATER TREATMENT <i>H.G.S.S.U. Priyankara, T.R.E.A.H.D. Rajapaksha, K.G.N. Nanayakkara</i>	
09.30 - 09.45 hrs	ICSBE_262	ULTRASONIC MODIFICATION OF ADSORBENTS FOR ENHANCEMENT OF THE PERFORMANCE IN DYE REMOVAL FROM AQUEOUS SOLUTION <i>L.K.K.N. Perera, K.H.M. Kuruwita, B.M.W.P.K. Amarasinghe</i>	
09.45 - 10.00 hrs	ICSBE_185	CASE STUDIES OVER THE FAILURE OF ONSITE SEWERAGE TREATMENT SYSTEMs IN SRI LANKA <i>U.G. Amarawickrama, T.D. Denagama</i>	
10.00 - 10.15 hrs	ICSBE_221	A REVIEW OF IMPACTS OF OCEAN ACIDIFICATION ON CORAL REEFS <i>P.M.M. Nilusha, M. Danthurebandara, C. S. Kalpage</i>	
10.15- 10.30 hrs	ICSBE_239	HEALTH QUALITY ASSESSMENT OF THE BEERALLA STREAM IN ELLA WITH RESPECT TO THE SELECTED PHYSICO-CHEMICAL AND BIOLOGICAL FACTORS IN WATER: AN ASSESSMENT OF THE EFFECTS OF UNSUSTAINABLE TOURISM PRACTICES <i>R. M. A. Dilini, J. Manatunge, G.G.N. Thushari, S.M. Gnanasingha</i>	
10.30- 10.45 hrs	ICSBE_21	USE OF BULKING AGENTS FOR COMPOSTING SECONDARY SEWAGE SLUDGE FROM WASTEWATER TREATMENT PLANTS; A REVIEW <i>S.V. Chandeepea, C.S. Kalpage</i>	

17th December 2023

Room 2 (Hybrid)/ Session 02

Water Resources Planning and Pollution Control Session

Join Zoom Meeting	https://zoom.us/j/97144657867?pwd=dm5vZzl4c3BLRVB2bXc2QmV1MHhEZz09		
	Meeting ID: 971 4465 7867 Passcode 816212		
Session Chair 1	Dr. G. M. P. R. Weerakoon	Session Coordinator 1	Mr. Ravindra Ekanayake
Session Chair 2	Dr. Chandima Gunawardana	Session Coordinator 2	Mr. Ravindu Udara
Time	Paper ID	Title	
11.30 - 11.45 hrs	ICSBE_01	A STUDY ON GARBAGE ACCUMULATION IN MAHAWELI RIVER, NEAR POLGOLLA RESERVOIR T.D. Denagama, D.E. Liyanage	
11.45 - 12.00 hrs	ICSBE_40	IMPROVED OPERATION OF MINIPE LEFT BANK CANAL IRRIGATION SYSTEM <i>S. Ranwala, U.H.M.S. Silva, K.D.W. Nandalal</i>	
12.00- 12.15 hrs	ICSBE_55	ASSESSING THE STRUCTURAL STRENGTH OF FABRICATED BURNT CLAY ECO-BRICKS WITH RICE HUSK ASH AND ALUM SLUDGE	
12.15- 12.30 hrs	ICSBE_128	A CASE STUDY ON THE QUALITY ASSURANCE AND CONTROLLING PRACTICES IN THE WATER SUPPLY PROJECTS OF THE NATIONAL WATER SUPPLY AND DRAINAGE BOARD SRI LANKA (NWSDB-SL). <i>Jathursan S, Gobidan N.N</i>	
12.30 - 12.45 hrs	ICSBE_203	ENHANCING FISH HEALTH, WATER QUALITY, AND ENVIRONMENTAL RESPONSIBILITY WITH AN INTEGRATED AQUAPONIC APPROACH TO REVERSE OSMOSIS (RO) REJECT WATER MANAGEMENT <i>W.P.Madhushani Perera, M.T.U.D. Mallikarathne, G.A.H.K.M. Gamlath I, A.M.H.M. Abeyasinghe</i>	
12.45 - 13.00 hrs	ICSBE_224	OPTIMIZING PHYSICS PARAMETERS FOR HEAVY RAINFALL FORECASTING IN THE KELANI RIVER BASIN USING THE WRF MODEL <i>P.L.L.N. Perera, N.G.P.B. Neluwala, J.J.Wijetunge</i>	

