



THE
COLOMBO
CONFERENCE

The 02nd International Conference on
**UNIVERSITY-INDUSTRY COLLABORATIONS
FOR SUSTAINABLE DEVELOPMENT (ICSD)- 2025**

PROGRAM BOOK





The 2nd International Conference on
University-Industry Collaborations for Sustainable Development (ICSD)- 2025
Colombo, Sri Lanka | 9th - 10th May 2025

The 2nd International Conference on University-Industry Collaborations for Sustainable Development (ICSD 2025)

Vision

To create a global platform that inspires and empowers University-Industry collaborations, driving sustainable solutions, innovative technologies, and entrepreneurial strategies for sustainable development

Mission

To facilitate dialogue, knowledge exchange, and partnerships among academia, industry, and policymakers. By integrating cutting-edge research, practical insights, and visionary thinking, the conference seeks to enhance university curricula, strengthen business links, and catalyze the development of innovative sustainable solutions that promote environmental and socio-economic growth

09th – 10th May 2025, Colombo 07, Sri Lanka

PREFACE

Welcome to the Second International Conference on University-Industry Collaborations for Sustainable Development (ICSD 2025), also known as The Colombo Conference. This distinguished gathering catalyzes the exchange of cutting-edge ideas, innovative technologies, and entrepreneurial strategies within the realm of agro-industries. With a commitment to fostering sustainability, the conference aims to propel university curricula into new dimensions, fortify business ties, and cultivate a fertile ground for invention, innovation, and entrepreneurship. Contained within this book are the abstracts of research work spanning various sub-specialties, evidence of the diverse and impactful contributions made by scholars and practitioners alike. These abstracts are scheduled for presentation at parallel sessions from May 09th and 10th, 2025 at the gapHQ, Colombo 07, Sri Lanka. We extend our deepest appreciation to our esteemed keynote speakers, whose valuable insights have played a pivotal role in shaping the discourse on University-Industry Collaborations for Sustainable Development. The richness of this compilation is grateful much to the dedication and caliber of the contributing authors, who have presented research papers of exceptional quality. Each abstract featured in this book has undergone rigorous scrutiny by a panel of academic and professional experts, individuals distinguished in their respective fields. We express our sincere gratitude to these reviewers for their tireless efforts, which have elevated the scholarly standard of this collection. Acknowledgment is also due to the unwavering support and guidance provided by the local and international advisory committees, as well as the diligent members of the co-chairs committee. Their valuable input has been instrumental in arranging the success of this significant event. We extend our heartfelt thanks to all volunteers who have generously offered their time and expertise, contributing to the seamless execution of the conference. Moreover, we gratefully acknowledge the financial sponsorship generously provided by numerous organizations, whose support has been instrumental in ensuring the achievement of this international conference. It is our earnest hope, as editors, that this abstract book will serve as a valuable resource for the global research community engaged in studies related to University-Industry Collaborations for Sustainable Development. May the insights shared within these pages inspire and guide future endeavors toward a more sustainable and collaborative future.

Editors

Prof. Ranjith Dissanayake

Dr. Pradeep Gajanayake

The Second International Conference on University-Industry Collaborations for Sustainable Development (ICSD 2025) 09th and 10th May 2025, gapHQ, Colombo 07, Sri Lanka

Message from the Conference Co-Chairs

It is with great pleasure that we extend a warm welcome to all participants of the Colombo Conference – the Second International Conference on University-Industry Collaborations for Sustainable Development (ICSD 2025) in the vibrant city of Colombo, Sri Lanka. The chosen theme, "University Industry Collaborations for Sustainable Development," resonates deeply with the global imperative for fostering innovative and sustainable research to shape a brighter future. In organizing this conference, our vision is to create a dynamic convergence point for talents, knowledge, and dedication. We believe that this platform will serve as a crucible for the generation of groundbreaking ideas and the exchange of expertise among participants dedicated to the cause of sustainable global development. Our conference explores diverse sub-topics within the sphere of sustainable development, focusing on the intricate interplay of academia and industry. We anticipate discussions spanning a wide range of subjects, each contributing to the overarching goal of advancing sustainable research practices for the benefit of future generations. The selected, leading full papers of the Colombo Conference (ICSD 2025) will be published by Springer Nature under the book series Proceedings in Technology Transfer. All other accepted papers will be published in a special volume of proceedings with an international standard book number (ISSN). The choice of Colombo as our host city holds significance, as it is a city steeped in rich heritage, unique architecture, cultural diversity, and natural beauty. We hope that amidst the intellectually stimulating sessions, you find moments to relish the distinctive charm and climate of Colombo. Our heartfelt gratitude goes out to our distinguished guests, keynote speakers, authors, members of the international advisory committee, and the dedicated editorial committee. We extend sincere appreciation to our sponsors and all those who have generously volunteered their time and efforts to ensure the success of this pivotal event. As conference co-chairs, we are honored to be part of this collaborative journey towards sustainable development. We look forward to witnessing the flourishing exchange of ideas and forging lasting connections during this memorable event.

Prof. Ranjith Dissanayke
Prof. G. Yugantha Jayasinghe
Prof. Sujeeva Setunga
Prof. Dilanthi Amaratunga
Prof. Lasith Gunawardena
Prof. Irene Lill
Prof. Artūras Kaklauskas
Assoc. Prof. Sarintip Tantane
Asst. Prof. Sujinda Sriwattana
Assoc. Prof. Jörgen Sparf
Dr. Ravi Liyanage
Dr. Valsson Varghese

The Second International Conference on University-Industry Collaborations for Sustainable Development (ICSD 2025) 09th and 10th May 2025, gapHQ, Colombo 07, Sri Lanka

09 th May 2025					
Time	Room 1 (Hybrid)	Room 2 (Hybrid)	Room 3 (Physical)	Room 4 (Physical)	Room 5 (Online)
08.00 - 09.00	Registration				
09.00 - 10.30	Inauguration Ceremony				
10.30 - 11.00	Morning Refreshments				
11.00 - 13.00	Global Agro-Industry Forum	Innovative Approaches to Sustainable Food Product Development	Microplastics and Plastics: Challenges, Innovations, and Sustainable Solutions		
13.00 - 14.00	Lunch				
14.00 - 16.00	Circular Economy for Sustainable Development	Climate-smart Agriculture for a Resilient and Food-secure Future	Environmental Engineering Innovations for Sustainable Resource Management	Invention and Innovation	Emerging Technologies for Resilient Agroecosystems
16.00 - 16.30	Evening Refreshments				
18.30 - 22.00	Dinner (Only for Invitees)				
Room 1 Zoom Link	https://us06web.zoom.us/j/84698484187?pwd=IVMbr0tnQWwE9WNzE3TVyPyZdOYIWN.1 Meeting ID: 846 9848 4187 Passcode: 060425				
Room 2 Zoom Link	https://learn.zoom.us/j/97094447919?pwd=lzbfmEyrJHonHb1a2Wc35TuN3CnHIU.1 Meeting ID: 970 9444 7919 Passcode: F.Gr1!g.				
Room 5 Zoom Link	https://us05web.zoom.us/j/81253626290?pwd=BRANpdpLBYjopsWi4zpW5iEmr7ETWX.1 Meeting ID: 812 5362 6290 Passcode: Q53H5s				

10 th May Online Sessions					
Time	Room 1	Room 2	Room 3	Room 4	Room 5
10.00 -12.00	Circular Economy for Sustainable Development	Climate-smart Agriculture for a Resilient and Food-secure Future	Innovative Approaches to Sustainable Food Product Development	Microplastics and Plastics: Challenges, Innovations, and Sustainable Solutions	Innovative Technological and Material Advancements for Sustainable Industrial and Healthcare Applications
12.00 - 14.00	Interval				
14.00 - 16.00	Innovative Approaches to Sustainable Food Product Development	University-Industry Partnerships for Sustainable Development	Agroindustry's Trends, Patterns, and Developmental Impacts	Industrial Electronics	Environmental Engineering Innovations for Sustainable Resource Management
Room 1 Zoom Link	https://us06web.zoom.us/j/84698484187?pwd=IVMbr0tnQWwE9WNzE3TVyPyZdOYlWN.1 Meeting ID: 846 9848 4187 Passcode: 060425				
Room 2 Zoom Link	https://learn.zoom.us/j/97094447919?pwd=lzbfmEyrJHonHbl a2Wc35TuN3CnHIU.1 Meeting ID: 970 9444 7919 Passcode: F.Gr1!g.				
Room 3 Zoom Link	https://learn.zoom.us/j/94967266766?pwd=a3SATTWvuHQ5nYckNYdj0mk4CBo3m2.1 Meeting ID: 949 6726 6766 Passcode: t4j4%CP?				
Room 4 Zoom Link	https://us05web.zoom.us/j/89948367534?pwd=hKDHnoUMS470gOmIOqP3pPGhz0CbwN.1 Meeting ID: 899 4836 7534 Passcode: C0eu3H				
Room 5 Zoom Link	https://us05web.zoom.us/j/81253626290?pwd=BRANpdpLBYjopsWi4zpW5iEmr7ETWX.1 Meeting ID: 812 5362 6290 Passcode: Q53H5s				

