



**Sustainable Technologies for Economic Resilience**

# ORAL PRESENTATION SESSIONS



23<sup>rd</sup> and 24<sup>th</sup> of November 2023

Organized by  
**Faculty of Technology**  
University of Sri Jayewardenepura Sri Lanka

Thursday Afternoon, 23<sup>rd</sup> of November 2023  
13.00 – 15.30

## Six Physical Sessions & One Online Session

#	Session	Room
1	AEN - Automotive Engineering (5)	FF1
2	BCI - Building Construction and Infrastructure Technology (9)	FF2
3	CNT/ISA/IMT - Communication and Networking Technology/Information Systems/Interactive Media Technology (5)	FF8
4	EEE/MRA - Electrical, Electronics, and Embedded Systems/ Mechatronics, Robotics, and Automation (7)	FF9
5	GGG - Geo Resources, Geo Environment, and Geotechnics (6)	GF4
6	TEM - Technology Education and Management (5)	GF5
7	BBI1 - Biotechnology, Bioengineering, and Industrial Bioprocessing (11)	Online

Thursday, 23<sup>rd</sup> November 2023 – 13.00 – 15.30 IST (UTC+5.30)

Room: FF1

Session: **AEN** Automotive Engineering

Panel Members	ID	Abstract Title	Authors
<b>Session Chairs:</b> Chair: Eng. H. R. Jayetileke Co-chair: Eng. O. A. P. C. Oruthota Department of Materials and Mechanical Technology, Faculty of Technology, University of Sri Jayewardenepura  <b>Evaluators:</b> Eng. HDNS Priyankara Department of Mechanical Engineering, Faculty of Engineering Technology, The Open University of Sri Lanka, Sri Lanka  Eng. Jaanaka Wimaladharma Former Operations Manager, Nokia Sri Lanka and Maldives	55	Design and Manufacture of Zero Steering Mechanism	<b>E.K.N. Malinda</b> , P.D.C. Viduranga, D.M. Kuruwitage, O.A.P.C. Oruthota, W.R. de Mel
	64	Conceptual Design of an Innovative Motorcycle Safety Jacket with Integrated Breathing Aid for Enhanced Rider Protection	<b>G.G.S. Wijerathne</b> , P.D.B.N. Weerakkody, J.A.I.B. Jayakodi, K.J. Tharukshi, D.M.S. Upeksha, D.L.V. Wijesinghe
	174	Tilt Trike Mechanism to Improve Roll Stability of Three-wheeled Vehicles	<b>D.M.I.S. Dasanayake</b> , D.S. Chinthana, N.P. Dasanayake
	181	Feasibility Study on Renewable Energy Access: Battery Swappable Conversion Kit for Three-Wheelers in Sri Lanka	<b>D.M.H.H.S. Rajasuriya</b> , T.P.D. Pieris, N.P. Dassanayaka, W.R. de Mel, H.R. Jayetileke, O.A.P.C. Oruthota, W. H. P. Sampath
	184	Engine Lubricant Viscosity Monitoring System	<b>Saruban S</b> , Rishiheshan N, N.P. Dassanayake

Thursday, 23<sup>rd</sup> November 2023 – 13.00 – 15.30 IST (UTC+5.30)

Room: FF2

Session: **BCI** - Building Construction and Infrastructure Technology

Panel Members	ID	Abstract Title	Authors
<p><b>Session Chairs:</b> Chair: Dr. Sakura Bogoda Co-chair: Dr. T. Manori Perera Department of Civil and Environmental Technology, Faculty of Technology, University of Sri Jayewardenepura</p> <p><b>Evaluators:</b> Dr. Sankha Widinghe Department of Civil and Environmental Technology, Faculty of Technology, University of Sri Jayewardenepura</p> <p>Dr. I.S.K. Wijayawardane Civil Engineering, Faculty of Engineering Technology, The Open University of Sri Lanka, Nawala, Nugegoda.</p>	22	The Impact of Cost Increment of Building Construction Materials on the Current Building Construction Industry in Sri Lanka	S.S. Liyanagama and R.A.N. Dilrukshi
	74	Utilization of Water Treatment Plant Sludge and Sugarcane Bagasse Ash for Environmentally-friendly Clay Brick Manufacturing	<b>J.A.L. Cheshara</b> and S. Sajitthan
	107	Identification of the Factors Effect on Construction Project Risk Based on Time, Cost and Quality Parameters in Sri Lankan Construction	W.N. Kawmudi and S.D. Jayasooriya
	124	Optimizing Recycled Aggregate Application in Pavement Base Construction with Machine Learning	C. Dassanayaka, S. Etipola, R. Mallawarachchi and J. Kosgolla
	177	Applications of Coconut Husk Ash to Replace Sand in Mortar Mixtures	<b>U.M.M. Perera</b> and S.G. Bogodage
	188	Effect of Leachate Permeation on the Swelling Behavior of Bentonite Amended Clay Liners	<b>L. Thayaparan</b> , L.P. Vidyananda, H.H. Abeysundara and J.A.D.K Wanigarathna
	199	Effect of Environmental Moisture Buffering in Wall Plaster in Brick Wall	<b>P.H.S.M. Nadeesharathna</b> and G.B. Sakura
	250	Advancement in Properties of Concrete Paving Block by Utilizing Steel Fabrication Site Waste	<b>I.M. Ikram</b> and T.M. Perera
	256	Suitability of E-Waste as an Alternative for Coarse Aggregate in Concrete	<b>M.D.K.C. Jayathilaka</b> and T.M. Perera

Thursday, 23<sup>rd</sup> November 2023 – 13.00 – 15.30 IST (UTC+5.30)

Room: FF8

Session: **CNT/ISA/IMT** - Communication and Networking Technology/Information Systems/Interactive Media Technology

Panel Members	ID	Abstract Title	Authors
<b>Session Chairs:</b> Chair: Dr. Nalaka Lankasena Co-chair: Dr. P.L.M. Prabhani Department of Information and Communication Technology, Faculty of Technology, University of Sri Jayewardenepura	148	Responsibilities and Rules for Healthcare Service Process Governance	<b>Gilmini T.G Dantanarayana</b> , Jayaweera P
	236	Automated Railway Ticketing System with Biometrics Verification and GPS-based Real-time Train Tracking	H.S. Serasinghe, <b>B.H.U. Bogahawaththa</b> , R.M.M.D. Rathnayake, M.P.P. Liyanage, H.M.S.C.R. Heenkenda
	251	Motion Capture for 3D avatars in mobile VR applications to enhance the user experience of Smartphone VR Devices.	<b>A.B.G. Imal</b> and Nethmi Weerasingha
<b>Evaluators:</b> Dr Wijendra Gunathilake, Department of Computer Science, Faculty of Technology, General Sir John Kotelawala Defense University.  Dr. KD Sandaruwan University of Colombo School of Computing	39	Technology: Development of a System to Verify Citizen Identity Information Using a Single Identity and Provide the Right to Citizens to Control the Availability of the Information	<b>Tharindu Disanayaka</b> , Akalanka Panapitiya, Ahamed Aadhil , Nalaka Lankasena, Sankani C R Heenkenda
	79	Analysis of Channel Models For VLC	<b>Milena Elisha Premanath</b> , Nawanjana M Pathirage, Dilanka de Silva