17th December 2023

Room 2 (Hybrid)/ Session 03

Water Resources Planning and Pollution Control Session

Join Zoom Meeting	https://zoom.us/j/97144657867?pwd=dm5vZzI4c3BLRVB2bXc2QmV1MHhEZz09		
	Meeting ID: 971 4465 7867 Passcode: 816212		
Session Chair 1	Prof. S. B. Weerakoon	Session Coordinator 1	Mr. Ravindra Ekanayake
Session Chair 2	Prof. Shameen Jinadasa	Session Coordinator 2	Mr. Ravindu Udara
Time	Paper ID	Title	
14.15 - 14.30 hrs	ICSBE_108	SCALE EFFECT ON RAINFALL-RUNOFF MODELING IN UPPER KELANI RIVER BASIN, SRI LANKA <i>M.K.D.K.C. Madapatha, W.A.I. Madhawa, M.M.G.T. De Silva</i>	
14.30 - 14.45 hrs	ICSBE_111	WATER QUALITY MODELLING AND IMPROVEMENT OF WATER SAFETY OF RAMBAKAN OYA RESERVOIR CATCHMENT IN MAHA OYA IRRIGATION DIVISION <i>Y.M Saifudeen, A.J.F Mazeera, A.C.A Suja</i>	
14.45 - 15.00 hrs	ICSBE_118	DYNAMIC BEHAVIOR OF SALINITY INTRUSION IN KELANI RIVER, SRI LANKA <i>V.D. Athuraliya, N.G.P.B. Neluwala, K.P.P.Pathirana</i>	
15.00 - 15.15 hrs	ICSBE_121	ORGANIC MEMBRANE FILTERS FOR TEXTILE WASTEWATER TREATMENT: A REVIEW <i>R.P.D.D. Senarathne, C.S. Kalpage</i>	
15.15 - 15.30 hrs	ICSBE_123	DETECTION OF MICROPLASTICS FROM DOMESTIC LAUNDERING USING ATTENUATED TOTAL REFLECTANCE – FOURIER TRANSFORM INFRARED (ATR-FTIR) SPECTROSCOPY <i>Vigneswaran Nitharshan, Sajani Kolambage, Tharanja Gobal Krishnan, Aravinda Nirella, Nimantha Jayanaka, Pradeep Gajanayake, Rohan S. Dassanayake,</i>	
15.30- 15.45 hrs	ICSBE_126	ACCURACY OF CURVE NUMBER METHOD IN ESTIMATING RAINFALL-RUNOFF RELATIONSHIP FOR SUGARCANE LAND USE UNDER TROPICAL CLIMATE IN SRI LANKA: A COMPARATIVE STUDY OF MEASURED AND COMPUTED DATA <i>L. M. J. R. Wijayawardhana, K. D. N. Weerasinghe and C. M. Navaratne</i>	
15.45- 16.00 hrs	ICSBE_95	ASSESSMENT OF THE BEHAVIOUR OF FLOW PATTERNS WITH THE PRESENCE OF R PUMP HOUSE, RAISING OF FLOOD BUNDS USING 2D HYDRAULIC NUMERICAL MODELING <i>S.M.Hewavidana, K. Subasinghe</i>	
16.00 – 16.15 hrs	ICSBE_355	MODELLING STORM WATER MANAGEMENT SYSTEMS IN RESPONSE TO DIFFERENT RAINFALL AND LAND USE PATTERNS <i>Pramudika W.O.H, Ubhayaratna K.M.M, Gunawardana W.C.T.K.</i>	

17th December 2023

Room 3 (Hybrid)/ Session 01

CAS Special Session : Advancements in Eco-Environmental Sciences and Water Treatment: A Multidisciplinary Approach (JRDC Session)

Join Zoom Meeting	https://zoom.us/j/97717785708?pwd=QU5FMnpUNk44e1BhWUhsVGVoZWJ3Zz09		
	Meeting ID: 977 1778 5708 Passcode: 182599		
Session chair 1	Prof. Rohan Weerasooriya	Session Coordinator 1	Mr. Dilan Danushka
Session chair 1	Prof. Yuansong Wei	Session Coordinator 2	Mr. J A I D Viduranga
Time	Description	Facilitator	Title
9.00 – 9.20 hrs	Keynote	Prof. Yuansong Wei	Resilience of anammox application from sidestream to mainstream: a combined system coupling denitrification, partial nitrification and partial denitrification with anammox
Time	Paper ID	Title	
09.20 – 09.35 hrs	ICSBE_370	DETECTION OF CRYPTOSPORIDIUM AND CORONAVIRUS IN INFLUENT AND EFFLUENT WATER IN SELECTED WATER TREATMENT PLANTS ALONG THE MAHAWELI RIVER IN KANDY DISTRICT <i>P.T.A. Thilakarathna, S. Athukorala, F. Fareed, R.N. Jinadasa, T.N. Premachandra, M. Makehelwela³, B.R. Fernando¹, S.K. Weragoda, Yawei Wang, Zhang Yu, Min Yang and S.H.P.P. Karunaratne</i>	
09.35 -09.50 hrs	ICSBE_371	DIVERSITY AND ANTIBIOTIC RESISTANCE OF HETEROTROPHIC BACTERIA IN DRINKING WATER: A STUDY ALONG THE MAHAWELI RIVER WATER TREATMENT PLANTS FROM KOTAGALA TO BALAGOLLA <i>P.T.A. Thilakarathna, S. Athukorala, F. Fareed, R.N. Jinadasa, T.N. Premachandra, M. Makehelwela, B.R. Fernando, S.K. Weragoda, Yawei Wang, Zhang Yu, Min Yang and S.H.P.P. Karunaratne</i>	
09.50 – 10.05 hrs	ICSBE_372	EXPERIENCES OF CHINESE ECO-INDUSTRIAL PARK DEVELOPMENT <i>Jingru Liu</i>	
10.05 – 10.20 hrs	ICSBE_373	EFFECTS OF DRINKING WATER FLUORIDE AND HARDNESS ON BOVINE SERUM BIOCHEMICAL PROPERTIES IN HIGH CKDU PREVALENCE AREAS IN SRI LANKA UNDER ONE HEALTH APPROACH <i>H.M.S.Wasana, G.D.R.K.Perera, I.A.M.P. Ileperuma, H.T.K. Abeyesundara⁶ L. Jayarathne, Youngsong Wei</i>	
10.20 – 10.35 hrs	ICSBE_374	OPTIMIZATION STRATEGY OF GRAVITY-DRIVEN MEMBRANE FILTRATION BASED ON MICROBIAL RISK CONTROL IN PERMEATE <i>Qingke Yuan, Hao Zhao, Yanfeng Liu, Ying Meng, Fubo Luan</i>	

