

MERCon 2020 - Conference Program

/ 1: July 28, 2020

Track 1

Session W.1.1 Civil Engineering 1		
Time Slot	Paper Title	Authors
0830-0845	3D Full-Field Deformation Measuring Technique Using Digital Image Correlation	Nadarajah Sujeeka; Arulkumar Vithushanthini; Chinthaka Mallikarachchi
0845-0900	Bond-Slip Models of CFRP/Steel Double Strap Joints Subjected to Long Term Exposure of Moisture and Elevated Temperature	Nirosha Dilrangi Perera; Kanishka Chandrthilake; Kumari Gamage
0900-0915	Study on Bamboo and Steel as Hybrid Reinforcement for Concrete Slab	Parasuram Mageswaran; K. Baskaran
0915-0930	Embodied Energy and Carbon Footprint of Two Storied Refuge Space with Lightweight Load Bearing Panels	Bryan Eric Thevarajah; Thishan Jayasinghe; Sujeewa Lewangamage; Tim Ibell
0930-0945	Strengthening of Damaged Out of Plane Curved Reinforced Concrete Beam Using CFRP	Suren Kulendren; Warnakulasuriya Chinthana Fernando; Kumari Gamage
0945-1000	Influence of Intersected Fold-Lines on Thin Folded Membranes	Kandamulla Waduge C Piyumi; Chinthaka Mallikarachchi

Session W.2.1 Civil Engineering 2		
Time Slot	Paper Title	Authors
1330-1345	Parametric Study on the Homogenized Response of Woven Carbon Fibre Composites	Sumudu Herath; Milindu Jayasekara; Chinthaka Mallikarachchi
1345-1400	Study on Concrete Filled Steel Circular and Square Tubes	Madhusa Rukshan Bogahawaththa; Prince Madhuranga; K. Baskaran; Hasitha Damruwan Hidallana-Gamage
1400-1415	Holistic Behaviour of Urban Pond Systems for Flood Risk Mitigation- A Case Study in Metro Colombo Area	Narmadha T Ponnampereuma; R. L. H. L. Rajapakse
1415-1430	Feasibility of Robotic Technology for the Advancement of Construction Industry in Sri Lanka	Madawa Gamlath; Anuradha Waidyasekara; Sonali Pandithawatta
1430-1445	Examining the Community Perception Towards Communication Modes of Issuing Multi-Hazard Early Warning (MHEW) in Sri Lanka	Pitigala Liyana Arachchi Ishani Shehara; Chandana Siriwardana; Dilanthi Amaratunga; Richard Haigh
1445-1500	Structural Mechanics Analogies for a Resilience Audit and Index	Priyan Dias; Sahan Viswakula
1500-1515	Development of Low Cost Wireless Sensor Network and Online Data Repository System for Time Synchronous Monitoring of Civil Infrastructures	Punithavel Vishnu; Sujeewa Lewangamage; Thishan Jayasinghe; Jayawickrama Kumara

Session W.3.1 Civil Engineering 3		
Time Slot	Paper Title	Authors
1545-1600	Investigation on the Mechanical Property Variation on Timber Caused Due to the Thermal and Chemical Modification	Pavithra Sudeshika; Malsha Shehani Mendis; Rangika Halwatura
1600-1615	A Preliminary Study on Fabric Formwork for a Mud-concrete Slab System	Suluxan Sitsabesan; Kavinda IU Nanayakkara; Rizna Arooz; Rangika Halwatura
1615-1630	Development of Foam Concrete Blocks with Bottom Ash	Isuri Chamodya Fonseka; Anura Nanayakkara
1630-1645	Investigation of Fungus Growth and Moss Growth on Different Wall Care Putty Materials Along with Different Walling Materials	Anupama Gunawardana; Himahansi Galkanda; Rangika Halwathura
1645-1700	Investigation of Mechanical Properties of Mud Concrete with Coconut Fiber Reinforcement	Harsha Galabada; Himahansi Galkanda; Prasad Dharmaratne; Rangika Halwathura
1700-1715	Study on Use of Glass in Sri Lankan Construction Industry	Fowza Jisthi; Hasitha Damruwan Hidallana-Gamage

