



2025 IEEE 4th International Conference

on

**Smart Technologies for Power, Energy and Control
(STPEC 2025)**

December 10 -13, 2025 | NIT Goa, Goa, India



**STPEC 2025
NIT GOA**

IEEE STPEC 2025

**2025 IEEE 4th International Conference on Smart Technologies for
Power, Energy, and Control**

10-13 December, 2025, Goa, India

Technical Session Schedule (4-12-2025)



Department of Electrical and Electronics Engineering

National Institute of Technology Goa, India

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Smart Technologies for Power, Energy and Control (STPEC 2025)

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Day 1		Date: 10-12-2025		Oral Session – 1		Time : 16:00 to 17:30	
Date: 10-12-2025		Parallel Session 1		Track 1		Venue :	
ID	Time Slot	Paper ID	Paper Title				
OS-T1-S1-P1	16:00 - 16:15	188	Economic Load Dispatch using RUN optimization <i>Authors:</i> Ujjwal Kumar, Manoj Kumawat, Ujjwal Kumar Kalla, Ashok Kumar				
OS-T1-S1-P2	16:15 - 16:30	1503	Design and Simulation of an Electronic on-Load Tap Changer Transformer under Transient and Steady-State Conditions <i>Authors:</i> Narayan Prasad, Rajesh Pindoriya, Jeetendra Chaudhary, Apsara Adhikari, Akhileshwar Mishra, Shailendra Kumar Jha				
OS-T1-S1-P3	16:30 - 16:45	425	Power Grid Failures in the Renewable Era: The April 2025 Blackout in Spain and Portugal <i>Authors:</i> Sunil Ankeshwarapu, Vennol Dhiraj Naik, Krity Kumari Rao				
OS-T1-S1-P4	16:45 - 17:00	1369	Reliability Improvement of Bullet Train Power Systems Through Cyber Insurance Premium under Grid and Cyber Outages <i>Authors:</i> Pesingi veerendra Rajesh varma, Shaik Affijulla				
OS-T1-S1-P5	17:00 - 17:15	1097	Optimal Placement of PMUs using AO Algorithm By Considering Data Traffic and Cost Installation Indices in Smart Grid <i>Authors:</i> Vedik Basetti, Chandan Shiva, Sachidananda Sen, Shruti Ankam, Shriram S. Rangarajan, Dr. N.G.P.				
OS-SS09-S1-P6	17:15 - 17:30	592	Grid-Connected PV System Using Isolated DC-DC Converter for MPPT With Power Quality Enhancement <i>Authors:</i> Rahul Kumar Verma; Rajan Kumar				
Date: 10-12-2025		Parallel Session 2		Track 2		Venue :	
ID	Time Slot	Paper ID	Paper Details				
OS-T2-S1-P1	16:00 - 16:15	437	Performance Analysis of DTC-Based Dual Three-Level and Dual Two-Level Inverters in Five-Phase OEW-PMSM Drives with simplified SVM <i>Authors:</i> Mohan Malla, Ramesh Tejavathu				
OS-T2-S1-P2	16:15 - 16:30	503	Frequency Domain Dielectric Response of Aged Transformer Oil- paper Insulation Retrofilled with Natural Ester Oil <i>Authors:</i> Soumya Chatterjee, Brahmaswarup Laha, Arup Kumar Das				
OS-T2-S1-P3	16:30 - 16:45	715	Stator Winding Faults Detection using Symmetrical Components of Stator Fluxes in Three Phase Induction Motor <i>Authors:</i> Tushar Vilhekar Visvesvaraya, Makarand Ballal				
OS-T2-S1-P4	16:45 - 17:00	737	Sensorless Speed Control of Dual Stator Induction Machine Using Enhanced Rotor-Flux based Model Reference Adaptive System with Stator Command Voltage Estimation <i>Authors:</i> Abhijit Das, Shantanu Chatterjee, Amarendra Edpuganti				
OS-T2-S1-P5	17:00 - 17:15	1012	Performance Comparison of Field-Oriented Control of Si-IGBT, SiC-MOSFET and GaN-Based PMSM Drive <i>Authors:</i> Bharat Lal, Jeevanand Seshadrinath				



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Date: 10-12-2025		Parallel Session 3		Track 3	Venue :
ID	Time Slot	Paper ID	Paper Details		
OS-T3-S1-P1	16:00 - 16:15	216	Coupled Inductor Based Non-Isolated High Gain DC-DC Converter <i>Authors:</i> Raj Moyal, Jahangeer Dar, Mukesh Pathak		
OS-T3-S1-P2	16:15 - 16:30	386	Power Factor Correction by Phase Angle Regulation and Mitigation of Voltage fluctuations using MLI based DVR <i>Authors:</i> singamasetty manmadha rao, R J Satputaley, Renuka Dhote		
OS-T3-S1-P3	16:30 - 16:45	117	Integrated Control Strategy for BLDC Motors Using a High-Gain DC-DC Converter with Sensorless Feedback <i>Authors:</i> Konda Naresh, D Suresh, Swapnajit Pattnaik		
OS-T3-S1-P4	17:00 - 17:15	285	Design and Analysis of a Triple-Gain Seven-Level Switched Capacitor Inverter for PV Application <i>Authors:</i> Biswajit Sarangi, Varsha Singh		
OS-T3-S1-P5	17:15 - 17:30	311	Study the effect of Current Source Driver on the performance of Traction Inverter <i>Authors:</i> Yashahshree Thombre, Madhuri Chaudhari		
OS-T3-S1-P6	17:15 - 17:30	731	Impact of Shield Wires Configuration on Lightning-Induced Overvoltages in Power Transmission Systems <i>Authors:</i> Shakthi Prasad		
Date: 10-12-2025		Parallel Session 4		Track 4	Venue :
ID	Time Slot	Paper ID	Paper Details		
OS-T4-S1-P1	16:00 - 16:15	187	Gradient-Based Optimizer for Short-term Hydrothermal Generation Scheduling <i>Authors:</i> Aman Kumar, Manoj Kumawat, Ujjwal Kumar Kalla, Ashok Kumar		
OS-T4-S1-P2	16:15 - 16:30	1246	A Reduced Switch Count Three-Level Inverter for Wind Energy System Using ANN-Based Vector Control <i>Authors:</i> Giribabu Dyanamina, Navin Kumar		
OS-T4-S1-P3	16:30 - 16:45	500	Grid-Tied Single-Stage Solar Photovoltaic-Based EV Battery Charging with MPPT and Power Quality Improvement <i>Authors:</i> Varsha Sahu, Rajan Kumar		
OS-T4-S1-P4	16:45 - 17:00	416	Assessing the Impact of EV Integration in Multi-Area Economic Dispatch under Renewable Uncertainty <i>Authors:</i> Priyanka Hooda, prem prakash		
OS-T4-S1-P5	17:00 - 17:15	499	Real-Time Optimization of Partially Shaded Solar Photovoltaic Modules using Parameter-optimized Global Maximum Power Point Tracking <i>Authors:</i> N S Ramanathan, Devangi Devangi, Naran M PindoriyaPallavi Bharadwaj		
OS-T4-S1-P6	17:15 - 17:30	488	A Fuel Cell Integrated Reduced Stage High Gain Grid Connected Solar PV Inverter <i>Authors:</i> Soumyarupa Saha, Subhendu Dutta		



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Date: 10-12-2025		Parallel Session 5		Track 5	Venue :
ID	Time Slot	Paper ID	Paper Details		
OS-T5-S1-P1	16:00 - 16:15	283	SoC estimation of lithium-ion batteries using Golden Jackal algorithm tuned Support Vector Machine <i>Authors:</i> Saneep K, Sundareswaran K, P Srinivasa Rao Nayak, Sishaj P Simon, Josephine R L, Mithun T		
OS-T5-S1-P2	16:15 - 16:30	504	Design, Analysis and Control of Multi-Mode Cell Voltage Equalizer using Fly-back Converter for Series-Connected Battery String <i>Authors:</i> Abhaya Kumar Sahoo, Keerthi Saladi, Sashwathkumar S, Lizanne Fernandes, V. Sankaranarayanan		
OS-T5-S1-P3	16:30 - 16:45	709	Integrating Distracted Driving Detection with Vehicle Platooning for Semi-Autonomous Driving in Smart Transportation <i>Authors:</i> Anirban Dasgupta, Rahimul I. Mazumdar, Parijat Bhowmick		
OS-T5-S1-P4	16:45 - 17:00	817	Comparative Analysis of Different Rotor-Shaped IPMSM for Two- Wheeler Electric Vehicles <i>Authors:</i> Lourembam Devi, Sreenu Sreekumar, Anoubam Delin Sharma, Stalin Meitei Athokpam, Kilangleima Chingsubam		
OS-T5-S1-P5	17:00 - 17:15	909	Sensitivity Analysis of LCC-S Based Multiphase Inductive Power Transfer System Under Compensating Parameter Variation <i>Authors:</i> Sukumar Das, Apurv Kumar Yadav		
Date: 10-12-2025		Parallel Session 6		Track 6	Venue :
ID	Time Slot	Paper ID	Paper Details		
OS-T6-S1-P1	16:00 - 16:15	72	Eddy Current Sensor Based Smart Control System for Optimizing Industrial Zinc Coating Process Using Adaptive Machine Learning and IIoT <i>Authors:</i> Tarun Das ; Chinmay Bera; Chandan Dutta; Prem Kumar Das; Nitish Kumar Bhakat; Kedar Bhabe; Sarnishtha Palit Sagar		
OS-T6-S1-P2	16:15 - 16:30	97	Calibration of Photo Resistive Sensor Using Optimization Algorithms <i>Authors:</i> Bhanu Teja		
OS-T6-S1-P3	16:30 - 16:45	109	Dual Parametric Fractional Controller for Unstable Fractional Order Processes <i>Authors:</i> Rammurti Meena; Sudipta Chakraborty; Vipin Chandra Pal		
OS-T6-S1-P4	16:45 - 17:00	226	Dual-Loop PD Control for Time Delayed Double Integrating Processes Using a Smith Predictor <i>Authors:</i> Prabir Singha; Dipjyoti Das; Sudipta Chakraborty		
OS-T6-S1-P5	17:00 - 17:15	300	Dynamic Viscoelastic Modeling Analysis & Nonlinear Control of Smart Material Actuator for Rehabilitation Purposes <i>Authors:</i> Pranjal Sharma; Krishnan Chemmangat		
OS-T6-S1-P6	17:15 - 17:30	315	Leader-Follower Consensus with Deep Neural Networks <i>Authors:</i> Khushal Chaudhari; Krishanu Nath; Manas Bera		



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Date: 10-12-2025 Parallel Session 7		Special Session 1		Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-SS01-S1-P1	16:00 - 16:15	497	Electric Vehicles Impact on the Power Grid: A Review of Challenges, V2G Integration, and AI-Based Control Strategies <i>Authors:</i> Sahil Bansod ; Rudresh kadu; Madhuri Chaudhari	
OS-SS01-S1-P2	16:15 - 16:30	483	A Data-Driven Dynamic Pricing Framework for EV Fast Charging Using Enhanced Bi-LSTM <i>Authors:</i> Manish Kurre; Ranjeet Sah; Shailendra Kumar	
OS-SS01-S1-P3	16:30 - 16:45	978	Optimal Allocation and Hosting Capacity Analysis of EV Charging Stations and Solar PV Systems in Bhopal City <i>Authors:</i> Priyanshu Gupta; Vivek Mohan; Reshmi A. R ; Mrudula Murukan G; Aedna Kurian	
OS-SS01-S1-P4	16:45 - 17:00	1486	A Grid/Solar PV Assisted Multifunctional On-Board Charger for Micro EVs <i>Authors:</i> Prakash Ji; Virendra Prasad Maurya	
OS-SS01-S1-P5	17:00 - 17:15	365	Optimal Sizing of PV, Wind Power, and Battery Storage for Coordinated EV Charging Stations with Distribution System <i>Authors:</i> Digambar Govind; Manoj Fozdar	
OS-SS01-S1-P6	17:15 - 17:30	1169	Optimal Placement of Electric Vehicle Rapid Charging Stations with V2G Strategies <i>Authors:</i> Sandip Yeole; Prakash G. Burade	
Date: 10-12-2025 Parallel Session 8		Special Session 2		Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-SS02-S1-P1	16:00 - 16:15	565	Design and Experimental Validation of Robust Super-Twisting Control for Underactuated Rotational Pendulum Systems <i>Authors:</i> Tara Swaraj; Prachurjya Dutta; Rahash Nathasarma; Nabanita Adhikary	
OS-SS02-S1-P2	16:15 - 16:30	566	A Toolbox for Estimating UAV Battery Requirements and Flight Time. <i>Authors:</i> Nageshwar Kumar; Nalin Kumar Sharma; Rahul R. Salunkhe	
OS-SS02-S1-P3	16:30 - 16:45	1378	Gaussian Process Regression-Assisted Sliding Mode Control for Trajectory Tracking of Unmanned Surface Vehicles <i>Authors:</i> Sidharthan S; Santhakumar Mohan	
OS-SS02-S1-P4	16:45 - 17:00	964	Robust Position Tracking Control of Underwater Vehicle-Manipulator System: Nonsingular Fast Terminal Quasi Sliding Mode <i>Authors:</i> Vikas Karade; Girish Lakhekar	
OS-SS02-S1-P5	17:00 - 17:15	1281	Semantic Spatial Object Interpretation for Indoor Environments using Sensor Fusion <i>Authors:</i> Deep Senchowa; Deepjyoti Kalita; Priyakshi Bordoloi; Abhijit Boruah; Debajit Sarma	
OS-SS02-S1-P6	17:15 - 17:30	912	Mobile Robot Navigation Using Reinforcement Learning based Soft Actor-Critic Algorithm <i>Authors:</i> Syed Zaffir Sajad Kamili; Shoaib Mohd Nasti; Mohammad Chishti	



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Date: 10-12-2025		Parallel Session 9		Mixed Track	Venue :
ID	Time Slot	Paper ID	Paper Details		
OL-T2-S1-P1	16:00 - 16:15	1549	Investigations on effect of shaft-mounted position sensor unbalance on SRM performance and its remedy <i>Authors:</i> Debamalya Rakshit, Devraj Roy, Aparajita Sengupta, Mainak Sengupta		
OL-T2-S1-P2	16:15 - 16:30	630	Fault Diagnosis and Identification in Permanent Magnet Synchronous Motor Using Temporal Convolutional Network <i>Authors:</i> Anukriti Sharma, Khushboo Ramawat, Bharat Singh Rajpurohit, Adil Usman, Pramod J. Chaudhary		
OL-T5-S1-P3	16:30 - 16:45	167	A Comprehensive Study of Battery Health Indicators Extraction using Partial Charging Curve <i>Authors:</i> Ilango Karupppasamy, Shrinidhi Ganesh, Varshini R, Shubhashri V P		
OL-T6-S1-P4	16:45 - 17:00	1214	Transportation Electrification in Crisis: A 2025 Review of Electric Vehicle Mobility and Infrastructure Resilience During Disruptive Events. <i>Authors:</i> Tarun Puli; Jawahar Sagar; Harshitha Puli		
OL-T6-S1-P5	17:00 - 17:15	389	Empirical Study of Challenges and Knowledge Practices in Automation Control Software <i>Authors:</i> Amar Banerjee		
OL-SS01-S1-P6	17:15 - 17:30	582	A Data-Driven Dynamic Pricing Framework for EV Fast Charging Using Enhanced Bi-LSTM <i>Authors:</i> Gobika Nihedhini; Thangavel S		
OL-SS05-S1-P7	16:00 - 16:15	1071	Anomaly-Resilient Control for Automatic Generation Control Systems: Detection and Mitigation of Data Integrity Attacks <i>Authors:</i> Harshitha Puli; Jawahar Sagar; Puli Tarun		

Day 2		Date: 11-12-2025		Oral Session - 2	Time : 08:30 to 10:00
Date: 11-12-2025		Parallel Session 1		Track 1	Venue :
ID	Time Slot	Paper ID	Paper Title		
OS-T1-S2-P1	08:30 - 08:45	480	Optimized Power Flow Management in High Renewable and PEV Penetration Scenarios Using Multi-Verse Optimizer <i>Authors:</i> Supriya Jaiswal, Ankur Maheshwari, Himanshu Raj		
OS-T1-S2-P2	08:45 - 09:00	501	Strategic Bidding for Virtual Power Plant in Energy Markets Using New Hybrid MGFO Technique for Energy Scheduling <i>Authors:</i> Choudhary Om Prakash		
OS-T1-S2-P3	09:00 - 09:15	521	Optimal Reactive Power Dispatch using Incomprehensible but Intelligible-in-time Logics <i>Authors:</i> Rahul Kumar, S. Sivasubramani		
OS-T1-S2-P4	09:15 - 09:30	523	Critical Voltage Stability Index Based μ PMU Placement in Active Distribution Network <i>Authors:</i> Koushik Mandal, Manas Mukherjee, Biman Kumar Saha Roy		
OS-T1-S2-P5	09:30 - 09:45	1341	A Novel Passive Islanding Detection Technique with Hybrid DER Technologies <i>Authors:</i> Ankit Mishra, Abhinesh Kumar Sah, Rudrakant Tripathi, S.R.Mohanty, M.K. Verma, Avirup Maulik		
OS-T1-S2-P6	09:45 - 10:00	647	Enhancing Substation Protection Against Cyber Attacks Using LSTM Autoencoder <i>Authors:</i> Ravi Prakash Mahobia, Baidyanath Bag, Swapnajit Pattnaik		
OS-SS11-S2-P7	10:00 - 10:15	1332	Hybrid Tasmanian Devil Optimization Algorithm for Solving multi- objective Optimal Power Flow <i>Authors:</i> Bimal Kumar Dora; Prachi Nagarkar; Manoranjan Sahoo		