10.35 - 10. 50 hrs	ICSBE_375	FLUORESCENCE CHARACTERISTICS OF DISSOLVED ORGANIC MATTER IN GROUNDWATER AND SURFACE WATER IN TANK CASCADE SYSTEMS IN THE DRYZONE OF, SRI LANKA <i>S. Indika, Y.S. We, D.Z. Hu, I. Yapabandara, S. Athauda,, T. Cooray, M. Makehelwala, K.B.S.N. Jinadasa, S.K. Weragoda R. Weerasooriya</i>
10.50 - 11.05 hrs	ICSBE_376	IMPACT OF ORGANIC FERTILIZER RATIOS ON MICROBIAL COMMUNITIES IN AGRICULTURAL RUNOFF: A FIELD SIMULATION STUDY <i>WANG Jinshi, HOU Yaojun, WANG Zhirong, WANG Yawei, WEI Yuansong</i>
Tea Break		
Time	Paper ID	Title
11.30 - 11.40 hrs	ICSBE_377	TEMPORAL AND SPATIAL DYNAMICS OF WATER QUALITY PARAMETERS IN BEIRA LAKE: SEASONAL VARIATIONS AND ECOLOGICAL IMPLICATIONS <i>Sangeeth Prasad, Yuansong Wei, Tushara Chaminda, Tharindu Ritigala, Suresh Indika, Isuru Yapa, Sujithra.K. Weragoda, Madhubhashini Makehelwala</i>
11.40 - 11.50 hrs	ICSBE_378	ANALYSIS OF MEMBRANE FOULING CHARACTERISTICS AND CLEANING STRATEGIES OF NANOFILTRATION PLANT WITH DECENTRALIZED WATER SUPPLY FROM RURAL GROUNDWATER SOURCES <i>HU Da-zhou, SURESH-Indika, WEI Yuan-song</i>
11.50 - 12.00 hrs	ICSBE_379	CHARACTERISTICS OF DISSOLVED ORGANIC MATTERS IN THE TREATMENT OF THE DEWATERING LIQUOR OF ANAEROBIC DIGESTION PRETREATED BY THERMAL HYDROLYSIS <i>YUE Wen-hui, LIU Ji-bao, GUO Jian-ning, WEI Yuan-song, SUI Qian-wen</i>
12.00 - 12.10 hrs	ICSBE_380	POWDERED ACTIVATED CARBON-CATALYZED MN(II) REMOVAL BY FREE CHLORINE FOR CONTROLLING DRINKING WATER DISCOLORATION PROBLEMS <i>G. Li, and B. Shi</i>
12.10 - 12.20 hrs	ICSBE_381	INTEGRATION OF SULFAMMOX AND SULFIDE-DRIVEN AUTOTROPHIC DENITRIFICATION (SDAD) PROCESSES IN ANAEROBIC MBR FOR TREATING RUBBER INDUSTRY WASTEWATER WITH HIGH AMMONIA AND SULFATE <i>T.I.P. Wimalaweera, F. Zuo, Q.Tang, K.B.S.N. Jinadasa, S.K. Weragoda, T. Ritigala, R. Weerasooriya, M. Makehelwala , and Y.S. Wei</i>
12.20 - 12.30 hrs	ICSBE_382	INVESTIGATING THE HYDROCHEMICAL COMPOSITIONS AND EVOLUTION OF GROUNDWATER DUE TO THE INFLUENCE OF SEAWATER INTRUSION IN THE MANNAR DISTRICT, SRI LANKA <i>Samadhi Athauda, Yunwen Wang, Zhineng Hao, Suresh Indika, Isuru Yapabandara, Sujithra K. Weragoda, Jingfu Liu and Yuansong Wei</i>
12.30 12.40 hrs	ICSBE_383	FOULING MECHANISMS AND EFFECTIVE CLEANING STRATEGIES FOR ELECTRODIALYSIS DISTILLATION IN BRACKISH GROUNDWATER TREATMENT <i>Malalagama T.P, Binghui Tian, Gunathilake M.D.D.R, Min Yang</i>
12.40 - 12.50 hrs	ICSBE_384	A COMPREHENSIVE STUDY ON APPLICABILITY AND OPTIMIZING DOMESTIC TREATMENT PLANTS FOR GROUNDWATER REVITALIZATION IN THE CKDU-AFFECTED DRY ZONE OF SRI LANKA <i>M.D.D.R. Gunathilake, Y.D. Kahatapitiya, B.K.R.S. Wanshanatha, R.M.C.P. Rathnayaka, T.P. Malalagama, M. Makehelwala, S.K. Weragoda, Binghui Tian</i>
12.40 - 12.50 hrs	ICSBE_104	IMPORTANCE OF STUDY ON BIOFILM CHARACTERIZATION WITHIN WATER DISTRIBUTION NETWORKS <i>E.G.W. Gunawardana, D.R. Gunathilake, C. Ratnayake, K.R.A.D.U. Jeewarathne, M. Makehelwala, S.K. Weragoda, C.D. Gamage, R. Weerasooriya</i>
12.50 – 13.05	ICSBE_385	BARRIERS FOR THE APPLICABILITY OF CIRCULAR ECONOMY CONCEPT FOR SUSTAINABLE WASTE MANAGEMENT IN SRI LANKAN SUGAR MANUFACTURING INDUSTRY <i>P.D. Jayawardhana, D.M.P.P. Dissanayake, P.A.P.Y.Gajaba</i>