Track 2

Session W.1.2 Chemical and Process Engineering		
Time Slot	Paper Title	Authors
0830-0845	Study on Fluidization Behaviour of Raw and Dry Sri Lankan Black Pepper	Manisha Abesekera; Kalpani Dissanayake; Gayani K Jayatunga; Padma Amarasinghe
0845-0900	Investigation of CO ₂ Sequestration Possibility via Indirect Mineral Carbonation Using Waste Coal Fly Ash	Kisal Randula Senadeera; Thisara Kaveendra Jayasinghe; Piyumali Mewanthika Jayasundara; Gayathree Nanayakkara; Mahinsasa Rathnayake
0900-0915	Assessment of the Potential of CO ₂ Sequestration from Cement Flue Gas Using Locally Isolated Microalgae	Sachindra C. N. Wijayasekera; Bimal Y. Cooray; Malith Premaratne; Thilini U. Ariyadasa
0915-0930	Process Parameter Optimization of Urban Biowaste Carbonization	Sinhara M H D Perera; Chathuranga Wickramasinghe; Mahinsasa Narayana
0930-0945	Estimation of Occurrence Frequencies of Chemical Plant Equipment Failure Accident End Events During Preliminary Design Stage	Prabuddhi Kalpana Rathnasekara; Manisha Y. Gunasekera
0945-1000	Novel Application of Adaptive Fixed Neighbourhood Based SPH (AFN-SPH) Method to Reduce Computational Time in Meshfree Based Plant Tissue Drying Models	K. G. Prasadi Hansani; Ambala Kodithuwakkuge Chanaka Indunil Kodithuwakku; Sumith Baduge; Chaminda Karunasena

Session W.2.2 Materials Science and Engineering 1		
Time Slot	Paper Title	Authors
1330-1345	Design, Fabrication and Testing of Lead Zirconate Titanate Based Ultrasonic Wave Generator	Sivanujan Selvarathinam; Sudarman Upali Adikary
1345-1400	Use of Acrylic Polymer Modified Hydrophobic Nano-Silica in Reinforcing of XNBR Nano-Composites	Lumbini Paramitha Ramasinghe; Vinitha Liyanage
1400-1415	Surface Wettability Analysis of Nichrome Alloy Based on the Measurements of Sessile Droplet Contact Angles	Aruna Kumarasiri; S Amarasinghe; Dinesh Attygalle
1415-1430	The Tensile Electroplasticity of Low Carbon Steel with Low Amplitude Pulse Current	Nayanathara Hendeniya; Gayan Aravinda Abeygunawardane; Indika De Silva; Shiranga Wickramasinghe
1430-1445	Investigation of Thermal and Mechanical Properties of Micro Crystalline Cellulose Based Composites	Kavindu Maduranga; Shehan Roshana Silva; Bandu Samarasekara; S Amarasinghe; L Karunanayake; Sampath C Weragoda
1445-1500	Property Analysis of Cellulose Fibers Extracted from Traditional Rice Straw Varieties	Abirami Ratnakumar; Bandu Samarasekara; S Amarasinghe; L Karunanayake
1500-1515	Shelf Life Extension of Cavendish Banana Fruit Using Cold Plasma Treatment	Thisara Sandanuwan; Dinesh Attygalle; Sampath C Weragoda; S Amarasinghe; Bandula Ranaweera; Kamani Rathnayake; Wageesha Alankara