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Date: 11-12-2025		Parallel Session 2	Track 2	Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-T2-S2-P1	08:30 - 08:45	1424	Comparative Analysis of Six Phase Symmetric and Asymmetric Induction Motor Under DTC <i>Authors:</i> Shruthi Regu, Ramsha Karampuri, Jay K. Pandit	
OS-T2-S2-P2	08:45 - 09:00	195	Barrier Method Optimized MTPA and AFSTSMO-CDSC-SRF-PLL Techniques for Sensorless Operation of SPV-Battery-Charger Integrated PMaSynRM Based LEV <i>Authors:</i> Sushant Kumar, Shailendra Kumar, Shashank Kurm	
OS-T2-S2-P3	09:00 - 09:15	1533	Experimental Studies on Magnetization Behaviour of Axial Electromagnetic Bearings <i>Authors:</i> Aditya Raj, Kamiseti N V Prasad, G. Narayanan	
OS-T2-S2-P4	09:15 - 09:30	634	Vibration based Incipient Inter turn Fault diagnosis in Permanent Magnet Synchronous Machine using Deep Learning Approach <i>Authors:</i> Khushboo Ramawat, Bharat singh Rajpurohit, Adil Usman, Pramod J. Chaudhary	
OS-SS11-S2-P5	09:30 - 09:45	1562	Matrix Converter-Fed DFIG for Variable-Speed Wind Energy Systems: A Vector Control Approach <i>Authors:</i> Soumyabrata Das	
Date: 11-12-2025		Parallel Session 3	Track 3	Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-T3-S2-P1	08:30 - 08:45	1586	A New Converter Topology to Suppress Common-Mode Voltage in Open End PMSM Drives based on Three-Phase Unfolder <i>Authors:</i> Brojogopal Majhi	
OS-T3-S2-P2	08:45 - 09:00	287	Modified Bridgeless Luo Converter Topology for Electric Vehicle Charging Applications Fed with Multiple Sources <i>Authors:</i> Vishvanath M, Venkadesan A, Sentamizh Selvan S , Jojin Thomas	
OS-T3-S2-P3	09:00 - 09:15	341	Optimal EPS Control for Minimum Backflow Power and Current Stress for Dual Active Bridge Converter <i>Authors:</i> Jahangeer Dar	
OS-T3-S2-P4	09:15 - 09:30	357	Assessment of Control Strategies and Switching Technologies in DC- DC Power Conversion <i>Authors:</i> Abhishek Raj	
OS-T3-S2-P5	09:30 - 09:45	85	Harmonic Component Based Analysis and Loss Minimization of Soft Switched Triple Active Bridge Converters <i>Authors:</i> Harikrishnan A, Silpashree Sahu, Dipankar De, Alberto Castellazzi	
OS-T3-S2-P6	09:45 - 10:00	92	Design and Performance Evaluation of a Bridgeless Zeta Converter for Efficient EV Charging Systems <i>Authors:</i> Vishvanath M, Chenna Raghavendra Reddy G, Lokesh Kola, Sunkanna Ganiga, Venkadesan A, Sentamizh Selvan S	



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Date: 11-12-2025		Parallel Session 4		Track 4	Venue :
ID	Time Slot	Paper ID	Paper Details		
OS-T4-S2-P1	08:30 - 08:45	1436	A Seamless Transition of Microgrid using Dedicated Resynchronization Distributed Generation based on Droop Control <i>Authors:</i> Pallavi Rani, Suman Murugesan, Asheesh Kumar Singh		
OS-T4-S2-P2	08:45 - 09:00	505	Market Design for Short-Term Power Trading Through Electric Power Exchange <i>Authors:</i> Vankadara Kumar		
OS-T4-S2-P3	09:00 - 09:15	507	Electrical Design and Techno - Economic Analysis of Hybrid Floating Solar PV System <i>Authors:</i> Gunda Sai Charan Raj, P S Kulkarni, Vaidehi Menon, Eluri Haritha, Riya Kansal, Muskan Saxena		
OS-T4-S2-P4	09:15 - 09:30	605	DFOGI-RLS lattice-FLL Based Synchronization Technique for Wind- PV-BESS Based Standalone Distributed System with Local Non-Linear Load <i>Authors:</i> Divyansh Shailly, prakash chittora, Madhusudan Singh		
OS-T4-S2-P5	09:30 - 09:45	543	MachineLearning - Based State of Charge Estimation for Li-Ion Batteries and Validation by Historical Data and Synthetic Data <i>Authors:</i> Tikam Bhardwaj		
OS-T4-S2-P6	09:45 - 10:00	891	Stability Analysis of GFLI and GFMI integrated with weak-AC Grid and under SSO Phenomenon <i>Authors:</i> Gandi Ravi Kumar, N.V. Srikanth, Sudipta Mitra		
Date: 11-12-2025		Parallel Session 5		Track 5	Venue :
ID	Time Slot	Paper ID	Paper Details		
OS-T5-S2-P1	08:30 - 08:45	961	A Taxonomy of Data Inconsistencies and their operational impact in Automatic Train Operation <i>Authors:</i> Pardeep Kumar, Divakar Singh, Meenakshi Chaudhary, Sanjay Motia		
OS-T5-S2-P2	08:45 - 09:00	1001	Fault-Tolerant Radio Communication Framework for TCAS: Design, Implementation and Validation <i>Authors:</i> Raj Singh, Sandeep Kumar, Sanjay Motia, Manpreet Kaur		
OS-T5-S2-P3	09:00 - 09:15	1066	Design and Analysis of Coreless Double-D Coil for Dynamic Wireless Power Transfer in Electric Vehicles Under Misalignment <i>Authors:</i> Ngangoiba Maisnam, Maria Loukrakpam, Shaik Affijulla, Ksh Milan Singh		
OS-T5-S2-P4	09:15 - 09:30	1068	Sustainability Challenges and Economic Impact of Electric Vehicle Charging Infrastructure Deployment <i>Authors:</i> Joynath Mishra		
OS-T5-S2-P5	09:30 - 09:45	1151	Performance Analysis of Distribution Systems under Different Electric Vehicle Penetration Levels <i>Authors:</i> Sapna Verma, Bhavnesh Kumar, Arjun Tyagi		
OS-T5-S2-P6	09:45 - 10:00	1377	A Comprehensive Review on Pantograph-Catenary Arc Detection and Classification in High-Speed Railway Traction Systems <i>Authors:</i> Kriti Mathur, Dr. Sandeep Kumar Yadav, Dr. Bharat Singh Rajpurohit		



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Date: 11-12-2025		Parallel Session 6		Track 6	Venue :
ID	Time Slot	Paper ID	Paper Details		
OS-T6-S2-P1	08:30 - 08:45	409	Design and Implementation of Smart Road Management System Using PLC and HMI <i>Authors:</i> Dinanath Prasad; Alok Vardhan; Mahendra Dwivedi; Preeti Singh		
OS-T6-S2-P2	08:45 - 09:00	535	Interactive steering for seamless transition during control handover in autonomous driving <i>Authors:</i> Adithyaa Rettaikudi Gurumoorthi; Vaidehi Bagaria; Bijo Sebastian		
OS-T6-S2-P3	09:00 - 09:15	751	Multi-hypotheses Trajectory Prediction of On-Road Vehicles Using MC-EKF with Map Constraints <i>Authors:</i> Muni Srinvasulu B; Bijo Sebastian; Lelitha Vanajakshi		
OS-T6-S2-P4	09:15 - 09:30	1093	AI-Driven Adaptive FOPID Control for Predictive Maintenance with Experimental Analysis <i>Authors:</i> Ankush Gund		
OS-T6-S2-P5	09:30 - 09:45	1116	Smart Controller for Energy-Efficient AHU Operation in Academic Buildings <i>Authors:</i> Sushil Kannan; Maya Vijayan; Thanga Raj Chelliah; Sudhakar Subudhi		
Date: 11-12-2025		Parallel Session 7		Special Session 1	Venue :
ID	Time Slot	Paper ID	Paper Details		
OS-SS01-S2-P1	08:30 - 08:45	683	Design and Development of a Dynamic Wireless Charging System Using a Single Inverter with Constant Voltage and Constant Current Charging <i>Authors:</i> Bharatiraja C; Nakeeran R		
OS-SS01-S2-P2	08:45 - 09:00	1003	Quantum Inspired Weighted PSO Guided Incentive Scheme for EV Charging Stations <i>Authors:</i> Sohom Banerjee; Dipayan Nath; Ujjal Sur		
OS-SS01-S2-P3	09:00 - 09:15	1155	Optimal Sizing And Placement Of Electric Vehicle Charging Station With The Integration Of Renewable Energy Source <i>Authors:</i> Anugraha C; Narayanan K; Anurag Sharma; Tomonobu Senjyu; Alexander Aguilla; Gulshan Sharma		
OS-SS01-S2-P4	09:15 - 09:30	1342	VSG-based Grid Forming Inverter Control for Solar PV and Electric Vehicles to Enhance the Frequency Stability in LFC Systems <i>Authors:</i> Suriya Sharif; Asadur Rahman; Abdullah Ahmad		
OS-SS01-S2-P5	09:30 - 09:45	1224	A Novel THF-NLFXLMS Control Approach for PMSG-Integrated Three-Phase Microgrid intended to G2V and V2G EV Charging Infrastructure <i>Authors:</i> Sanjay Kumar; Shailendra Kumar; Bhim Singh		
OS-SS01-S2-P6	09:45 - 10:00	556	Optimizing Electric Vehicle Routing with Geospatial and Real-time Charging Station Data <i>Authors:</i> Roshan Kumar; Abhishek Yadav; Chndra Dev Singh; Ankit Kumar; Suddhasil De; Mala De		



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Date: 11-12-2025		Parallel Session 8		Special Session 3	Venue :
ID	Time Slot	Paper ID	Paper Details		
OS-SS03-S2-P1	08:30 - 08:45	279	Impact Assessment of Fast DC EV Charging Station Integration in Islanded Microgrid Using a Node Sensitivity-Based Approach <i>Authors:</i> Amrutha Raju B		
OS-SS03-S2-P2	08:45 - 09:00	761	Health Monitoring of Brushless DC Motor Based Electric Vehicles-A Review <i>Authors:</i> Munish Yadav; Abhishek Kumar Pandey; Anshika Gupta; Monalisa Biswal		
OS-SS03-S2-P4	09:00 - 09:15	1579	A Comparative Analysis of Various Deep Learning Models for State- of-Charge Estimation in Lithium-Ion Batteries <i>Authors:</i> Arghya Mitra; Sourabh Joshi		
OS-SS03-S2-P5	09:15 - 09:30	1580	Digital Twin Implementation and Scenario Analysis for a PV Fed Microgrid System <i>Authors:</i> Kumkum Choudhary; Chinmay Karkar; Arghya Mitra; Sunil Bhat		
Date: 11-12-2025		Parallel Session 9		Mixed Track	Venue :
ID	Time Slot	Paper ID	Paper Details		
OS-T1-S2-P1	08:30 - 08:45	1415	Impact of Renewables on Losses and Voltage Profile in Distribution Systems. <i>Authors:</i> Prabhat Kiran, Venkatakirthiga Murali		
OS-T3-S2-P2	08:45 - 09:00	1490	Bidirectional Power Flow Control in a Grid-Connected EV Charging System Using DAB Converter <i>Authors:</i> Farha Khan, Shirazul Islam, Lazhar Ben-Brahim, Adel Gastli, Farhad Illahi Bakhsh		
OS-T4-S2-P3	09:00 - 09:15	1561	Adaptive PID Control for MPPT in Solar PV Powered Boost Converter <i>Authors:</i> Heet Dhorajiya, Vinod Kumar Bussa, Tarakanath Kobaku		
OS-T5-S2-P4	09:15 - 09:30	770	Dual Solar based Isolated Battery Charger for Vehicle Integrated Photovoltaics Application <i>Authors:</i> Sanam Agnihotri, Dipankar Debnath		
OS-T6-S2-P5	09:30 - 09:45	414	Metaheuristic Optimization of UAV Mission Planning with a Novel Cost Function <i>Authors:</i> Naresh Kumar; Persdeep Kaur		
OS-T6-S2-P6	09:45 - 10:00	1354	Synthesis and Characterisation of MoS₂/TiO₂ Nanocomposites for Photovoltaic Solar Cell Systems <i>Authors:</i> Mohd Ansari		
OS-SS20-S2-P6	10:00 - 10:15	1398	Parametric Analysis of Grid Forming Inverter with Inertia Emulation for Microgrid Applications <i>Authors:</i> Raghavendra Bandaru, Sreeraj E. S., Punnet Kumar Goel		



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Date: 11-12-2025		Parallel Session 10		Track 1 & 2	Venue :
ID	Time Slot	Paper ID	Paper Details		
OL-T1-S2-P1	08:30 - 08:45	137	Modeling and Analysis of Partial Discharge Behavior in XLPE Cables: Void Characteristics, Voltage Impacts, and Insulation Aging <i>Authors:</i> Puja Roy, Ujjwal Kumar Kalla, Neha Adhikari		
OL-T1-S2-P2	08:45 - 09:00	396	A Study And Assesment Of Impact Of Accelerated Thermal Ageing On Partial Discharge Test On Xlpe Cable <i>Authors:</i> Puja Roy, Ujjwal Kumar Kalla, Neha Adhikari		
OL-T1-S2-P3	09:00 - 09:15	508	A Closed Form Fault Location Method for Double-Circuit Series Compensated Lines <i>Authors:</i> Neethu George, OD Naidu, Ashok Kumar Pradhan		
OL-T2-S2-P4	09:15 - 09:30	926	Intelligent Fault-Tolerant Control Strategy for 5-Phase HV Electric Vehicle Traction Inverters <i>Authors:</i> Anindya Banik, Shantanu Saha		
OL-T2-S2-P5	09:30 - 09:45	1361	A Modified Hysteresis Controller for SRM Drive Fed from AHB Converter <i>Authors:</i> Sumit Singh, Amit Kumar Jain		
OL-T2-S2-P6	09:45 - 10:00	1575	Design and Performance Assessment of Hybrid Halbach Brushless PM Motor for UAV Applications Considering Torque and Rare-Earth Utilization Efficiency <i>Authors:</i> Vaibhav Bhardwaj, Amit Kumar Jain		
Date: 11-12-2025		Parallel Session 11		Mixed Track	Venue :
ID	Time Slot	Paper ID	Paper Details		
OL-T2-S3-P1	08:30 - 08:45	842	Hexagonal Linear Electromagnetic Actuator for Vehicular Suspension System <i>Authors:</i> Ben Hur Bandeira Boff, Matheus Palm da Silva, Gabriel Behling da Silveira, Jeferson Vieira Flores, Ály Ferreira Flores Filho, Paulo Roberto Eckert		
OL-T2-S3-P2	08:45 - 09:00	753	Surrogate Modeling of SynRM for Fast Assessment of Dynamic Performance in EVs Applications <i>Authors:</i> Gabriel Behling da Silveira, Guilherme Homrich, Igor Pasa Wiltuschnig, Bernardo Ernesto Moro Ransan, Aurélio Tergolina Salton, Paulo Roberto Eckert		
OL-T3-S3-P3	09:00 - 09:15	1172	High-Gain DC-DC Converter with Voltage Doubler for Solar PV Systems Operating at Low Duty Cycle <i>Authors:</i>		
OL-T6-S3-P4	09:15 - 09:30	352	Multi-Channel LSTM Framework for Intermittent and Incipient Fault Detection & Isolation in Nuclear Reactor Core Instrumentations <i>Authors:</i> Suryakant Gautam; Neha Rani Yadav; Siddhartha P. Duttagupta		
OL-T6-S3-P5	09:30 - 09:45	1389	α-Blend MPC: A Curvature-Adaptive Dual-Weight Model Predictive Control for Autonomous Vehicle Navigation <i>Authors:</i> Abhishek Thakur; Venya Gupta; Aditya Joshi; Sudhansu Kumar Mishra; Subrat Kumar Swain		
OL-SS04-S3-P6	09:45 - 10:00	1228	Simulation Analysis and Comparative Study of Multi beam Piezoelectric Energy Harvester in Low Power IoT Applications <i>Authors:</i> Hemant Narayan; Prakash Marimuthu; Shakila Baskaran		
OL-SS10-S3-P7	10:00 - 10:15	1519	PiGraphNet: A Novel Physics-Informed Graph Neural Network for Remaining Useful Life Prediction of Lithium-Ion Batteries in Electric Vehicles <i>Authors:</i> Manoranjan Gandhudi, Kattankulathur; Gangadharan G R		



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Day 2		Date: 11-12-2025	Oral Session - 3	Time : 12:00 to 13:30
Date: 11-12-2025		Parallel Session 1	Track 1	Venue :
ID	Time Slot	Paper ID	Paper Title	
OS-T1-S3-P1	12:00 - 12:15	679	A Systematic Review of Electricity Theft Detection Technologies in Modern Distribution Networks <i>Authors:</i> Makarand Ballal, Kirankumar Shinde, Subhra Kar, Manish Wath	
OS-T1-S3-P2	12:15 - 12:30	760	Improving the Resilience of Insulator Hydrophobicity Classification Systems Against Cyber Attacks. <i>Authors:</i> Akash R, Sarathi R, Manu A. Haddad	
OS-T1-S3-P3	12:30 - 12:45	798	Economic Operation of an Islanded Microgrid Using PSO-Tuned Droop-Controlled Distributed Generations alongside Solar and Wind Generations <i>Authors:</i> SK SORIF, Supriya Sarkar	
OS-T1-S3-P4	12:45 - 13:00	847	Resilience Enhancement Methods for Power Distribution Network Under Extreme Events - Review, Gaps and Future Directions <i>Authors:</i> Mohd Shahrukh, Ranjana Sodhi	
OS-T1-S3-P5	13:00 - 13:15	944	Cyber Resilient Protection Functionality of Modern Protective Relays <i>Authors:</i> Rahul Pujari	
OS-T1-S3-P6	13:15 - 13:30	992	Smart Wireless Numerical Relay with Real-Time Fault Isolation for Transmission Lines <i>Authors:</i> Afthab Seyed, Prince Bharti, Priyadarshni S, Roopa Sri A E, Venkatesh Muniyandi, Raja P	
OS-SS11-S3-P7	13:30 - 13:45	1333	An Enhanced Fox Optimization Algorithm for Optimal Reactive Power Dispatch: A Case Study on the Indian 62-Bus System <i>Authors:</i> Prachi Nagarkar; Bimal Kumar Dora; Manoranjan Sahoo	
Date: 11-12-2025		Parallel Session 2	Track 2	Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-T2-S3-P1	12:00 - 12:15	855	CKF-based Sensorless Control of PMSM Drives Integrating with gh-framed DTC-SVM <i>Authors:</i> Shibaji Mondal, Priyankar Roy, Atanu Banerjee, Ujjwal Mondal	
OS-T2-S3-P2	12:15 - 12:30	941	Scalar Control of Induction Motor with Current Limiting Feature <i>Authors:</i> Manju Bhashini, Ragavan K, Pallavi Bharadwaj	
OS-T2-S3-P3	12:30 - 12:45	1051	A Current Sensor Fault Tolerant Technique for Pole-Changing Induction Motors <i>Authors:</i> Shubham Dabral, Saptarshi Basak	
OS-T2-S3-P4	12:45 - 13:00	1565	Dynamic Band-Scaling Adaptive Flux Hysteresis With Adaptive Field Weakening for MTPA-Integrated Advanced DTC in Three-Level NPC Inverter-Fed IPMSM Drives Under Voltage-Constrained Wide-Speed Operation <i>Authors:</i> Arnab Chatterjee, Avik Bhattacharya	
OS-T2-S3-P5	13:00 - 13:15	209	Field-Oriented Control of Synchronous Reluctance Motor for Electric Vehicle <i>Authors:</i> Vaishnavi U M	
OS-T2-S3-P6	13:15 - 13:30	369	Sensorless position estimation and speed control of IPMSM using high frequency oscillating voltage injection <i>Authors:</i> Sourabh Paitandi, Subhajit Dey, Arnab Bose, Mainak Sengupta	