17th December 2023

Room 3 (Hybrid)/ Session 03

Urban Landscape Ecological Planning Session

Join Zoom Meeting	https://zoom.us/j/97717785708?pwd=QU5FMnpUNk44eIBhWUhsVGVVoZWJ3Zz09		
	Meeting ID: 977 1778 5708 Passcode: 182599		
Session chair 1	Prof. Lalitha Dissanayake	Session Coordinator 1	Mr. Dilan Danushka
Session chair 1	Prof. Maros Finka	Session Coordinator 2	Mr. J A I D Viduranga
Time	Description	Facilitator	
14.15 - 14.30 hrs	Keynote Lecture 01	Prof. Cristian Loja from the University of Bucharest	
Time	Paper ID	Title	
14.30 - 14.45 hrs	ICSBE_280	A COMPARATIVE LIFE CYCLE ASSESSMENT OF E-THEIS AND BOUND THESIS USING THE GATE-TO-GATE APPROACH <i>Y Suwarkka, K Kumareswara, M Atapattu</i>	
14.45 - 15.00 hrs	ICSBE_290	ENHANCING URBAN FLOOD RESILIENCE THROUGH PERVIOUS CONCRETE: INNOVATIVE SOLUTIONS FOR SUSTAINABLE URBAN LANDSCAPING <i>M.N.M Shahmy, D.D Dias and U.B.S Fernando</i>	
15.00 - 15.15 hrs	ICSBE_292	ASSESSING THE IMPACT OF WETLAND CONVERSION TO UNREGULATED URBAN DEVELOPMENT ON FLOOD RISK: A GIS-BASED ANALYSIS OF THE MEDA ELA AND PINGA OYA CATCHMENTS IN KANDY DISTRICT <i>W.M.S.S. Dias, and D.M.L. Dissanayake</i>	
15.15 - 15.30 hrs	ICSBE_299	GREEN IMPRESSIONS: UNDERSTANDING URBAN VEGETATION PERCEPTIONS IN UNESCO HERITAGE CITY KANDY <i>D.M.L. Dissanayake , D.R.P. Godamunna</i>	
15.30 - 15.45 hrs	ICSBE_301	ASSESSING THE LEVEL OF CONNECTIVITY OF THE RIVERSCAPE STRUCTURE: A SPATIAL GRAPH-BASED APPROACH <i>D.D. Weerakkody, J.C.P.H. Gamage, E. R. K. Chandrathilaka, Kajanan Selvaranjan</i>	
15.45 - 16.00 hrs	ICSBE_249	STUDY ON THE CONTRIBUTION OF ART IN ENHANCING THE PLACE ATTACHMENTS IN URBAN CONTEXT <i>R.R Samaratunge, D. De Silva, J. Wijesundara</i>	
16.00 - 16.15 hrs	ICSBE_05	THE ROLE OF COMMUNITY PARTICIPATION IN DISASTER RISK REDUCTION INITIATIVES WITH SPECIAL REFERENCE TO THE BATTICALOA CITY <i>Y. Arthy</i>	

