



International Conference on
Sustainable Technologies and Sciences ICSTS-2025
4th to 6th December 2025

Programme Schedule

Day 1. 04-12-2025

9.30 – 10.30	Inaugural Function
10.45 – 11.15 Plenary Lecture-1	Dr. Vandana Sreedharan , Government Engineering College, Kannur <i>Exploring Circular Economy in Geotechnical Engineering</i> https://us06web.zoom.us/j/85229196197?pwd=hJuzboO85UACRaPAFUZk6Zal5kWlb3.1
11.30 – 12.00 Plenary Lecture 2	Dr. Darren Chian Siau Chen , National University of Singapore <i>Turning Marine Waste into Green Cement: A Singapore Case Study</i> https://us06web.zoom.us/j/85229196197?pwd=hJuzboO85UACRaPAFUZk6Zal5kWlb3.1
12.15 – 12.45 Plenary Lecture 3	Dr. Arlete Apolinário , University of Porto, Portugal <i>Advanced nanostructured photoelectrodes for photoelectrochemical cells and solar water splitting</i> https://us06web.zoom.us/j/85229196197?pwd=hJuzboO85UACRaPAFUZk6Zal5kWlb3.1
14.00 – 14.30 Plenary Lecture 4	Dr. T P D Rajan , National Institute for Interdisciplinary Science and Technology <i>Development of Lightweight Aluminium alloys and Composites for Automotive and Aerospace Systems</i> https://us06web.zoom.us/j/85229196197?pwd=hJuzboO85UACRaPAFUZk6Zal5kWlb3.1
14.45 – 15.15 Plenary Lecture 5	Dr. Rajeswari Sridhar , National Institute of Technology Trichy <i>Responsible AI – Tools for Explainability</i> https://us06web.zoom.us/j/85229196197?pwd=hJuzboO85UACRaPAFUZk6Zal5kWlb3.1
15.30 – 16.00 Plenary Lecture 6	Dr. K J Thomas , Central University of Kerala <i>Quantum Phenomena in Semiconductor Nanostructures and Topological Insulators</i> https://us06web.zoom.us/j/85229196197?pwd=hJuzboO85UACRaPAFUZk6Zal5kWlb3.1
16.30 – 18.00 Technical Session- 1 Theme Lecture	Track-1, CSE- Dr. Vinodu George – <i>Block Chain for Sustainable Development</i> Track-2 ECE – Dr. Resmi R - <i>Bridging Biology and Technology: The future of human centric innovation</i> Track- 3 EEE – Dr. Aseem – <i>Mobility Trends and Clean Energy Synergy</i>



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16.30 – 17.00 Paper presentation	Track – 4 – ME – Dr. Anil Kumar B C – <i>Case Studies: Multi-criteria Decision Making (MCDM) Techniques for optimum selection</i>
17.00 – 18.00	Track-5 – CE – Dr. Beenamol – <i>Time history response analysis of RC Moment resisting Framed Structures subjected to earthquake</i>
	Track- 6 – Sciences – Prof Deepthi Chandran - <i>Mathematical modelling for a better future: Transforming complexity into insight</i>

Day 2: 05-12-2025

9.30 – 10.00 Plenary Lecture- 7	Dr Krishna Reddy , University of Illinois, Chicago, USA <i>Resilient and Sustainable Solutions for Storm-Surge Protection in Coastal Communities</i> https://us06web.zoom.us/j/85229196197?pwd=hJuzboO85UACRaPAFUZk6Zal5kWlb3.1
10.15 – 10.45 Plenary Lecture-8	Dr. Kalpana R , National Institute of Technology Karnataka, Surathkal. <i>High Power Converters for off Board EV Chargers</i> https://us06web.zoom.us/j/85229196197?pwd=hJuzboO85UACRaPAFUZk6Zal5kWlb3.1
11.15 – 11.45 Plenary Lecture 9	Dr. Selvam Ravindranath , Finland International School, Maldives <i>Engineering Oceans: Innovative Solutions for a Sustainable Future</i> https://us06web.zoom.us/j/85229196197?pwd=hJuzboO85UACRaPAFUZk6Zal5kWlb3.1
12.00 – 12.30 Plenary Lecture 10	Dr Ganesh Neelakanta Iyer , National University of Singapore <i>The Carbon Cost of Intelligence: Navigating the AI Sustainability Paradox</i> https://us06web.zoom.us/j/85229196197?pwd=hJuzboO85UACRaPAFUZk6Zal5kWlb3.1
14.00 – 14.30 Plenary Lecture 11	Dr. David Toll , Durham University, UK <i>A sustainable solution for preventing rainfall-induced landslides</i> https://us06web.zoom.us/j/85229196197?pwd=hJuzboO85UACRaPAFUZk6Zal5kWlb3.1
14.45 – 15.45 Plenary Lecture 12	Dr Vishnu C Rajan , Indian Institute of Technology Tirupati <i>Toward Future-Ready Supply Chains: Harmonising Risk, Resilience, and Sustainability</i>