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Date: 11-12-2025		Parallel Session 3	Track 3	Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-T3-S3-P1	12:00 - 12:15	426	Modeling of Mazzilli ZVS Flyback Converter Coupled with Cockcroft-Walton Voltage Multiplier Using MATLAB Simulink <i>Authors:</i> Sushma Balanagu, Srikanth Allamsetty, Ambrish Devanshu	
OS-T3-S3-P2	12:15 - 12:30	445	New Scheme of Health Monitoring for SiC based Three-Phase Inverter <i>Authors:</i> Jegurupati Gowri Prasanth, Priyabrata Shaw, Manoranjan Sahoo	
OS-T3-S3-P3	12:30 - 12:45	451	An Improved Quadratic Boost Converter with High Voltage Gain and Lower voltage stress for Fuel Cell Applications <i>Authors:</i> Ravi Kanaparthi	
OS-T3-S3-P4	12:45 - 13:00	465	Active Disturbance Rejection Control for Power Quality Improvement in Islanded Microgrids <i>Authors:</i> Revannath Kakade, Kayalvizhi S	
OS-T3-S3-P5	13:00 - 13:15	485	Single Switch Based Quadratic Gain Buck-Boost PFC Charger with DCM Operation <i>Authors:</i> Rahul Kumar, Bhim Singh	
OS-T3-S3-P6	13:15 - 13:30	498	Performance Analysis of Chaotic PWM Schemes for Cascaded H-Bridge Multi-Level Inverter Topologies <i>Authors:</i> Kritika Kamboj, Shubham Chib, Kamaldeep Boora	
Date: 11-12-2025		Parallel Session 4	Track 4	Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-T4-S3-P1	12:00 - 12:15	873	Investigation of Flow Induced Variation in Vanadium Redox Flow Battery with Electrochemical Impedance Spectroscopy <i>Authors:</i> Jusmita Das	
OS-T4-S3-P2	12:15 - 12:30	894	Hybrid BO-LSBoost Model for Accurate Prediction of Remaining Useful Life of Li-Ion Battery <i>Authors:</i> Shivi Varshney	
OS-T4-S3-P3	12:30 - 12:45	852	Time-Localized Detection of Partial Shading in Solar PV Array Using Discrete Wavelet Transform <i>Authors:</i> Sonzali Meena, Suresh Kumar Gawre	
OS-T4-S3-P4	12:45 - 13:00	809	Traveling Wave Based Fault Type Classification for Networks Connected with Inverter Based Resources <i>Authors:</i> OD Naidu, Neethu George	
OS-T4-S3-P5	13:00 - 13:15	924	Data-Driven Digital Twin for Real-Time Condition and Stability Monitoring of a PV-Integrated Boost Converter System Using ED-LSTM-A <i>Authors:</i> Naresh Kumar Kumawat, Nishant Kumar	
OS-T4-S3-P6	13:15 - 13:30	979	Optimal Wind-Solar Generation Mix for Cost-Reliability Trade-Off in Power Systems <i>Authors:</i> Aedna Kurian, Vivek Mohan, Reshmi A.R, Priyanshu Gupta	



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Date: 11-12-2025		Parallel Session 5	Track 5	Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-T5-S3-P1	12:00 - 12:15	1440	Anti-Demagnetization and Efficiency Enhancement Strategies for Hybrid Magnet Interior Permanent Magnet Synchronous Motor <i>Authors:</i> Abhishek Shukla, Saptarshi Basak	
OS-T5-S3-P2	12:15 - 12:30	1461	Solar Integration by Topological Reconfiguration of On-board Charger <i>Authors:</i> Dilip Patel, Ramanuja Panigrahi	
OS-T5-S3-P3	12:30 - 12:45	1588	Reduction of Harmonic Distortion in Five-Phase VSI using Modified Pentagonal Space Vector PWM <i>Authors:</i> Harsh Moon, Ramsha Karampuri	
OS-T5-S3-P4	12:45 - 13:00	511	Power Flow Control in Dual-Stage Bidirectional EV Charging System <i>Authors:</i> Akash Ganne, Lalit Sahu, Allamsetty Hemachander, Rajan Kumar	
OS-T5-S3-P5	13:00 - 13:15	723	Constant Power Wireless Charging with Active Load Impedance Matching Network <i>Authors:</i> Rohan Burye, Sheron Figarado	
OS-T5-S3-P6	13:15 - 13:30	1040	VANET and Reinforcement Learning: A Performance Optimisation Perspective <i>Authors:</i> Amrit Raj, Deepti Kakkar	
Date: 11-12-2025		Parallel Session 6	Track 6	Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-T6-S3-P1	12:00 - 12:15	1063	A Novel Lightweight Symmetric Encryption and Decryption Hardware for A Secured Cps Application <i>Authors:</i> Priyanka Ram; Vikas Mittal	
OS-T6-S3-P2	12:15 - 12:30	239	Gaussian Filtering for Noisy Hyperchaotic System: Synchronization and Secure Communication <i>Authors:</i> Venu Gopal Yamalakonda; Ram Bilas Pachori; Balasubramanyam Appina; Abhinoy Kumar Singh	
OS-T6-S3-P3	12:30 - 12:45	304	Performance Analysis of LSVF Equivalent Output Feedback I-PD control for Non-Minimum Phase Systems <i>Authors:</i> Rajeev Kumar; Jayati Dey; Tapas Kumar Saha	
OS-T6-S3-P4	12:45 - 13:00	1134	ISE-Tuned Control for Frequency Regulation of Renewable-Integrated Airport Microgrid <i>Authors:</i> Sameer Singh; V. P. Singh; A. Mathur	
OS-T6-S3-P5	13:00 - 13:15	1133	Analysis and Quasi Sliding Mode Synchronization of Quadratic Hyperbolic Tangent Memductance Function based Lorenz System <i>Authors:</i> Surajit Suklabaidya; Piyush Pratap Singh; Binoy Krishna Roy	
OS-T6-S3-P6	13:15 - 13:30	124	AI-Driven Automated Design Generator for Smart Mechanical Components in Power and Energy Systems <i>Authors:</i> Poorva More; Vishvajeet Sutar; Rohit Chitari; Sanika Kamble; Sadhana Shendage; Tanvi Patil	



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Date: 11-12-2025		Parallel Session 7	Special Session 06	Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-SS06-S3-P1	12:00 - 12:15	198	Optimized Machine-Learning Approach for Estimation of State-of-Charge of Lithium-ion Batteries for Sustainable Transportation <i>Authors:</i> Zeba Anjum; Sheeraz Kirmani; Mohd Rizwan Khalid	
OS-SS06-S3-P2	12:15 - 12:30	303	Non-Intrusive Load Monitoring using Power Signature Analysis: An adaptive AI Approach <i>Authors:</i> setti suresh; Sharada Rudrakshimath; T Narendra Reddy; Prakash Vinod; Geetha Chakaravarthi	
OS-SS06-S3-P3	12:30 - 12:45	698	State of Health SOH Estimation of Simscape Table-Based Lithium-Ion Battery for Microgrid Using Extended Kalman Filter <i>Authors:</i> Mainak Biswas; Arnab Ghosh; Pravat Kumar Ray	
OS-SS06-S3-P4	12:45 - 13:00	804	Integrating Water-Solid TENGs into Green Energy Systems: Insights from Experiment and Machine Learning <i>Authors:</i> Mohammad Khan; Khursheed Ahmad Sheikh	
OS-SS06-S3-P5	13:00 - 13:15	1086	PSO and Fuzzy Based Optimal Allocation of Wind Turbines <i>Authors:</i> Ritika Anand; Divya Bharathi Raj; Venkatakirthiga Murali	
OS-SS06-S3-P6	13:15 - 13:30	757	Hybrid Deep Q-Learning with Tabular Updates for Speed Prediction of Heavy Duty Vehicles <i>Authors:</i> Priyanka Sarkar; Rajan Chaudhary; Nalin Kumar Sharma; Rahul Kala; Sri Niwas Singh	
OS-SS06-S3-P7	13:30 - 13:45	479	AI-Driven Smart Cleaning Optimization Strategy for Dust-Accumulated PV Module <i>Authors:</i> Rahma Aman; M Rizwan; Abdul Azeem	
Date: 11-12-2025		Parallel Session 8	Track 3	Venue :
ID	Time Slot	Paper ID	Paper Details	
OL-T3-S3-P1	12:00 - 12:15	598	Modeling and Integration of Regenerative Braking for Motor Through SCMIC-Based Hybrid PV/ Battery System <i>Authors:</i> Parinita Mondal, Jayati Dey, Tapas Kumar Saha	
OL-T3-S3-P2	12:15 - 12:30	484	A Single Phase to Three Phase Direct AC-AC Modular Multilevel Converter based Induction Motor Drive <i>Authors:</i> Irfan Ahmed, Parambhik Sur	
OL-T3-S3-P3	12:30 - 12:45	1277	A Novel High Step-Up Voltage Improvement DC-DC Circuit with Evolutionary-based Fuzzy Controller for Fuel Cell Systems <i>Authors:</i> Dr. Hussaian Basha	
OL-T3-S3-P4	12:45 - 13:00	1388	Solar-Powered Boost Converter Using PID Control for Efficient Speed Regulation of a BLDC Motor and Real-Time MPPT <i>Authors:</i> Mohit Singh, Naushad Husszain, Madhu Singh	
OL-T3-S3-P5	13:00 - 13:15	1511	Extended Kalman Filter Based Control of Coupled Inductor Buck-Boost Converter For Grid Connected System <i>Authors:</i> Debarchita Mishra, Krithik M, Ananth S	
OL-T3-S3-P6	13:15 - 13:30	1541	Regional Pole Placement based Control of a Phase-Shifted Inverter- Fed Current Doubler Rectifier under Parametric and Load Variations <i>Authors:</i> Gourab Banerjee, Anirudh Nath, Aparajita Sengupta, Mainak Sengupta	



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Date: 11-12-2025		Parallel Session 9	Mixed Track	Venue :
ID	Time Slot	Paper ID	Paper Details	
OL-T6-S3-P1	12:00 - 12:15	363	A Machine Learning Framework with Synthetic Dataset of Renewables and EVs for Predicting Electrical Distribution System Performance <i>Authors:</i> Veerendra A.S; Varaprasad Janamala	
OL-SS01-S3-P2	12:15 - 12:30	519	Reinforcement Learning-Based Energy Management for Multi-Zone EV Charging Stations <i>Authors:</i> Arpana Singh, Uma Nangia, M. Rizwan	
OL-SS04-S3-P3	12:30 - 12:45	570	Optimized Bidirectional Dual-Input Single-Output DC-DC Converter for Enhanced Electric Vehicle Integration <i>Authors:</i> Not Found	
OL-SS04-S3-P4	12:45 - 13:00	466	A New Single Switch Fault Tolerant Multilevel Inverter for RES Applications <i>Authors:</i> Busireddy Hemanth Kumar	
OL-SS16-S3-P5	13:00 - 13:15	457	Digital Twin Framework for Predictive Maintenance of Autonomous Vehicle Suspension System <i>Authors:</i> Vinay Kumar R; Pavan Kumar K.K.; Ramasamy D.; Noor M.M.; Harun W.S.W.; Samylingam L; Aslfattahi Navid; Sadat Kiai Maryam; Chee Kuang Kok.	
OL-SS16-S3-P6	13:15 - 13:30	456	Smart Thermal Regulation in EV Batteries Using Real-Time Digital Twin Feedback for Enhanced Performance <i>Authors:</i> Vinay Kumar R; Pavan Kumar K.K.; Ramasamy D.; Harun W.S.W.; Samylingam L; Navid Aslfattahi; Maryam Sadat	
Date: 11-12-2025		Parallel Session 10	Special Session 19	Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-SS19-S3-P1	12:00 - 12:15	572	Fusion-Based Switched Kalman Filter for State-of-Charge Estimation in Electric Vehicles Under Dynamic Conditions: A Real-Time Validation. <i>Authors:</i> Sai Ram Surya Lakshmi Avanthika Dasari; Ramanjaneya Reddy Udumula; Lokeshgupta Bhamidi	
OS-SS19-S3-P2	12:15 - 12:30	577	Data-Model Fusion Approach for Combined State of Charge and State of Health Estimation of Lithium-ion Batteries in Electric Vehicles Using Extended Kalman Filter <i>Authors:</i> Kolli Sai Kiran; D S R S L Avanthika; Ramanjaneya Reddy Udumula; Bhamidi Lokeshgupta; Naresh Kumar Vemula	
OS-SS19-S3-P3	12:30 - 12:45	886	Experimental Validation of an Intelligent Dual-Battery Hybrid EV System with PEMFC Range Extension and ML-Based Control Architecture <i>Authors:</i> Bharatiraja C; tmnavinkumar TM	
OS-SS19-S3-P4	12:45 - 13:00	883	Computational Fluid Dynamics Driven Sensor Optimization for Early Hydrogen Leak Detection Enhancing FCEV Safety <i>Authors:</i> Bharatiraja C; J Nithish Nithish; navinkumar TM	
OS-SS19-S3-P5	13:00 - 13:15	696	Robust Controller for Single-Stage Isolated Power Conditioning Unit On-Board Charger <i>Authors:</i> Mohammad Ali; Aman Keshri; Dogga Raveendhra; Suneel Raju Pendem; BL Narasimha Raju; Pradyumn Chaturvedi	
OS-SS19-S3-P6	13:15 - 13:30	650	Performance investigation and characterization of high semiconductor devices using ERS C <i>Authors:</i> Aman Keshari; Mohammad Asif Ali, Dogga Raveendhra, Suneel Raju Pendem, B L Narasimharaju	



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Day 2		Date: 11-12-2025	Oral Session- 4	Time : 16:00 to 17:30
Date: 11-12-2025		Parallel Session 1		Track 1
Venue :				
ID	Time Slot	Paper ID	Paper Title	
OS-T1-S4-P1	16:00 - 16:15	1083	A Unified Approach for Mitigating Loss of Excitation Using Adaptive Sliding Mode Control <i>Authors:</i> Ankush Sharma, Bhavesh R. Bhalja	
OS-T1-S4-P2	16:15 - 16:30	1106	Steady-State Modeling and Frequency Control for Enhanced Power Stability under Dynamic Bidirectional Load Scheduling <i>Authors:</i> Srikant Sabbanwar, Rajshri J. Satputaley	
OS-T1-S4-P3	16:30 - 16:45	1288	Utilizing Flexibility from P2P Network for Frequency Control Under a Coordinated TSO-DSO Framework <i>Authors:</i> Liza Debbarma, Sanjoy Debbarma, Kingshuk Roy, PiyushPratap Singh	
OS-T1-S4-P4	16:45 - 17:00	1310	Current Mismatch-Based Newton-Raphson Power Flow Algorithm for Autotransformer Fed Traction Power Supply System <i>Authors:</i> Pradyumna Pradhan; BiswarupDas	
OS-T1-S4-P5	17:00 - 17:15	1405	An Imposed Distributed Generation for Resynchronization Methodology for Microgrid Seamless Transitions <i>Authors:</i> Shikhar Jagram Singh, Suman Murugesan, Asheesh Kumar Singh	
OS-T1-S4-P6	17:15 - 17:30	1335	PMU Data Security via Chaotic Frequency Modulation and Spectral Correlation-Based Intrusion Detection <i>Authors:</i> Abhishek Chauhan; Siddhartha Deb Roy	
OS-SS11-S4-P7	17:30 - 17:45	1309	Load Variance and Reliability Analysis of Distribution Systems with Coordinated PV Generation and Green Hydrogen Storage <i>Authors:</i> Payal Jangilwar; Soumyabrata Das; Jawaharlal Bhukya	
Date: 11-12-2025		Parallel Session 2		Track 2
Venue :				
ID	Time Slot	Paper ID	Paper Details	
OS-T2-S4-P1	16:00 - 16:15	247	Torque Ripple Reduction of Switched Reluctance Motor With Stator Pole And Rotor Pole Shaping <i>Authors:</i> Amit Patel, Om Mistry	
OS-T2-S4-P2	16:15 - 16:30	674	High-Performance V-Shaped IPM Motor with Fractional Slot Concentrated Windings for Electric Vehicle Propulsion <i>Authors:</i> Bharatiraja C, Sanjeev Guhan K S, Nagarajan V S, Rajini V, Dilsha Purushothaman, Mahesh Krishnamurthy	
OS-T2-S4-P3	16:30 - 16:45	791	Enhanced Sensorless PMSM Drive Control with Data-Driven ANFIS-SMO Integration. <i>Authors:</i> Shilpa Ranjan, Brijendra Sangar, Madhusudan Singh, Mini Sreejeth	
OS-T2-S4-P4	16:45 - 17:00	1574	Finite Element Analysis of a Five Phase PMSM Machine with Open-Circuit Fault and its Mitigation <i>Authors:</i> Shinoy K S, Sudharshan Kaarthik R, Anish Gopinath	
OS-SS07-S4-P5	17:00 - 17:15	1032	Sensorless SRM Drive Using MPC-Controlled Bidirectional Converter for Torque Ripple Reduction <i>Authors:</i> Srijani Mukhopadhyay	