Tea Break

16.45 - 17.00 hrs	ICSBE_269	URBAN GOVERNANCE AND POLICY FORMULATION IN URBAN SLUMS AND SHANTY DWELLERS IN SRI LANKA (SPECIAL REFERENCE TO THE 'HAVELOCK' SLUMS IN COLOMBO DISTRICT) <i>H.A.S.U. Geethanjalee, and D.M.Y. Abeywardhana</i>
17.00 - 17.15 hrs	ICSBE_193	THE ROLE OF CULTURAL VALUE IN SUSTAINABLE URBAN DEVELOPMENTS WITH SPECIAL REFERENCE TO THE FLOATING MARKET IN PETTAH <i>R.T.L.S. Rajapaksha , N.L. Rubasin Gamage, H.P. Munasinghe</i>
17.15 - 17.30 hrs	ICSBE_256	MACHINE LEARNING APPROACH FOR MODELING MODE CHOICE DECISIONS OF SRI LANKAN TRAVELLERS <i>W.D Lakmini, I.C.S Jayasena, W.R.S.S Dharmarathna, U. Jayasinghe</i>
17.30 - 17.45 hrs	ICSBE_340	INFLUENCE OF URBAN PARKS ON URBAN THERMAL ENVIRONMENT – A CASE STUDY: INTERMEDIATE ZONE & ARID ZONE IN SRI LANKA <i>W.G.K.D.Jayalath, T.A.N.T.Perera, G.Y.Jayasinghe</i>
17.45 - 18.00 hrs	ICSBE_183	RESUE LEFTOVERS: PERSEPTIONS OF TOURISTS ON ADAPTIVE REUSE OF BUILDINGS AS HOTELS & CAFES <i>K.B Seenapatabendige</i>
18.00 - 18.15 hrs	ICSBE_250	A STUDY ON COMMUNITY HABITS AND LIFESTYLE CHOICES WITH SPECIAL REFERENCE TO NUGEGODA LOCALITY <i>K.A.S. Rathugamage, D. De Silva, J. Wijesundara</i>
18.15 - 18.30 hrs	ICSBE_298	URBAN FOREST ECOSYSTEM SERVICES AND MANAGEMENT: A CASE STUDY OF THE THREE MAIN FOREST PATCHES WITHIN KANDY CITY, SRI LANKA <i>D.M.L. Dissanayake, and G.K.C.R. Kapuge</i>

17th December 2023

Room 4 (Online)/ Session 01

Water Resource Planning and Pollution Control Session

Join Zoom Meeting	https://zoom.us/j/98561175011?pwd=L0JpdVhtay9Dbk40VFMxd3JkZIN6Zz09		
	Meeting ID: 985 6117 5011 Passcode: 979488		
Session chair 1	Prof. Nadeeshani Nanayakkara	Session Coordinator 1	Mr. Anjana Indunil
Session chair 1	Dr. Sujithra Weragoda	Session Coordinator 2	Mr. J A R Kavinda
Time	Paper ID	Title	
09.00 – 09.15 hrs	ICSBE_30	WATER MANAGEMENT OF ROTTAI TANK SCHEME IN POTTUVIL IRRIGATION DIVISION <i>YKMRC Yapapatune, DA Ekanayake, PDS Senevirathne I, Eng.S.Tharshika</i>	
09.15 – 09.30 hrs	ICSBE_78	UNRAVELING CLIMATOLOGICAL TRENDS: 40-YEAR ANALYSIS OF LONG-TERM PARAMETERS IN KIGALI, RWANDA <i>N.R. Josiah, D.P.C. Lalnath</i>	
09.30 – 09.45 hrs	ICSBE_344	EFFECT OF IRRIGATION RESERVOIRS ON STREAMFLOW SIMULATION IN DRY ZONE, SRI LANKA <i>Buddhi Suraweera, Kasun De Silva</i>	
09.45- 10.00 hrs	ICSBE_268	AI-BASED MACHINE LEARNING ALGORITHMS FOR WATER QUALITY ANALYSIS: A REVIEW <i>R.M.L.S Rajapaksha, R.P.W.N Karunasiri, T.A.N.T Perera, Kosala Sirisena</i>	
10.00 – 10.15 hrs	ICSBE_349	BIODEGRADABILITY INDEX (BDI) AS AN INDICATOR FOR EFFLUENTS QUALITY MEASUREMENT; A CASE STUDY BASED ON DIFFERENT INDUSTRY SECTORS IN MATARA DISTRICT, SRI LANKA <i>G.R. Diwyanjalee, B.K.A. Bellanthudawa, D.K.N.S. De Silva, A.R. Gunawardana</i>	