Thursday, 23<sup>rd</sup> November 2023 – 13.00 – 15.30 IST (UTC+5.30)

Room: FF9

Session: **EEE/MRA** - Electrical, Electronics, and Embedded Systems/ Mechatronics, Robotics, and Automation

Panel Members	ID	Abstract Title	Authors
<p><b>Session Chairs:</b>  <b>Chair: Dr. Sampath Edirisinghe</b>                      Department of Department of Computer Engineering,                      University of Sri Jayewardenepura</p> <p><b>Co-chair: Eng. Ashan Weeraratne</b>                      Department of Materials and Mechanical Engineering,                      University of Sri Jayewardenepura</p> <p><b>Evaluators:</b>  <b>Dr. Ruchire Wijesinghe</b>                      Department of Electrical and Electronic Engineering,                      Sri Lanka Institute of Information Technology</p> <p><b>Eng. Peshan Sampath</b>                      Department of Materials and Mechanical Engineering,                      University of Sri Jayewardenepura</p>	18	Design and Development of Non-contact AC Current Detection Smart Safety Glove	<b>R.L.P.S. Rajapaksha</b> and H.E. Bandara
	176	Implementation of an Innovative Drive for an Induction Motor with Larger Inertia Load	<b>M.H.M.L.R Herath</b> and M.H.M.N.D Herath
	129	Hybrid Leg-propeller Mechanism for Enhanced Locomotion and Efficiency in Amphibious Robots	S.D.K.R Samarathunga and <b>S.B. Dayawansa</b>
	144	Reforming Mass-scale Gel Pen Manufacturing: An AI-Enhanced Writing Mechanism for Improved Quality Control and Defect Detection	S.S. Vitharana, <b>W.V.P.P. Madhumali</b> , H.G.C. Wijayagrahi, Seichiro Miura, D.H. Marabedda and W.V.P.J. Madhushika
	158	Design and Development of a Motorized Handloom Machine to Increase the Production Rate	W.D.S. Ferando, <b>S.A.T.M. Gunawardana</b> , S.A.M. Ladushan, H.M.C.M. Herath, H.G.C.R. Laksiri and R.A.T. Akash
	197	Review on Braille Display Actuation Methods for Visually Impaired individuals	<b>M.S.M. Marshad</b> , <b>S.S.R. Coddipily</b> , R.A.M. Chamishka, G.M.S.M. Gaspe and P.S.H. Pallemulla
	226	Brain Computer Interface-based Smart Wheelchairs: A Comprehensive Literature Review	<b>B.W.N.S. Bandara</b> , <b>S.A.H.D. Batuwantudawa</b> , D.A.B. Jayawardene, H.D.I. Piyumini and I.U.E. Naotunna

Thursday, 23<sup>rd</sup> November 2023 – 13.00 – 15.30 IST (UTC+5.30)

Room: GF4

Session: GGG - Geo Resources, Geo Environment, and Geotechnics

Panel Members	ID	Abstract Title	Authors
<p><b>Session Chairs:</b> Chair: Dr Thushan C Ekneligoda Co-chair: Mr. Dilan Ranweera Department of Civil and Environmental Technology, Faculty of Technology, University of Sri Jayewardenepura</p> <p><b>Evaluators:</b> Dr Kamal Karunananda Department of Civil Engineering, Open University, Sri Lanka</p> <p>Prof. Daham Jayawardene Head, Department of Forestry, University of Sri Jayewardenepura</p>	28	Effect of Inadequate Site Investigation at the Design and Construction Stages of Pile Foundations in Sri Lanka	T Piurnaraj
	82	Comprehensive Evaluation of the Meethotamulla Waste Dump Site	S M Rupasinghe, K.H. Cheshani Peiris, Dinal Nimnajith
	97	A GIS-based study of the site selection for ecotourism activities (with spatial reference to Galle District)	M.V.T. Dhanushkaa, H.A.N. Hettiarachchi and A.M.A.R. Geethalankara
	121	An application of GIS and Remote Sensing techniques for site selection and development of tourism infrastructures in the Southern Coastal Belt of Sri Lanka (With Special Reference to Beruwala DSD and Bentota DSD).	S M Perera, H. A. N. Hettiarachchi, A. M. A. R. Geethalankar
	159	Feasibility of Improving the Weak Soils by Using Natural Biopolymer - Chitosan	T Nawarathna, K Sandeepa, S Sampath, G Sivakumar
	261	The Reactivation and Formation of Fractures During the Process of Impact Crater Formation	H Henkel, T.C Ekneligoda

Thursday, 23<sup>rd</sup> November 2023 – 13.00 – 15.30 IST (UTC+5.30)

Room: GF5

Session: **TEM** - Technology Education and Management

Panel Members	Invited Talk by Dr. Asoka de Silva, Director-Science Education, National Institute of Education		
	ID	Abstract Title	Authors
<p><b>Session Chairs:</b> Chair: Ms. Kaushalya Gunarathne Co-chair: Dr. Chathurie Nupearachchi Department of Science for Technology, Faculty of Technology, University of Sri Jayewardenepura</p> <p><b>Evaluators:</b> <b>Professor C. N. Wickramasinghe</b> Department of Commerce and Financial Management, Faculty of Management Studies, University of Kelaniya</p> <p><b>Dr. (Eng) B.G.D. Achintha Madhusanka</b> Department of Mechatronics Engineering, SLTC Research University</p>	40	A Study on Student Perception of Online Learning - Reference to Geomatics Students	<b>N.D.I. Vithanaa</b> , and K.U.J. Sandamali
	122	Optimizing the Fabric Flows During the Warehouse Receiving Process: A Simulation Study Special Reference to the Fabric Industry in Sri Lanka	<b>S.M.A.V.S. Tennakoon</b> , S.A.K.M. Perera, M.A.D.I.D. Sarathchandra, E.A.D.D.D. Edirisinghe and M.G.S. Dilanthi
	128	Investigating the Challenges Encountered by ESL Learners in Online Speech Lessons during the COVID-19 Pandemic in Sri Lanka	<b>S.M.U.D. Senanayake</b>
	205	Intention to Use AI Tools for Quality Education: A Study of Final Year Undergraduates of University of Kelaniya, Sri Lanka	<b>R.D. Weerasinghe</b>
	219	A Study on the Effectiveness of Using Podcasts to Enhance English-Speaking Skills of Secondary ESL Learners	<b>M.H.M Sewwandi</b> and K.T.P.C Somarathna