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Date: 11-12-2025		Parallel Session 3	Track 3	Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-T3-S4-P1	16:00 - 16:15	708	Switched-Capacitor Based Common-Ground Nine-Level Boosting Inverter SCCGI <i>Authors:</i> Kaibalya Panda, Sumant Kumar Dalai, Pratap Sekhar Puhan, Gayadhar Panda	
OS-T3-S4-P2	16:15 - 16:30	767	Evaluating PWM Strategies for Enhanced Performance in Three-Phase Modular Multilevel Converter <i>Authors:</i> Krunal Prajapati, Pradyumn Chaturvedi	
OS-T3-S4-P3	16:30 - 16:45	768	Load-Resilient Voltage Regulation of Interleaved Boost Converter Using Model-Free Reinforcement Learning <i>Authors:</i> Shubham Tirmallu, Krunal Prajapati, Mohd Alam	
OS-T3-S4-P4	16:45 - 17:00	774	Design and FEM Analysis of High Frequency Transformer using ANSYS Maxwell for Galvanic Isolation Application <i>Authors:</i> Ashish Gupta, Piyush Kant, Sunil Kumar Dube	
OS-T3-S4-P5	17:00 - 17:15	803	A Modified Virtual Impedance Based Current Limiting Control of Grid Connected PMSG under Distorted Grid Conditions <i>Authors:</i> Amit Kumar, Asha Rani M.A.	
OS-T3-S4-P6	17:15 - 17:30	868	Control of Dual Transformer Triple Active Bridge with NN-based Link Current Optimization <i>Authors:</i> Varri Chandra Sekhar Pavan Kumar, Harikrishnan A, Silpashree Sahu, Dipankar De, Alberto Castellazzi	
Date: 11-12-2025		Parallel Session 4	Track 4	Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-T4-S4-P1	16:00 - 16:15	993	Design and Implementation of an Efficient and Safe Adaptive Charging System for Li-Ion Batteries <i>Authors:</i> Hemann A Devarajan, Venkatesan S, Venkatesh M, Moorthi Sridharan	
OS-T4-S4-P2	16:15 - 16:30	1021	Performance Enhancement and Excess Energy Minimization in Hybrid Renewable Energy Systems for Cold Desert Regions <i>Authors:</i> Neelam Bora, Swapnajit Pattnaik, Baidyanath Bag	
OS-T4-S4-P3	16:30 - 16:45	1064	Virtual Synchronous Generator-Controlled Grid-Forming Wind Turbine Integrated with VSC-HVDC System: Modeling and Performance Evaluation <i>Authors:</i> Arvind Kumar, Prakirty Kumari, Dushyant Sharma	
OS-T4-S4-P4	16:45 - 17:00	1250	Effect of ANode Thickness on Internal Short Circuit Behavior of Li- ion Battery <i>Authors:</i> pitambar Randive	
OS-T4-S4-P5	17:00 - 17:15	1173	Evaluating Hybrid Grid-Scale Energy Storage Solutions for India's 2025 Power Requirements <i>Authors:</i> Debanjan Mukherjee	
OS-T4-S4-P6	17:15 - 17:30	268	Modified Tuna Swarm Optimization based Volt-VAr optimization in Radial Distribution System using Energy Storage Systems <i>Authors:</i> Deepak Porwal, Manoj Fozdar, Rajive Tiwari	



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Date: 11-12-2025		Parallel Session 5	Track 5	Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-T5-S4-P1	16:00 - 16:15	1513	A Time-Varying COA-TVECM Enumeration for Modelling the Demand–Cost Nexus in EV Battery Recycling Towards Circular Economy <i>Authors:</i> Uttam Saha, Parimal Acharjee, DR. Tushar Kanti Bera	
OS-T5-S4-P2	16:15 - 16:30	282	AC-powered Dual-Active-Bridge DAB Based EV Charger with Reduced Current Stress Converter using an Adaptive DC link <i>Authors:</i> Ranjeet Sah, Shashank Kurm, Shailendra Kumar	
OS-T5-S4-P3	16:30 - 16:45	280	Embedded Realization of Deep Learning Based LMPC for PMSM Drives <i>Authors:</i> Akash Patil, Yoshit Tapar, Pramod Ubale, Nirlipta Ranjan Mohanty, Dr. Dayaram Sonawane	
OS-T5-S4-P4	16:45 - 17:00	359	Exploring Cyber Risks in Grid-Integrated Electrical Vehicle On-Board Charger OBC. <i>Authors:</i> Nikhil Sardar; Prashant Surana, Gaurav Choudhary, Dr. Ehsan Jamshidpour	
OS-T5-S4-P5	17:00 - 17:15	881	Optimized Ferrite Design for Wireless Charging of Electric Vehicles A Cost-Efficient Approach <i>Authors:</i> Bharatiraja C; Ragul R; R. Nakkeeran	
OS-SS03-S4-P6	17:15 - 17:30	792	Co-adaptive Reinforcement Learning-based Attacker-Defender Model for Secured Smart Distribution System <i>Authors:</i> Atharva Rath; Akshaiy Thinakaran; Dipanshu Naware	
Date: 11-12-2025		Parallel Session 6	Track 6	Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-T6-S4-P1	16:00 - 16:15	1468	Mathematical Modeling and Drying Kinetics in Thermal Energy Storage assisted Greenhouse Solar Dryer <i>Authors:</i> Vaibhav saxena, Kartik Dubey, Vinay Arya, Chirodeep Bakli	
OS-T6-S4-P2	16:15 - 16:30	231	Enhanced Automation Using FPGA and IoT for Multi-Environment Applications <i>Authors:</i> Harshavardhan Singh; Parvathy Harikumar	
OS-T6-S4-P3	16:30 - 16:45	317	Anomaly Detection in Industrial Time Series Using LSTM: A Case Study on Solar Panel Monitoring <i>Authors:</i> Mukesh Azad	
OS-T6-S4-P4	16:45 - 17:00	367	Application of Golden Eagle Optimization in Reduced Order Modeling <i>Authors:</i> Aswant Kumar Sharma	
OS-T6-S4-P5	17:00 - 17:15	685	Edge-AI Framework for Real-Time PCB Fault Detection with Cloud-Integrated Automation for Sustainable Electronics <i>Authors:</i> Veeramani Kandasamy T; Ramesh Babu P; Devendiran S; Raj Thilak S T; Sugeetha R S	
OS-SS18-S4-P6	17:15 - 17:30	516	Electrolyser- Fuel Cell-PV-Battery System Connected Grid System with GMBZ Adaptive Filtering for Hybrid EV Charging Infrastructure <i>Authors:</i> Tanu Prasad; Shailendra Kumar; Shashank Kurm	



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Date: 11-12-2025		Parallel Session 7	Special Session 12	Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-SS12-S4-P1	16:00 - 16:15	383	Stabilizing the Memristive Liu System Using PI-Based Sliding Mode Control: Implications for Autonomuos Vehicle Dynamics <i>Authors:</i> Pallav Sahay; Rani Kumari	
OS-SS12-S4-P2	16:15 - 16:30	658	Development and Validation of a LiDAR-Based Autonomous Navigation Stack Using Autoware with Custom PCD and Lanelet2 Maps <i>Authors:</i> Manikandan G; Bharatiraja C; Sivanathan K	
OS-SS12-S4-P3	16:30 - 16:45	854	Real-Time Road Surface Classification Using MobileNetV2 and Vision Transformers: A Smartphone-Based Edge AI Framework <i>Authors:</i> Nakka Gowri Prasad; A Srinivaas	
OS-SS12-S4-P4	16:45 - 17:00	670	Design, Implementation & Optimization of Indoor Autonomous Mobile Robotic System using RGBD Camera and 2D Lidar <i>Authors:</i> Hem Joshi Thapar	
OS-SS12-S4-P5	17:00 - 17:15	872	A 5G-Enabled IoT Architecture for V2V and V2I Communication in Autonomous Vehicles <i>Authors:</i> Momin Shaik; Gudipati Jawahar sagar	
Date: 11-12-2025		Parallel Session 8	Special Session 17	Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-SS17-S4-P1	16:00 - 16:15	719	Model Predictive Control based Optimal Charging for the Health Improvement in Lithium-ion Batteries <i>Authors:</i> Swastik Acharya; Arijit Guha; Asim Kumar Naskar; Bikky Routh	
OS-SS17-S4-P2	16:15 - 16:30	733	In-Situ State of Health Estimation of Electric Vehicle Batteries using Partial Driving Data <i>Authors:</i> Jayabrata Maity; Munmun Khanra	
OS-SS17-S4-P3	16:30 - 16:45	1034	Design and Evaluation of Carboxymethyl Cellulose-Starch Hybrid Gel Electrolytes Toward Quasi-Solid-State Zinc-Ion Batteries <i>Authors:</i> Sreshtha Ganguly; Dilip Bennada; Sreeraj Puravankara	
OS-SS17-S4-P4	16:45 - 17:00	1165	Understanding the Impact of Charge-Discharge Rates on Lithium-Ion Battery Performance <i>Authors:</i> Subham Khange; Vivek Kumar Chaudhary; Ashwini KumarSharma	
OS-SS17-S4-P5	17:00 - 17:15	1411	A Multiphysics Cell-level PEMWE Simulation Model for Crossover Mitigation <i>Authors:</i> Manikya Pathak; Lalit Pant	
OS-SS17-S4-P6	17:15 - 17:30	1422	Optimal Estimation of the State-of-Energy and Surface Temperature of Li-ion Batteries using an Extended Kalman Filter with Cramer-Rao Lower Bound <i>Authors:</i> Nilima Gadkar; Arijit Guha; Bikky Routh; Swastik Acharya	



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Date: 11-12-2025		Parallel Session 9	Special Session 04	Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-SS04-S4-P1	16:00 - 16:15	424	Enhanced State of Charge Estimation for Electric Vehicle Batteries Using Temperature-Integrated Coulomb Counting Method <i>Authors:</i> Venkatesh Boddapati; Prakash DB; Nindra sekhar; Nethravath S	
OS-SS04-S4-P2	16:15 - 16:30	458	Optimal Sizing and Siting of Solar Distributed Generators in a Radial Distribution System using Whale Optimisation Algorithm <i>Authors:</i> Prakash DB; Venkatesh Boddapati; Chethan Raj D	
OS-SS04-S4-P3	16:30 - 16:45	775	Low-Power High-Speed Approximate Ternary Half Adders and Multipliers Multiplier Circuit Design using Carbon Nanotube Field Effect Transistors <i>Authors:</i> Murali P	
OS-SS04-S4-P4	16:45 - 17:00	455	An Optimal Compensation Topology to Improve Efficiency in Bidirectional Wireless Power Flow Systems <i>Authors:</i> Venkata Madhava Ram Tatabhatla; Ravulakari Kalyan; Nindra Sekhar	
Date: 11-12-2025		Parallel Session 10	Track 4	Venue :
ID	Time Slot	Paper ID	Paper Details	
OL-T4-S4-P1	16:00 - 16:15	1431	A Hybrid STL-LSTM Framework for Data-Driven EV Load Forecasting <i>Authors:</i> Arpana Singh, Poonam Dhaka	
OL-T4-S4-P2	16:15 - 16:30	1435	A Novel Power Electronic Control Scheme for Regulating Voltage and Frequency in an Off-Grid Micro-Hydro Turbine-Driven SEIG System <i>Authors:</i> Hanumanthu Kesari, Kumaresan N.	
OL-T4-S4-P3	16:30 - 16:45	1535	Optimal Energy Management of Grid-Connected Microgrid, including Conventional and Non-Conventional Energy Sources, using Demand Response <i>Authors:</i> Hemant Patel, Aashish Kumar Bohre	
OL-T4-S4-P4	16:45 - 17:00	1540	Economic Dispatch of Microgrid with and without DR using Dragonfly Algorithm <i>Authors:</i> Hemant Patel	
OL-T4-S4-P5	17:00 - 17:15	567	Multi-Objective DG and Soft Open Points Allocation in RDS using Harris Hawks Optimization and Particle Swarm Optimization Techniques <i>Authors:</i> Hemant Patel; Aashish Kumar; Omkar Yadav	
OL-T4-S4-P6	17:15 - 17:30	301	A Triboelectric Nanogenerator for Wind Energy Harvesting and Battery Charging Applications <i>Authors:</i> Suvabrata Sil, Arunangshu Ghosh	
OL-SS12-S4-P7	17:30 - 17:45	854	Real-Time Road Surface Classification Using MobileNetV2 and Vision Transformers: A Smartphone-Based Edge AI Framework <i>Authors:</i> Nakka Gowri Prasad; A Srinivaas	



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Day 3		Date: 12-12-2025	Oral Session - 5	Time : 08:30 to 10:00
Date: 12-12-2025		Parallel Session 1		Track 1
ID	Time Slot	Paper ID	Paper Title	
OS-T1-S5-P1	08:30 – 08:45	680	Adaptive Log-Fractional Terminal Sliding Mode Control for Residual Current Compensation in Bushfire-Prone Power Networks <i>Authors:</i> Tushar Kanti Roy, Md Apel Mahmud,	
OS-T1-S5-P2	08:45 - 09:00	1359	End-to-End Modeling and Serialization of PMU Data Frames by Incorporating Communication Delay under IEEE C37.118 Framework <i>Authors:</i> Md Arif Hussain, Vianny Wahlang, Ksh Milan Singh, Shaik Affijulla	
OS-T1-S5-P3	09:00 - 09:15	1487	Impedance-Based Topology Identification for Radial Distribution Networks using Smart Meter Data <i>Authors:</i> Ujjawal Jhajharia, Satish Sharma, N.P. Padhy	
OS-T1-S5-P4	09:15 - 09:30	672	A Derivative-Free Power Flow Analysis Approach in AC Droop-Controlled Islanded Microgrids <i>Authors:</i> Ghanshyam Meena, Akhilesh Mathur, V. P Singh	
OS-T1-S5-P5	09:30 - 09:45	377	A Remote Current Injection Based Islanding Detection Technique for Microgrid <i>Authors:</i> Shyamal Das, Pankaj Achlerkar, Subhransu Samantaray	
OS-T1-S5-P6	09:45 - 10:00	1384	ML Based Approach to Mitigate the Effect of Thermal Transients on the Dielectric Response data for Dry-Type Insulation <i>Authors:</i> Somesh Ganguly	
Date: 12-12-2025		Parallel Session 2		Track 2
ID	Time Slot	Paper ID	Paper Details	
OS-T2-S5-P1	08:30 – 08:45	1211	Performance Evaluation of Small DC-Link Capacitor Based Drive under Grid Disturbance Conditions <i>Authors:</i> Ramkrishan Maheshwari, Dinesh Kumar, Thomas Ebel	
OS-T2-S5-P2	08:45 - 09:00	1018	Data-Driven Fault Severity Estimation in Permanent Magnet Synchronous Machines <i>Authors:</i> Khushboo Ramawat, Anukriti Sharma, Bharat Singh Rajpurohit	
OS-T2-S5-P3	09:00 - 09:15	1442	Enhancing Speed Response in PMSM-Fed Electric Vehicles Through Active Disturbance Rejection Controller-Based Vector Control Method <i>Authors:</i> Sanjay Kumar Kakodia, Giribabu Dyanamina, Amarendra Edpuganti	
OS-T2-S5-P4	09:15 - 09:30	95	Grey Target Approach for Estimating the Remaining Life of Power Transformers <i>Authors:</i> Mulpuru Gopi, Chilaka Ranga, Kushal M Jagtap	
OS-T2-S5-P5	09:30 - 09:45	219	Modelling and Simulation of Predictive Torque Control of Matrix Converter fed Induction Motor Drive <i>Authors:</i> Vinay Kumar T, Puli Rajanikanth, Satyam Tiwari	
OS-T2-S5-P6	09:45 - 10:00	980	Induction Motor Control for Wide Speed Range with Parameter Estimation and Validation <i>Authors:</i> Manju Bhashini, Ragavan K, Pallavi Bharadwaj	



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Date: 12-12-2025		Parallel Session 3		Track 3	Venue :
ID	Time Slot	Paper ID	Paper Details		
OS-T3-S5-P1	08:30 – 08:45	869	Analysis and Control of NIBB-Converter Assisted Improved Triple Active Bridge Converter for Two-Port Application <i>Authors:</i> Silpashree Sahu, Dipankar De, Alberto Castellazzi		
OS-T3-S5-P2	08:45 - 09:00	871	Design and Simulation of a DC-DC Boost Converter with MPPT Control for Solar PV Applications <i>Authors:</i> Siddharth Upmanyu, Jeevan Pammi, Sashwathkumar S, Suresh Mikkili		
OS-T3-S5-P3	09:00 - 09:15	950	Real-Time Assessment of Grid-Tied Black-Box Inverter: Using Data-Driven Digital Twin <i>Authors:</i> Arun Kumar, Nishant Kumar		
OS-T3-S5-P4	09:15 - 09:30	967	A Novel Single-Stage AC–AC Converter Topology with Reduced Voltage Stress for Solid-State Transformers <i>Authors:</i> Rupesh Yadav, Raj Moyal, Mukesh Kumar Pathak		
OS-T3-S5-P5	09:30 - 09:45	968	A New Wide-Range ZVS Enabled Single-Stage AC–AC Converter for Solid-State Transformers SST <i>Authors:</i> Rupesh Yadav, Jahangeer Ahmad Dar, Mukesh Kumar Pathak		
OS-T3-S5-P6	09:45 - 10:00	254	Evaluation of a ± 5 kV Solid-state-based 200 ns duration Pulse Generator <i>Authors:</i> Aashish Ranjan, Babul Saini, Anshul Kumar Yadav, Anand Abhishek		
Date: 12-12-2025		Parallel Session 4		Track 4	Venue :
ID	Time Slot	Paper ID	Paper Details		
OS-T4-S5-P1	08:30 – 08:45	1289	DC Bus Voltage Control Strategy for Hybrid Energy Storage System with Renewable Energy System <i>Authors:</i> Sheikh Sajid, Pradyumn Chaturvedi		
OS-T4-S5-P2	08:45 - 09:00	1022	Effect of CCTO on Energy Storage of NaNbO₃-based Ceramic <i>Authors:</i> Amiya Mandal		
OS-T4-S5-P3	09:00 - 09:15	1322	Estimating Power System Inertia: A Study with Renewable Energy Integrated Power Networks <i>Authors:</i> Nitisha Darwade		
OS-T4-S5-P4	09:15 - 09:30	1324	Intelligent ANN control technique for grid integrated Solar PV System <i>Authors:</i> Shruti Prajapati		
OS-T4-S5-P5	09:30 - 09:45	1376	Techno-Economic Analysis of Integrating Optimized Hydrogen Fuel Cell as an Energy Buffer in Green Energy Microgrid <i>Authors:</i> Harikrishnan K, Rajesh Kumar Mahto, Pallavi Bharadwaj		
OS-T4-S5-P6	09:45 - 10:00	1418	Smart Energy Management System for Green Microgrids with Different Energy Storage Devices <i>Authors:</i> Gupteswar Behera, Pallavi Bharadwaj		