09th May 2025 / 09.00 – 10.30 hrs	
Inauguration Ceremony	
Join Zoom Meeting	https://us06web.zoom.us/j/84698484187?pwd=IVMbr0tnQWwE9WNzE3TVyPyZdOYlWN.1
	Meeting ID: 846 9848 4187 Passcode: 060425
08.00 - 09.00	Registration
09.00 - 09. 05	Commencement of the Opening Ceremony
09.05 - 09. 08	Lighting the Oil Lamp
09.08 - 09.10	National Anthem
09.10 - 09. 20	Welcome Address by Prof. Emeritus Ranjith Dissanayake
09.20 - 09.40	Speech by Chief Guest Eng. Namal Peiris
09.40 - 09.45	Keynote Speaker Introduction by Dr. H. K. B.S. Chamara
09.45 - 10.10	Keynote Address by Prof. Guttila Jayasinghe
10.10 - 10.15	Vote of Thanks by Dr. Pradeep Gajanayake

09th May 2025 / 11.00 – 13.00 hrs	
Room 01 - Session 01 (Hybrid)	
Global Agro-Industry Forum	
Join Zoom Meeting	https://us06web.zoom.us/j/84698484187?pwd=IVMbr0tnQWwE9WNzE3TVyPyZdOYIWN.1
	Meeting ID: 846 9848 4187 Passcode: 060425
11.00 - 11.05	Commencement of the Global Agro-Industry Forum
11.05 - 11.10	Welcome Address by Prof. Emeritus Ranjith Dissanayake, University of Peradeniya
11.10 - 11.35	Opening Key Lecture by Prof. Buddhi Marambe, University of Peradeniya
11.35 – 12.00	Second Key Lecture by Prof. Dilantha Fernando, University of Manitoba, Canada
12.00 - 12.55	<p>Panel Discussion on Synergizing Academia, Government, Industry, and Research to Transform Sri Lanka's Agro-Industry</p> <p><i>Panel Members:</i> Prof. Guttala Jayasinghe, University of Ruhuna Dr. Thushara Wickramaarachchi, Ministry of Agriculture, Livestock, Land and Irrigation Dr. Sepalika Sudasinghe, National Science Foundation Mr. Tharaka Jayasinghe, A. Baur & Co. (Pvt.) Ltd</p>
12.55 - 13.00	Closing Remarks by Prof. Chaminda Bandara, University of Peradeniya

09 th May 2025 / 11.00 – 13.00 hrs		
Room 02 - Session 01 (Hybrid)		
Innovative Approaches to Sustainable Food Product Development		
Join Zoom Meeting	https://learn.zoom.us/j/97094447919?pwd=lzbfNjYrJHh1a2Wc35TuN3CnHIU.1	
	Meeting ID: 970 9444 7919 Passcode: F.Gr1!g.	
Session Chairs		
Dr. Rumesh Liyanage University of Sri Jayewardenepura Sri Lanka		Dr. Amani Wijesinghe Wayamba University of Sri Lanka Sri Lanka
Mr. Sisitha Ramachandra Sri Lanka Technology Campus Sri Lanka		
Time	Paper ID	Title
11.00 – 11. 20	Key Lecture	The Role of Sensory Science and Technology in Sustainable Development and Disaster Management Dr. Rumesh Liyanage University of Sri Jayewardenepura Sri Lanka
11.20 – 11.35	ICSD_094	DETERMINATION OF THE KNOWLEDGE, ATTITUDES, AND UTILIZATION OF COOKING OIL AMONG FAMILIES OF UNIVERSITY UNDERGRADUATE STUDENTS IN SELECTED FACULTY, SRI LANKA <i>S. A. K.S. Subasingha, Renuka Jayatissa, D. Helani, H. Munasinghe, P.G.S.M. De Silva, A. Buddhika G. Silva</i>
11.35 – 11.50	ICSD_142	APPLICATION OF HEAT PUMP DRYING IN A DEEP-BED REDUCING THE FINAL MOISTURE CONTENT OF REFUSED TEA <i>S.M.J.R. Sangakkara, K.S.P. Amaratunga, H.K.P.P. Kariyawasam, C.A. Kumarage</i>
11.50 – 12.05	ICSD_179	DEVELOPMENT OF NUTRITIOUS CRACKER FROM SEA CUCUMBER (HOLOTHURIA SCABRA): A SUSTAINABLE ALTERNATIVE PROTEIN SOURCE <i>W.T.N. Rodrigo, N.M. Wijesundara, A.S. Mahaliyana</i>
12.05 – 12.20	ICSD_189	CEYLON CINNAMON INCORPORATED DOG FOOD: AN OUTCOME OF INDUSTRY CONTRACTED UNIVERSITY RESEARCH, INNOVATION AND COMMERCIALIZATION <i>I.D. Weeraratna, D.A.M. De Silva, R.K. Mutucumarana, R.K.C. Jeewanthi, W.A.S.H.Senevirathne, K.M.S.A.K. Dehideniya, J.M.U.S. Wijenayake</i>
12.20 – 12.35	ICSD_218	ELECTROCHEMICAL EVALUATION OF TiO ₂ -INTEGRATED CARBON ELECTRODES IN AQUEOUS AND APROTIC POLYMERIC IONIC LIQUID ELECTROLYTES FOR ENERGY STORAGE APPLICATIONS <i>U. L. I. Udayantha, R. D. A. A. Rajapaksha</i>
12.35 – 12.50	ICSD_010	DEVELOPMENT OF ANTIOXIDANT RICH CARBONATED BEVERAGE USING POMEGRANATE (<i>Punica granatum</i>) ARILS OLEORESIN <i>M.R.D. Silva, C.V.L. Jayasinghe, G.D.M.P. Madhusankha</i>
12.50 – 01.05	ICSD_032	ANTIDIABETIC AND ANTIOBESITY POTENTIAL OF UNDERUTILIZED FLOURS AS ALTERNATIVES TO REFINED WHEAT FLOUR <i>N.S. Nirmani, C. Jayathilake, R. Liyanage, I. Wickamasinghe, M.A. Jayasinghe</i>
Session Coordinator		Ms. Dhanushika Attigala +94 77 650 4163

09th May 2025 / 11.00 – 13.00 hrs		
Room 03 - Session 01 (Physical)		
Microplastics and Plastics: Challenges, Innovations, and Sustainable Solutions		
Session Chairs		
Dr. Yohan Mahagamage The Open University of Sri Lanka Sri Lanka	Dr. Sajith Edirisinghe University of Sri Jayawardenepura Sri Lanka	Dr. Uthpala Jayawardene The Open University of Sri Lanka Sri Lanka
Time	Paper ID	Title
11.00 – 11. 20	Key Lecture	Macro to Micro: Understanding Plastic Contamination and Driving Innovations for a Cleaner Planet Dr. Yohan Mahagamage The Open University of Sri Lanka
11.20 – 11.35	ICSD_006	EVALUATING THE IMPACT OF KNOWLEDGE ON PUBLIC ATTITUDES TOWARD SUSTAINABLE ALTERNATIVES TO PLASTIC <i>S.N. Kalubadanage, J.N. Ranasinghe, J.P. Madanayaka</i>
11.35 – 11.50	ICSD_036	EFFECTIVENESS OF ETHYLENE ABSORBENT SACHETS IN EXTENDING THE SHELF LIFE OF TOMATOES AT DIFFERENT MATURITY STAGES UNDER AMBIENT STORAGE CONDITION <i>B.V.A.M.Ranasinghe, W.M.S.S.K.Weerasinghe, M.Senevirathne</i>
11.50 – 12.05	ICSD_037	AN ANALYSIS OF CONSUMER WILLINGNESS TO PAY FOR SUSTAINABLE BEVERAGE PACKAGING IN KURUNAGALA DISTRICT <i>H.M.S.A,Bandara, A.A.D.S.I.Wijewardhana, H.M.S.Maduwashini, R.S.N.Rajapaksha, R.K.C.E.D.Bnadara, K.V.D.H.R.Karawita</i>
Session Coordinator		Eng. Ravishka Iroshana +94 775405870