Thursday, 23<sup>rd</sup> November 2023 – 13.00 – 15.30 IST (UTC+5.30)

**Special Online Session**

Session: **BB11** - Biotechnology, Bioengineering, and Industrial Bioprocessing

Zoom Link: <https://learn.zoom.us/j/94954270829?pwd=Vys3cUVHMEEx5VzRuLzdncXNBVnYyQT09>

Meeting ID: 949 5427 0829 | Passcode: IC1ET-bbi3

Panel Members	ID	Abstract Title	Authors
<p><b>Session Chairs: Chair:</b>  <b>Dr. Thilina U. Jayewardene</b>                      Université du Québec à Trois-Rivières  <b>Co-Chair: Dr. Danushika Manathunga</b>                      Department of Biosystems Technology, Faculty of Technology, University of Sri Jayewardenepura</p> <p><b>Evaluators:</b>  <b>Dr. Prasad T. Jayasooriya</b>                      Department of Bioprocess Technology, Faculty of Technology, Rajarata University of Sri Lanka</p> <p><b>Prof. Janaka Wijesinghe</b>                      Professor in Food Science &amp; Technology, Department of Food Sci. &amp; Tech., Uva Wellassa University</p>	42	Fucoidan Isolated from the Edible Seaweed Sargassum fusiforme Suppresses Skin Damage Stimulated by Airborne Particulate Matter	<b>Xiping Wang</b>
	46	Arsenic Removal from the Popular Edible Seaweed Sargassum fusiforme by Sequential Processing Involving Hot Water, Citric Acid, and Fermentation	<b>xin yang</b>
	47	Fucoidan Isolated from Fermented Sargassum fusiforme Suppresses Oxidative Stress through Stimulating the Expression of Superoxidase Dismutase and Catalase by Regulating Nrf2 Signaling Pathway	<b>Yifan Zheng</b>
	52	Fucoidan Isolated from the Popular Edible Brown Seaweed Sargassum fusiforme Suppresses Lipopolysaccharide-induced Inflammation by Blocking NF-κB Signal Pathway	<b>Yang Yang</b>
	142	Streptococcus parauberis-derived Extracellular Vesicles Modulate the Immune Responses In vitro and In vivo	<b>De Zoysa, Mahanama *;</b> Jayathilaka, Thulshan; Dias, Hasitha; Nikapitiya, Chamilani
	156	Polyphenolic Compounds Isolated from Marine Algae Attenuate the Replication of SARS-CoV-2 in the Host Cell through a Multi-Target Approach of 3CLpro and PLpro	<b>Dineth P Nagahawatta</b>
	160	Sargassum horneri as a prebiotic dietary supplement for immunity development in a Streptococcus parauberis infected zebrafish model by regulating the growth and secondary metabolite production of lactic acid bacteria	<b>Nisansala Liyanage</b>
	178	Fucoidan from Scytosiphon lomentaria regulates pro-inflammatory cytokine production and the NF-κB pathway, exerting anti-inflammatory activity in lipopolysaccharide-induced RAW 264.7 cells	<b>Henarath Hetti Arachchilage Chathuri Kanchana Jayawardhana</b>
	190	Development of muscle hypertrophy and strength in sedentary adult mice by brown algae and algal polyphenols	<b>Sang-Woon Lee</b>
	193	Purification and Structural Characterization of Sulfated Polysaccharides Derived from Brown Algae, Sargassum binderi: Inhibitory Mechanism of iNOS and COX-2 Pathway Interaction	<b>Chan-young Kim</b>
215	Vernicia fordii (Hemsl.) Airy Shaw extract stimulates insulin secretion in pancreatic β-cells and improves insulin sensitivity in diabetic mice	<b>Yujin Roh</b>	

Friday Morning, 24<sup>th</sup> of November 2023  
9.30 – 12.00

## Six Physical Sessions

#	Session	Room
1	ATS1 - Agricultural Technologies for Sustainability (10)	FF1
2	AID1 - Artificial Intelligence and Data Science (10)	FF2
3	BBI2 - Biotechnology, Bioengineering, and Industrial Bioprocessing (9)	FF8
4	EES1 - Energy, Environment, and Sustainability (10)	FF9
5	FNP1 - Food Security, Nutrition, and Processing Technology (10)	GF4
6	MEP1 - Materials Engineering and Process Technology (7)	GF5

Friday, 24<sup>th</sup> November 2023 – 9.30 – 12.00 IST (UTC+5.30)

Room: FF1

Session: **ATS1** - Agricultural Technologies for Sustainability

Panel Members	ID	Abstract Title	Authors
<b>Session Chairs:</b> Chair: Dr. Ruvini Abhayapala Co-chair: Dr. Udayagee Kumarasinghe Department of Biosystems Technology, Faculty of Technology, University of Sri Jayewardenepura	15	A Review on Crop Simulation Models for Enhancing Sugarcane Yield and Productivity: Current Status and Future Prospects	<b>A.H.Weerakoon</b> , T.A.N.T.Perera and G.Y.Jayasinghe
	66	Automated Environment Control System for Indoor Gardening	<b>S.M.M. Himesh</b> , H.P.N. Chathurangi, R.M.A. Nishantha and T.Ketheesan
<b>Evaluators:</b> <b>Dr. Surani Chathurika</b> Department of Urban Bioresources, Faculty of Urban and Aquatic Bioresources, University of Sri Jayewardenepura	106	Quantifying Flavour and Colour of Black Tea Brew while Optimizing Water Hardness at Different pH Levels	<b>K.A.K.N. Abeysinghe</b> , K.H.M.I. Karunarathna, A.M.G.N. Rathnayake, M.M. Nipunika, R.A.A.P. Marapana and B. Gajanayake
	110	Evaluation of the Effect of Vermiwash on Growth and Yield of Green Gram ( <i>Vigna radiata</i> )	<b>M. Tharmaseelan</b> , A.P. Jayasinghe and NVT Jayaprada
<b>Dr. JBDAP Kumara</b> Department of Export Agriculture, Faculty of Agricultural Sciences, Sabaragamuwa University of Sri Lanka	113	Watershed Management Prioritization of Amban Ganga Sub-basin of Mahaweli River Basin	<b>E.R.M.S. Ekanayake</b> , N.S. Withanage, G.D.J.M. Abeyssekara and R.A.D. Madhushan
	130	Preparation And Characterization Of Nutrient Loaded Hydrogel Nano-hybrids To Be Used As A Slow Release Fertilizer	<b>R.K. Maduwanthi</b> , I. Munaweera, and W.P.T.D. Perera
	138	Detection Of Powdery Scab Pathogen ( <i>Spongospora Subterranea F. Sp. Subterranea</i> ) In Potato Using RT –QPCR	<b>K.P.L.Arosha</b> , K.Pakeerthan and C.Ranasinghe
	141	Novel Tissue Culture Medium Protocol: Evaluate Potential of Arrowroots as an Alternative Solidifying Agent in Micropropagation of Pineapple ( <i>Ananas comosus</i> L.)	<b>B.M. Nisansala</b> , M.M.T.M. Bandara and R.D. Abhayapala
	157	In-vitro Regeneration Using Seeds of <i>Gypsophila elegans</i> (Pink Baby's Breath)	<b>J.D.W.Jayaneththi</b> , E.M.T.S.Ekanayake, R.U.W.M.C.B.Rambukwella, and R.M.S.I.Rathnayake