Session W.3. 2 Materials Science and Engineering 2		
Time Slot	Paper Title	Authors
1545-1600	Synthesis and Characterization of Microcrystalline Cellulose from Cotton Textile Waste	Ravisrini Jayasinghe; Bandu Samarasekara; S Amarasinghe
1600-1615	Prediction of True Compressive Flow Stress of AA 6063 Through Ultrasonic Attenuation	Kuenzang Jurmey; Nishan Sharma Ghimire; Vigneswaran Sivahar; Gayan Aravinda Abeygunawardane; Miyuru Piyathilake
1615-1630	Effect of Particle Size Distribution of Rice Straw on Cellulose Extraction	Abirami Ratnakumar; Bandu Samarasekara; S Amarasinghe; L Karunanayake
1630-1645	MCC-Based Transducer Material to Detect Relative Humidity	Anne Fernandopulle; L Karunanayake; Bandu Samarasekara; S Amarasinghe; Dinesh Attygalle
1645-1700	Synthesis and Morphological Characterization of TiO ₂ Nanotube Arrays	Hansi Dananjalee Rajapakse; Shashini Rathnayaka; Hansinee Sitinamaluwa; Ravindi Jayasundara
1700-1715	Chemical Modification of Microcrystalline Cellulose Using Sunflower Oil	Shanari Rathnayake; L Karunanayake; Bandu Samarasekara; S Amarasinghe
1715-1730	Effect of CH ₃ NH ₃ I Concentration on Performances of the Perovskite Solar Cells	Keembiyage Manchana Arush; Ishan Anuruddha; Galhenage A Sewvandi

Track 3

Session W.1.3 Signal Processing, vision and communication 1		
Time Slot	Paper Title	Authors
0830-0845	A Retinex Based GAN Pipeline to Utilize Paired and Unpaired Datasets for Enhancing Low Light Images	Harshana Weligampola; Gihan Jayatilaka; Suren Sritharan; Gunawath Mudiyansele Roshan Indika Godaliyadda; Mervyn Parakrama Ekanayake; Roshan G. Ragel; Vijitha R Herath
0845-0900	Multi Depth-Velocity Filters for Enhancing Multiple Moving Objects in 5-D Light Field Videos	Namalka Liyanage; Sakila Jayaweera; Chamira U. S. Edussooriya; Chamith Wijenayake; Arjuna Madanayake; Panajotis Agathoklis; Leonard T. Bruton; Eliathamby Ambikairajah
0900-0915	Gain Performance of Single-Pump Phase Sensitive Amplifier in the Quadratic Gain Regime	Dushani R Munasinghe; Gresha Srimani Samarakkody; Sachinthani Alahakoon; Ruwan Udayanga
0915-0930	Adaptive Centroid Placement Based SNIC for Superpixel Segmentation	Janith Bandara Senanayaka; Dilshan Thilanka Morawaliyadda; Shehan Tharauka Senarath; Gunawath Mudiyansele Roshan Indika Godaliyadda; Mervyn Parakrama Ekanayake
0930-0945	Empirical Study of Intermediate Filters in Order to Improve the Optical Flow Estimation	Vanel Lazcano; Claudio Isa-Mohor
0945-1000	Xilinx RF-SoC-Based Digital Multi-Beam Array Processors for 28 / 60 GHz Wireless Testbeds	Sravan Pulipati; Viduneth Ariyaratna; Aditya Dhananjay; Mohammed E. Eltayeb; Marco Mezzavilla; Josep M Jornet; Soumyajit Mandal; Shubhendu Bhardwaj; Arjuna Madanayake

Session W.2.3 Big Data, Machine Learning, and Cloud Computing 1

Time Slot	Paper Title	Authors
1330-1345	Chronic Kidney Disease Prediction Using Machine Learning Methods	Imesh Udara Ekanayake; Damayanthi Herath
1345-1400	Classification of Cyberbullying Sinhala Language Comments on Social Media	Hewa Malavi Arachchige Ishara Amali; Shantha Jayalal
1400-1415	Sentiment Lexicon Expansion Using Word2vec and fastText for Sentiment Prediction in Tamil Texts	Sajeetha Thavareesan; Sinnathamby Mahesan
1415-1430	Tamil News Clustering Using Word Embeddings	Faathima Fayaza; Surangika Ranathunga
1430-1445	Sentiment Analysis of Sinhala News Comments Using Sentence-State LSTM Networks	Piyumal Demotte; Lahiru Senevirathne; Binod Karunanayake; Udyogi Munasinghe; Surangika Ranathunga
1445-1500	WDIAS: A Microservices-Based Weather Data Integration and Assimilation System	Gihan Chanuka Karunaratne, Herath Mudiyansele; Herath Mudiyansele Nelanga Dilum Bandara; Srikantha Herath
1500-1515	Fine-Grained Named Entity Recognition for Sinhala	Rameela Azeez; Surangika Ranathunga