09 th May 2025 / 14.00 – 16.00 hrs		
Room 01 - Session 02 (Hybrid)		
Circular Economy for Sustainable Development		
Join Zoom Meeting	https://us06web.zoom.us/j/84698484187?pwd=IVMbr0tnQWwE9WNzE3TVyPyZdOYIWN.1	
	Meeting ID: 846 9848 4187 Passcode: 060425	
Session Chairs		
Dr. K. P. P. Udayagee University of Sri Jayawardenepura Sri Lanka		Dr. Thilanka Ariyawansa University of Colombo Sri Lanka
Dr. Pasan Bandara University of Sri Jayewardenepura Sri Lanka		
Time	Paper ID	Title
14.00 – 14.20	Key Lecture	Closing the Loop by Turning Biobased Sludge into Biochar through Industrial Symbiosis Dr. KPP Udayagee - University of Sri Jayawardenepura
14.20 – 14.35	ICSD_079	INNOVATIVE TECHNOLOGIES AND SUSTAINABLE STRATEGIES FOR GLOBAL WASTE MANAGEMENT AND RECYCLING: A COMPREHENSIVE REVIEW <i>R.M.N.T. Rathnayaka, N.J. Dissanayake, H.M.R. Nimeshika, M.C.M. Warnakulasuriya, K. M. C. Tharupath, W. G. M. Randika, G. Y. Jayasinghe</i>
14.35 -14.50	ICSD_146	ADVANCING CIRCULARITY IN THE CONSTRUCTION SECTOR: A SYSTEMATIC REVIEW OF INNOVATIVE PRACTICES, DIGITAL TECHNOLOGIES, AND POLICY FRAMEWORKS FOR SUSTAINABLE RESOURCE MANAGEMENT <i>M.A.D.K. Jayathilaka, T.S. Ukwatte, G.Y. Jayasinghe</i>
14.50 – 15.05	ICSD_149	STRATEGIC IMPORTANCE OF DEVELOPING A SRI LANKAN OCEAN TEST CENTRE (SLOT) FOR TROPICAL MARINE ENERGY INNOVATION <i>H.D.A. Dilrukshi, K.A.C. Udayakumar, R.L.K. Lokuliyana</i>
15.05 – 15.20	ICSD_163	CIRCULAR ECONOMY FOR RESILIENT DISASTER RECOVERY: STRATEGIES FOR SUSTAINABLE REBUILDING AND COMMUNITY EMPOWERMENT <i>V.Nirthani, A.H Weerakoon, C.S.Bandara, G.Y. Jayasinghe</i>
15.20 – 15.35	ICSD_195	STUDY OF SONICATION TIME EFFECT ON GRAPHITE PARTICLE SIZE AND DISPERSION STABILITY IN AQUEOUS MEDIA <i>A D L Attigala, J A K Pramod, D C Manatunga, N D Silva</i>
15.35 – 15.50	ICSD_166	DEVELOPMENT OF SUSTAINABLE AND ECO-FRIENDLY BRICKS USING DRIED SLUDGE AND WET BOTTOM ASH DISCARDED FROM APPAREL INDUSTRY WASHING AND DYEING PLANTS <i>M.J. Chiranga, Jayasinghe I.C.</i>
15.50 – 16.05	ICSD_202	PROMOTING ENVIRONMENTAL SUSTAINABILITY IN SRI LANKA’S APPAREL SECTOR THROUGH EFFECTIVE POST CONSUMER WASTE MANAGEMENT AND CIRCULAR ECONOMY PRACTICES: A REVIEW <i>D.P.T.T.Silva</i>
Session Coordinator		Eng. Sanjeev Dananjana +94 773530403

09 th May 2025 / 14.00 – 16.00 hrs		
Room 02 - Session 02 (Hybrid)		
Climate-smart Agriculture for a Resilient and Food-secure Future		
Join Zoom Meeting	https://learn.zoom.us/j/97094447919?pwd=lzbfNjYrJHh1a2Wc35TuN3CnHIU.1	
	Meeting ID: 970 9444 7919 Passcode: F.Gr1!g.	
Session Chairs		
Dr. H.K.B.S. Chamara University of Sri Jayewardenepura Sri Lanka		Dr. D. M. S. S. Daundasekara University of Peradeniya Sri Lanka
Dr. H. K. J P. Wickramasinghe Wayamba University of Sri Lanka Sri Lanka		
Time	Paper ID	Title
14.00 – 14.20	Key Lecture	Harnessing Technological Innovations to Enhance Climate Resilience in Agriculture Dr. H.K.B.S. Chamara, University of Sri Jayewardenepura
14.20 – 14.35	ICSD_174	ADOPTION OF SOILLESS CULTIVATION IN URBAN SRI LANKA: PUBLIC PERCEPTION, BARRIERS, AND OPPORTUNITIES <i>H.N.N.Haputhota, T.S.Ukwatte, G.Y.Jayasinghe</i>
14.35 -14.50	ICSD_186	BIOSTIMULANT POTENTIAL OF A MICROALGAL-BASED LIQUID BIOFERTILIZER ON RICE (<i>Oryza sativa</i>) <i>H.A.D.R.P. Sirimanna, A.D.S.N.P. Athukorala</i>
14.50 – 15.05	ICSD_047	ASSESSMENT OF TIMBER AUTHENTICITY IN SRI LANKA: A CASE STUDY ANALYSIS <i>C. K. Muthumala, G. Y. Jayasinghe, K.P.L. Nishantha Patabandi</i>
15.05 – 15.20	ICSD_056	ENHANCING THE DURABILITY OF FINGER- JOINTED PINE (<i>Pinus caribaea</i>) WOOD TO MITIGATE CLIMATE CHANGE <i>C. K. Muthumala, K.K.I.U ArunaKumara, De Silva Sudhira, P.L.A.G Alwis</i>
15.20 – 15.35	ICSD_216	INTEGRATING ARTIFICIAL INTELLIGENCE FOR EARLY DETECTION OF BLISTER BLIGHT DISEASE IN TEA PLANTATIONS: A SYSTEMATIC LITERATURE REVIEW <i>R.H.V. Sathsari, N.W. Gunasekara, W.G.M. Randika,T.A.N.T. Perera, G.Y. Jayasinghe</i>
15.35 – 15.50	ICSD_212	INVESTIGATING TEA PLANT HEALTH MONITORING AND YIELD VARIABILITY PREDICTION USING MODIS-DERIVED NDVI: A SYSTEMATIC REVIEW <i>K.V.A.M. Madhushan, T.A.N.T. Perera, N.W. Gunasekara, W.G.M. Randika, G.Y. Jayasinghe</i>
15.50 – 16.05	ICSD_048	STAKEHOLDERS IN FLOOD RISK MANAGEMENT: A CASE STUDY OF THE NILWALA RIVER IN SRI LANKA. <i>W.N.K Hapuwaththa, HMM Herath</i>
Session Coordinator		Ms. Sadeepa Dinali +94 71 649 6485

09 th May 2025 / 14.00 – 16.00 hrs		
Room 03 - Session 02 (Physical)		
Environmental Engineering Innovations for Sustainable Resource Management		
Session Chairs		
Dr. Rohan Dassanayake University of Sri Jayewardenepura Sri Lanka	Dr. Kasun Nandapala University of Vocational Technology Sri Lanka	Dr. Mihiri Seneviratne Open University of Sri Lanka Sri Lanka
Time	Paper ID	Title
14.00 – 14.15	ICSD_027	SUSTAINABLE BIOCHAR PRODUCTION VIA CO-PYROLYSIS OF TEXTILE DYEING SLUDGE AND WASTE COOKING OIL FOR METHYLENE BLUE REMOVAL <i>K.D.H. Nayanathara, H. M. T. C. Herath, W. D. C. Udayanga, S. Pathirana</i>
14.15 – 14.30	ICSD_067	ADAPTABILITY OF EMERGING TECHNOLOGIES BY SRI LANKAN CONSTRUCTION SMES: A SOCIAL SUSTAINABILITY PERSPECTIVE <i>S.M.H. Fernando, P.H.G.M.A. Ranasinghe, H.D. Subhasingha</i>
14.30 -14.45	ICSD_076	MECHANICAL PROPERTIES OF CEMENT PASTE SAMPLES WITH PARTIAL REPLACEMENT OF OPC BY SUGARCANE BAGASSE ASH IN SRI LANKA <i>H.D.K.U. Premathilaka, C. Kulasuriya, M.W.T.C. Dayarathne</i>
14.45 – 15.00	ICSD_092	SOLUTION FOR URBAN SUSTAINABILITY: A COLLABORATIVE APPROACH FOR DISASTER MANAGEMENT AND COMMUNITY AWARENESS <i>H. Sawandi, L. Kaveesha, S. Sankalpa, F. Hasan, A. Jayasinghe</i>
15.00 – 15.15	ICSD_102	EVALUATION OF ENVIRONMENTAL PERFORMANCE IN HYDROTHERMAL CARBONIZATION OF SEWAGE SLUDGE: COMPARISON WITH CURRENT MANAGEMENT PRACTICES IN SRI LANKA <i>G.R.P.S. Karunarathne, P.A Koliyabandara</i>
15.15 – 15.30	ICSD_117	SELECTION OF APPROPRIATE STANDARD ANALYTICAL METHODS OF KEY SURFACE WATER QUALITY PARAMETERS IN THE MUTHURAJAWELA WETLAND <i>S. J. S. Bandara, R. U. K. Piyadasa, G. R. P. S. Karunarathne, E. R. Gunawardhana</i>
15.30 – 15.45	ICSD_040	OPTIMIZING NATIONALLY DETERMINED CONTRIBUTIONS IMPLEMENTATION THROUGH AI AND GRAPH DATA MODELING <i>P.M.P.C. Gunathilake, T. Hewawasam, A.A.J.K. Gunatilake</i>
15.45 – 16.00	ICSD_114	CONTRIBUTION OF SRI LANKAN HIGHER EDUCATION INSTITUTES FOR ENGINEERING EMPLOYABILITY SKILLS DEVELOPMENT <i>H. M. A. D. K. Herath, R. A. Ekanayake</i>
Session Coordinator		Eng. Ravishka Iroshana +94 775405870