Friday, 24<sup>th</sup> November 2023 – 9.30 – 12.00 IST (UTC+5.30)

Room: FF2

Session: **AID1** - Artificial Intelligence and Data Science

Panel Members	ID	Abstract Title	Authors
<p><b>Session Chairs:</b>                      Chair: Dr. Chamara Liyanage                      Co-chair: Mrs. Sankani Heenkenda                      Department of Information and Communication Technology, Faculty of Technology, University of Sri Jayawardenepura</p> <p><b>Evaluators:</b>                      Dr. Kaneeka Vidanage                      Dept. of Computer Science, General Sri John Kotelawala Defence University</p> <p><b>Dr. Malinda Punchimudiyanse</b>                      Dept. of Computer Science, Faculty of Natural Sciences, The Open University of Sri Lanka</p>	33	Conducting a Topic Modeling Approach Using Twitter Data: Growth of Suicide Attempts in the Covid-19 Period	<b>Sanju Balasooriya</b> , Hiruni Rupasingha - Sabaragamuwa University of Sri Lanka
	37	Machine Learning-Based Approach for Diabetic Foot Ulcer Depth Classification Using 2D Images	Pasan Watagala, <b>Dasun Pathiraja</b> , Krishan Kanishka, Nalaka Lankasena Sankani Heenkenda - Dept. of ICT, FOT, USJ
	109	E - Cript mobile application: Identify era and pictorial symbols in sinhalese inscriptions based on machine learning and image processing technologies	<b>Shashini Devindi</b> , Nethmini Kankanamge, Samadhi Wijesinghe, Nalaka Lankasena, Sankani Heenkenda - Dept. of ICT, FOT, USJ
	116	Analyzing the Individual's Response to Political Actions During Covid-19 Pandemic Using Topic Modelling Techniques	<b>Sajini Hansika</b> , K Ranasinghe, Hiruni Rupasingha - Sabaragamuwa University of Sri Lanka
	117	Impact of GLOVE embeddings with Neural Models for Short Text Classification	<b>Kithsrii jayakody</b> , Tharinda Vidanagama - Wayaba University of Sri Lanka
	132	Forecasting the Requirements for Mental Health Interventions of Employees Using Machine Learning Algorithms	<b>Kalani Imanthika</b> , K Ranasinghe, Hiruni Rupasingha - Sabaragamuwa University of Sri Lanka
	224	EMAIL MARKETING CAMPAIGN OPTIMIZATION USING MULTI ARM BANDITS	Chirath Dasanayaka, <b>Chamodhi Wickramasinghe</b> , Kanishka Dandeniya - University of Peradeniya
	227	Real-Time Road Sign Recognition System with Smart Voice Integration Using Computer Vision and AI	<b>Sanduni Senevirathna</b> , Asangi Welege, Thilumi Wijesinghe, M.P.P. Liyanage, Sankani Heenkenda - Dept. of ICT, FOT, USJ
	232	A Deep Learning Approach To Utilize AI Voice Assistants In Healthcare	<b>Tharushika Abedheera</b> - NSBM Green University
	234	Soil Erosion Detection and Mitigation Solutions using Machine Learning	<b>Manomi Kalubowila</b> , Kiriwaththuduwege Mithara, Iddippulige Jinadari, M.P.P Liyanage, Sankani Heenkenda - Dept. of ICT, FOT, USJ, Udayagee Kumarasinghe - Dept. of BST, FOT, USJ

Friday, 24th November 2023 – 9.30 – 12.00 IST (UTC+5.30)