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Date: 12-12-2025		Parallel Session 5	Track 5	Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-T5-S5-P1	08:30 – 08:45	1589	Cascaded H Bridge converter for STATCOM and multiport EV charging applications and its capacitor voltage balance technique during Uneven Loading Conditions <i>Authors:</i> Ibhan Chand Rath; Siba Kumar Patro	
OS-T5-S5-P2	08:45 - 09:00	1591	A Multiport Charging Station Based on Parallel Hybrid Converters with Grid and Load Unbalance Compensation. <i>Authors:</i> Ibhan Chand Rath; Jayant Kumar; Siba Kumar Patro	
OS-T5-S5-P3	09:00 - 09:15	447	A Novel Data-Driven Machine Learning Framework for SOC Estimation in EV Batteries: A White-Box Approach Using Elastic Net Regression <i>Authors:</i> Manivannan R; Vigneswar N	
OS-T5-S5-P4	09:15 - 09:30	106	A Hybrid Solar-PV Grid-Tied Battery Energy Storage System for Modern EV Charging Applications <i>Authors:</i> Javed Ansari; Saran Chaurasia; Shivam Yadav; Bhim Singh; Kuldeep Sahay	
OS-T5-S5-P5	09:30 - 09:45	293	Design and Analysis of PI and PID Controllers for Dual-Loop PWM Voltage Control in Switched Reluctance Motor Drives <i>Authors:</i> Lata Sushil Dufare; Sandeep Dehuri	
OS-T5-S5-P6	09:45 - 10:00	789	Cost Effective Reconfigurable Induction Motor Stator Windings for Single Phase Integrated Onboard Charger <i>Authors:</i> Srinivas Karatlapelly	
Date: 12-12-2025		Parallel Session 6	Track 6	Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-T6-S5-P1	08:30 – 08:45	825	A Resilient NN Assisted Switching Control for Networked Control Systems under DoS Attacks <i>Authors:</i> ManMahendra Singh; Puneet Mishra	
OS-T6-S5-P2	08:45 - 09:00	937	Decentralized Interval Type-2 Fuzzy Logic Fractional Order PID Controller Design for a Liquid Level System <i>Authors:</i> Soumya Mahapatro; Bidyadhar Subudhi; sudipta chakrabroty; Dr. Manmohan Sharma Sharma	
OS-T6-S5-P3	09:00 - 09:15	1005	Real-Time Lane Assist System Using Computer Vision with Adaptive PID Control. <i>Authors:</i> Devadharshan D; S Shyam Ganesh; Hrithick E; Dhanvin S; Karthika R	
OS-T6-S5-P4	09:15 - 09:30	1011	Type-2 Fuzzy-Based NMPC for Robust Trajectory Tracking Under Sensor and Actuator Faults <i>Authors:</i> Atanu Panda; Lidia Ghosh; Biswanath Chakraborty	
OS-T6-S5-P5	09:30 - 09:45	1039	Crowd Monitoring and Control Using Joint Face Super-Resolution, Head Pose Estimation and Face Verification <i>Authors:</i> Ramakant Soni; Pawan K. Ajmera; Ayush Srivastava; Yatharth Agarwal	
OS-T6-S5-P6	09:45 - 10:00	1292	An Intelligent Marksheet Extraction Framework Using GenAI, PaddleOCR and TableNet <i>Authors:</i> Kummari Gangadhar; Jagadam Deepak; Nakka Ratnakar	



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Date: 12-12-2025		Parallel Session 7	Special Session 13	Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-SS13-S5-P1	08:30 – 08:45	403	Sensorless Feedforward Neural Network–Observer MPPT for Boost Converter Photovoltaic Systems <i>Authors:</i> Rajeev Ranjan; Niket Tamrakar; Syed Ayan; Nikhil Chander	
OS-SS13-S5-P2	08:45 - 09:00	932	Efficient Method for Maximizing Power Output from a Hexagonal Solar Pyramid Structure Compared to a Planar Surface <i>Authors:</i> Ajit Rajawat; Anurag Agarwal; Kunwar Aditya	
OS-SS13-S5-P3	09:00 - 09:15	1499	Comparative Analysis of Power Performance Enhancement in Solar PV Systems Using Phase Change Materials Across Distinct Indian Climate Zones <i>Authors:</i> Nagaraju Jadi; Kalpitkumar Solanki; Rehan Raza Mohammed; Ishika Agarwal; Chirodeep Bakli	
OS-SS13-S5-P4	09:15 - 09:30	601	The Efficiency-Quality Dilemma: Real-Time HIL Validation of MPPT Algorithms for Resilient Rural PV-Grid Integration <i>Authors:</i> umavani m; Pravalika Phani D; Kishore Babu; Jagadish S; Hemanth K	
OS-SS13-S5-P5	09:30 - 09:45	750	AI-Driven Multi-Model Adaptive Tilt Optimization for Bifacial Solar Arrays under Spatiotemporal Variability in Process <i>Authors:</i> Radharaman Shaha; Chetan Jambhulkar; Umesh Hiwase; Lata Gidwani	
OS-SS13-S5-P6	09:45 - 10:00	1339	Lag-Aware Ensemble Learning for Generalized Hourly GHI Forecasting Across India <i>Authors:</i> Anirudh D; Jezer Nirmal J; Jineshwar S D	
Date: 12-12-2025		Parallel Session 8	Special Session 17	Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-SS17-S5-P1	08:30 – 08:45	971	Hybrid Pulse Power Characterization and Equivalent Circuit Modeling of 18650 NMC Batteries at Low Temperature <i>Authors:</i> Farkhanda Azmi; Mayur Bonkile; Anandaroop Bhattacharya	
OS-SS17-S5-P2	08:45 - 09:00	583	Modeling and Control of Hybrid Fuel Cell–Battery System Using a Bidirectional DC-DC Converter for EV and Microgrid Applications <i>Authors:</i> Hemavathi S; G Shri Meenakshi; Akashkumar R	
OS-SS17-S5-P3	09:00 - 09:15	668	Dynamic State of Charge Estimation of Lithium-Ion Batteries Using a Model Switching Approach <i>Authors:</i> Rajkumar Roy; Nilanjan Patra	
OS-SS17-S5-P4	09:15 - 09:30	1037	Design and Thermal Characterization of Al6061-T6 Reinforced with Graphene, SiC, and B4C Nanoparticles for Electric Vehicle Battery Enclosure <i>Authors:</i> Manimaran Saravanan; Bharatiraja C; Rohit Xavier Chatter, Kattankulathur; Udit Narayan Sai P	
OS-SS17-S5-P5	09:30 - 09:45	1126	Identifiable Single Particle Model with Electrolyte Dynamics <i>Authors:</i> Saketh Pinapati; Akesh Kotnana; Jose Mathew; Anilkumar Davu	
OS-SS17-S5-P6	09:45 - 10:00	429	Smart Prognostics for Li-Ion Battery Reuse: Machine Learning-based Remaining Useful Life Estimation in Second-Life Applications <i>Authors:</i> Akhtar Zeb; Pankaj Saha; Ari Hentunen; Doniyor Urishov	



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Date: 12-12-2025		Parallel Session 9		Mixed Track	Venue :
ID	Time Slot	Paper ID	Paper Details		
OS-SS02-S5-P1	08:30 – 08:45	189	AI-Segmentation with Look Ahead Horizon Control for Path Following of Low-flying Drones <i>Authors:</i> Kaushal Kishore; CM Antony; Mahit James		
OS-SS05-S5-P2	08:45 - 09:00	1483	Application of Artificial Intelligence Techniques in Smart Interactions between the EV and Grid using V2G and G2V Modes: A Comprehensive Review <i>Authors:</i> Farha Khan; Shirazul Islam; Lazhar Ben-Brahim; Adel Gastli; Farhad Illahi Bakhsh		
OS-SS08-S5-P3	09:00 - 09:15	515	A Non-Isolated Hybrid DC-DC Converter with Continuous Current and High Efficiency for EV Chargers <i>Authors:</i> Kiran Nallamekala; Pranathi Karra; Pavani Menda; Rambabu Motamarri		
OS-SS08-S5-P4	09:15 - 09:30	651	Small Signal Modelling and Closed Loop Control of Series LC Partial Resonant Current-Fed Half-Bridge DC-DC Converter <i>Authors:</i> Swati Tandon; Akshay Kumar Rathore; Sheron Figarado		
OS-SS18-S5-P5	09:30 - 09:45	620	AI-Powered Adaptive Battery Model for Fast Charging Scheduling Incorporating SoC-Dependent Dynamics and Degradation Forecasting <i>Authors:</i> Vikram Kumar Saxena; Kundan Kumar ; Benjamin A Shimray; Sanjeet Kumar Dwivedi		
OS-SS18-S5-P6	09:45 - 10:00	1510	Hydrogen as a Decarbonization Vector: Classification, Production Insights, and its Range <i>Authors:</i> Vima Mali; Kundan kumar; Pankaj verma		
Date: 12-12-2025		Parallel Session 10		Track 4,5 &6	Venue :
ID	Time Slot	Paper ID	Paper Details		
OL-T4-S5-P1	08:30 – 08:45	1017	Interval Modelling and Model Order Reduction of WTG Connected Power System <i>Authors:</i> Salik Dewangan		
OL-T4-S5-P2	08:45 - 09:00	1276	A Novel Accurate Demand Side Battery Management by Using an Adaptive Radial Basis Neural Network Controller <i>Authors:</i> Dr. Hussaian Basha		
OL-T4-S5-P3	09:00 - 09:15	1163	Energy Efficient Control of Photovoltaic Integrated Low Voltage Distribution Network <i>Authors:</i> Anuradha Tomar, Lakshya Bhatnagar		
OL-T5-S5-P4	09:15 - 09:30	755	Design of Axial Flux Ferrite Permanent Magnet DC motor for E-bike application <i>Authors:</i> Sagar Gupta; Amit Jain		
OL-T5-S5-P5	09:30 - 09:45	917	Low-Cost Flat-Type Interior Permanent Magnet Machine With Hybrid Permanent Magnet Material <i>Authors:</i> Sagar Gupta; Vaibhav Bhardwaj; Amit Jain		
OL-T6-S5-P6	09:45 - 10:00	173	Urban Traffic Intelligence: Merging Computer Vision and Reinforcement Learning for Proactive Congestion Control <i>Authors:</i> Aadithyaa Aadithyaa; Sravya Duvvuri; Bhavana Naidu; Lalithamani N		



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Date: 12-12-2025		Parallel Session 11	Mixed Tracks	Venue :
ID	Time Slot	Paper ID	Paper Details	
OL-T1-S5-P1	08:30 – 08:45	166	Leveraging Extensive Feature Engineering for Robust Fault Diagnostics in DG Penetrated Distribution Networks <i>Authors:</i> Adhishree Srivastava, Neha Nidhi, Piyush Kumar Ojha	
OL-T2-S5-P2	08:45 - 09:00	93	Comprehensive Study Paper on the Role of Additive Manufacturing in Production of Permanent Magnet Synchronous Motor <i>Authors:</i> Asma Raza, Ujjwal Kumar Kalla	
OL-T3-S5-P3	09:00 - 09:15	434	Performance Analysis of a Boost-Type Five-Level MLI Driven by a PEM Fuel Cell Stack <i>Authors:</i> Praveen Bansal, Anuj Lodhi	
OL-T4-S5-P4	09:15 - 09:30	1441	Power Quality Enhancement of Hybrid PV-Wind- Battery-FCS-AE Based Standalone Microgrid under the Operation with Various Loads <i>Authors:</i> K Lokeswara Rao, Usha A, R.S. Geetha	
OL-T6-S5-P5	09:30 - 09:45	173	Urban Traffic Intelligence: Merging Computer Vision and Reinforcement Learning for Proactive Congestion Control <i>Authors:</i> Aadithyaa Aadithyaa; Sravya Duvvuri; Bhavana Naidu; Lalithamani N	
OL-SS03-S5-P6	09:45 - 10:00	952	Probabilistic Flexibility Enhancement in Active Distribution Networks under Operational Constraints <i>Authors:</i> T Koteswara Rao; Ankur Rana	
OS-SS03-S2-P3	10:00 - 10:15	1287	Strategic Planning of Electric Vehicle Charging Stations and Reactive Power Compensation for Interruption Cost Reduction in Distribution Systems <i>Authors:</i> B Vinod Kumar; Aneesa Farhan M A	

Day 3		Date: 12-12-2025		Oral Session-6		Time : 12:00 to 13:30	
Date: 12-12-2025		Parallel Session 1		Track 1		Venue :	
ID	Time Slot	Paper ID	Paper Title				
OS-T1-S6-P1	12:00 - 12:15	1444	String Level Arc Fault Detection and Localization in Large-Scale Solar PV Array <i>Authors:</i> Shubham Kumar				
OS-T1-S6-P2	12:15 - 12:30	1551	Conditional-GAN-Based Generation Command Restoration Algorithm in a Mileage-Based Dispatch Framework with Aggregated VPP Flexibility <i>Authors:</i> Kingshuk Roy, Sanjoy Debbarma, Liza Debbarma				
OS-T1-S6-P3	12:30 - 12:45	392	Effect Of Inertia On Power System With Renewable Energy Integration <i>Authors:</i> Pandi K				
OS-T1-S6-P4	12:45 - 13:00	131	Smart Energy Management System for a Solar-Powered EV Charging Station <i>Authors:</i> Sindhu M R				
OS-T1-S6-P5	13:00 - 13:15	155	Comprehensive Insights on Partial Discharge Detection and Monitoring in Medium Voltage Applications <i>Authors:</i> Rafeetha V C , Shashank H Joshi, Dr. Madhu G M, Dr. Vyjayanthi C				
OS-T1-S6-P6	13:15 - 13:30	697	Real-Time Energy Theft Detection in Smart Meters Using Stream- Based Big Data Analytics <i>Authors:</i> Vijayanand Selvaraj				



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Date: 12-12-2025		Parallel Session 2		Track 2	Venue :
ID	Time Slot	Paper ID	Paper Details		
OS-T2-S6-P1	12:00 - 12:15	656	Poisson-Based Modeling of Arc-Induced Spike Events for Low- Voltage Distribution Systems <i>Authors:</i> Ratnakar Nutenki, Haraprasad Badajena, Aurobinda Routray, Ashok Kumar Pradhan		
OS-T2-S6-P2	12:15 - 12:30	675	Guidelines for Relay Configuration to Handle Mutual Coupling Effect of Parallel lines <i>Authors:</i> Ravindra Kumar, Manoj Tripathy		
OS-T2-S6-P3	12:30 - 12:45	1132	Short-Term Electricity Price Forecasting Using RFECV-based Feature Selection and GA-Optimized BiLSTM <i>Authors:</i> Ashish Prajesh, Prema Jain		
OS-T2-S6-P4	12:45 - 13:00	255	Solving OPF with Stochastic Wind Power Using a Nature-Inspired Gorilla Troops Optimizer <i>Authors:</i> Abhishek Saini		
OS-T2-S6-P5	13:00 - 13:15	1316	Advanced Delay Architectures for Accurate Timing Control in High-Speed Automated Systems <i>Authors:</i> Narendra Singh Beniwal; Shashwat Singhal; Shruti Kalra; Ruby Beniwal		
OS-T2-S6-P6	13:15 - 13:30	1458	IoT Node Synchronized with Indian Constellation for Phasor Measurement in Power System <i>Authors:</i> Pratik Sharma, Ankush Sharma		
Date: 12-12-2025		Parallel Session 3		Track 3	Venue :
ID	Time Slot	Paper ID	Paper Details		
OS-T3-S6-P1	12:00 - 12:15	1432	Design and Control of High Power Density Power Electronics for Fuel Cell-based Energy Storage Systems <i>Authors:</i> Rajesh Mahto, Aditya Kant, Pallavi Bharadwaj		
OS-T3-S6-P2	12:30 - 12:45	1539	Design and Implementation of a High-Gain DC-DC Converter for Solar Photovoltaic Systems <i>Authors:</i> Madhav kumar, Kaibalya Prasad Panda, Ritula Thakur, Gayadhar Panda		
OS-T3-S6-P3	12:45 - 13:00	141	Robust Isolation Demonstration of BDC Process in DC-DC Converter for Data-Center Application <i>Authors:</i> Balaji Rathod, Alok Mishra, Asif Iqbal, Nataraj Kowti, Rajesh Reddy Tummuru		
OS-T3-S6-P4	13:00 - 13:15	256	High-Gain OSQSBC with Coupled Inductor for Efficient Solar- Powered EV Battery Charging <i>Authors:</i> Kamaraja A S, Karthik Kumar K		
OS-SS08-S6-P5	13:15 - 13:30	907	Chattering Free Performance of Buck Converter using Optimized Non-linear Sliding Mode Surface <i>Authors:</i> Anupam Agarwal; Man Mohan Garg		