09 th May 2025 / 14.00 – 16.00 hrs		
Room 4 - Session 02 (Physical)		
Invention and Innovation		
Session Chairs		
Prof. Ayantha Gomes Sri Lanka Institute of Information Technology Sri Lanka	Dr. Isuru Wijayawardane The Open University of Sri Lanka Sri Lanka	Dr. Dhanushika Manatunga University of Sri Jayewardenepura Sri Lanka
Time	Paper ID	Title
14.00 – 14.15	ICSD_082	ENHANCING PVDF ULTRAFILTRATION MEMBRANES WITH MO 2 TIALC 2 MAX PHASE FOR SUSTAINABLE WATER TREATMENT APPLICATIONS <i>H.M.S.N. Bandara, W.G.C Kumarage, W.J.M Samaranayake</i>
14.15 – 14.30	ICSD_091	BIG DATA-DRIVEN PEDESTRIAN ANALYTICS FOR SUSTAINABLE URBAN MOBILITY: INNOVATION FOR PEDESTRIAN HOTSPOT DETECTION FOR WALKABLE AND ENVIRONMENTALLY FRIENDLY CITIES. <i>W. S. H. Sawandi, A. B. Jayasinghe</i>
14.30 -14.45	ICSD_100	DEVELOPMENT OF A FRICTIONLESS FLYWHEEL ENERGY STORAGE SYSTEM FOR DOMESTIC APPLICATIONS IN SRI LANKA <i>H.K.G.S.H. Hathurusinghe, H.P.M.C.L. Pathirathna, W.G.R.T. Bandara, G.I.T. Priyadarshana, I.P.M. Wickramasinghe 2, B.J.C.L. Jayathunga 3, M.R.H.E. Bandara</i>
14.45 – 15.00	ICSD_125	NANOCOCRYSTAL STRATEGY TO IMPROVE THE RELEASE KINETICS OF ACTIVE PHARMACEUTICAL INGREDIENTS <i>Dylan G. Ramanan, Nadeesh M. Adassooriya</i>
15.00 – 15.15	ICSD_219	IDENTIFYING OPTIMAL VEGETATION INDICES AND REMOTESENSING METHOD FOR ACCURATE YIELD PREDICTION IN SRI LANKAN TEA PLANTATIONS: A SYSTEMATIC REVIEW <i>R.M.M.N. Ranasingha, W.G.M. Randika, W.B.M.A.C. Bandara, G.Y. Jayasinghe</i>
15.15 – 15.30	ICSD_097	A WEB-BASED MATERNAL CARE SYSTEM FOR MIDWIVES AND EXPECTANT MOTHERS IN SRI LANKA <i>M.K. Yehan Lakwindu, D.B. Mewan Jayathilake, Bhashini Wijewickrama</i>
15.30 – 15.45	ICSD_151	MACHINE LEARNING FOR EARLY DETECTION OF MOTOR DYSFUNCTION IN PARKINSON’S DISEASE USING 6-AXIS IMU DATA <i>T. Nanayakkara, K.Samarawickrama</i>
Session Coordinator		Eng. Hashan Thilakarathna +94 71 517 4147

9 th May 2025 / 14.00 – 16.00 hrs		
Room 05 - Session 02 (Online)		
Emerging Technologies for Resilient Agroecosystems		
Join Zoom Meeting	https://us05web.zoom.us/j/81253626290?pwd=BRANpdpLBYjopsWi4zpW5iEmr7ETWX.1	
	Meeting ID: 812 5362 6290 Passcode: Q53H5s	
Session Chairs		
Prof. S. Wijetunga University of Ruhuna Sri Lanka		Dr. Gayan Amarasooriya Uva Wellassa University Sri Lanka
		Dr.Chinthaka Bandara Karalliyadda Rajarata University of Sri Lanka Sri Lanka
Time	Paper ID	Title
14.00 – 14.15	ICSD_199	INTEGRATION OF DRONE-BASED MULTISPECTRAL IMAGING, MACHINE LEARNING, AND IOT FOR EARLY DETECTION AND MONITORING OF FUSARIUM WILT IN BANANA CULTIVATION: A COMPREHENSIVE SYSTEMATIC REVIEW <i>W.G.M. Randika, M.C. Karunadasa, W.B.M.A. Bandara, Kazuhito Sakai, G.Y. Jayasinghe</i>
14.15 – 14.30	ICSD_197	APPLICATION OF MACHINE LEARNING FOR EARLY DETECTION OF FUSARIUM WILT (PANAMA WILT DISEASE) IN BANANA (MUSA SPP.)-A SYTEMATIC REVIEW <i>H.J.A Rupasingha, W.G.M Randika, W.B.M.A.C. Bandara, G.Y. Jayasinghe</i>
14.30 -14.45	ICSD_162	A REVIEW ON CLIMATE - SMART AGRICULTURE (CSA) FOR CLIMATE CHANGE ADAPTATION: EMERGING TRENDS, BENEFITS, AND CHALLENGES <i>S.M.A.B. K. Samarakoon, N. Saheedha, J.A.S.G Randimali, R.M.B.M Rathnayake, W.M.D.S. Abeyrathne, H.G.S.C. Wickramasooriya, O.D.I.P Dissanayake</i>
14.45 – 15.00	ICSD_073	HYDROLOGICAL MODELING IN TROPICAL RIVER BASINS: A SYSTEMATIC REVIEW OF SWAT APPLICATIONS FOR RUNOFF AND SOIL EROSION ASSESSMENT <i>M.M.S.T. Jayamali, T.A.N.T. Perera, G.Y. Jayasinghe</i>
15.00 – 15.15	ICSD_144	ROOFTOP AGRICULTURE FOR URBAN RESILIENCE: TRENDS, SUITABILITY, AND IMPACTS <i>T.S. Ukwaththa, H.T. Rupasinghe, G.Y. Jayasinghe</i>
15.15 – 15.30	ICSD_123	SWOT ANALYSIS ON CIRCULAR ECONOMY PRACTICES IN FISHERIES AND AQUACULTURE SECTOR IN SRI LANKA; A CASE STUDY IN SOUTHERN COASTAL BELT OF SRI LANKA. <i>M.C. Karunadasa, W.G.M. Randika, E.R.M.S. Ekanayake, T.N. Samarakkody, R.A.M. Chandana, R.H.A.M.D.T.R. Thilakasiri, G.G.N. Thushari, G.Y. Jayasinghe, U. Kumarasinghe</i>
15.30 – 15.45	ICSD_139	REVITALIZING SUSTAINABLE AGRICULTURE AND FOOD SYSTEMS: A SYSTEMATIC REVIEW OF CIRCULAR STRATEGIES WITH BIOFERTILIZERS, BIOCONTROL AGENTS, AND PRECISION TECHNOLOGIES <i>W.M.W.S.S. Gnanarathne, E.M.N.N. Nawarathna, N.W. Gunasekara, T.A.N.T. Perera, G.Y. Jayasinghe</i>
Session Coordinator		Ms. Resheeka Ariyaratne +94 75 0254258