Session W.3.3 A Biomedical Engineering and Electronics Systems		
Time Slot	Paper Title	Authors
1545-1600	Evaluation of Hand Tremor Frequency Among Patients in Sri Lanka Using a Soft Glove	Pasindu Kavindya; Isira Awantha; Ashan T Wanasinghe; Asitha L. Kulasekera; Katudampe Vithanage Damith Suresh Chathuranga; Bimsara Senanayake
1600-1615	A Data Driven Binning Method to Recover More Nucleotide Sequences of Species in	Kasun Vimukthi; Geeth Wimalasiri; Prabhath Bandara; Damayanthi Herath
1615-1630	A Scalable Pavement Sensing, Data Analytics, and Visualization Platform for Lean Governance in Smart Communities	Phong H Nguyen; Vincent Brown; Raghav Rao; Matthew McConnell; Farhad Kaffashi; Nicholas Barendt; Nicholas Zingale; Soumyajit Mandal; Kenneth Loparo
1630-1645	A High-Speed Charge Injection Circuit for Nanosecond-Scale Electrochemical Measurements	Junjun Huan; Jifu Liang; Nicholas Georgescu; Zhange Feng; Daniel Scherson; Soumyajit Mandal
Session W.3.3 B Signal Processing, vision and communication 2		
1700-1715	Control Channel Denial-of-Service Attack in SDN-Based Networks	Shriparen Sriskandarajah
1715-1730	Implementation and Testing of a Switching Circulator for Twin-Pair STAR Radio Architectures	Udara Silva; Hasantha Malavipathirana; Sravan Pulipati; Shubhendu Bhardwaj; Soumyajit Mandal; Arjuna Madanayake

/ 2: July 29, 2020

Track 1

Session T.1.1 Civil Engineering 4		
Time Slot	Paper Title	Authors
0830-0845	Synchronized Sensing and Network Scalability of Low Cost Wireless Sensor Networks for Monitoring Civil Infrastructures	Punithavel Vishnu; Suguneswaran Radershan; Sujeewa Lewangamage; Thishan Jayasinghe
0845-0900	Structural Defects in Domestic Buildings & Propose Guidelines for a Safe and Economical Design	Mohamed Zenith Mirza; Hasitha Damruwan Hidallana-Gamage
0900-0915	A KPI Based Performance Measurement Framework for Sri Lankan Construction Projects	Asitha Rathnayake; Malik Ranasinghe
0915-0930	Global Climate Change Impacts on Wave Energy Potential Along the South Coast of Sri Lanka	Pravin Maduwantha; Harshinie Karunarathna; Bahareh Kamranzad; Harsha Ratnasooriya; Kasun De Silva
0930-0945	Spillway Modernization for Improving Robustness of Village Tank Cascades for Floods, Sri Lanka	K. T. N. Perera; Nimal Wijayarathna; H. M. Jayatillake; Jagath Manathunge; Tilak Priyadarshana
0945-1000	Estimation of Impact of Artificial Groundwater Recharge in Small Islands Using a Numerical Modeling Approach	Packiyarajan Rubyhanusha; R. L. H. L. Rajapakse

Session T.3.1 Transportation Engineering and Logistics 1		
Time Slot	Paper Title	Authors
1330-1345	An Approach to Identify Bottlenecks in Road Networks Using Travel Time Variations: A Case Study in the City of Colombo and Suburbs	Thilakshan Thisaiveerasingam; Gayani Rajapaksha; Saman Bandara
1345-1400	Post Harvest Losses and the Role of Intermediaries in the Vegetable Supply Chain	Ruchira T Gunarathna; Yapa Mahinda Bandara
1400-1415	Analyzing the Geographical Catchment Areas of Fort-Malabe LRT by Access Modes	Harini Mendis; Dimantha De Silva
1415-1430	A Statistical Approach to Quantify the Reliability of Travel Time for Trip Planning Purposes	Chathura Jayathma Vidanapathirana; Saman Bandara; Vindula Jayawardana
1430-1445	Validation of Mechanistic-Empirical Pavement Design Approach for Flexible Pavement Design	Karasinghe A. R. N. Jayarathna; Rajapakshe P. P. K. Premarathne; Wasantha K Mampearachchi
1445-1500	Discrete Event Simulation Method to Model Passenger Processing at an International Airport	Kulunu Munasingha; Varuna Adikariwattage
1500-1515		