17th December 2023

Room 4 (Online)/ Session 02

Geotechnical Engineering Session

Join Zoom Meeting	https://zoom.us/j/98561175011?pwd=L0JpdVhtay9Dbk40VFMxd3JkZIN6Zz09		
	Meeting ID: 985 6117 5011 Passcode : 979488		
Session chair 1	Dr. Rasika Athapaththu	Session Coordinator 1	Mr. Anjana Indunil
		Session Coordinator 2	Mr. J A R Kavinda
Time	Paper ID	Title	
11.30 - 11.45 hrs	ICSBE_13	INVESTIGATION OF GEOTECHNICAL PROPERTIES OF EXPANSIVE SOIL STABILIZED WITH FLY ASH AND QUARRY DUST <i>T.B.C.H. Dissanayake, D. de S. Udakara</i>	
11.45 - 12.00 hrs	ICSBE_44	STABILITY ANALYSIS OF ROAD EMBANKMENT CONSTRUCTED BY TREATING MARGINAL SOILS WITH GEOPOLYMER BASED STABILIZERS <i>Tharshsany, S. Shagiththiya, M.C.M Nasvi , J. Sangeetha</i>	
12.00 - 12.15 hrs	ICSBE_112	PREDICTION OF COLLAPSE POTENTIAL OF SOILS USING ARTIFICIAL NEURAL NETWORK <i>A.K.B.J. Aththanagoda, L.C. Kurukulasuriya</i>	
12.15 - 12.30 hrs	ICSBE_127	COMPARISON OF IN-SITU STATE OF A TAILINGS DEPOSIT WITH RECONSTITUTED LABORATORY SPECIMEN STATES <i>PGN Nayanthara, C Gallage, SSSD Biyanvilage, J Rajapakse, T Rowles, E Tuplin</i>	
12.30 - 12.45 hrs	ICSBE_346	REVIEW OF RELIABILITY EVALUATION OF CROSS-HOLE SONIC LOGGING FOR BORED PILE INTEGRITY <i>Y.A. Naotunna, N.H. Priyankara, D.M.K.N. Seneviratna</i>	
12.45 - 13.00 hrs	ICSBE_19	ANALYSIS OF THE SHEAR BEHAVIOR OF STABILIZED SOIL- CONCRETE INTERFACE IN GEOTECHNICAL STRUCTURES <i>W.A.W. Wijesingha, K.H.S.M. Sampath</i>	
13.00 - 13.15 hrs	ICSBE_06	THE DRIEST END OF THE SOIL WATER CHARACTERISTICS CURVE (SWCC) WAS DEVELOPED FOR DIFFERENT SOIL DEPTHS USING WP4C <i>K.K.A, Shanika, Y.N.S. Wijewardana, H.M.S.K, Herath, L.W. Galagedara</i>	
13.15 - 13.30 hrs	ICSBE_321	INVESTIGATION OF FOUNDATION PROTECTION MORTAR LAYER WITH ABILITY TO WITHSTAND THE BEHAVIOR OF FINE GRAIN SOIL <i>J.A.S.M Jayasinghe, U.B.S Fernando</i>	

17th December 2023

Room 4 (Online)/ Session 03

Sustainable Solutions Session

Join Zoom Meeting	https://zoom.us/j/98561175011?pwd=L0JpdVhtay9Dbk40VFMxd3JkZIN6Zz09		
	Meeting ID: 985 6117 5011 Passcode : 979488		
Session chair 1	Prof. Senani Wijewardana	Session Coordinator 1	Mr. Anjana Indunil
Session chair 1	Dr. Udayagee Kumarasinghe	Session Coordinator 2	Mr. J A R Kavinda
Time	Paper ID	Title	
14.15 - 14.30 hrs	ICSBE_322	SPATIAL DISTRIBUTION OF METEOROLOGICAL DROUGHTS IN THE MADURU OYA BASIN IN THE DRY ZONE OF SRI LANKA: IMPLICATIONS OF CLIMATE CHANGE <i>W.M.R.T.Y. Wijekoon, R.L.H.L. Rajapakse</i>	
14.30 - 14.45 hrs	ICSBE_196	CHANGE DETECTION FROM 2017-2022 OF MANGROVE AREA AROUND THAMPALAGAM BAY AND ESTIMATION OF CARBON DIOXIDE ABSORPTION OF MANGROVES IN A SELECTED AREA USING GIS AND REMOTE SENSING TECHNIQUES <i>Jeyapalu Jathushan, and V.P.A. Weerasinghe</i>	
14.45 - 15.00 hrs	ICSBE_149	THROUGH THE SHADOWS: AN IN-DEPTH STUDY OF INFORMAL WASTE COLLECTORS' PLIGHT AMIDST COVID-19 IN SRI LANKA <i>N. Fernando, Y.M.M De Silva</i>	
15.00 - 15.15 hrs	ICSBE_41	A REVIEW: DEVELOPMENT TECHNIQUES FOR MUNICIPAL OPEN DUMPSITE IN DEVELOPING COUNTRIES <i>K.G.S. Rukshan and Y.N.S. Wijewardana</i>	
15.15 - 15.30 hrs	ICSBE_261	LONG SHORT-TERM MEMORY (LSTM) & FEEDFORWARD ARTIFICIAL NEURAL NETWORK (ANN) FOR FLOOD PREDICTION <i>G.W.T.I. Madhushanka, M.T.R. Jayasinghe, R.A. Rajapakse</i>	