10 th May 2025 / 10.00 -12.00 hrs		
Room 01- Session 01 (Online)		
Circular Economy for Sustainable Development		
Join Zoom Meeting	https://us06web.zoom.us/j/84698484187?pwd=IVMbr0tnQWwE9WNzE3TVyPyZdOYIWN.1	
	Meeting ID: 846 9848 4187 Passcode: 060425	
Session Chairs		
Dr. K. P. P. Udayagee University of Sri Jayawardenepura Sri Lanka	Dr. Renuka Ariyawansha Sri Lanka Technological Campus Sri Lanka	A/Prof. Shalini Yadev Rabindranath Tagore University Associate Professor India
Time	Paper ID	Title
10.00 – 10.15	ICSD_060	CHALLENGES IN PAPER RECYCLING IN SRI LANKA: ANALYSING BARRIERS AND IDENTIFYING PRACTICAL SOLUTIONS FOR ENHANCED RECYCLING <i>E.A.R.N. Nadinya, M.A.M.A. Shahan, G.N.I. Wimalaweera, R. Danuharan, and M.A.N.S.Jayarathna</i>
10.15 – 10.30	ICSD_128	INNOVATIVE WET WASTE DRYING: A SUSTAINABLE AND AUTOMATED APPROACH <i>M.G.O.I. Mihiradha, P.G.C.D. Madushika, M.A. Poornima, P.D.Y. Sumangali, A.A.G.S.R. Kumari, L.H.N. De Silva</i>
10.30 – 10.45	ICSD_148	POTENTIAL, CHALLENGES, AND STRATEGIC IMPLEMENTATION OF FLOATING SOLAR PHOTOVOLTAIC (FPV) TECHNOLOGY IN SRI LANKA <i>PMSR Muhandiram</i>
10.45 – 11.00	ICSD_157	ASSESSING THE ECONOMIC VALUE OF GREEN SPACES: A LAND VALUATION APPROACH IN COLOMBO DISTRICT, SRI LANKA <i>D.M.W.S.H. Dissanayake, W.A.M. Fernando, J.C. Edirisinghe</i>
11.00 – 11.15	ICSD_155	OPTIMIZATION AND EVALUATION OF OILY WASTEWATER TREATMENT FOR SHIPS: A CASE STUDY AT SUPREME PETRO LANKA (PVT) LTD, SRI LANKA <i>R.A.R. Dissanayake, H.Y.A. Nandana, H.Y.K.S. De Silva, D.R.I.B. Werellagama, H.Y.S. Kavinda</i>
11.15 – 11.30	ICSD_203	DEVELOPMENT OF A NATURAL PIGMENT-BASED REAL-TIME INDICATOR FOR FOOD SPOILAGE DETECTION <i>P.M. Minoli, D.N. Liyanage</i>
11.30 – 11.45	ICSD_160	UNLOCKING THE POTENTIAL FOR CIRCULAR ECONOMY IN THE TEA INDUSTRY: A SYSTEMATIC REVIEW OF LIFE CYCLE ASSESSMENT, RESOURCE OPTIMIZATION, AND EMISSION REDUCTION STRATEGIES <i>E.R.M.S. Ekanavake, W.B.M.A.C. Bandara, K.T. Arivawansha</i>

11.45 – 12.00	ICSD_107	<p>INVESTIGATION OF THE CARBON EMISSION REDUCTION TARGETS TOWARDS SUSTAINABILITY -A FOCUS ON 3PL COMPANIES IN SRI LANKA</p> <p><i>K.V.G.T. Erandika, G.D.N. Perera, K.B.T.N.P. Pallawala, M.M.A.C. Wijesinghe, N.Karunaratna, N. Kalansuriya</i></p>
Session Coordinator		Ms. Sajani Kolambage +94 71 5642762

10 th May 2025 / 10.00 -12.00 hrs		
Room 02- Session 01 (Online)		
Climate-smart Agriculture for a Resilient and Food-secure Future		
Join Zoom Meeting	https://learn.zoom.us/j/97094447919?pwd=lzbfNjYrJHh0bHh1a2Wc35TuN3CnHIU.1	
	Meeting ID: 970 9444 7919 Passcode: F.Gr1!g.	
Session Chairs		
Dr. H.K.B.S. Chamara University of Sri Jayewardenepura Sri Lanka		Dr. Kumudu Priyadarshani Perera Kopiyawattage University of Peradeniya Sri Lanka
Dr. N. E. Wedamulla Uva Wellassa University Sri Lanka		
Time	Paper ID	Title
10.00 – 10.15	ICSD_191	MORPHOLOGICAL CHARACTERIZATION OF EX-SITU CONSERVED SWEET POTATO ACCESSIONS <i>E.W.D.M. Nimalarathna, E.S.C. Edirisinghe, J.P. Eeswara, C.H. Denagamage, D.M.T.S. Dassanayake, P.H.G.H.Y. Weeraseskara</i>
10.15 – 10.30	ICSD_193	IMPACT OF NATURAL AGING ON THE PHYSICOCHEMICAL PROPERTIES OF WHEAT FLOUR DURING SHORT-TERM STORAGE: IMPLICATIONS FOR BAKING QUALITY AND SHELF-LIFE OPTIMIZATION <i>V.S.Danthanarayana, M.A.J.Wansapala, J.W.A.U.Yasas</i>
10.30 – 10.45	ICSD_026	DESIGN AND DEVELOPMENT OF A SMART TECHNIQUE TO SCREEN THRIPS AND MITES IN FOLIAGE GROWN IN ENCLOSED ENVIRONMENTS. <i>U.J.D.R. Kumari, D.M.A.L. Gunarathna, H.K.P.P. Kariyawasam</i>
10.45 – 11.00	ICSD_031	INNOVATIVE ANTIMICROBIAL COATING WITH CITRUS MAXIMA PEEL AND AZADIRACHTA INDICA LEAF EXTRACTS FOR ANTHRACNOSE CONTROL IN SOUR BANANAS <i>S.A.D.Y.Ukwatta, S.M.A.A.Senevirathna</i>
11.00 – 11.15	ICSD_053	AGRONOMIC PERFORMANCE AND YIELD POTENTIAL OF TURMERIC (CURCUMA LONGA L.) UNDER OPEN FIELD AND GREENHOUSE CONDITIONS <i>W.M.C.S. Jayaweera, S. R. Amarasinghe, A. L. Ranawake</i>
11.15 – 11.30	ICSD_074	EFFECT OF SILICA GEL ON THE PROPERTIES OF MUNICIPAL WASTE COMPOST PELLETS <i>U.N. Werake, R.T.K. Ariyawansa, B. F.A. Basnayake</i>
11.30 – 11.45	ICSD_098	SMART IOT SYSTEM FOR OPTIMIZED INDOOR MUSHROOM CULTIVATION <i>H.M.N.S. Muthunayaka, S.T.G.D.S. Siyambalagasthane, B.G.W.J. Wimalasooriya, A.K.L. De Silva, N.N. Johar, J.A.A.C. Wijesinghe, P.M.D.T. Pathiraje</i>
11.45 – 12.00	ICSD_167	UTILIZING UAVS FOR AIR QUALITY MONITORING AND VEGETATION HELTH ASSESSMENT THROUGH VEGETATIVE INDICES TO MITIGATE FUTURE CLIMATE CHANGE: SYSTEMATIC REVIEW <i>M.C. Karunadasa, W.G.M. Randika, W.B.M.A.C. Bandara, R.U. Halwathura, G.Y. Jayasinghe</i>
Session Coordinator		Ms. Madhushani Gunawardhana +94 71 624 0453

10 th May 2025 / 10.00 -12.00 hrs		
Room 03- Session 01 (Online)		
Innovative Approaches to Sustainable Food Product Development		
Join Zoom Meeting	https://learn.zoom.us/j/94967266766?pwd=a3SATTWvuHQ5nYckNYdj0mk4CBo3m2.1	
	Meeting ID: 949 6726 6766 Passcode: t4j4%CP?	
Session Chairs		
Dr. Rumesh Liyanage University of Sri Jayewardenepura Sri Lanka		Dr. Amali Alahakoon University of Sri Jayewardenepura Sri Lanka
Mr. Buddhika Purnaka Siriwardena University of Colombo Sri Lanka		
Time	Paper ID	Title
10.00 – 10.15	ICSD_175	INNOVATIVE SOLUTIONS FOR CONVERTING FOOD WASTE IN TO VALUE- ADDED PRODUCTS AT MIDIGAMA FRUIT FARM <i>K.N.N. Silva, N. Tharanga, C. Udayanaga, P.H.N. Rasanjalee</i>
10.15 – 10.30	ICSD_182	DEVELOPMENT OF AN INSTANT HERBAL PORRIDGE INCORPORATING MORINGA LEAVES AND ASSESSMENT OF ITS PHYSICOCHEMICAL AND NUTRITIONAL PROPERTIES <i>S.S. Ranatunga, D.M.S.S. Daundasekara, W.A.P.D. Wedisinghe</i>
10.30 – 10.45	ICSD_185	EFFECT OF SODIUM ALGINATE- RICE BRAN ENCAPSULATION ON VIABILITY AND STORAGE STABILITY OF LACTOBACILLUS RHAMNOSUS GG IN COLD BAEI (AEGLE MARMELOS L. CORREA) FLOWER DRINK <i>A.P.Chandrasiri, A.M.M.U.Adikari</i>
10.45 – 11.00	ICSD_188	AN OPEN INNOVATION BUSINESS MODEL OF EXPORT ORIENTED ARTISANAL TEA SME: A CASE OF FOREST HILL TEA. <i>P.G.D. Nadeeshika, B.G.V. Lakshani, G.A.N. Dilthusha, H.K.S. Chathurangi, N.P. Kuruppu, M.W.S.G. Lakshitha, D.A.M De Silva</i>
11.00 – 11.15	ICSD_192	IMPACT OF DRYING METHODS ON WATER-SOLUBLE, INSOLUBLE, AND TOTAL DIETARY FIBER COMPOSITIONS OF FIVE SELECTED DIETARY FIBER-RICH PLANT SOURCES IN SRI LANKA <i>E.R. Gunawardhana, R. Liyanage, S.B. Navarathne, K.G.L.R. Jayathunge, R.M.N.A. Wijewardhana, S.A.I.D. Weerasinghe</i>
11.15 – 11.30	ICSD_200	DETERMINATION OF COMPOSITIONAL CHANGES OF BEE HONEY ACCORDING TO THE GEOGRAPHICAL LOCATION AND THE FEEDING PATTERN OF HONEY BEES <i>S.A.I.D. Weerasinghe, R. Liyanage, S.B. Navaratne, A.H.L.R. Nilmini, E.M.R.K.B. Edirisinghe, C.L. Liyanage, R. Coorey, E.R. Gunawardhana</i>
11.30 – 11.45	ICSD_201	DEVELOPMENT AND CHARACTERISATION OF VEGAN CHEESE ANALOGUE FROM SOYBEAN (GLYCINE MAX) AND YELLOW PEA (PISUM SATIVUM L.) MILK <i>A.G.A.P. Sarathchandra, P.G.I. Dias</i>
11.45 – 12.00	ICSD_208	EVALUATING THE POTENTIAL OF PUNARNAWA MANDURA (AN AYURVEDIC HERBAL-MINERAL DRUG) AS A PLANT-BASED DIETARY SUPPLEMENT FOR MANAGING IRON DEFICIENCY ANEMIA <i>G.D.T.K.Abesinghe, D.G.C.Wathsala, U.L.H.A.K Uswaththa, M.N.T.N Ravihari</i>
Session Coordinator		Ms. Sadeepa Dinali +94 71 649 6485