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Date: 12-12-2025		Parallel Session 4		Track 4	Venue :
ID	Time Slot	Paper ID	Paper Details		
OS-T4-S6-P1	12:00 - 12:15	1421	Performance Evaluation and Experimental Validation of Zig-Zag PV Array Reconfiguration Under Partial Shading Conditions <i>Authors:</i> Rahul Pukale		
OS-T4-S6-P2	12:15 - 12:30	526	Hydrodynamic Modeling and Matrix Converter-Based Control of a PMLG for Ocean Wave Energy Harvesting <i>Authors:</i> Anupa Gugulothu, sharmili das		
OS-T4-S6-P3	12:30 - 12:45	1019	Loss Analysis in String-Level Photovoltaic Systems: Impact on Energy Yield <i>Authors:</i> Neil Samaddar, V Prasant, Dipankar Debnath		
OS-T4-S6-P4	12:45 - 13:00	1023	MoS2/Barium Ferrite Nanocomposite: A Synergistic Electrode for Advanced Supercapacitor Applications <i>Authors:</i> Shivam Kumar Mittal, Udeshwari Jamwal, K. L. Yadav		
OS-T4-S6-P5	13:00 - 13:15	689	Improved PEM Fuel Cell Parameter Identification through Polynomial Regression Assisted PSO <i>Authors:</i> Omkar Singh, Anjan Kumar Ray, Geeta Srivastava		
OS-T4-S6-P6	13:15 - 13:30	736	Grid Resilience and Renewable Integration: India's Transition to a Sustainable Power System <i>Authors:</i> Shubhra Shah, Prakash sharma		
Date: 12-12-2025		Parallel Session 5		Track 5	Venue :
ID	Time Slot	Paper ID	Paper Details		
OS-T5-S6-P1	12:00 - 12:15	1474	3-phase triple-boosted Multilevel Inverter for Photovoltaic Applications with Seven Levels of Switched Capacitors <i>Authors:</i> Vinayak Kumar, Ruchi Agarwal, Pravindra Kumar		
OS-T5-S6-P2	12:15 - 12:30	1484	A Novel Five-Level Symmetric Multilevel Inverter Design for Solar Photovoltaic Systems <i>Authors:</i> Pravindra Kumar, Ruchi Agarwal, Vinayak Kumar		
OS-T5-S6-P3	12:30 - 12:45	1355	Enhanced Ultra Gain Cubic DC-DC Converter For EV and Grid Applications Using Dual Switch Operation <i>Authors:</i> Arun Polasa, Roshini Gaini, Pavani Guvvala, Phanindra Kumar Samudrala, Manikanta Kuraganti, Ramulu Chinthamalla		
OS-T5-S6-P4	12:45 - 13:00	653	Hybrid Quantum-Classical Model for Digit Recognition in Electric Vehicle <i>Authors:</i> Fareed Singh Kang; Neeraj Kumar; Ravinder Kumar; Rajesh Chaudhary		
OS-T5-S6-P5	13:00 - 13:15	1481	Real-Time Gain-Tuned A Novel Source-Side Virtual RL Damper for DC Bus Voltage Stabilisation in Cascaded DC-DC Converters within a DC Microgrid <i>Authors:</i> Suryakant Kumar; Satadal Bhowmik; Gauri Shankar; Vedantham Lakshmi Srinivas		
OS-T5-S6-P6	13:15 - 13:30	635	Modelling and Control of Fourth-Order Zeta Converter for Electric Vehicle Charging <i>Authors:</i> Yasir Bashir; Farhat Manzoor; Amarendra Edpuganti; Shantanu Chatterjee		



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Date: 12-12-2025		Parallel Session 6		Track 6	Venue :
ID	Time Slot	Paper ID	Paper Details		
OS-T6-S6-P1	12:00 - 12:15	1150	Design and Implementation of HMI by enhancing Data Logging capabilities for improved process control <i>Authors:</i> Suhas Gowda; Suresha C		
OS-T6-S6-P2	12:15 - 12:30	1423	AMIGO Based Control Strategy for Frequency Stabilization of Marine Microgrid <i>Authors:</i> Akanksha Waghmare; V. P. Singh		
OS-T6-S6-P3	12:30 - 12:45	1296	A Smart Eyewear-Based Solution for Non-Verbal Patient Communication Using Blink Detection <i>Authors:</i> Harinath Airedy		
OS-T6-S6-P4	12:45 - 13:00	1298	Dual-Factor Authentication for Industrial Machinery Access Using RFID and Fingerprint Verification <i>Authors:</i> Harinath Airedy		
OS-T6-S6-P5	13:00 - 13:15	977	Intelligent Grasp Planning using Open-Vocabulary Image Segmentation and Large Language Models <i>Authors:</i> Prithvi Raj Baskar; Bijo Sebastian; Alpana Dubey; Suma Mani Kuriakose		
Date: 12-12-2025		Parallel Session 7		Special Session 13	Venue :
ID	Time Slot	Paper ID	Paper Details		
OS-SS13-S6-P1	12:00 - 12:15	1370	Integration of Solar and Wind Power with Virtual Synchronous Generators for Improved Transient Stability and Virtual Inertia Support <i>Authors:</i> Suparna Maity; Sandip Chanda; Alok Srivastava; Raja Ram Kumar; Abhinandan De		
OS-SS13-S6-P2	12:15 - 12:30	230	Renewable Energy: High-Efficiency Dual-Absorber CsFAPbBr ₃ /FAMASnBr ₃ Perovskite Solar Cell <i>Authors:</i> Raushan Kumar; Alisha Priya; Alok Priyadarshi; Premendra Premendra; Shivam Kumar		
OS-SS13-S6-P3	12:30 - 12:45	976	A Dual Input Single Output Nonisolated DC/DC Converter for Low/High Voltage Sources with Step Down/Up Capabilities <i>Authors:</i> Avisha Tah		
OS-SS13-S6-P4	12:45 - 13:00	1067	Evaluating Bifacial Perovskite Solar Cell Performance Under Dual-Side Illumination <i>Authors:</i> Mustak Ahmed Ansary; Shweta Pal; Pawan Kumar; Biswajit Mandal; Gaurav Siddharth		
OS-SS13-S6-P5	13:00 - 13:15	1056	A Review of Agro Photovoltaic Systems Leveraging AI for Sustainable Food and Energy Production <i>Authors:</i> Manish Kumar; Dheeraj Sharma		
OS-SS13-S6-P6	13:15 - 13:30	1147	Performance Evaluation of Amorphous Silicon Photovoltaics Integrated in Marine Structures: Impact of Submersion Depth and Thermal Management <i>Authors:</i> Rehan Raza Mohammed; Kalpitkumar Solanki; Girish Kumar Rudraraju; Chirodeep Bakli		
OS-SS13-S6-P7	13:30 - 13:45	1217	Comparative Shadow Profiling of PV Structures across Latitudes for Optimized Agrivoltaic Design <i>Authors:</i> Babul Saini; Ragani Raj; L. Padmavathi; Anand Abhishek		



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Date: 12-12-2025		Parallel Session 8		Special Session 21	Venue :
ID	Time Slot	Paper ID	Paper Details		
OS-SS21-S6-P1	12:00 - 12:15	1366	EV Battery Charging Using Five-phase Open-End Drive With Three-phase Asymmetric Anti-Parallel Supply Configuration <i>Authors:</i> Akanksha Karlekar; Ramsha Karampuri		
OS-SS21-S6-P2	12:15 - 12:30	1387	Impact Analysis of EV Drive Cycles and Types on the Optimal Management of Smart Homes <i>Authors:</i> Giriwar Chaurasia, Subho Paul, Mitresh Kumar Verma		
OS-SS21-S6-P3	12:30 - 12:45	1428	Design and Simulation of a Coupled Inductor Interleaved Buck Converter for High-Efficiency DC Power Application <i>Authors:</i> Chandika Pratap Singh, Harsh Prajapati, Narendrababu A, Naveen Yalla		
OS-SS21-S6-P4	12:45 - 13:00	1449	Detection, Classification and Phase Localization of Cyber Attacks in 3- ϕ Standalone Inverter Systems <i>Authors:</i> Tushita Das, Mitikiri Sagar Babu, Sriranga Suprabhath Koduru, Vedantham Lakshmi Srinivas, Sukumar Mishra		
OS-SS21-S6-P5	13:00 - 13:15	1454	Modeling, Control, and Performance Analysis of a Five-Phase Induction Motor with SPWM <i>Authors:</i> Ayantika Guria, Arka Dutta, Kartick Chandra Jana		
OS-SS21-S6-P6	13:15 - 13:30	1573	Reinforcement Learning-Based Tuning of a Bidirectional Wireless Charging System to Zero Phase Angle under Misalignment <i>Authors:</i> Midiminchi Yadav		
Date: 12-12-2025		Parallel Session 9		Mixed Track	Venue :
ID	Time Slot	Paper ID	Paper Details		
OS-T2-S6-P1	12:00 - 12:15	1455	Dynamic Effects on Flux Linkage Versus Current Contours in Single-Pulse-Operated High-Speed Switched Reluctance Machine <i>Authors:</i> Samrat Das, Gopalaratnam Narayanan		
OS-T2-S6-P2	12:15 - 12:30	1452	Lyapunov Control with Immersion and Invariance Observer for Robust BLDC Motor Drive Operation <i>Authors:</i> Mitesh Astik, Nitte Meenakshi, Shital Bhatt, Dhruv Shah		
OS-T2-S6-P3	12:30 - 12:45	540	Indirect Field-Oriented Control of a Single-Phase Induction Motor Fed by a Three- phase Inverter <i>Authors:</i> Boikuntha Bikash Buragohain, Parthajit Dutta, Soumya Samanta		
OS-T3-S6-P4	12:45 - 13:00	673	Performance-Oriented Design of a Three-Phase ANPC SC Inverter Using Multilevel Architecture <i>Authors:</i> Dipanwita Ganguly		
OS-T4-S6-P5	13:00 - 13:15	897	Boosting Energy Storage Performance: Ni-Doped ZnMn₂O₄ as a Promising Electrode for Supercapacitors <i>Authors:</i> Kalpana Kukreti, Shivam Kumar Mittal, Kanhaiya Lal Yadav		
OS-T4-S6-P6	13:15 - 13:30	1182	Enhanced Conductivity In Mn-Doped NaNbO₃ : A Promising Mixed Ionic–Electronic Conductor <i>Authors:</i> Deepanshu Kaneria, Amiya Mandal, Kanhaiya Lal Yadav		
OS-T6-S6-P7	13:30 - 13:45	1363	Real-Time Detection of Cyber Attacks in Smart Environments Using Multi-Rate Kalman Filtering <i>Authors:</i> Akash Agarwal; Jagat Jyoti Rath; Shubhi Purwar		



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Date: 12-12-2025		Parallel Session 10	Mixed Track	Venue :
ID	Time Slot	Paper ID	Paper Details	
OL-T2-S6-P1	12:00 - 12:15	1128	Modeling of Series-connected Split-phase Induction Motor under Open-Circuit Fault <i>Authors:</i> Deeksha Bhule, R. Sudharshan Kaarthik	
OL-T4-S6-P2	12:15 - 12:30	1113	Control and Energy Management of Fuel Cell with Hybrid Energy Storage System <i>Authors:</i> Tirtharaj Mali, Moushumi Patowary, Probit Rabha	
OL-T6-S6-P3	12:30 - 12:45	864	Comparative Analysis of Classical MOR Methods for MIMO Hydro Power System <i>Authors:</i> Salik Dewangan	
OL-T6-S6-P4	12:45 - 13:00	1318	Scalable Road Surface Anomaly Detection System Using Apache Spark and Real-Time Data Streaming <i>Authors:</i> Padmakumari P; Suganya D ; Sujatha M; Jaiaakaash J.S; Sowmiya K	
OL-SS04-S6-P5	13:00 - 13:15	552	Development Of Distinct Third-Order Inverse Filters Employing Single OTRA <i>Authors:</i> Shubhojit Ghosh; Aniket Mazumder; Shuvadeep Biswas; Ram Bhagat	
OL-SS13-S6-P6	13:15 - 13:30	1330	Experimental investigation of wind-induced aerodynamic responses on a ground-mounted photovoltaic array under varying wind angles <i>Authors:</i> Krishna Debnath	

Day 4		Date: 13-12-2025	Oral Session-7	Time : 08:30 to 10:00
Date: 13-12-2025		Parallel Session 1	Track 1	Venue :
ID	Time Slot	Paper ID	Paper Title	
OS-T1-S7-P1	08:30 - 08:45	879	A Comparative Analysis of HDLC and TCP/IP Communication Profiles for DLMS/COSEM-Based Smart Metering Systems <i>Authors:</i> Dhanavath Shankar	
OS-T1-S7-P2	08:45 - 09:00	916	Virtual Synchronous Generator based Improved Non-linear Mitigation Technique for Enhanced Power Quality <i>Authors:</i> Buddhadeva Sahoo, Sarthak Mohanty, Pravat Kumar Rout, Prakash Chandra Sahu, Manoj Kumar Debnath, Pritam Bhowmik	
OS-T1-S7-P3	09:00 - 09:15	1139	Cooperative Energy Exchange Of A Heterogeneous Prosumer Microgrids For Mutual Economic Energy Share <i>Authors:</i> Durga Gudavalli, Alivelu Manga Parimi	
OS-T1-S7-P4	09:15 - 09:30	1144	Adaptive Analytical Control and Optimization of STATCOM in Solar-Fed Transmission Lines under Outlier Scenarios <i>Authors:</i> Chetan Jambhulkar Tulsiramji	
OS-T1-S7-P5	09:30 - 09:45	1248	Frequency Response Analysis of Transformer Winding Faults Using Circuit-Based Modeling and Driving Point Impedance <i>Authors:</i> Mithun Mondal, Manoj Samal	
OS-T1-S7-P6	09:45 - 10:00	1500	Tensile Strength and Thermal Degradation Analysis of EPDM Composites for High Voltage Insulation <i>Authors:</i> Sreelekha V, Pradeepkumar P. Joy, Aryanandiny B, Binu Sankar	



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Date: 13-12-2025		Parallel Session 2		Track 2	Venue :
ID	Time Slot	Paper ID	Paper Details		
OS-T2-S7-P1	08:30 - 08:45	827	Adaptive State-of-Energy Estimation of Supercapacitor using Fractional Calculus <i>Authors:</i> Suparna Maity		
OS-T2-S7-P2	08:45 - 09:00	98	GGM-LDMAF Control and Seamless Operation of a Solar-Powered EV Charger <i>Authors:</i> Pavan Singh, Divyank Srivastava, Bhim Singh, Arunima Verma, Saurabh Mani Tripathi		
OS-T2-S7-P3	09:00 - 09:15	110	Grid-Tied Solar Water Pumping System Using Sensorless PMSM and IAVSLMS Algorithm <i>Authors:</i> Wazid Ali, Divyank Srivastava, Bhim Singh, Arunima, Saurabh Mani Tripathi		
OS-T2-S7-P4	09:15 - 09:30	344	PVsyst-Based Design and Performance Evaluation of a 100 kWp Grid-Connected Solar PV System in Egypt <i>Authors:</i> Mohamed Moustafa		
OS-T2-S7-P5	09:30 - 09:45	1521	Event-Driven Control Strategies for Efficient Microgrid Operation <i>Authors:</i> Amit Mallick, Ruchita Singh, Jatin Pradhan, Rosy Pradhan, Rajiv Kumar Mishra		
Date: 13-12-2025		Parallel Session 3		Track 3	Venue :
ID	Time Slot	Paper ID	Paper Details		
OS-T3-S7-P1	08:30 - 08:45	257	Design and Analysis of a Uni-Switch Quadratic Boost Converter with Three-Winding Coupled Inductor for Efficient Solar-Powered EV Battery Charging <i>Authors:</i> Karthik Kumar K, Kamaraja A S		
OS-T3-S7-P2	08:45 - 09:00	310	Enhanced Dynamic Wireless Charging Circuits for E - Mobility : A Comparative Study <i>Authors:</i> Amizhzhiniy Rajalingam Sudha, Josephine R L		
OS-T3-S7-P3	09:00 - 09:15	355	Performance Analysis of a Modified Single-Phase Split-Source Inverter Achieving Reduced Commutation Loss and Enhanced Voltage Gain <i>Authors:</i> Haricharan Nannam, Sai manohar Majji, Angel babita muppidi, Surya A		
OS-T3-S7-P4	09:15 - 09:30	199	Enhanced Ripple Reduction Strategies for Parallel-Operated AC-DC Converters : A MATLAB/Simulink Study <i>Authors:</i> Ilango Karuppasamy, Harun Kumar M		
OS-T3-S7-P5	09:30 - 09:45	807	Design and Performance Analysis of Vienna Rectifier as the Input Stage for EV Charger <i>Authors:</i> Aman Deep, Yadvendra Singh, Krishna Kumar Gupta, Sunil Kumar Singla, Shakti Singh, Pallavee Bhatnagar		



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Date: 13-12-2025		Parallel Session 4		Track 4	Venue :
ID	Time Slot	Paper ID	Paper Details		
OS-T4-S7-P1	08:30 - 08:45	213	A Synergistic Neural–Kalman Hybrid Approach for Real-Time State Estimation <i>Authors:</i> Tasadeek Dar, Satyavir Singh		
OS-T4-S7-P2	08:45 - 09:00	541	A Novel Dissipativity-Based Observer for State of Charge Estimation in Lithium-Ion Electric Vehicle Batteries: An Experimental Approach <i>Authors:</i> Manivannan R, Vinothini K		
OS-T4-S7-P3	09:00 - 09:15	756	Data-Driven Multi-Objective Optimization of Perovskite Solar Cells Using SCAPS-1D, Gaussian-Process Surrogates & NSGA-II <i>Authors:</i> leeladevi velpuri		
OS-T4-S7-P4	09:15 - 09:30	820	Enhancing the Life Expectancy of Storage Device in a Solar PV based Microgrid <i>Authors:</i> Saqib Wani, Sofi Jan, Rabiya Bhat, Mubashar Zargar, Ikhlaz Hussain		
OS-T4-S7-P5	09:30 - 09:45	1183	Adaptive Step Size Implementation for P&O MPPT Algorithm Using Particle Swarm Optimization <i>Authors:</i> Seema Diwan		
OS-T4-S7-P6	09:45 - 10:00	1305	Improvement Uncertainty in Renewable Energy Sources using Monto Carlo optimization technique <i>Authors:</i> Dr.Hima Bindu Eluri		
Date: 13-12-2025		Parallel Session 5		Special Session 07	Venue :
ID	Time Slot	Paper ID	Paper Details		
OS-SS07-S7-P1	08:30 - 08:45	763	Energy Management in Renewable-Integrated Smart Grid with Electric Vehicles, Battery Storage, and Consumer Incentives <i>Authors:</i> Sampatirao Nanibabu; Shakila Baskaran; Prakash Marimuthu		
OS-SS07-S7-P2	08:45 - 09:00	781	Improving Grid Compliance and Economic Efficiency Using Energy Storage Under DSM Regulation 2024 <i>Authors:</i> Ravindra Kuhada; Bharat Singh Rajpurohit		
OS-SS07-S7-P3	09:00 - 09:15	799	Design and Analysis of a ZVS Buck Converter with Comparative MPPT Algorithms for Photovoltaic Systems <i>Authors:</i> Souvik Mondal; Arnab Ghosh; Pravat Kumar Ray; Riju Nandi		
OS-SS07-S7-P4	09:15 - 09:30	822	Cross-Tied BIPV Hybrid Interconnections with enhanced GMPP and reduced Mismatch loss for extreme Shading resilience in Smart Buildings <i>Authors:</i> Nikhil Arunrao Bodkhe; Debayan Sarkar; Risha Mal		
OS-SS07-S7-P5	09:30 - 09:45	1201	Control-Oriented Design of a Standalone PV-Battery-Inverter System with Dynamic Load <i>Authors:</i> Pranati Purohit		
OS-SS07-S7-P6	09:45 - 10:00	1216	Analysis of recent TT and QT Asymmetrical Interconnections in BIPV Arrays under Real-World Partial Shading for Urban Energy Networks <i>Authors:</i> Nikhil Arunrao Bodkhe; Debayan Sarkar;		
OS-SS07-S7-P7	10:00 - 10:15	877	Economic and Stability Analysis of Solar Based Distributed Generators in Residential Buses of Distribution System <i>Authors:</i> Vidhya Sri J; Snehaa Arun; Narayanan K; Anurag Sharma; Gulshan Sharma; Mithulan Nadarajah		