17th December 2023

Room 5 (Physical)/ Session 01

Geotechnical Engineering Session

Session chair 1	Dr. Chandana Kurukulasuriya	Session Coordinator 1	Mr. Kumudu Prabodya
Session chair 1	Dr. S. K. Navaratnarajah	Session Coordinator 2	Mr. H A S Malshan
Time	Paper ID	Title	
09.00 - 09.15 hrs	ICSBE_42	ASSESSMENT OF SHEAR STRENGTH PROPERTIES OF DREDGED SAND <i>P.L. Punchihewa, R.J.K.B.C. Ranathunga, A.M.R.G. Athapaththu</i>	
09.15 - 09.30 hrs	ICSBE_130	USE OF FIELD MONITORING DATA AND THE FINITE ELEMENT ANALYSIS IN THE OPTIMIZATION OF DEEP EXCAVATION SUPPORT SYSTEMS: A CASE STUDY <i>V.S.S.D. Silva, and L.I.N. de Silva</i>	
09.30 - 09.45 hrs	ICSBE_16	STRENGTH, SWELL AND COST BASED MIX OPTIMIZATION OF CEMENT AND FLY ASH TREATED EXPANSIVE SOILS <i>A.M.S.N. Abeyasinghe, L.C. Kurukulasuriya, M.C.M. Nasvi</i>	
09.45 - 10.00 hrs	ICSBE_360	REVIEW OF LOAD SHARING MECHANISM OF PILED-RAFT FOUNDATION <i>D.A.P.Prasad, and N.H.Priyankara</i>	
10.00 - 10.15 hrs	ICSBE_255	EFFECT OF GRID UNDER SLEEPER PAD ON SHEAR RESISTANCE AT SLEEPER-BALLAST INTERFACE <i>H. G. S. Mayuranga, S. K. Navaratnarajah, C. S. Bandara and J. A. S. C. Jayasinghe</i>	

17th December 2023

Room 5 (Physical)/ Session 02

Sustainable Solutions Session

Session chair 1	Dr. Pradeep Gajanayake	Session Coordinator 1	Mr. Kumudu Prabodya
Session chair 1	Prof. C. S. Kalpage	Session Coordinator 2	Mr. H A S Malshan
Time	Paper ID	Title	
11.30 - 11.45 hrs	ICSBE_80	OPTIMIZATION AND SCALE-UP OF PREPARING BATTERY-GRADE GRAPHITE FROM SRI LANKAN VEIN GRAPHITE FOR RECHARGEABLE LITHIUM-ION BATTERIES <i>H.M.H.D.K. Naranpanawa, T.H.N.G. Amaraweera, N.W.B. Balasooriya, K.W.S.N. Kumari, H.W.M.A.C. Wijayasinghe</i>	
11.45 - 12.00 hrs	ICSBE_89	ELECTROCHEMICAL PERFORMANCE OF CuO ANODE MATERIAL SYNTHESIZED BY CHEMICAL PRECIPITATION METHOD FOR RECHARGABLE LITHIUM-ION BATTERIES <i>W. T. R. S. Fernando, T. H. N. G. Amaraweera, H. W. M. A. C. Wijayasinghe</i>	
12.00 - 12.15 hrs	ICSBE_146	BIO CHAR DERIVED FROM WASTE BIOMASS SOURCES AS A FILLER FOR NATURAL RUBBER: A REVIEW <i>M.G.D. Sanduranga, R.D.H. Iresha, and C.S. Kalpage</i>	
12.15 - 12.30 hrs	ICSBE_274	DEVELOPMENT OF UV PROTECTIVE COATINGS TO RETAIN THE COLOR OF GARMENTS USING INORGANIC UV ABSORBERS <i>D.P.Lokuwithana, and L.Palliyaguru</i>	
12.30 - 12.45 hrs	ICSBE_252	DETERMINING THE PRECISE PHYSICAL PROPERTIES OF RUBBER AGGREGATE DERIVED FROM DISCARDED TIRES <i>B.G.V. Sanjaya, J.M.R.S. Appuhamy, W.M.K.R.T.W. Bandara, S. Venkatesan, R.J. Gravina</i>	
12.45 - 13.00 hrs	ICSBE_357	EXPLORING PERCEPTIONS OF SERVICE DELIVERY IN A LOCAL MUNICIPALITY IN SOUTH AFRICA <i>E.S. Ngcobo, C. Gerwel Proches , N. Singh</i>	
13.00 – 13.15 hrs	ICSBE_359	STRENGTHENING TSUNAMI PREPAREDNESS IN SRI LANKA: AN ASSESSMENT OF THE ACTION PLAN OF TSUNAMI READY RECOGNITION PROGRAMME <i>K.K.C.L. Kannangara, C.S.A. Siriwardana, C. Liyanarachchige</i>	
13.15 – 13.30 hrs	ICSBE_39	DURABILITY OF ORDINARY CONCRETE MADE OF MANUFACTURED SAND AND OFFSHORE SAND <i>M.G.S. Asangi, K.M.C. Konthesingha, A. Branavan, I.R. Upasiri, W.P.H.P. Weerasinghe, H.M.S.C. Rathnasiri, P.M.W.P. Kumara</i>	