Room: FF8

Session: **BBI2** - Biotechnology, Bioengineering, and Industrial Bioprocessing

Panel Members	ID	Abstract Title	Authors
<p><b>Session Chairs:</b> Chair: Dr. KKA Sanjeeva Co-chair: Dr. Danushika Manathunga Department of Biosystems Technology, Faculty of Technology, University of Sri Jayewardenepura</p> <p><b>Evaluators:</b> Dr. KHINM. Herath Department of Bio-systems Engineering, Faculty of Agriculture and Plantation Management, Wayamba University of Sri Lanka, Makandura, Gonawila</p> <p><b>Dr. WMG Sandamalika</b> Senior Lecturer, Department of Aquaculture &amp; Fisheries, Faculty of Livestock, Fisheries and Nutrition, Wayamba University of Sri Lanka, Makandura, Gonawila 610170, Sri Lanka</p>	14	Developing a pH Sensitive Electrospun Fiber Mat Using Butterfly Pea Anthocyanin for Ocular pH Detection	<b>Sandaruwana, Halwala Hewa Pathirana B*</b> ; Manatunga, Danushika C; Nilmini, Renuka; Costha, Pabakara; Dassanayake, Rohan S; Wijesinghe, Ruchire Eranga
	34	Ligninolytic Bacterial Survival Under Extreme UV-C Radiation in a Coconut-Shell Activated Carbon Conventional Carrier	<b>Senadheera, Uvin E.*</b> ; Jayasanka, Jasinth; Hewawasam, Choolaka; Udayanga, Dhanushka
	36	Development and Characterization of Mycelium Based-composites from Locally Available Biological Resources as an Alternative Material to Expanded Polystyrene Packaging	<b>Madusanka, Chathura T.G.C.*</b> ; Udayanga, Dhanushka; Nilmini, Renuka; Rajapaksha, Suranga M. ; Hewawasam, Choolaka; Manamgoda, Dimuthu
	54	Culturing of Microalgae Nannochloropsis sp. and Determination of Proximate and Fatty Acid Profiles	<b>Premachandra, Madhavi S*</b> ; Balasooriya, Dr.; Premarathna, Mahesh
	63	Development of a Bioencapsulated Oral Vaccine Against Aeromonas hydrophila Infections In Koi Carp (Cyprinus carpio).	<b>Perera, Thiruni *</b> ; Sanjeeva, Asanka; Heenatigala, Prajani; Adikari, Amitha ; Dunusinghe, Bhagya; Liyanage, Wishva
	78	Enhancement of Cold-pressed Thymoquinone Extraction from Black Seeds (Nigella sativa L.) using Microwave Pretreatment	<b>Bulathsinhala, Heshani S*</b> ; Rajapaksha, Surakshi; Madarasinghe, Sumuduni
	86	Comparison of Essential Oil Compositions of Fresh and Dried Leaves of Psidium guajava L.	<b>Madanayake, Kanchana Hasaranga*</b>
	92	Expression of Recombinant SDARV1-GFP Fusion Protein In The Methylophilic Yeast, Pichia Pastoris	<b>Wickramatunga, Thilini S*</b>
	133	One-pot synthesis of waste cotton-derived cellulose-MnO <sub>2</sub> nanocomposite and its dye removal ability	<b>Peramune, Dinusha L</b> ; Dassanayake, Rohan S*; Manatunga, Danushika C; Premalal, Vikum Anura; Nilmini, Renuka

Friday, 24th November 2023 – 9.30 – 12.00 IST (UTC+5.30)

Room: FF9

Session: **EES1** - Energy, Environment, and Sustainability

Panel Members	ID	Abstract Title	Authors
<p><b>Session Chairs:</b>                      Chair: Dr. A.R. Nihmiya                      Co-chair: Dr. Choolaka Hewawasam                      Department of Civil and Environmental Technology, Faculty of Technology, University of Sri Jayewardenepura</p> <p><b>Evaluators:</b>                      Dr. Asanka Weerasekera                      Department of Civil and Environmental Technology, Faculty of Technology, University of Sri Jayewardenepura</p> <p>Dr. Chanaka Udayanga                      Faculty of Computing and Technology, University of Kelaniya</p>	31	Low-cost Solar Desalination System for Rural Areas	<b>D.D.A.Karunarithna</b> and A.R.Nihmiya
	32	Thermal Insulation Wall Panels from Waste Polypropylene and Natural Fiber Materials	<b>W.N.K.P Karunathilaka</b> , A.R Nihmiya and Asangi gannoruwa
	57	The influence of vacuum pressure on efficiency and long-term performance of perovskite solar cells fabricated using chemical vapor deposition technique	<b>Waruni G.K. Perera</b> , Vikum Anura Premalal, Rohan S Dassanayake
	77	Effect of the Concentration of the Electrolyte in the Electrochemical Reduction of Carbon Dioxide"	<b>Hirusha H Jayarathne</b> , Abdul Rahim Nihmiya, Renuka Nilmini, P.K.D. Duleepa Pitigala
	90	Development of a Bio-composite Material as an Alternative to Plastic Plates using Banana peels, Banana stem fibers and Cassava Starch.	<b>G.K.K. Isharaa</b> , S.M.P.A. Koliyabandaraa
	103	Biodiesel Production Using Rendered Oil From Waste Chicken Skin	<b>Ayodhya Wickramathilaka</b> , amoda Gunarathne Dinusha Martino, Mahinsasa Rathnayake
	210	Exposure Level To Background Radiation In Linac Indoor Area At Apeksha Hospital, Maharagama"	<b>Mithurshan P Pakkiyarasa</b>
	216	Designing a Microgrid for Rural Areas in Wet and Dry Zone of Sri Lanka	<b>Benorith Lawrence</b> , Chandika S Kiriella
	220	Development of Bio-based Edible Package from Fruit and Vegetable Waste	<b>Tharmika Sothilingam</b>
	258	Fabrication of Symmetric Supercapacitor by Sawdust-derived Activated Carbon	<b>Subhane Sinna Lebbe</b> , Vikum Anura Premalal

Friday, 24th November 2023 – 9.30 – 12.00 IST (UTC+5.30)

Room: GF4

Session: **FPN1** - Food Security, Nutrition, and Processing Technology

Panel Members	ID	Abstract Title	Authors
<p><b>Session Chairs:</b> Chair: Dr. Chathuri Senanayake Co-chair: Dr. Pasan Bandara Department of Biosystems Technology, Faculty of Technology, University of Sri Jayewardenepura</p> <p><b>Evaluators:</b> Dr. Dulani Somendrika, Department of Food Science and Technology, Faculty of Applied Sciences, University of Sri Jayewardenepura</p> <p>Eng. Ayesha Sandaruwani, Department of Biosystems Technology, Faculty of Technology, University of Sri Jayewardenepura</p>	10	Characterizing the Starch Properties of Underutilized Tuber Varieties in Sri Lanka as Alternative Starch Sources: Dioscorea esculenta and Manihot esculenta	<b>K.M.U. Priyadarshani*</b> , K.V.T. Gunawardena, K.G.L.R. Jayathunge, D.A.W. Nilukshi and A.W.D. Priyangani
	23	Evaluation of Organoleptic, Physicochemical, and Microbiological Quality Parameters of a New Tea Blend under Different Storage Conditions	<b>M.K.L.C. Madalagama*</b> , D.C. Manatunga and M.M.A. Korala
	48	Composite Edible Coating Treatments to Improve the Physicochemical Properties of Lime (Citrus Aurantiifolia) during Ambient Storage	<b>S.M.A.A. Senevirathna</b> , K.G.L.R. Jayathunge*, W.L.I. Wijesekara and G.L.R. Prasanga
	60	Physico-chemical Characteristics of Starch Extracted from White Sweet Potato (Ipomea batatas (L.) Lam.) Grown in Sri Lanka	<b>M.A.W.N. Marasinghe</b> , R. Liyanage, P.C. Bandara, R.S. Dassanayake, S.M. Rajapaksha and K.G.L.R. Jayathunge*
	65	Development of Milk-grain Food Supplement and Determination of the Fatty Acid Profile	<b>W.W. Anupama*</b> , H.M.T. Herath, D.U. Rajawardana, M.M.N.P. Gunasekara and J.M.J.K. Jayasinghe
	69	Formulation of a Synbiotic Beverage Using Palmyra Fruit Pulp and Evaluation of Nutritional and Functional Properties	<b>A.T.H. Antony*</b> and O.D.A.N. Perera
	75	Detection of Frying Oil Rancidity Levels Using a Mobile Application	P.D.P.C. Pussella, G.M. Somaratne*, P.P.A.J. Rathnayake, M.A. Samarasekara, C.Y. Bandara, W.A.G.E. Wijelath and U.G.Y. Madusanka
	80	Bioconversion of Coconut Coir and Paddy Straw into an Edible Mass of Pleurotus eous: Effects on Nutritional Composition and Antioxidant Capacity	<b>M.A. Sirimanne</b> and G.S.G. Liyanage*
	146	Evaluation of Quality Attributes of Organic Vegan Protein Bar Developed Using Plant-based Materials	<b>P.D.N. Boteju</b> , A.M.A.U. Alahakoon* and K.D.K. Wanasinghe
	70	Development of a Flour-based Edible Popsicle Stick and Edible Cutlery to Replace Wooden Popsicle Sticks and Single-use Plastic Cutlery	<b>D.S. Dissanayake</b> , H.M.T. Herath and K.K.A. Sanjeewa*