10 th May 2025 / 10.00 -12.00 hrs		
Room 04 - Session 01 (Online)		
Microplastics and Plastics: Challenges, Innovations, and Sustainable Solutions		
Join Zoom Meeting	https://us05web.zoom.us/j/89948367534?pwd=hKDHnoUMS470gOmlOqP3pPGhz0CbW.N.1	
	Meeting ID: 899 4836 7534 Passcode: C0eu3H	
Session Chairs		
Dr. Yohan Mahagamage The Open University of Sri Lanka Sri Lanka	Dr. H.B. Jayasiri Ocean University of Sri Lanka Sri Lanka	Dr. Manavi Ekanayake Wayamba University of Sri Lanka Sri Lanka
Time	Paper ID	Title
10.00 – 10.15	ICSD_145	UNDERGRADUATES’ AWARENESS AND PERCEPTIONS ON MICROPLASTICS: A CASE STUDY ON SABARAGAMUWA UNIVERSITY OF SRI LANKA <i>K.W.R. Himara, R.M.K.D.Rathnayake, N.W.J.V. Hansika, N.M.H.I.Nayakarathne</i>
10.15 – 10.30	ICSD_156	WILLINGNESS TO PAY FOR MARINE PLASTIC LITTER CLEANUPS IN SRI LANKA USING CONTINGENT VALUATION METHOD <i>T. A. D. Hasini, H. Pyoa</i>
10.30 – 10.45	ICSD_171	EXTRACTION OF CHITOSAN FROM SHRIMP EXOSKELETON AND DEVELOPMENT OF ECO-FRIENDLY BIOPLASTICS: A SUSTAINABLE WASTE- TO-RESOURCE APPROACH <i>A.S.S. Jahan, M.H. Haroon</i>
10.45 – 11.00	ICSD_206	A REVIEW ON MICROPLASTIC CONTAMINATION IN GROUNDWATER: SOURCES, PATHWAYS, AND IMPACTS ON PLANT AND HUMAN HEALTH <i>S.M.A.B. K Samarakoon, N. Saheedha, J.A.S.G Randimali, R.M.B.M Rathnayaka, W.M.D.S. Abeyaratne, H.G.S.C. Wickramasooriya, O.D.I.P Dissanayake</i>
11.00 – 11.15	ICSD_165	MANUFACTURING BRICKS FROM PLASTIC WASTE AND GLASS DUST AS A SUSTAINABLE WASTE MANAGEMENT STRATEGY <i>I.C. Jayasinghe, D.A.R.T. Weerasinghe</i>
11.15 – 11.30	ICSD_084	SINGLE-USE PLASTIC CONTROL IN SRI LANKA <i>N. S. Gamage</i>
Session Coordinator		Ms. Reshika Ariyaratne +94 75 0254258

10 th May 2025 / 10.00 – 12.00 hrs		
Room 05 - Session 01 (Online)		
Innovative Technological and Material Advancements for Sustainable Industrial and Healthcare Applications		
Join Zoom Meeting	https://us05web.zoom.us/j/81253626290?pwd=BRANpdpLBYjopsWi4zpW5iEmr7ETWX.1	
	Meeting ID: 812 5362 6290 Passcode: Q53H5s	
Session Chairs		
Dr. Gayan Priyadarshana University of Sri Jayewardenepura Sri Lanka		Dr. Yohani Ranasinghe University of Colombo School of Computing
Dr. Samanthi Seneviratne University of Ruhuna Sri Lanka		
Time	Paper ID	Title
10.00 – 10.15	ICSD_013	DEVELOPMENT AND EVALUATION OF ZnO NANOPARTICLE EMBEDDED ANTIMICROBIAL HERBAL SUNSCREEN SERUM FORMULATION WITH A HIGH SUN PROTECTION FACTOR <i>G.S. Gunawardana, Dr. R.S. Dassanayake</i>
10.15 – 10.30	ICSD_039	DEVELOPMENT AND CHARACTERIZATION OF SUSTAINABLE INSULATION PANELS FROM CASHEW SHELL COMPOSITE MATERIALS <i>T Thanukshan, KMTS Bandara, A Koswatta, RR Jayasinghe, A Thilaxsana</i>
10.30 – 10.45	ICSD_057	INVESTIGATION OF SELF-HEALING CONCRETE USING COCONUT WAX-EPOXY CAPSULES FOR THE ACCELERATION PHASE <i>H.M.A.L. Herath, U.B.S. Fernando</i>
10.45 – 11.00	ICSD_095	SOLVENT-ASSISTED MECHANOCHEMICAL MILLING OF CAFFEINE: NANOPARTICLE FORMATION AND POLYMORPHIC TRANSITIONS <i>H. M. Malithi M. Pitawala, Nadeesh M. Adassooriya</i>
11.00 – 11.15	ICSD_096	MECHANOCHEMICAL SYNTHESIS OF ASPIRIN NANOCRYSTALS FOR PHARMACEUTICAL APPLICATIONS <i>G.D.S.K. Garumanna, N.M. Adassooriya</i>
11.15 – 11.30	ICSD_220	EXPLORING THE ANTIOXIDANT AND ANTI-INFLAMMATORY PROPERTIES IN A CLINICALLY RECOGNIZED AYURVEDIC OIL <i>P.A. Sewwandi, A.G.N. Nirmali, S.P. Vithanage, A.I. Kuruppu</i>
11.30 – 11.45	ICSD_090	INTEGRATION OF SOLAR THERMAL ENERGY IN BIOMASS GASIFICATION SYSTEMS FOR SUSTAINABLE COOKING IN RURAL COMMUNITIES <i>N. Arunprakash, T. Pakeetharan, J.M.S.U. Bandara</i>
Session Coordinator		Ms. Dhanushika Attigala +94 77 650 4163