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Date: 13-12-2025		Parallel Session 6	Special Session 09	Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-SS09-S7-P1	08:30 - 08:45	278	Shunt Active Power Filter Based on DETOGI for Self-Excited Induction Generator Under Unbalanced Loaded Condition <i>Authors:</i> Jotirmoy Samanta; Ralli Sangno; Rajen Pudur	
OS-SS09-S7-P2	08:45 - 09:00	275	ANN-Based Predictive Maintenance For Mini Grid Black Out Prevention <i>Authors:</i> R Nethra; Sahaana Shri S.K; CH. Vaishnavi Krishna; Binu Krishnan U; Rahul S	
OS-SS09-S7-P3	09:00 - 09:15	830	Integration of Solar PV System with Electric Grid for Reactive Power Control <i>Authors:</i> Rahul Kumar; Mukesh Kumar Kirar	
OS-SS09-S7-P4	09:15 - 09:30	1101	Assessment of Grid Voltage Fluctuations on the Performance of a Three-Phase Grid-Integrated Inverter <i>Authors:</i> Mensia Gabriel; Peter Makolo; Jackson Justo; Ramesh Bansal ; Galina Demidova	
OS-SS09-S7-P5	09:30 - 09:45	790	Disruptive Event Classification with the Help of Power Quality Features Extracted from μPMU Measurement <i>Authors:</i> Partha Kayal	
OS-SS09-S7-P6	09:45 - 10:00	857	LTO Battery Fading Prediction using Deep Learning <i>Authors:</i> Sreenu Sreekumar	
OS-SS09-S7-P7	10:00 - 10:15	405	Technical & Financial Impact of Renewable Energy Penetration in LT Distribution Networks: A Real Case Scenario <i>Authors:</i> Shine Raj	
Date: 13-12-2025		Parallel Session 7	Special Session 20	Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-SS20-S7-P1	08:30 - 08:45	691	Cascadable Second-Order Universal Filter With CMOS-Based DX-MOCCII For Control Engineering <i>Authors:</i> Aamir Suhail Taray; Ashok Kumar	
OS-SS20-S7-P2	08:45 - 09:00	692	Scalogram-Histogram Driven CNN Approach for Classifying Power System Disturbances in PMU Data. <i>Authors:</i> Pradeep Khatik; Punjan Dohare	
OS-SS20-S7-P3	09:00 - 09:15	813	Hybrid BSO-Based Multi-Objective Optimization for Enhanced Power Management in DC Microgrids <i>Authors:</i> Gaurav Kumar	
OS-SS20-S7-P4	09:15 - 09:30	1337	Genetic Algorithm-Optimized Fuzzy Control of Battery Storage Systems for Virtual Inertia Emulation in Microgrids <i>Authors:</i> Yashodan Prabhu Borkar; Soumitra Das	
OS-SS20-S7-P5	09:30 - 09:45	1349	Cost efficient charging scheduling methodology for Electric Vehicles in multi-type charger environments <i>Authors:</i> Krishan Chopra; Mukesh Kumar Shah, Jaipur India; K.R. Niazi	
OS-SS20-S7-P6	09:45 - 10:00	1443	Advanced Incentive-Based Demand Response Strategies for Optimal Energy Management in Microgrids <i>Authors:</i> Amit Singh; Neha Yadav	



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Date: 13-12-2025		Parallel Session 8	Special Session 21	Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-SS21-S7-P1	08:30 - 08:45	782	Enhancing RDN Performance with Optimized EVCS, DG, and SC Placement Using Zero-Bus Logic OR based Forward-Backward Load Flow <i>Authors:</i> Anagha Rajendran K P, Soumyabrata Barik, Sudarshan Swain	
OS-SS21-S7-P2	08:45 - 09:00	1391	Solid-State and AI-Driven Advances in EV Battery Ecosystems: Road to 2030 <i>Authors:</i> Pooja Choudhary, Anubhav Agrawal	
OS-SS21-S7-P3	09:00 - 09:15	624	High-Gain Voltage-Lift Switched-Capacitor Switched Inductor based Converter for Electrified Traction Drive System <i>Authors:</i> Gaurav., Sukanta Halder, Nakka Jayaram, Nilanjan Das, Mitesh Kumar, Bharat bhai Patel, Sk Bittu	
OS-SS21-S7-P4	09:15 - 09:30	625	Improved High Gain Next-Gen DC-DC Converter for DC-BUS Applications <i>Authors:</i> Aida Shahriardoust, Gaurav, Sukanta Halder, Kaibalya Prasad Panda, Uppalapati Sudheer Kumar	
OS-SS21-S7-P5	09:30 - 09:45	1429	Three-Level NPC Operation of TS-NPC with Capacitor Voltage Balancing Control <i>Authors:</i> Devwrat Devwrat, Narendrababu A, Kishor Hirekar, Naveen Yalla	
OS-SS21-S7-P6	09:45 - 10:00	942	Damping of Sub Synchronous Oscillation Serving to DFIG based Type 3 Wind System <i>Authors:</i> Vijay Mohale, Sunny Sonandkar, Madhukar Waware, Rahul Chanmanwar, and Vitthal Bandal	
OS-SS21-S7-P7	10:00 - 10:15	1558	Addressing Cyber-Physical Vulnerabilities in V2G and G2G Systems through a Hybrid Recovery Framework <i>Authors:</i> Aditya Rastogi, Anubhav Agrawal, Mehak Bhardwaj, Sejal Gupta	
Date: 13-12-2025		Parallel Session 9	Mixed Track	Venue :
ID	Time Slot	Paper ID	Paper Details	
OL-SS06-S7-P1	08:30 - 08:45	292	Fuzzy Logic Controlled Hybrid EV Charging Station Utilizing Solar Power and Diesel Generator <i>Authors:</i> Masadi Prashanth Kumar; Srikanth Velpula; Saiprakash Chidurala; Buddhadeva Sahoo; Kalyaani Thota	
OL-SS07-S7-P2	08:45 - 09:00	934	Distributed Discrete-Time Controller for Coordinated Operation of Clustered DC Nanogrids <i>Authors:</i> Anuradha Tomar	
OL-SS10-S7-P3	09:00 - 09:15	1127	Ground Fault Detection in RES Integrated Power System Networks Using Clustering Algorithm <i>Authors:</i> Venkateswarlu Mandadhi; Rakesh Kumar Panda; Kumaresan N	
OL-SS17-S7-P4	09:15 - 09:30	568	Modelling of Partial Discharge Detection in Power Transformer Using ZnO Material Based Piezoelectric Sensor <i>Authors:</i> Dr. Sorokhaibam Nilakanta Meitei; Saibal Chatterjee	
OL-SS18-S7-P5	09:30 - 09:45	1028	Performance Analysis of 100 kWp Stand-Alone Solar PV System in North-Eastern Part of India, Manipur <i>Authors:</i> Thokchom Singh; Benjamin A. Shimray; Sanasam Dhanabanta Singh; Athokpam Bharatbushan Singh; Sorokhaibam Nilakanta Meitei	
OL-SS20-S7-P6	09:45 - 10:00	711	Efficient Probabilistic Load Flow Utilising Latin Hypercube with Translational Propagation Algorithm <i>Authors:</i> Neeraj Gupta, B Rajnarayan Prusty	



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Date: 13-12-2025		Parallel Session 10	Mixed Track	Venue :
ID	Time Slot	Paper ID	Paper Details	
OL-T1-S7-P1	08:30 - 08:45	452	Hybrid Machine Learning for Uncertainty-Aware Net Load Forecasting in Renewable-Integrated Grids <i>Authors:</i> Yogita Singh, Vaibhavi Raja, Jyoti Kumari, Deepak Kumar, G Lloyds Raja	
OL-T2-S7-P2	08:45 - 09:00	1457	Enhanced Sensorless Control of PMSM Using Torque-Aided Extended Kalman Filter for Robust Speed Operation <i>Authors:</i> Raja Gandhi; Deigratia Sutnga; Edi Sankararao; Ajay Anand; Rakesh Roy	
OL-T2-S7-P3	09:00 - 09:15	1447	Performance Enhancement of DTC in Induction Motors Using Ant Colony Optimization with Max-Min Ant System <i>Authors:</i> Arpita Banik, Raja Gandhi, Nabarun Biswas, Rakesh Roy	
OL-SS04-S7-P4	09:15 - 09:30	532	A Novel Single Leg Switch Based Non-Isolated Multi-Port DC-DC Converter for PV-Battery Hybrid Energy Systems <i>Authors:</i> Jayamurugan Mookkan; Saravanan Kaliyaperumal; Narayanamoorthi R; Sivaprasad Athikkal; Vivekanandan Subburaj	
OL-SS06-S7-P5	09:30 - 09:45	267	Design and Optimization of a Low-Power Hybrid Solar-Micro Hydro Microgrid with ANN-Based Voltage and Frequency Control for Remote Electrification <i>Authors:</i> Somila Hashunao; R K Mehta	
OL-SS06-S7-P6	09:45 - 10:00	1419	Federated Multi-Stage Market Clearing with Integrated Probabilistic Forecasting for Decentralized Energy Systems <i>Authors:</i> Surya Singh; Amit Kumar Singh	

Day 4		Date: 13-12-2025	Oral Session-8	Time : 12:00 to 13:30
Date: 13-12-2025		Parallel Session 1	Track 1	Venue :
ID	Time Slot	Paper ID	Paper Title	
OS-T1-S8-P1	12:00 - 12:15	1507	Twin-Delayed DDPG-Tuned PIDF Controller for Load Frequency Control in Power Grid with Distributed Energy Resources <i>Authors:</i> Tumuluri Datta Venkata Sai, Sukriti Tiwari, Devesh Shukla	
OS-T1-S8-P2	12:15 - 12:30	1581	Fuzzy Slope Entropy-Driven Protection Scheme for Micro-grids Incorporating ΔV-ΔI Plane-Based Fault Classification <i>Authors:</i> Chinmayee Biswal, Pravat Kumar Rout, Binod Kumar Sahu, Subhransu Ranjan Samantaray	
OS-T1-S8-P3	12:30 - 12:45	512	Intelligent Time-Domain Protection of Grid-Forming Microgrids Enabled by IEC 61850 GOOSE Communication. <i>Authors:</i> Aditi Gupta	
OS-T1-S8-P4	12:45 - 13:00	1471	Application of Active GUPFC for microgrid stability <i>Authors:</i> Jayesh Joglekar, Pratiksha Kadam	
OS-T1-S8-P5	13:00 - 13:15	1085	A Resilient Controller for Enhancement of Load Frequency Control in Multi-Area Restructured Power System with Nonlinearities <i>Authors:</i> Pranav Singh, Sarvesh Kumar, Ravi Shankar, S N Singh	



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Date: 13-12-2025		Parallel Session 2	Special Session 05	Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-SS05-S8-P1	12:00 - 12:15	206	Hybrid Deep Learning Models for Real-Time Anomaly Detection in Electric Vehicle Systems <i>Authors:</i> Seema S; Ashima Anand; Amit Kumar; Mukesh Singh; Prasant Singh Rana	
OS-SS05-S8-P2	12:15 - 12:30	682	Design of a Robust Nonlinear Attack Estimator for Grid-Tied Inverters using a Friction Observer for Grid-Tied Inverters <i>Authors:</i> Sandford Stebbings; Shama Naz Islam; Md Enamul Haque; Md Apel Mahmud	
OS-SS05-S8-P3	12:30 - 12:45	578	BiLSTM-Based Load Forecasting for Individual Appliances in Smart Homes <i>Authors:</i> Ravivarma Kamireddy; Lokeshgupta Bhamidi; Ramanjaneya Reddy U	
OS-SS05-S8-P4	12:45 - 13:00	1463	Accurate State of Charge Estimation of Li-ion Battery Pack in Real Driving Conditions Using Safe Reinforcement Learning <i>Authors:</i> Reeta Rana; Anju Bala; Mukesh Singh	
OS-SS05-S8-P5	13:00 - 13:15	1102	Bidirectional Gated Recurrent Unit and CatBoost for Energy Demand Forecasting using Explainable Artificial Intelligence <i>Authors:</i> Deepika Kamboj; Neeru Jindal; Mukesh Singh	
OS-SS05-S8-P6	13:15 - 13:30	1478	MQTT-Enabled Smart Net Metering for V2G with Predictive Analytics <i>Authors:</i> Ashiq Bhat; Mukesh Singh; Singara Singh	
OS-SS05-S8-P7	13:30 - 13:45	459	Renewable Energy and Load Demand Forecasting using Multivariate Time Series Foundation Model <i>Authors:</i> Nipun Bansal; Sudhindra Pai; Yashasvi Bansal	
Date: 13-12-2025		Parallel Session 3	Track 3	Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-T3-S8-P1	12:00 - 12:15	982	Design and Development of a Single-Stage LED Driver Using Boost Converter with Dimming Control Algorithms <i>Authors:</i> Vijayalakshmi A L	
OS-T3-S8-P2	12:15 - 12:30	1501	Five-Level Fault-Tolerant Inverter With Preserved Output Under Multiple Switch Failure <i>Authors:</i> Prajesh Niranjana	
OS-T3-S8-P3	12:30 - 12:45	1344	Modelling and Analysis of Multi-stage Acceleration Grid Power Supply Dual Control for Neutral Beam Injector <i>Authors:</i> Ashok Mankani, Aditya Naugraiya, Aritra Chakraborty, Saurabh Kumar, Amal S, Meddi Tharun, Suryakant Gupta, Priyesh Chauhan	
OS-T3-S8-P4	12:45 - 13:00	1394	Emerging Trends in Voltage Source Converters: A Topological Review on Thyristor Integration <i>Authors:</i> Ayushi Gupta, Shourya Sharma, Siba Kumar Patro	
OS-T3-S8-P5	13:00 - 13:15	1425	Design and Control of a Self-Balanced Quadruple Boost 17-Level Switched Capacitor-Based Inverter <i>Authors:</i> AbdulNadeem	
OS-T3-S8-P6	13:15 - 13:30	1434	A 13-, 19-, and 25-Level Switched-Capacitor Multilevel Inverter with three fold gain for Renewable Energy Applications <i>Authors:</i> Md Ashraf Ali Khan, M Saad Bin Arif, Mohd Faraz Ahmad, Abu Athar	



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Date: 13-12-2025		Parallel Session 4	Track 4	Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-T4-S8-P1	12:00 - 12:15	1315	Techno-Economic Feasibility Study of a Rooftop Solar PV System for EV Charging at University Campus Building <i>Authors:</i> Krishna Kumar Saini, Diptanjan Sengupta, HD Mathur	
OS-T4-S8-P2	12:15 - 12:30	1357	Techno-Economic and Environmental Analysis of a Stand-Alone Hybrid PV-Wind-Diesel Microgrid for Electrification Using PSO, EHO, and QPSO <i>Authors:</i> Ritu K R Uit	
OS-T4-S8-P3	12:30 - 12:45	176	Grid-Forming Inverters: Overview of Major Technologies and Their Applications in Microgrid Operation <i>Authors:</i> Dhavalkumar Dave, Rital Gajjar, Rakesh Gajjar, Binal Modi	
OS-T4-S8-P4	12:45 - 13:00	948	Three-Phase ETOSSI-Controlled Solar-Battery Grid System for Power Quality Enhancement and Seamless EV Charging Transition <i>Authors:</i> Sarthak Mohanty, Shubhranshu Mohan Parida, Pravat Kumar Rout, Buddhadeva Sahoo	
OS-T4-S8-P5	13:00 - 13:15	1283	Order Diminution of Higher-Order Islanded Microgrids Using Hybrid Truncation–Routh and Factor Division Approach <i>Authors:</i> Richa Chaudhary, Vinay Pratap Singh, Akhilesh Mathur	
OS-T4-S8-P6	13:15 - 13:30	1409	Cross Diagonal Pattern Reconfiguration for Multilevel Inverter fed Two-Stage PV Water Pumping System <i>Authors:</i> Hemanth Kumar Raju Alluri, Mikkili Suresh, Venugopal Reddy B	
Date: 13-12-2025		Parallel Session 5	Special Session 08	Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-SS08-S8-P1	12:00 - 12:15	550	Design and analysis of Ultra-Gain Bi-directional DC-DC Converter <i>Authors:</i> Vansh Sharma; Porpandiselvi S	
OS-SS08-S8-P2	12:15 - 12:30	576	Machine Learning Enhanced Phase-Shift Optimization Control in Bidirectional Multi-Level DAB Converter for EV Charger Application <i>Authors:</i> Subhabrata Pal; Avik Bhattacharya	
OS-SS08-S8-P3	12:30 - 12:45	410	Modeling and Simulation of Single-Phase Shift Power Modulation in Isolated Bi-directional Dual Active Bridge DC-DC Converter <i>Authors:</i> Nivedika Kher; Arun Rathore; Nageswar Bhukya	
OS-SS08-S8-P4	12:45 - 13:00	1099	Reconfigurable Bidirectional Zeta–SEPIC Converter for Solar and Battery Integration with Fault-Tolerant Mode Switching <i>Authors:</i> Niwin MJ; S Thangavel	
OS-SS08-S8-P5	13:00 - 13:15	1509	A Novel Ultra High-Gain DC–DC Converter for Fuel Cell Electrical Vehicles <i>Authors:</i> Yasir Bashir; Prakash Ji Barnawal; Amarendra Edpuganti	
OS-SS08-S8-P6	13:15 - 13:30	384	Single-Source Boost Multilevel Inverter with a New switching Approach <i>Authors:</i> Eddu Karunakaran; Yellasiri Suresh; Bhukya Nageswar Rao	