Friday, 24th November 2023 – 9.30 – 12.00 IST (UTC+5.30)

Room: GF5

Session: **MEP1** - Materials Engineering and Process Technology

Panel Members	ID	Abstract Title	Authors
<p><b>Session Chairs:</b> Chair: Dr. Gayan Priyadarshana Co-chair: Dr. Gayan Siriwardana Department of Civil and Environmental Technology, Faculty of Technology, University of Sri Jayewardenepura</p> <p><b>Dr. Chanaka Sandaruwan</b> Sri Lanka Institute of Nanotechnology (SLINTEC)</p> <p><b>Dr. Asanka Roshan</b> Sri Lanka Institute of Nanotechnology (SLINTEC)</p>	95	Synthesis, Characterization and Comparison of Metal Doped Silica Nanoparticles for Antibacterial Applications	<b>P.N. Yapa</b> , I. Munaweera, L. Weerasinghe, C. Sandaruwan, N.M.C. Nissanka, and M.M. Weerasekera
	100	The Effect of Surface Corrosion on the Tensile Properties of En-09 Plain Carbon Steel	<b>K.M.D.Harshana</b> , A.G.G.I.Tennakoon, A.G.C.S. Amarasinghe, A.G.G.M. Wijethunga, U.D.N.Udagedara, and W.P.P.M. Malinga
	139	Impact Strength, Density And Hardness Properties Of Water Hyacinth (Eichhornia Crassipes) Fibre Reinforced Thermoplastic Composite	<b>N.A. Kaushi Aloka</b> , R.A. Jayasinghe, G. Priyadarshana, and A.H.L.R. Nilmini
	155	Development of a Low-Cost Non-Marking Tyre Tread using a Natural Mineral	<b>B.T. D Madhushani</b> , A.A.G.K. Siriwardana, S.M Rajapaksha, A.H.L.R.N. Liyanage, G. Priyadarshana, A. Gannoruwa, and R. Gunaratna
	165	Extrudable Cellulosic Fiber/ABS Composites for Automobile Applications	<b>P.G.T. Devika</b> , A.A.G.K. Siriwardana, K.I.A. Wijenayake, H.D. Mapage, A.H.L.R.N. Liyanage, S.M Rajapaksha, G. Priyadarshana, A. Gannoruwa, and R. Gunaratna
	189	Extrudable Biopolymer/Thermoplastic Composites for Environmental Remediation	<b>K.I.A. Wijenayake</b> , A.A.G.K. Siriwardana, R. Gunaratna, H.D. Mapage, K.G. Kaushani, and G. Priyadarshana
	195	Evaluation of colloidal stability of chitin nanofiber dispersions extracted from different species of crab shells	<b>N.L. Rathnasinghe</b> , R.A. Jayasinghe, A.H.L.R. Nilmini, N. D. Tissera, R. N. Wijesena, and G. Priyadarshana



Friday Afternoon, 24<sup>th</sup> of November 2023  
13.00 – 15.30

## Five Physical Sessions

#	Session	Room
1	ATS2 - Agricultural Technologies for Sustainability (9)	FF1
2	BBI3 - Biotechnology, Bioengineering, and Industrial Bioprocessing (8)	FF2
3	EES2 - Energy, Environment, and Sustainability (3)	FF8
4	FNP2 - Food Security, Nutrition, and Processing Technology (10)	FF9
5	MEP2 Materials Engineering and Process Technology (7)	GF4

Friday, 24<sup>th</sup> November 2023 – 13.00 – 15.30 IST (UTC+5.30)

Room: FF1

Session: **ATS2** - Agricultural Technologies for Sustainability

Panel Members	ID	Abstract Title	Authors
<p><b>Session Chairs:</b> Chair: Dr. Ruvini Abhayapala Co-chair: Dr. Udayagee Kumarasinghe Department of Biosystems Technology, Faculty of Technology, University of Sri Jayewardenepura</p> <p><b>Evaluators:</b> <b>Dr. Surani Chathurika</b> Department of Urban Bioresources, Faculty of Urban and Aquatic Bioresources, University of Sri Jayewardenepura</p> <p><b>Dr. JBDAP Kumara</b> Department of Export Agriculture, Faculty of Agricultural Sciences, Sabaragamuwa University of Sri Lanka</p>	185	Morphological Characterization of ex-situ conserved Groundnut Accessions in the Plant Genetic Resources Centre, Sri Lanka.	<b>B. H. R. B. S. Chandrasekara</b> , D. G. C. Jeewani, E. S. C. Edirisinghe and N. M. C. Nayanakantha
	186	Eco-friendly Bactericide: to Control Bacterial Wilt in Brinjal Caused by <i>Ralstonia solanacearum</i> .	<b>I. P. G. Dilshani</b> , D.S.Kekulandara, M.S.W.Fernando, N.M.C.Nayanakantha
	187	Revolutionizing Hybrid Seed Production: Unveiling a Morphological Key for Early Detection of Hybridity in Brinjal ( <i>Solanum melongena</i> L.) Varieties	<b>M.R.P. Rimsa</b> , H.M.P.S Kumari, and H.K.B.S. Chamara
	192	Effect of Age of Broiler Breeders and Duration of Egg Storage On Hatchability, Fertility and Chick Rejects	<b>M.D.I.Thathsarani</b> , N.N.R.N. Nugara, A.L. Ranaweera and A.E.U. Nishantha
	202	Enhancing Tomato ( <i>Solanum lycopersicum</i> L.) Growth, Yield, and Soil Properties Through Combined Application of Vermicompost and Inorganic Fertilizer	<b>S. Keerthika</b> , A. Amirthalojanan, S. Sivaneson, H. K. B. S. Chamara
	208	Replacement of Hydroponic Maize Fodder for Concentrate Feed in the Diet of Lactating Dairy Cows	<b>B.A.S.K. Abayawardana</b> , R.M.S Gunathilake, R.M.C.L. Rajapaksha and G.W.A.S Lakmini
	212	Identification of Pathogens Associated with Export Foliage Plants	<b>A.N.F. Mathiha</b> , A.G.S.S. Ambagaspitiya, and M.H.A.D. Subashini
	248	Agronomic Evaluation of Advanced Chili ( <i>Capsicum annuum</i> L.) Breeding Lines for Yield, Yield Attributed Traits, and Pest and Disease Incidences	M.A.K.F. Aroofiya, B.G.R.C. Ruwan Balasooriya, <b>M.R.P. Rimsa</b> and H.K.B.S. Chamara
	253	Morphological Characterization and Assessment of Genetic Variability of Soybean Accessions ( <i>Glycine max</i> L. Merrill)	<b>C.J.S.S. Jayawardhana</b> , H.M.S.N Herath and H.K.B.S Chamara

