



12th Consecutive Annual Undergraduate Research Symposium UNI-IN ALLIANCE 2026



TIME SCHEDULE: ORAL PRESENTATIONS

Time	VENUE					
	Smart Classroom	B2	C2	F1	M2	Seminar Hall
	Chemical and Environmental Science	Biological Sciences	Business and Management Sciences	Environmental and Resource Economics	Theoretical and Applied Physics	Information Technology and Computing
10.30 am - 10.45 am	ID 24 S.G. Jayasundara Exploring the potential of phthalocyanine-based Mn(II) complex for dye decolorization: demonstrated on selected azo and xanthene dyes	ID 23 K.A.S.T. Kuruppuarachchi Phytochemical screening and antibacterial activity of methanolic extracts of leaf and root of <i>Solanum torvum Sw.</i>	ID 12 K.G.R. Senanayake Exploring the factors affecting consumer behaviour toward eco-friendly products: the role of perception of the green activity trap among consumers in Sri Lanka	ID 15 B.G.Y. Pamodani Investigate the factors influencing circular economy adaptation behavior among apparel small and medium enterprises in Pamunuwa, Maharagama	ID 40 J.D.A Udara Determination of spiral arm pitch angles in spiral galaxies using python-based image analysis	ID 27 K.M. Kalansooriya PulseFit: An integrated machine learning framework for personalized calorie prediction, workout recommendation, and diet enhancement.
10.45 am - 11.00 am	ID 33 W. S.P. De Silva	ID 26 S.T. Wijerathna	ID 13 B.V.N. Waidyarathna	ID 17 J.A.A.S Nathasha	ID 46 L.V.D. Ravihara	

	Global warming potential of technically specified rubber (TSR) production in Sri Lanka: a comparative cradle-to-gate life cycle assessment across three factories	Molecular and phenotypic screening of selected <i>Capsicum</i> varieties for anthracnose resistance caused by <i>Colletotrichum capsici</i> .	Understanding repurchase intention after service failure: the mediating effect of e-commerce service tolerance in Sri Lanka	A study of suppliers' sustainability business practices and circular economy principles in hardware retail business in the Colombo district.	Solar activity and pandemic occurrence, a statistical and machine learning analysis of sunspot dynamics (1800–2025)	
11.00 am - 11.15 am	ID 65 P.A.O Adithya Investigation of the effect of EDTA incorporation on Zinc blooming and mechanical properties of vulcanized rubber under environmental aging conditions	ID 29 J. D, C. Hansamali Extraction, characterization, and evaluation of the antifungal activity of secondary metabolites produced by <i>Trichoderma asperellum</i> against selected plant pathogenic fungi.	ID 38 S.N.M.R.L.V. Nawarathna From vicious cycle to virtuous cycle: Growth barriers facing small cashew-based enterprises in Kajugama, Sri Lanka	ID 52 B.A.S.G. Karunarathna Consumer intention to engage in extended producer responsibility (EPR) practices within the FMCG sector in Sri Lanka		

					Engineering, Technological Sciences and Innovation	
11.15 am - 11.30 am	ID 91 T. Bopitiya Assessment of soil Carbon sequestration potential across land use types in Thalangama environmental protection area, Sri Lanka	ID 30 B.M.R Bandaranayake Isolation, identification and characterization of a fungal biocontrol agent against bean anthracnose caused by <i>Colletotrichum lindemuthianum</i>	ID 39 I.P.U. Vithana Tourist harassment by small-scale street businesses (SSSBs) in Galle fort: A study on its negative effects on destination selection	ID 72 F. A. M. Thashmil Development of a sustainable Coco peat-based cat litter	ID 97 K.A.D.P.K. Gunathilaka Development of a natural dye from <i>Artocarpus Nobilis</i> leaf pigments for sustainable cotton dyeing	ID 60 K. W. S. C. Wickramasinghe SCAFMIND: Progressive scaffold withdrawal for autonomous reasoning in large language models
	Polymer and Material Science	Food Science and Nutrition			Mathematics and Applied Statistics	
11.30 am - 11.45 am	ID 10 B. A. I. Jayamanna Synergistic corrosion protection of iron using	ID 36 M.J.A Cooray Development and optimization of plant-based probiotic beverages using pumpkin	ID 48 K.S. Amarathunge Explaining the franchise readiness in Sri Lankan Rugby through governance,		ID 35 K.L.I.J. Madhusanka A graph theoretical framework for E-commerce UI	ID 82 S.R. Amarasiri AI-Driven multimodal mental health screening chatbot for detecting emotional masking