Session T.4.1 A Transportation Engineering and Logistics 2		
Time Slot	Paper Title	Authors
1545-1600	A Framework to Incorporate Safety Performance for Low Volume Roads in Pavement Management Systems	R. M. k. Sandamal; R. K. T. k. Ranawaka; H. R. Pasindu
1600-1615	Analyze the Potential of Developing Colombo as a Cruise Hub in South East Asia	Oshan W Amarathunga
1615-1630	Study of the Impact Roadside Parking Has on Traffic Flow Characteristics - A VISSIM Simulation Based Approach	Pinnaduwa H. S. Madushanka; Don N. D. Jayaratne; HR Pasindu

Session T.4.1 B Civil Engineering 5		
Time Slot	Paper Title	Authors
1630-1645	Identification of the Impact on Road Roughness on Speed Patterns for Different Roadway Segments	C. Abeygunawardhana; R. M. k. Sandamal; H. R. Pasindu
1645-1700	Utilization of Bottom Ash on Thin Asphalt Surfaced Pavements for Low Volume Roads	Jesudasan Arjoon Moses; Danushka Kasun Bandara; Wasantha Kumara Mampearachchi
1700-1715	Methodology to Incorporate Frictional Performance in the Pavement Management System of Sri Lankan Expressways	Hirushi Vandana Thenuwara; H. R. Pasindu

Track 2		
Session T.1.2 Textile and Apparel		
Time Slot	Paper Title	Authors
0830-0845	Direct Electrospun Cellulose-Based Conductive Nanofibres for Electronic Textiles	Nandula D Wanasekara; Hashan N Thenuwara; Nilupuli C Rathnayaka; Puwakdandawe V.T. Weerasinghe
0845-0900	Investigating the Feasibility of Applying Spin Coating Method for Textiles	Nipuna Dissanayaka; Sumudumalee Wijeratne Abeysundara; Nandula D Wanasekara
0900-0915	Biodegradable Composite for Temporary Partitioning Materials	Dumindu Geeth Dassanayaka; Dilshan P Hedigalla; Ujithe Gunasekera
0915-0930	Investigating the Possibilities to Produce Alginate Filaments with Locally Available Seaweeds	Aruna Dharmarathne; Isuri U Thilakasinghe; Ujithe Gunasekera; Vithursha Vijayarajah
0930-0945	The Development of Sustainable Alternative to Neoprene Wetsuit Fabric	Ushani Navodya; Ganuka L Keenawinna; Ujithe Gunasekera
0945-1000	Machine Learning-based Approach for Modelling Elastic Modulus of Woven Fabrics	Windula Kularatne; Hasitha Sampath Ranawaka; Sandun Fernando; Nilhan Niles; Tss Jayawardana; Pubudu Ranaweera

Session T.2.2 Technology Management		
Time Slot	Paper Title	Authors
1130 - 1145	Model for Measuring the Effect of Utility Interventions on Change of Consumer Behavior on Energy Savings: A Study Based on Sri Lankan Domestic Sector	Witharamalage Jayaratne; Sarath Dasanayaka; D Mudalige
1145-1200	Personality Traits of Techno-Entrepreneurial Engineers in Sri Lanka	Praneeth Wijesinghe; Thesara Jayawardana; Sarath Dasanayaka
1200-1215		
1215-1230		