Friday, 24<sup>th</sup> November 2023 – 13.00 – 15.30 IST (UTC+5.30)

Room: FF2

Session: **BBI3** - Biotechnology, Bioengineering, and Industrial Bioprocessing

Panel Members	ID	Abstract Title	Authors
<p><b>Session Chairs:</b> Chair: Danushika Manathunga</p> <p>Co-chair: Dr. KKA Sanjeewa Department of Biosystems Technology, Faculty of Technology, University of Sri Jayewardenepura</p> <p><b>Evaluators:</b> <b>Dr. KHINM. Herath</b> Department of Bio-systems Engineering, Faculty of Agriculture and Plantation Management, Wayamba University of Sri Lanka, Makandura, Gonawila</p> <p><b>Dr. WMG Sandamalika</b> Senior Lecturer, Department of Aquaculture &amp; Fisheries, Faculty of Livestock, Fisheries and Nutrition, Wayamba University of Sri Lanka, Makandura, Gonawila 610170, Sri Lanka</p>	149	Antimicrobial potential of endophytic Colletotrichum spp. isolated from the medicinal plant Munronia pinnata	<b>Munasinghe H.H. Randulee</b> ; Sankalya S Ambagaspitiya; Dhanushka Udayanga; W.P.K.M Abeysekera
	162	Antioxidant and Sun Protection Potential of Crude Bark Extract and Fractions of Ceylon Cinnamon (Cinnamomum zeylanicum Blume): In Vitro Suitability in Cosmeceutical Applications	<b>K.N.K. Senarathne</b> ; W.P.K.M Abeysekera; Dr. Kanchana Abeysekera; Sirimal GA Premakumara; Renuka Nilmini
	164	Preparation of Perfume using Rose Oil and Improvement and Optimization of its Characteristics using Orange, Vetiver and Sandalwood Oils	<b>Nimesha D Herath</b>
	166	Clinical and Therapeutic Effects of Diosgenin on Nonalcoholic Steatohepatitis (NASH)	<b>Lakna M Amarakoon</b>
	218	Formulation and Evaluation of a Multi-purpose Facial Scrub from Palmyrah	<b>Anojan Pakeerathan</b> , Sankalya S Ambagaspitiya; Anu Balasubramaniam
	262	Investigation Of Beneficial Fungi and Pathogenic Streptomyces In Imported Liquid Biofertilizer	<b>Narthaki Y Pathirana</b> ; W.P.K.M Abeysekera; Subhashini M
	263	A Study on Storage Stability of Ceylon Black Tea: Orthodox and Cut, Tear, Curl (CTC) Tea Bags	<b>Yasuri I Hettiarachchi</b> ; W.P.K.M Abeysekera; K.R.W. Abeywickrama
	267	Development Of Low Cost Basal Media For Micropropagation Of Pineapple [Ananas Comosus (L.) Merr.]	<b>Thilini A Raviduni</b> ; W.P.K.M Abeysekera; Narmada Perera

Friday, 24<sup>th</sup> November 2023 – 13.00 – 15.30 IST (UTC+5.30)

Room: FF8

Session: **EES2** - Energy, Environment, and Sustainability

Panel Members	ID	Abstract Title	Authors
<p><b>Session Chairs:</b>                      Chair: Dr. A.R. Nihmiya                      Co-chair: Dr. Choolaka Hewawasam                      Department of Civil and Environmental Technology, Faculty of Technology, University of Sri Jayewardenepura</p> <p><b>Evaluators:</b>                      Dr. Asanka Weerasekera                      Department of Civil and Environmental Technology, Faculty of Technology, University of Sri Jayewardenepura</p> <p>Dr. Chanaka Udayanga                      Faculty of Computing and Technology, University of Kelaniya</p>	171	Effect of Dolomite Application Rates on Soil Physicochemical Properties of Cinnamon (Cinnamomum zeylanicum Blume) Cultivation	<b>Chamodi T Rupasingha</b> , Mihiri Kariyawasam, Prof. H.M.S.K. Herath, Nilusha T Perera
	242	Biodegradability Index (BDI) derived from BOD:COD Ratio as an Indicator for Effluents Quality Measurement; A Case Study based on Vehicle Service Stations	<b>G.R. Diwyanjalee</b> , B.K.A. Bellanthudawa, D.K.N.S. De Silva and A.R. Gunawardana
	245	Quantifying Foreign Plastic Debris Recorded in Dikkowita Fishery Harbor	<b>P.M.S.R.Muhandiram</b> , R.U.Halwatura, K.S.Williams and C.Liyanage

Friday, 24<sup>th</sup> November 2023 – 13.00 – 15.30 IST (UTC+5.30)