10 th May 2025 / 14.00 – 16.00 hrs		
Room 01 - Session 02 (Online)		
Innovative Approaches to Sustainable Food Product Development		
Join Zoom Meeting	https://us06web.zoom.us/j/84698484187?pwd=IVMbr0tnQWwE9WNzE3TVyPyZdOYlWN.1	
	Meeting ID: 846 9848 4187 Passcode: 060425	
Session Chairs		
Dr. Chathuri Senanayake University of Sri Jayewardenepura Sri Lanka	Dr. Gayan Chandrajith Uva Wellassa University Sri Lanka	Dr. Erandya Jayawardena University of Vocational Technology Sri Lanka
Time	Paper ID	Title
14.00 – 14.15	ICSD_043	AQUAPONICS AS A SUSTAINABLE FOOD PRODUCTION METHOD: FINANCIAL AND TECHNICAL FEASIBILITY STUDY OF A SMALL-SCALE SYSTEM <i>W. M. L. T. Warnasooriya, O. D. Samarakkody, U. A. D. P. Gunawardena</i>
14.15 – 14.30	ICSD_101	PREVALENCE AND DETERMINANTS OF MALNUTRITION AMONG CHILDREN UNDER FIVE IN URBAN COASTAL HOUSEHOLDS: A CASE STUDY OF MORATUWA, COLOMBO, SRI LANKA <i>M. Thenabadu, M.A.J. Wansapala, S.M.Y.N. Gunadasa</i>
14.30 – 14.45	ICSD_111	DEVELOPMENT OF READY TO SERVE (RTS) FLAVOURED COFFEE <i>Y.A.N.T. Jayasinghe, I.V.A.D.C.S. Induruwa, C.A.K. Dissanayake, T.E. Weerawardhane</i>
14.45 – 15.00	ICSD_129	FABRICATION OF CELLULOSE NANOFIBER THIN FILMS INTEGRATED WITH POLYVINYL ALCOHOL AS AN ECO-SOUND PACKAGING SOLUTION FOR FRUIT AND VEGETABLE PRESERVATION <i>B.P.S. Rajapakshe, R.A. Jayasinghe, A.H.L.R. Nilmini, V. Karunaratne, R.N. Wijesena, G. Priyadarshana</i>
15.00 – 15.15	ICSD_140	ENHANCING CONSUMER PREFERENCE OF RUBUSTA INSTANT COFFEE BY INCORPORATING MICROENCAPSULATED CINNAMON; DEVELOPMENT AND PHYSICO-CHEMICAL ASSESSMENT OF A FLAVOURED INSTANT COFFEE <i>Y.G.A.D.K. Bandara, I.V.A.D.C.S. Induruwa, B.A. Perera, H.R.P. Fernando, T.E. Weerawardena</i>
15.15 – 15.30	ICSD_169	APPLICATION OF GELATINISED AND NON-GELATINISED KITHUL (CARYOTA URENS) FLOUR AS A NATURAL STABILISER IN COCONUT MILK-BASED ICE CREAM <i>S.A.S.K. Samarathunga, P.G.I. Dias</i>
15.30 - 15.45	ICSD_170	FORMULATION AND QUALITY EVALUATION OF BEETROOT (BETA VULGARIS) INCORPORATED PROBIOTIC DRINKING YOGHURT <i>H.M.K.V.B. Herath, P.G.I. Dias</i>
15.45 – 16.00	ICSD_173	DEVELOPMENT OF BIODEGRADABLE CUTLERY FROM MANIHOT ESCULENTA PEEL STARCH AND CITRUS SINENSIS PEEL POWDER AS SUSTAINABLE SOURCES <i>G.L.T. Godagedara, S.M.A.A. Senevirathna</i>

16.00 – 16.15	ICSD_143	<p>PSYCHROMETRIC PROPERTIES OF AIR IN A CLOSED-LOOP HEAT PUMP DRYING SYSTEMS</p> <p><i>C.A. Kumarage, K.S.P. Amaratunga, H.K.P.P. Kariyawasam, S.M.J.R. Sangakkara</i></p>
Session Coordinator		Ms. Sajani Kolambage +94 71 5642762

10 th May 2025 / 14.00 – 16.00 hrs		
Room 02 - Session 02 (Online)		
University-Industry Partnerships for Sustainable Development		
Join Zoom Meeting	https://learn.zoom.us/j/97094447919?pwd=lzbfNjYrJHh0bHl1a2Wc35TuN3CnHIU.1	
	Meeting ID: 970 9444 7919 Passcode: F.Gr1!g.	
Session Chairs		
Prof. Lasith Gunawardhana University of Sri Jayawardenepura Sri Lanka	Dr Shakila Pathirana University of Kelaniya Sri Lanka	Ms. Udani Gunawardana University of Sri Jayawardenepura Sri Lanka
Time	Paper ID	Title
14.00 – 14.15	ICSD_028	DEVELOPMENT OF A PREDICTIVE REGRESSION MODEL FOR MOMENT COEFFICIENT ESTIMATION IN VERTICAL-AXIS WIND TURBINES (VAWT)S THROUGH SIMULATION <i>W.A.A. Lakshani, S. Thilakaratne, M.A.P.C. Piyathilaka</i>
14.15 – 14.30	ICSD_058	EVALUATE EXISTING LOGISTIC SOLUTIONS AND DEVELOP A SUSTAINABLE PACKAGING SOLUTION FOR LIVE HOT PAPER PLANTLETS <i>K.K. Biyagama, D.A.M de Silva, G. Jayasundara, H.H.L. Wasana</i>
14.30 – 14.45	ICSD_068	ROLE OF UNIVERSITY INDUSTRY COLLABORATION IN UPGRADING SMALL SCALE DRY FISH VALUE CHAIN OF SOUTH OF SRI LANKA <i>N.H. A Vikumsara, I.M. Wickramarathna, D.A.M. De Silva, M.M.S.C. Senevirathne</i>
14.45 – 15.00	ICSD_153	INNOVATIVE ECO-FRIENDLY SUPERHYDROPHOBIC COATING FOR POLYESTER UMBRELLA FABRICS: ENSURING LONGEVITY AND WATER RESISTANCE <i>V.G.C. Samanmali, A.R.M.A.M. Rathnayake, N. Dharmaweera, M.M.M.G.P.G. Mantilaka, T. Bandara,R.T. De Silva</i>
15.00 – 15.15	ICSD_217	ROLE OF RESEARCH INSIGHTS IN CONNECTING GENERATION Z VALUES AND CHARACTERISTICS TO TEA TRENDS <i>M.A.E.K. Jayasinghe, I.M. Wickramarathna, D.A.M. De Silva</i>
15.15 – 15.30	ICSD_064	MEASUREMENT OF TECHNICAL EFFICIENCY OF PUBLIC SCHOOLS IN SRI JAYAWARDHANAPURA EDUCATION ZONE <i>M.A.C. Hansamali, N. Kurukulasooriya</i>
15.30 - 15.45	ICSD_118	PROBLEM-BASED LEARNING: INSIGHTS FROM A STUDENT-LED TEA FESTIVAL IN SRI LANKA <i>W.G.C.D.K. Wedage, D.A.M. De Silva</i>
15.45 – 16.00	ICSD_046	RASIONAL SELECTION OF OPTIMAL DOPANT FOR TIO ₂ PHOTOCATALYSTS USING MULTI-CRITERIA DECISION-MAKING TECHNIQUES IN DYE DEGRADATION <i>E. S. K. Zoysa, N. M. Adassooriya</i>

16.00 – 16.15	ICSD_051	STUDY ON THE ADAPTABILITY OF E-TENDERING IN SRILANKAN CONSTRUCTION INDUSTRY <i>V. Mary Vithiya, T. Tharmiya</i>
Session Coordinator		Ms. Madhushani Gunawardhana +94 71 624 0453

10 th May 2025 / 14.00 – 16.00 hrs		
Room 03 - Session 02 (Online)		
Agroindustry’s Trends, Patterns, and Developmental Impacts		
Join Zoom Meeting	https://learn.zoom.us/j/94967266766?pwd=a3SATTWvuHQ5nYckNYdj0mk4CBo3m2.1	
	Meeting ID: 949 6726 6766 Passcode: t4j4%CP?	
Session Chairs		
Dr. Priyanga Kariyawasam University of Colombo Sri Lanka		Dr. K.M.R.D Abhayapala University of Sri Jayewardenepura Sri Lanka
Dr. Chamila Wijekoon University of Ruhuna Sri Lanka		
Time	Paper ID	Title
14.00 – 14.15	ICSD_035	OPTIMIZATION OF DEHYDRATION CONDITIONS FOR BLUE PEA (CLITORIA TERNATEA) AND MARIGOLD (TAGETES ERECTS L.) FLOWERS USING DIFFERENT DRYING TECHNOLOGIES <i>Y.K. Kavindi, A.B.G.C.J. De Silva, H.K.P.P. Kariyawasam, H.M.U.I. Medawatta</i>
14.15 – 14.30	ICSD_038	WILLINGNESS OF RURAL WOMEN TO ENGAGE IN HOME GARDENING-ORIENTED COLLECTIVE ACTION GROUPS: THE APPLICATION OF THEORY OF PLANNED BEHAVIOR: A STUDY WITH REFERENCE TO RURAL FARMING COMMUNITIES IN THE KOKKILAI LAGOON, MULLAITIVU <i>A Thilaxsana, Ganganee C Samaraweera, Anuradha Jayaweera, T Thanukshan</i>
14.30 – 14.45	ICSD_077	HOW PERCEIVED EXTERNAL AND INTERNAL FACTORS IMPACT THE MANAGEMENT ACCOUNTING PRACTICES IN SMES IN KURUNEGALA DISTRICT <i>M. F. Nusaika, D. G. M. L. W. Kumari, H.A. Thanzeel</i>
14.45 – 15.00	ICSD_081	PAPER TITLE THE ROLE OF VERTICAL AGRICULTURE AND URBAN FARMING IN SUSTAINABLE FOOD PRODUCTION: A PARTWAY TO URBAN FOOD SECURITY AND CLIMATE RESILIENCE <i>K.G.S. Nimasha, D.R. Lakprabha, G.Y. Jayasinghe</i>
15.00 – 15.15	ICSD_105	IMPACT OF URBANIZATION ON FLORICULTURE: TRENDS AND SUSTAINABILITY – A REVIEW <i>W. G. I. Madushani, R. M. Y. I. Rathnayaka, D. L. C. K. Fonseka</i>
15.15 – 15.30	ICSD_109	ADVANCEMENTS IN CLIMATE-RESILIENT CROPS: TRENDS, CHALLENGES, AND THE PATH FORWARD FOR SUSTAINABLE AGRICULTURE <i>R.M.Y.I Rathnayake, W.G.I Madushani, D.L.C.K Fonseka</i>
15.30 - 15.45	ICSD_124	SMART FARMING AND MARKETPLACE SOLUTIONS <i>C.S. Wijetunga, M.A.H.K. Perera, W. C. Deshapriya, B. Wijewickrama</i>
15.45 – 16.00	ICSD_134	BARRIERS AND ENABLERS OF DIGITAL PLATFORM ADOPTION FOR ECONOMIC EMPOWERMENT IN RURAL SRI LANKA: A CONCEPTUAL FRAMEWORK <i>H.A. Seneviratne, S.P. Premaratne</i>
Session Coordinator		Ms. Sadeepa Dinali +94 71 649 6485