	epoxy-based nanocomposite consists of go and schiff base ligand-loaded mesoporous silica	(<i>Cucurbita maxima</i>) puree with soy milk matrix	financial viability, entertainment value, and technical expertise		optimization using the retail rocket dataset	
11.45 am - 12.00 noon	ID 85 H.A.T.T. Hettiarachchi Effect of enzymatic deproteinization on the raw rubber properties of skim natural rubber	ID 53 N.A.S. Cooray Assessing the correlation of quality parameters (crude fibre) and exogenous adulterants(maltodextrin,sugar,alkalinity)/polyphenols with the sensory taste profile of Ceylon black tea	ID 51 G.K. Bandara Factors influencing purchase intention towards electric bikes as sustainable mode of Transportation in the Colombo Distric, Sri Lanka		ID 63 L.R. Jansen Development of an interactive statistical process control application for quality process monitoring: a case study of an apparel manufacturing company in Sri Lanka	ID 84 H.G.P.P. Hettiarachchi Multi-feature tensor fusion for gender identification in Sinhala vocal performances using convoluntional neural networks
12.00 pm - 12.15 pm	ID 86 K.A.D.P.K. Gunathilaka	ID 74 B.R.T. Fernando	ID 54 H.K.R.N Perera		ID 70 S.U. Narahenpitage	ID 87 W.A.D.D.S Withanarachchi

	development of chitosan-based active packaging films integrated with <i>Sesbania grandiflora</i> leaf extract for enhanced antioxidant and antimicrobial properties	Multi-environmental lifecycle modeling and visual damage profiling of guava using fused thermal-visual deep learning	Determinants of investment willingness in the Sri Lankan financial market: evidence from generation z professionals working in blue-chip companies, Sri Lanka		Data-driven inventory optimization and demand forecasting to prevent raw material stockouts: A case study of an apparel accessories manufacturing company in Sri Lanka	Predictive and Prescriptive Risk Management in Agile Projects: An Explainable AI Framework for Sprint Level Root Cause Prioritization
12.15 pm - 12.30 pm	ID 98 K.E. Perera Development of a biobased and compostable multilayer film for intelligent food packaging applications		ID 56 D.S.T. Costa Evaluating the customer satisfaction of shopping malls standards in Sri Lanka		ID 83 W. N. S. Wijesekara Determinants of moonlighting (secondary jobholding) among employed individuals in Sri Lanka: Evidence from the labour force survey	ID 89 K.A.P.I. Fernando A semi-supervised long short-term memory autoencoder with shapely additive explanations for real-time progressive web app performance monitoring

<p>12.30 pm - 12.45 pm</p>			<p>ID 66</p> <p>K.A.K. Warsha</p> <p>Factors that mediate the relationship between urban farming preference and feasibility in urbanized area: a case study in Kotahena area.</p>			<p>ID 90</p> <p>N.S.S Weerasinghe</p> <p>AST-based extraction of angular code structures for automated documentation generation.</p>
<p>12.45 pm - 1.00 pm</p>			<p>ID 69</p> <p>S.N.T. Peiris</p> <p>Impact of regulatory complexity on solar power adoption among financially capable households: a case study of the Kalutara district</p>			<p>ID 95</p> <p>N.S.S. Weerasinghe</p> <p>Explainable personalized spaced repetition system for language learning</p>
<p>1.15 pm - 1.30 pm</p>			<p>ID 76</p>			

			<p>H.B.S.M. Karunaratne</p> <p>Ethical work environment in the gig economy special reference to pick me tuk-tuk drivers in Colombo</p>			
<p>1.30 pm - 1.45 pm</p>			<p>ID 94</p> <p>B.G.K Ridmi</p> <p>Investigating the level of implementation of extended producer responsibility (EPR)-based food packaging waste management by small and medium enterprises (SMEs) in the Colombo District, Sri Lanka</p>			