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16.00 – 16.30 Keynote Session-1	Track-1, CSE- Dr. Smithamol M B – <i>Lightweight Secure data sharing framework for multi user cloud environment</i> Track-2 ECE – Dr. Deepambika – <i>Sustainable Electronics</i> Track- 3 EEE – Dr. Rajasree Raghavan - <i>Model Predictive Control for fast discharging of Second Life Batteries</i> Track – 4 – ME – Dr. Anil Kumar. E N – <i>Development of a Structural Model for evaluating the factors affecting the competitiveness and economic performance of public healthcare system in Kerala</i> Track-5 – CE – Dr. Jayamohan J - <i>Case Studies of Stabilization of Slopes</i> Track- 6 – Sciences – Dr Anoop S Nair - <i>Sustainable Materials for Emerging Non-Conventional Drug Administration Pathways</i>
17.00 – 18.30 Technical Session- 2 Theme Lecture 17.00 – 17.30 Paper presentation 17.30 – 18.30	Track-1, CSE- Dr. Sumithra M D – <i>AI enabled smart infrastructure for sustainable cities</i> Track-2 ECE – Dr. Suma Sekhar – <i>Smart cameras for intelligent traffic systems</i> Track- 3 EEE – Dr. Kannan – <i>Application and Analysis of Deep Neural Network Architectures toward state of Charge Estimation of Lithium Ion Batteries</i> Track – 4 – ME – Dr. Sajan Jerome – <i>An outlook on electric vehicle adoption in India</i> Track-5 – CE – Dr. Sajan K Jose – <i>Foamcrete blocks using Industrial wastes: A sustainable building material</i> Track- 6 – Sciences – Dr. Lakshmipriya N - <i>Mathematical Approaches to Disease Dynamics, with Independent Insights on Sustainability</i>

Day 3: 06-12-2025

9.30 – 10.00 Plenary Lecture- 13	Dr Renjith S , Sree Chithra Institute of Medical Sciences and Technology <i>Sustainable Medical device development</i> https://us06web.zoom.us/j/85229196197?pwd=hJuzboO85UACRaPAFUZk6Zal5kWlb3.1
10.15 – 10.45 Plenary Lecture-14	Er P. Balakrishnan Nair , Institution of Engineers (India), Kerala State Centre <i>Eco-Friendly Supply Chain; Managing Sustainability</i> https://us06web.zoom.us/j/85229196197?pwd=hJuzboO85UACRaPAFUZk6Zal5kWlb3.1
11.00 – 11.30	Dr. Ajith Gopi , ZONERGIA Services Pvt. Ltd



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Plenary Session-15	Role of Renewable Energy in Achieving Sustainable Development Goals https://us06web.zoom.us/j/85229196197?pwd=hJuzboO85UACRaPAFUZk6ZaI5kWlb3.1
11.45 – 12.15 Keynote Session 2	Track-1, CSE- Dr. Smitha E S - <i>Social Sentiment analysis</i> Track-2 ECE – Dr. Mary Reena – <i>Sustainable and Cognitive Digital Engineering for IOT Networks</i> Track- 3 EEE – Prof Jayakumar M – <i>Industrial Power quality issues- Identification and testing of systems</i> Track – 4 – ME – Dr. Manoj Kumar C V – <i>Chemical Kinetic Modelling of fuels for IC Engine Combustion Simulation</i> Track-5 – CE – Dr. Arun N R – <i>Utilization of Coal Bottom ash as sustainable pozzolanic material</i> Track- 6 – Sciences – Dr Keerthi – <i>Designing Organic reactions for a sustainable future</i>
13.30 – 15.00 Technical Session- 3 Theme Lecture 13.30 – 14.00 Paper presentation 14.00 – 15.00	Track-1, CSE- Dr. Praveen Kumar – <i>Harnessing Technology for sustainability – Research Perspective</i> Track-2 ECE – Dr. Pramod – <i>High performance FIR Filter architectures using algorithmic level transformations and improved Add-Multiply Operations</i> Track- 3 EEE – Dr. Sheeja V Track – 4 – ME – Dr. Swaraj Kumar B - <i>Unlocking the potential of Hybrid Thermal Energy Storage for Renewable Integration</i> Track-5 – CE – Prof Radhika Nair – <i>Fragility assessment of RC Buildings considering seismic soil-structure interaction</i> Track- 6 – Sciences – Prof Lakshmi – <i>Sustainable practices in Applied Sciences</i>
15.30 – 17.00 Technical Session- 4 Theme Lecture 15.30 – 16.00 Paper presentation 16.00 – 17.00	Track-1, CSE- Dr. Jayalekshmi S – <i>Smarter Paths: Advancing Intelligent Routing in LR-WPAN for the IoT future</i> Track-2 ECE – Prof. Rensi Sam Mathew – <i>AI driven modulation recognition for next generation wireless networks</i> Track- 3 EEE – Dr. Baby Sindhu – <i>Nanodielectrics: A pathway to sustainable power systems</i> Track – 4 – CSE – D Rahul C – <i>Neural machine translation of Indian Languages</i> Track-5 – CE – Prof Merlin – <i>Roadside friction optimisation: A pathway to sustainable and safe road infrastructure</i> Track- 6 – Sciences – Prof. Archana -
17.00 – 17.30 Valedictory Session	