Session T.3.2 Sustainable Energy		
Time Slot	Paper Title	Authors
1330-1345	Efficiency Improvement of Solar Photovoltaic Thermal Systems by Experimental and Numerical Analysis	Thushan Rasika Kumara Karunasena; Himan KG Punchihewa; Inoka Damayanthi Manthilake
1345-1400	Study of the Impact of Electric Vehicles on Fuel Consumption and Carbon Dioxide Emission Scenarios in Sri Lanka	Surath Gajanayake; Saman Bandara; Thilakshan Thisaiveerasingam; Thusitha Sugathapala
1400-1415	Technical and Environmental Feasibility of Co-firing Torrefied Biomass in a Coal-fired Power Plant	Udya Devaraja; Sachini Supunsala Senadheera; Duleeka Gunarathne
1415-1430	Development of a Novel Preprocessing Method for Removal of Chlorophyll from Microalgae	Yashora Manduli Kulasinghe; Thilini U. Ariyadasa
1430-1445	Development of Design Guideline for Smokestacks of Standalone Emergency Generators to Satisfy Sri Lankan Emission Standards	Pasindu M. Ranathunga; W. H. N. Chamara Jayasinghe; R. P. J. Manura Randunu; Thusitha Sugathapala; Indrajith D Nissanka

Session T.4.2 Mining and Earth Resources Engineering		
Time Slot	Paper Title	Authors
1545-1600	Recovery of Copper from Concentrated Seruwila Copper Magnetite Ore from Chloride Electrolyte in the Presence of Hydrochloric Acid	Oscar Kithsiri Dissanayake
1600-1615	Analysis of Bulking Factor as a Basis for Royalty Calculation in Aggregate Quarrying in Sri Lanka	Treshan Nimasha Perera; Sachini Piyarathna; Isuru Liyanage; P Hemalal; Pannipitiye Dharmaratne; Samarasuriya Patabendige Chaminda; Indutilak Samaradivakara
1615-1630	Extraction of Copper from Seruwila Copper Magnetite Deposit	Chathuranga S Jayathilake; Sudath Rohitha; Oscar Kithsiri Dissanayake; Indika Rushan; Kanishka Dilshan
1630-1645	Ecological Evaluation of Urban Heat Island Effect in Colombo City, Sri Lanka Based on Landsat 8 Satellite Data	Oscar Kithsiri Dissanayake; Kumudu Madhawa Kurugama; Thuppahi Patabandige Charitha Ruwanthi
1645-1700	Stability Analysis of Slopes in Aruwakkalu Limestone Mine: A Finite Element Approach	Amirthan Thirukumaran; Lahiru Dananjaya; Tharaka Dilshan Jayarathna; Anjula Dassanayake; Chulantha Jayawardena; Madappuli Arachchige Don Maheshwari Gangawo Wickrama; Yoshiaki Fujii; Sophea Boeut

Track 3

Session T.1.3 Power Systems, Electrical Machines and High Voltage Engineering		
Time Slot	Paper Title	Authors
0830-0845	Improving Transient Stability of an Islanded Microgrid Using PV Based Virtual Synchronous Machines	Nisitha Padmawansa; Nilakshi Lidula
0845-0900	Experimental Study on Efficiency Enhancement of Concentrated Solar Photo-Voltaic Systems with Convex Lenses and Cooling	Prasanka Samaraweera; Dinidu Jeewandara; Uthpala Gammampila; Jayapalan Keerthanam; Ubuli Jayathunga; Asanka S Rodrigo
0900-0915	Optimum Battery Capacity for a Rooftop PV Solar System	Joseph Rohan Lucas; Omali Chathushka Devanarayana; Addara Pathirana Kusal Sandaruwan Pathirana; Paranavithanage Senali Chamathka Boteju; Weerahannadige Flavian Rumedha Charith Fernando
0915-0930	Impact of Solar PV Systems on the Reliability of Power Distribution Systems	Sewwandi Meegoda; Danula Balasooriya; Mahesh Dharmapriya; Anushka Kumara; Gihan Amarasinghe; Saranga Abeygunawardane
0930-0945	Designing a Robust Controller to Damp Sub-Synchronous Oscillations in Power Systems	Chamali Mahawala Gamage; Darshana P Wadduwage
0945-1000		