Room: FF9

Session: **FN2** - Food Security, Nutrition, and Processing Technology

Panel Members	ID	Abstract Title	Authors
<p><b>Session Chairs:</b> Chair: Dr. Amali Alahakoon Co-chair: Dr. Rumesch Liyanage Department of Biosystems Technology, Faculty of Technology, University of Sri Jayewardenepura</p> <p><b>Evaluators:</b> Dr. Dulani Somendrika, Department of Food Science and Technology, Faculty of Applied Sciences, University of Sri Jayewardenepura</p> <p><b>Eng. Ayesha Sandaruwani</b> Lecturer Probationary, Department of Biosystems Technology, Faculty of Technology, University of Sri Jayewardenepura</p>	88	Potential Use of Jackfruit ( <i>Artocarpus heterophyllus</i> L.) Seed Flour and Guava ( <i>Psidium guajava</i> L.) Peel Powder in Gluten-free Biscuit Formulation	<b>M.P. Piyasena</b> and W.A.J.P. Wijesinghe*
	99	Application of Quality Index Method, TVB-N and Histamine Content to Evaluate the Quality of Indian Scad ( <i>Decapterus russelli</i> ) and Frigate Tuna ( <i>Auxis thazard</i> ) at Different Market Conditions in Selected Suburbs of Colombo District	<b>D.M.W.C. Dissanayaka</b> , M.G.C.R. Wijesinghe and G.W.A.S. Lakmini*
	114	Microbiological Profile of Halloumi Cheese Fortified with Garlic ( <i>Allium sativum</i> ) and Pepper ( <i>Piper nigrum</i> )	<b>R. Jeyasiri</b> , M.A.L.S.S. Munasinghe* and H.N.N. Dilrukshi
	143	Development of Plant-Based Baby Jackfruit ( <i>Artocarpus heterophyllus</i> ) Fingers Using Citrus Fiber as a Clean Label Binding Agent	<b>K.D.K. Thulshani*</b> , M.P.M. Arachchige, W.L.C.M. Gunathilaka and E.V.R.T. Vidyasekara
	163	Enhancing the Functional and Sensory Attributes of Yogurt through the Incorporation of Mango ( <i>Mangifera indica</i> ) and Banana ( <i>Musa acuminata</i> ) Peels	<b>S.M.D.S.C. Senaratne*</b> , G. Somaratne and D. Roy
	170	Effect of Curry Leaf ( <i>Murraya koenigii</i> ) Powder Incorporation on Acrylamide Mitigation and Antioxidant Content in Dhal Vade	<b>B.K.H.H. Batuwita*</b> , J.M.J.K. Jayasinghe, R.A.U.J. Marapana and C.V.L. Jayasinghe
	196	Comparative Assessment of Different Solvents on the Extraction Efficiency of Phenolic Antioxidants Extracted from <i>Emblica officinalis</i> Seeds and <i>Annona muricata</i> L. Fruit Peel and Seeds	<b>A.A.K. Lankanayaka</b> , C.M. Senanayake*, K.G.L.R. Jayathunge, P.C. Bandara and D.C. Manatunga
	198	Determination of the Heavy Metal Content in Bee Honey and its Potential Health Risk	<b>S.A.I.D. Weerasinghe</b> , D.K. Hettiarachchi and E.M.R.K.B. Edirisinghe*
	206	The Variation of Physicochemical and Organoleptic Parameters of Tea Based on the Region and Age of the Produced Tea	<b>R.M.S.V. Pemadasa</b> , A.G.S.S. Ambagaspitiya* and M.M.A. Koralage
	233	In vitro Probiotic Potential of <i>Streptococcus thermophilus</i> Isolates from Traditional Sri Lankan Buffalo Curd	<b>C.J. Gunathunga</b> , L.J.S. Undugoda*, A.H.L.R. Nilmini, R.N. Nugara, D. Udayanga and M.M. Pathmalal

Friday, 24<sup>th</sup> November 2023 – 13.00 – 15.30 IST (UTC+5.30)

Room: GF4

Session: **MEP2** Materials Engineering and Process Technology

Panel Members	ID	Abstract Title	Authors
<p><b>Session Chairs:</b> Chair: Dr. Gayan Siriwardana Co-chair: Dr. Gayan Priyadarshana Department of Materials and Mechanical Technology, Faculty of Technology, University of Sri Jayewardenepura</p> <p><b>Evaluators:</b> <b>Dr. Chanaka Sandaruwan</b> Sri Lanka Institute of Nanotechnology (SLINTEC)</p> <p><b>Dr. Asanka Roshan</b> Sri Lanka Institute of Nanotechnology (SLINTEC)</p>	204	Utilizing Waste Cinnamon for the Development of Non-Marking Caster Wheel with Improved Aging Resistance	<b>R.P. P. Sandaruwan</b> , S. M. Rajapaksha, S. Mahaletchumi, C.A. Gunathilake, A.H.L.R.N. Liyanage, G. Priyadarshana, D. Udayanga, T. G. C. Madusanka, K. G. Kaushani, A.A.G.K. Siriwardana, A. Gannoruwa, S. Perera, and M. Premarathne
	209	Extrudable Fiber/Thermoplastic Composites for Sound Absorption Applications	<b>W.M.S.N. Kumari</b> , A.A.G.K. Siriwardana, K.I.A. Wijenayake, H.D. Mapage
	230	Development of Natural Rubber Latex Foam Formulation using Over-mature, Low Ammonia Latex	<b>C. Nisansala</b> , A. Gannoruwa, S. Kelaniyagama, A. H. L. R. Nilmini, S. Mahaletchumi, S.M. Rajapaksha, G. Priyadarshana, and A.A.G.K. Siriwardana
	237	Development of an Breathable Packaging Material for Cut Foliage with Natural Rubber Combined with Natural Fibres	<b>H.A.P.U.D. Aththanayaka</b> , R.B.C.D. Jayasundara, S.Mahaletchumi, S.H.Kelaniyagama, A. Gannoruwa, U. Kumarasinghe, and S. M. Rajapaksha
	257	Development of Natural Antimicrobial Agent and Antioxidant Loaded Food-Grade Rubber Compound	<b>R.P. P. Sandaruwan</b> , S. M. Rajapaksha, D. Akalanka, S. Mahaletchumi, C.A. Gunathilake, A.H.L.R.N. Liyanage, D. Udayanga, T. G. C. Madusanka, K. G. Kaushani, A.A.G.K. Siriwardana, A. Gannoruwa, and G. Priyadarshana
	259	Utilization of Arachis hypogaea Husks as a Filler in Composite Materials for Tire Compound Development	<b>K.A.U.H.K. Arachchi</b> , V. Silva, A.A.G.K. Siriwardana, A. Gannoruwa, S. Rajapaksha, A.H.L.R. Nilmini, G. Priyadarshana
	260	PVC Waste for Low-cost Neoprene Rubber Compound with Improved Properties	<b>W.M.A.D. Chinthaka</b> , S. M. Rajapaksha, A. Gannoruwa, A.A.G.K. Siriwardana, and G. Priyadarshana