17th December 2023

Room 6 (Hybrid)/ Session 01

Circular Economy Session

Join Zoom Meeting	https://zoom.us/j/97241148173?pwd=WGpPY2dXRlZ4RURJWFVhRW5rUWIBQT09		
	Meeting ID: 972 4114 8173 Passcode: 123782		
Session chair 1	Prof. Ajith De Alwis	Session Coordinator 1	Ms. Sajani Kolambage
Session chair 2	Dr. Mayuri Wijayasundara	Session Coordinator 2	Ms. Vishmi Gunathunga
Session chair 3	Ms. Anjulee Boralessa		
Time	Description	Facilitator	Title
09.00 – 09.20 hrs	Key Lecture 01	Dr. Ajith De Alwis	Net Zero and circularity - Actioning with Accountability
09.20 – 09.40 hrs	Key Lecture 02	Dr. Mayuri Wijayasundara	Net Zero and circularity - Role of circular economy in decarbonization
Time	Paper ID	Title	
09.40 – 09.55 hrs	ICSBE_09	EXPLORING CIRCULAR ECONOMY OPPORTUNITIES IN THE BUILT ENVIRONMENT: INSIGHTS FROM CASE STUDY ANALYSIS <i>Olivia Ho, Usha Iyer-Raniga, Kamani Sylva, Mahanama Dissanayaka</i>	
09.55 – 10.10 hrs	ICSBE_22	SUSTAINABLE CONSTRUCTION OF TRANSPORT CONNECTIVITY AND ASSET MANAGEMENT PROJECT, SRI LANKA <i>W.M.S.N. Weerasekara, K.K.K. Sylva, S.M. Dissanayaka</i>	
10.10 – 10.25 hrs	ICSBE_62	GHG EMISSIONLESS OPEN DUMPSITE: A CIRCULAR ECONOMY APPROACH <i>S. Himanujahn, W.A.K.S. Fonseka, D.H.P. Kaushalya, M.B.T.D. De Silva, R.A.K.K. Perera, M. Vithanage, B.C.L. Athapattu</i>	
10.25 – 10.40 hrs	ICSBE_278	PRIORITIZING GREEN HUMAN RESOURCE MANAGEMENT PRACTICES TOWARDS ACHIEVING ORGANIZATIONAL SUSTAINABILITY FROM EXPERTS' PERSPECTIVES: A CONCEPTUAL PAPER <i>Mafruha Hossain, and Mohammad Thoufiqul Islam</i>	
10.40 – 10.55 hrs	ICSBE_47	A STUDY ON ADAPTATIONS OF CIRCULAR ECONOMIC CONCEPTS IN CONSTRUCTION INDUSTRY OF SRI LANKA <i>J.M.D.S.D. Jayamanna, S.N.C.M Dias, T.D. Denagama</i>	

17th December 2023

Room 6 (Hybrid)/ Session 02

Circular Economy Session

Join Zoom Meeting	https://zoom.us/j/97241148173?pwd=WGpPY2dXR1Z4RURJWFVhRW5rUWIBQT09		
	Meeting ID: 972 4114 8173 Passcode : 123782		
Session chair 1	Prof. Ajith De Alwis	Session Coordinator 1	Ms. Sajani Kolambage
Session chair 2	Dr. Mayuri Wijayasundara	Session Coordinator 2	Ms. Vishmi Gunathunga
Session chair 3	Ms. Anjulee Boralessa		
Time	Paper ID	Title	
11.45 - 12.00 hrs	ICSBE_18	RESOURCE MANAGEMENT IN IRRIGATION PROJECTS OF SRI LANKA USING PRINCIPLES OF CIRCULAR ECONOMY <i>K.A.G.G.K. Kumarasinghe, and K. K. K. Sylva</i>	
12.00- 12.15 hrs	ICSBE_136	APPLICATION OF CIRCULAR ECONOMIC CONCEPTS AT CONSTRUCTION WASTE MANAGEMENT (COWAM) PROJECT, DADALLA, SRI LANKA <i>B M M I Balasooriya and, K K K Sylva</i>	
12.15- 12.30 hrs	ICSBE_266	MANAGEMENT OF E-WASTE IN URBAN SRI LANKAN HOUSEHOLDS <i>A. S. M. Musharraf, G. P. Jayasiri</i>	
12.30 - 12.45 hrs	ICSBE_138	TRANSITIONS TO PAPERLESS GOVERNMENT OFFICES: AN ANALYSIS OF CHALLENGES AND RECOMMENDATIONS FOR SUPPORTING THE GREEN ECONOMY <i>Tilak De Silva</i>	

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