Session T.2.3 Robotics and Intelligent Systems		
Time Slot	Paper Title	Authors
1130 - 1145	Sensor-Less Detection of Wheel Alignment Error for a Wheeled Mobile Robot Using the Disturbance Observer	A. M. Harsha S. Abeykoon; Shiva Paudel; Senadiri Dummunnage Arunya P. Senadheera
1145-1200	A Programming Framework for Robot Swarms	Mahendra Bandara Dassanayaka; Tharuka Bandara; Nadun Adikari; Isuru Nawinne; Roshan G. Ragel

Detailed Program

1200-1215	A Machine Learning Approach for NILM Based on Superimposed Current Profiles	A. M. Harsha S. Abeykoon; Paveen Senura Perera; Sanjeewika Prabodhanie; Mdnv Matharage
1215-1230	Motion Planning of Novel Stair-Climbing Wheelchair for Elderly and Disabled People	Sampath Ruwan Thamel; Rohan Munasinghe; Thilina Lalitharatne

Session T.3.3 A Micro/Nano Electro Mechanical Systems, Mechatronics, and Micromechatronics		
Time Slot	Paper Title	Authors
1330-1345	Design and Analysis of a MEMS-Based Transdermal Drug Delivery System	Nisal Minula Perera; Isira Awantha; Ashan T Wanasinghe; Dinuka Herath; Supun S H. G. Paththinige; Lahiru R Ekanayaka; Ranjith Amarasinghe
1345-1400	Invited Talk on Micromechatronics	
1400-1415		

Session T.3.3 B Mechanical Engineering Systems		
Time Slot	Paper Title	Authors
1430-1445	Performance Improvement of Industrial Induction Mould Heating Oven	Ellilraj Tharmapalan; Srimohanan Sivalingam; Nihlas Mohamed Seyyaf; Nehruganth Kanagalingam; Lasitha Balasooriya; Indrajith D Nissanka
1445-1500	Design of a Sustainable Automotive Turbocharger Remanufacturing System	Heshan Thenuka Jayawardane; Kavindu Wijesinghe; Punitha Wildeniya; J R Gamage
1500-1515	HipExo: A Hip Exoskeleton Robot for Load Lifting with Flexible Trunk Linkage Mechanism	Uswatta Liyanage Shehara Perera; Nimantha Priyamal Dasanayake; Hettiarachchige Pasindu Thineth Hettiarachchi; Vinura Asel Mannapperuma; Pubudu Ranaweera; Ranathunga Arachchilage Ruwan Chandra Gopura

Session T.4.3 A Software Engineering		
Time Slot	Paper Title	Authors
1545-1600	Bridge Ontology Architecture for Knowledge Management in Bridge Maintenance	Banujan Kuhaneswaran; S Vasanthapriyan
1600-1615	Blockchain-Based Product Traceability Beyond Proof of Existence	Tharangana Perera; Sithija Thewa Hettige; Shadhini A. P. Jayatilake; Wickramaranga Abeygunawardhana; Herath Mudiyansele Nelanga Dilum Bandara
1615-1630	Unit Test Code Generation Tool Support for Lower Level Programming Languages	Rasika Bandara; Indika Perera
1630-1645	MSChain: Blockchain Based Decentralized Certificate Transparency for Microservices	Dulaj Dilshan; Supimi Piumika; Chameera Rupasinghe; Indika Perera; Prabath Siriwardena
1645-1700	Automated Vehicle Parking Occupancy Detection in Real-Time	Heshan Padmasiri; Ranika Madurawe; Chamath Abeyasinghe; Dulani Meedeniya

Session T.4.3 B Big Data, Machine Learning, and Cloud Computing 2		
Time Slot	Paper Title	Authors
1700-1715	Hybrid Approach for Accurate and Interpretable Representation Learning of Knowledge Graph	Nivetha Yogendran; Abivarshi Kanagarajah; Kularajini Chandiran; Uthayasanker Thayasivam
1715-1730	Detection of Novel Biomarker Genes of Alzheimer's Disease Using Gene Expression Data	Shehan Perera; Kaveesha Hewage; Chamara Gunarathne; Rajitha Navarathna; Damayanthi Herath; Roshan G. Ragle