10 th May 2025 / 14.00 – 16.00 hrs		
Room 04 - Session 02 (Online)		
Industrial Electronics		
Join Zoom Meeting	https://us05web.zoom.us/j/89948367534?pwd=hKDHnoUMS470gOmIOqP3pPGhz0CbW.N.1	
	Meeting ID: 899 4836 7534 Passcode: C0eu3H	
Session Chairs		
Dr. Kasun Subasinghage University of Sri Jayawardenepura Sri Lanka		Dr. Ruchire Wijesinghe Sri Lanka Institute of Information Technology Sri Lanka
Dr. Bhagya Nathali Silva Sri Lanka Institute of Information Technology Sri Lanka		
Time	Paper ID	Title
14.00 – 14.15	ICSD_103	AUTOMATED ELECTRICITY BILLING WITH SMS COMMUNICATION <i>J. Jenojan, W. B. D. M. R. K. Dissanayaka, A. R. A. A. Amani, A. Kunaraj</i>
14.15 – 14.30	ICSD_116	DESIGN AND IMPLEMENTATION OF AN IOT-BASED FINGERPRINT ATTENDANCE SYSTEM FOR UNIVERSITIES WITH MOBILE AND WEB APPLICATION INTEGRATION <i>H.A.A Dinsara, B.N. Wijewickrama, J.U Perera, T.T. Kalansuriya</i>
14.30 – 14.45	ICSD_187	IOT-BASED BIOMASS PREDICTION USING CUSTOM MULTI-OUTPUT NEURAL NETWORK <i>D.M.K.I. Dissanayake, R.S.M.P.W. Rathnayake, D.P.C.K. Marasinghe</i>
14.45 – 15.00	ICSD_055	RECENT DEVELOPMENT OF AERODYNAMICS IN HIGH SPEED TRAIN FOR DRAG REDUCTION <i>E. S. K. Zoysa, M. A. Elangasinghe</i>
15.00 – 15.15	ICSD_070	IOT BASED SOLAR POWER PLANT MODELLING ANALYSER <i>S. Janoyan, K.A.N. Nimsara, W.B.D.M.R.K. Dissanayaka, A.R.A.A. Amani, N. Sakthivelnathan</i>
15.15 – 15.30	ICSD_110	EVALUATING THE PERFORMANCE OF AN ELEPHANT ELECTRIC FENCE SYSTEM BUILT USING IGNITION COILS <i>R.K.S Deshapriya, W.N.P.M.C.L Sasalanka</i>
15.30 - 15.45	ICSD_011	DEVELOPMENT OF AN AUTOMATED DEEP LEARNING-BASED PLATFORM FOR IDENTIFYING AND SORTING CRACKED EGGS <i>N.M.S.M Bandara, W.D.S.S Pemasinghe</i>
15.45 – 16.00	ICSD_071	UNMANNED AERIAL VEHICLES FOR WATER RESOURCE SURVEILLANCE AND MANAGEMENT; A SYSTEMATIC REVIEW <i>O.D.I.P Dissanayake, H.A.T.N Perera, G.Y Jayasinghe</i>
16.00 – 16.15	ICSD_221	TECHNOLOGICAL INNOVATIONS AND DEVELOPMENTS OF SMART FARMING: STATE-OF-THE-ART REVIEW <i>K. Keerthana, W.A.D.C.S. Perera, T.A.N.T.Perera, G.Y. Jayasinghe</i>
Session Coordinator		Ms. Reshika Arivarathne +94 75 0254258

10 th May 2025 / 14.00 – 16.00 hrs		
Room 05 - Session 02 (Online)		
Environmental Engineering Innovations for Sustainable Resource Management		
Join Zoom Meeting	https://us05web.zoom.us/j/81253626290?pwd=BRANpdpLBYjopsWi4zpW5iEmr7ETWX.1	
	Meeting ID: 812 5362 6290 Passcode: Q53H5s	
Session Chairs		
Prof. Senani Wijewardana Uva Wellassa University Sri Lanka		Dr. Deepachandi Lekamge Sabaragamuwa University Sri Lanka
		Dr. Manori Perera University of Sri Jayawardenepura Sri Lanka
Time	Paper ID	Title
14.00 – 14.15	ICSD_012	IMPACT OF CORPORATE GOVERNANCE CHARACTERISTICS ON ENVIRONMENTAL REPORTING IN THE BANKING SECTOR OF SRI LANKA <i>H.D.P.Sandamali, K.G.M.Nanayakkara</i>
14.15 – 14.30	ICSD_002	FABRICATION OF CERAMIC ENGOBE USING LOW-COST RAW MATERIALS AVAILABLE IN SRI LANKA <i>A.M.C.A. Kumara, Mr.Uditha Amarasinghe, Rohan Dissanayake</i>
14.30 – 14.45	ICSD_164	DEVELOPMENT OF PAPER PRODUCTS USING WATER HYACINTH AND CANNA PLANTS REMOVED FROM BEIRA LAKE, COLOMBO, SRI LANKA: AN ENVIRONMENTALLY FRIENDLY AND SUSTAINABLE APPROACH <i>Jayasinghe.I.C, A.R. Pilapitiya, H.D.J.U.J. Disanayaka, G.M.R. Pramodi, Ranoshi Siripala,W M Wickramathanthna, N.S. Wijayarathna</i>
14.45 – 15.00	ICSD_099	ASSESSING THE URBAN HEAT ISLAND EFFECT, IT’S INFLUENCE ON LOCAL CLIMATE AND PROPOSING SUSTAINABLE DEVELOPMENT STRATEGIES IN KANDY, SRI LANKA <i>G. A. M. D. S. Wickramasinghe,W.M.K. Yasara, D.P.N.Thathsarani</i>
15.00 – 15.15	ICSD_093	A COMMUNITY-CENTERED APPROACH TO IDENTIFY LATERAL EROSION SUSCEPTIBILITY IN MINOR RIVER TRIBUTARIES <i>W. D. S. Saranasekara, S. S.Ranabahu</i>
15.15 – 15.30	ICSD_044	CO-PYROLYSIS OF TEXTILE DYEING SLUDGE AND FLY ASH: SYNERGISTIC EFFECTS ON BIOCHAR YIELD AND DYE ADSORPTION FOR ENVIRONMENTAL APPLICATIONS <i>H. M. T. C. Herath, K. D. H. Nayanathara, S. Pathirana, W. D. C. Udayanga,</i>
15.30 - 15.45	ICSD_034	COMPARISON OF ANAEROBIC CO-DIGESTION OF CHEESE WHEY WITH GARDEN WASTE AND KITCHEN WASTE <i>S.M.U.S.T.J.A. Subasinghe, S.M.H.E. Dharmawickrama, S.M.W.T.P.K. Ariyaratna</i>
15.45 – 16.00	ICSD_196	AI AND MACHINE LEARNING APPROACHES TO ENHANCING PERFORMANCE AND EFFICIENCY OF AGRICULTURAL MACHINERY: A SYSTEMATIC REVIEW <i>H.G.S.C. Wickramasooriya, O.D.I.P Dissanayake, S.M.A.B.K Samarakoon, N. Saheedha, J.A.S.G Randimali, R.M.B.M Rathnayaka, W.M.D.S. Abeyrathne</i>
16.00 – 16.15	ICSD_059	MULTI-CRITERIA DECISION MAKING APPROACH FOR SELECTING THE OPTIMAL METHOD FOR ANTIBIOTIC REMOVAL FROM WASTEWATER <i>E. S. K. Zoysa, S. Indika</i>
Session Coordinator		Ms. Dhanushika Attigala +94 77 650 4163

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