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Date: 13-12-2025		Parallel Session 6	Special Session 10	Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-SS10-S8-P1	12:00 - 12:15	603	Optimized Operational Strategy for Integrated Multi Carrier Energy Systems <i>Authors:</i> Ankit Garg	
OS-SS10-S8-P2	12:15 - 12:30	906	Data-Driven Black-Box Digital Twin for Real-Time Degradation and Failure Prediction <i>Authors:</i> Arun Kumar; Nishant Kumar	
OS-SS10-S8-P3	12:30 - 12:45	334	Physics-Informed Neural Network-based Prediction of Battery Charging Dynamics of Chaotic Energy Harvesters <i>Authors:</i> Rahash Nathasarma; Ankit Tiwari; Binoy Krishna Roy	
OS-SS10-S8-P4	12:45 - 13:00	613	Real-Time SOC and Fault Detection via Hybrid CNN-EKF in BMS <i>Authors:</i> Gudipati Jawahar Sagar	
OS-SS10-S8-P5	13:00 - 13:15	752	A Machine Learning Approach for Efficiency-Based Fault Detection in EV Batteries <i>Authors:</i> Bhagya Satya Sri Vutukuri; Shanmukha Krishna Chaitanya M; Gowreesh Raja Dandamudi; D S R S L Avanthika; Ramanjaneya Reddy Udumula	
OS-SS10-S8-P6	13:15 - 13:30	1138	AI-Driven Predictive Maintenance for Boost-Luo Converter-Fed Motor Drives in Renewable Energy Systems <i>Authors:</i> Gudipati Jawahar Sagar; Tarkeshwar Matho	
Date: 13-12-2025		Parallel Session 7	Special Session 20	Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-SS20-S8-P1	12:00 - 12:15	1397	Frequency Regulation Enhancement of Multi-Area Hybrid Power System Considering CES using 3DoF based Cascaded Controller <i>Authors:</i> Shishu Kumar, Pranav Singh, Ravi Shankar, Ruchi Agarwal	
OS-SS20-S8-P2	12:15 - 12:30	478	Optimal Charge Scheduling for Economic Operation of Electric Vehicle Charging Station <i>Authors:</i> Samarendra Singh; Bishwajit Dey; Neeraj Kanwar; Srikant Misra	
OS-SS20-S8-P3	12:30 - 12:45	1122	Control Strategy of Bidirectional AC-DC Converter using modified RBFNN Algorithm to Improve PQ in Grid Connected PV-EV based Charger <i>Authors:</i> Sudhanshu Mittal; Manoj Badoni; Prakash Chittora; Gaurav Yadav	
OS-SS20-S8-P4	12:45 - 13:00	1141	Smart, Sustainable Wireless EV Charging with Harris Hawks-Enhanced Control Strategy <i>Authors:</i> Gudipati Jawahar Sagar; Tarkeshwar Matho	
OS-SS20-S8-P5	13:00 - 13:15	1401	A fuel cell and battery-based hybrid electric vehicle with super twisting sliding mode control for performance enhancement <i>Authors:</i> Lavudya Swathi, Sachidananda Sen, Basetti Vedik, Kumar Shiva	
OS-SS20-S8-P6	13:15 - 13:30	895	Optimized Operation of Multi-Carrier Energy Systems with Renewable and Demand Response Uncertainties <i>Authors:</i> Ankit Garg	



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Date: 13-12-2025		Parallel Session 8	Mixed Track	Venue :
ID	Time Slot	Paper ID	Paper Details	
OS-T1-S8-P1	12:00 - 12:15	1508	Damping Ratio and PI Integrator Gain Estimation from Generation-Loss Disturbances in the Indian Electricity Grid <i>Authors:</i> Debanjan Mukherjee	
OS-T3-S8-P2	12:15 - 12:30	1530	A Multi-Functional Dual-Source Single-Stage Converter for Hybrid Energy Integration and Power Conditioning <i>Authors:</i> Nikhil Agrawal, Anshul Agarwal, Tirupathiraju Kanumuri, Nitish Kumar Halliburton, Anurag Das, Dr. Vishwanath Karad	
OS-T6-S8-P3	12:30 - 12:45	144	Enhancement of Model Order Reduction for Discrete-Time Systems with Guaranteed Time-Domain Performance <i>Authors:</i> Kalyana Kiran Kumar; Kurman Sangeeta; Kranthi Kumar; Neelima Ambati; Sivasai Tangudu; Gandhi Ramarao	
OS-SS01-S8-P4	12:45 - 13:00	306	Modeling and Interpretation of Grid Power Loss in EV Infrastructure with Explainable AI <i>Authors:</i> Kanaka Raju; Suresh Patnaik Pakki; Y Santhosh Satya; Ashok Ganga; Jaganmohan Rao Tarra	
OS-SS21-S8-P5	13:00 - 13:15	1430	SiC based DC-DC Regulated Power Supply using LLC Resonant Converter <i>Authors:</i> Samerthya Kumar Pandey, Naveen Yalla, Narendrababu A	

Date: 13-12-2025		Parallel Session 9	Mixed Track	Venue :
ID	Time Slot	Paper ID	Paper Details	
OL-T1-S8-P1	12:00 - 12:15	258	False Data Injection Attack Resilient LFC for Two Area Power System with Optimized Hybrid Fractional Order PID Controller <i>Authors:</i> Anukriti Sharma, Bharat Singh Rajpurohit	
OL-T1-S8-P2	12:15 - 12:30	528	Directional Relaying Using Fundamental Harmonic Sensitivity in Phase Currents <i>Authors:</i> Srijita Saha, Biman Kumar Saha Roy, Rajesh Verma	
OL-T1-S8-P3	12:30 - 12:45	1433	Modular Electric Power Supply for Small Satellites <i>Authors:</i> Rhethika S, Anindya Dasgupta, H Priyadarshnam, Mini Sujith	
OL-T6-S8-P4	12:45 - 13:00	314	Stochastic Gradient-Biased Traversal: A Heuristic Approach for Efficient Leak Source Localization <i>Authors:</i> Atharva Tilak; Prajakta Salunkhe; Ninad Mehendale	
OL-SS04-S8-P5	13:00 - 13:15	1229	Structural Analysis of Piezo electric Sensor for Low Power IoT Applications <i>Authors:</i> Hemant Narayan; Prakash Marimuthu; Shakila Baskaran	
OL-SS21-S8-P6	13:15 - 13:30	1572	Design of Fault-Tolerant Dual Active Bridge for Solid-State Transformer. <i>Authors:</i> Saumendra Sarangi	



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Day 1		Date: 10-12-2025	Poster Session – 1	Time: 17:30 to 18:00
Venue :				
ID	Paper ID	Paper Title		
PS-S1-P1	1041	Asymmetrical DC-Link Voltage based 51-level Multilevel Inverter Topology with Less Switch Count <i>Authors:</i> Uday Patel, Siddharthsingh K. Chauhan, Prof. Dr. P. N. Tekwani		
PS-S1-P2	1479	Analysis of Modified Leaky-LMS Algorithm based Single-Stage Three-Phase Grid- Tied PV System using Current Error Space Phasor Hysteresis Controller <i>Authors:</i> Urvashiben Rathod, Uday Patel Institute of Technology, Siddharthsingh K. Chauhan, M. T. Shah, Prof. Dr. P. N. Tekwani		
PS-S1-P3	718	Optimum Off-Grid Hybrid Renewable Energy System with Hydrogen Generation Using a Chaotic Brown Bear Algorithm <i>Authors:</i> Henry Blankson, Himadri Lala		
PS-S1-P4	805	Modelling and Analysis of a PV-Powered DC wireless UAV charging station using DIgSILENT PowerFactory <i>Authors:</i> Gopalakrishnan Renganathan, Nilanjan Tewari		
PS-S1-P5	221	Optimized Sensor-less Speed Control of Three-Phase Induction Motor using Virtual Voltage Vectors <i>Authors:</i> Vinay Kumar T, Puli Rajanikanth, Akshad S. Ganachari		
PS-S1-P6	534	Parameter-Free Fault Locator for Double-Circuit Line With Essential Faulted Circuit Data <i>Authors:</i> Rohit Ray, Kaustav Kalita, Abhineet Prakash, S. Sivasubramani, S.K. Parida		
PS-S1-P7	648	Comparative Analysis of Reconstruction-Based Loss Metrics for Attack Detection in LCDR-Based Transmission Line Protection <i>Authors:</i> Ravi Prakash Mahobia, Aidyanath Bag, Swapnajit Pattnaik		
PS-S1-P8	880	Secure Data Exchange in Smart Metering: A DLMS/COSEM TCP/IP Wrapper Based Approach <i>Authors:</i> Dhanavath Shankar		
PS-S1-P9	1054	Advancing Grid-Forming Converter Control Using Transformer-Based Artificial Intelligence Model: A Performance Evaluation <i>Authors:</i> Abhay Kumar, Dushyant Sharma, Mayukha Pal		
PS-S1-P10	1153	Reliability-Weighted AdaBoost Regression Model for Distribution System State Estimation <i>Authors:</i> Himani Mattoo, Anirban Dasgupta, Muneeb Mushtaq Sheikh, Sreenath J.G. Praveen Tripathy		
PS-S1-P11	1542	Design and HIL Validation of a Closed-Loop Controlled 5 kW LLC Resonant Converter for 400 V DC Output Using OPAL-RT <i>Authors:</i> Uditveer Rajput; Annu Kumari; Sanjeev Singh; Giribabu dyanamina		
PS-S1-P12	1412	Optimal Network Reconfiguration using BPSO Technique with EVCs and DGs <i>Authors:</i> Akash Kumar, Anish Sharma, Abhishek S, Divya Bharathi Raj, Venkatakirthiga Murali		
PS-S1-P13	1476	MPPT Performance of P&O and PSO in Tilted Standalone PV Systems with Battery under Shading <i>Authors:</i> Rushabh Dukare, Narendrababu A, Yalla		
PS-S1-P14	1448	Bandgap Prediction in Mixed Sn-Pb Perovskites via Regression Models <i>Authors:</i> Shikha Marwaha		



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PS-S1-P15	1323	A Modified Notch Filter SOGI-Controlled Solar-Battery Interface for Power Quality Improvement in EV-Integrated Grids. <i>Authors:</i> Sarthak Mohanty, Shubhranshu Mohan Parida, Pravat Kumar Rout, Buddhadeva Sahoo
PS-S1-P16	671	Differentiation Method Based Reduction of Interconnected Hybrid Power System <i>Authors:</i> V. P. Sharma, Akhilesh Mathur, V. P. Singh, Tarun Bashishtha
PS-S1-P17	1566	Adaptive Field Weakening-Based Advanced DTC for IPMSM Drives With MTPA and Adaptive Flux Hysteresis Control Under Voltage-Constrained Wide-Speed Operation <i>Authors:</i> Arnab Chatterjee, Avik Bhattacharya
PS-S1-P18	716	Alternator Stator Winding Interturn Fault Detection by Digital Twin Data Driven Technique <i>Authors:</i> Makarand Ballal, Bhimrao Umare, Hiralal Suryawanshi, Rashmi Singh, Tushar Vilhekar, Kanchan Ghule
PS-S1-P19	741	Interpretable Deep Learning Models for Battery SoH Estimation Using Explainable AI <i>Authors:</i> Riya Sharma; Rahul Kumar Kamboj; Anju Bala; Ashima Singh; Mukesh Singh
PS-S1-P20	1498	Performance Evaluation of Cuckoo Search-Based MPPT in Ladder- Configured PV Arrays under Partial Shading Conditions <i>Authors:</i> Abhilash Sakhare, Suresh Mikkili
PS-S1-P21	622	Performance Analysis of Solar Power Generation Prediction Using Machine Learning Models <i>Authors:</i> Dr. Chidanandappa R
PS-S1-P22	1070	Comparative Insights on the Emerging Electronics Economy and Global Strategies for Electric Mobility and Semiconductor Industries <i>Authors:</i> Kamalesh MS; Franklin John Selvaraj; Bharatiraja Chokkalingam; Sanal Kumar; Murali Krishnan M; Vimala KV
PS-S1-P23	1042	A Transformer less Zeta Converter with Reduced Voltage Stress for Hybrid Electric Vehicle Applications <i>Authors:</i> Ramanathan G; Bharatiraja C; Sanjeevikumar Padmanaban
PS-S1-P24	663	High-Efficiency Soft-Switched Multiport Bidirectional Converter for Non-Isolated EV Power Systems <i>Authors:</i> Aravind R; Bharatiraja C; Ravi Eswar Kodumur Meesala
PS-S1-P25	882	Comparative Analysis of Phase Shift Modulation Strategies for Dual Active Bridge Converters <i>Authors:</i> Bharatiraja C; T.Dheepas warupan T; nakeera R
PS-S1-P26	667	A LiDAR-Inertial Mapping and Voice-Driven Goal-Setting Framework for Autoware-Based Autonomous Vehicles <i>Authors:</i> Akshat Tambi; Aditya Jambhale; Prema Sharma; Yashowardhan Singh; Manikandan Ganesan; Sivanathan Kandhasamy; Bharatiraja Chokkalingam



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Day 2		Date: 11-12-2025	Poster Session – 2	Time: 10:00 to 10:30
Venue :				
ID	Paper ID	Paper Title		
PS-S2-P1	1293	Performance Comparison of High-Gain DC-DC Converters for PV Fed EV Off-Board Chargers <i>Authors:</i> Paul Mathew; Prabhakar M		
PS-S2-P2	1495	Speed Sensorless Vector Controlled PMSM Drive Using Cascaded IMC Scheme <i>Authors:</i> Anurag Savarn, Vimlesh Verma, Md. Nishat Anwar		
PS-S2-P3	1030	A Seven-Level Triple-Boost Common-Ground Multilevel Inverter With Reduced Voltage Stress <i>Authors:</i> Deepak Singh, Sandeep N, Piyush Kant		
PS-S2-P4	1052	A Grid Connected PV Inverter with Subarray Level Control in MPP and non-MPP Mode <i>Authors:</i> Ayush Chauhan, Subhendu Dutta		
PS-S2-P5	1076	Triple Switch Triple Mode ASL DC-DC Converter for PV System <i>Authors:</i> Avneet Kumar, Sushma Korra, Sahendara Kumar		
PS-S2-P6	1081	An Overlap Timing-based Control Scheme for Active Current Source Gate Driver <i>Authors:</i> Satish Belkhole , Ashish Wanode		
PS-S2-P7	1087	Strategy to Minimize Low-Frequency Fluctuations in Utility Caused by Cyclic Load of Ramping Power Supplies in Booster Synchrotron <i>Authors:</i> Ujjwal Yadav, Manoj Gandhi, Aradhana Kumari		
PS-S2-P8	1159	Grid-Tied Multi-Stage PV Power Converter with Dual-Active-Bridge Interface for EV Applications <i>Authors:</i> Surya Prakash, Veerpratap Meena		
PS-S2-P9	1231	Converter Configuration and Control for Switch Fault Detection and Clearance in PMBLDC Motor Driven EVs <i>Authors:</i> Rahul Arora, Sanjeev Singh, Ujjwal Kumar Kalla, Dheeraj Kumar		
PS-S2-P10	1238	Enhanced Two-Port Model-Based Study and CCM/DCM Boundary Condition for LCC-LCC IPT Topology <i>Authors:</i> Jalaj Kumar, Suvendu Samanta		
PS-S2-P11	925	Efficient Architecture for CubeSat Electric Power System <i>Authors:</i> Anil Jakhar, Pravin Kumar, Amarendra Edpuganti		
PS-S2-P12	1547	Improved Power Conversion Efficiency of Power Electronics Converters in Discontinuous Conduction Mode for EV Chargers <i>Authors:</i> Sanjay Kumar		
PS-S2-P13	1290	Analysis of Inner Current Loop with PI and Hysteresis Controller for DC/AC VSC in Microgrid Applications <i>Authors:</i> Sheikh Sajid Visvesvaraya, Pradyumn Chaturvedi		
PS-S2-P14	1313	IoT-based Fault Diagnosis of AFE using Harmonic Distortion and Waveform Asymmetry for EV Charging Applications <i>Authors:</i> Ranesh S, Jyothilakshmi B, Arun Senthil G, Raja Singh R, Yong Wang		



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PS-S2-P15	1325	Leakage Current Minimization in Single Phase Grid Connected Solar PV <i>Authors:</i> Midhun Mohan, Sreeraj E S, Srikanth Kumar, Suruchi Jain, Javal Gadher, Pradip Magar
PS-S2-P16	1364	Design and Simulation of 15kV/5A DC Power Supply for Residual Ion Dump Using Modular Multilevel Converter <i>Authors:</i> Kumar Saurabh, Vivek Patel, Ashok Mankani, Aritra Chakraborty
PS-S2-P17	1426	A New Coupled-Inductor Based Quadratic Boost DC-DC Converter With Stacked Cell <i>Authors:</i> Raj Moyal, Rupesh Kumar Yadav, Mukesh Kumar Pathak
PS-S2-P18	1488	Dual Phase Shift Controlled Dual Active Bridge for 3-Stage MSCC EV Battery Charging <i>Authors:</i> Farha Khan, Shirazul Islam, Lazhar Ben-Brahim, Adel Gastli, Farhad Illahi Bakhsh
PS-S2-P19	1489	A Low Device Count Single-Phase Five-Level Boost Inverter <i>Authors:</i> Rage Ravitheja, Priyabrata Shaw, Manoranjan Sahoo
PS-S2-P20	1563	An Incremental MPPT-Controlled Soft-Switched LED Driver Using a PV-Fed Boost Converter for Street Lighting <i>Authors:</i> Banoth Chandrasingh, Porpandiselvi S, Vansh Sharma
PS-S2-P21	165	Enhancing LFC Systems Against Denial of Service Attacks: Detection and Resilience Strategies <i>Authors:</i> Shaahid Mehmood, Asadur Rahman, Inam ul Haq, Abdullah Ahmad
PS-S2-P22	113	Improving Active Power Generation with Multi-source Interconnected Power System with Artificial Electric Field Algorithm Supported by SMES and UPFC <i>Authors:</i> Shruthi Nookala, chandan kumar shiva, vedik basetti, sachidananda sen, Shubhashish Bhakta
PS-S2-P23	1193	Electromechanical Equivalent Circuit Modelling of PMSM with Stator Winding Faults Analysis <i>Authors:</i> Raja Singh R, Brindavan T. V.
PS-S2-P24	1459	Adaptive Multi-Objective Storage Planning for Flexibility Enhancement under High Renewable Variability <i>Authors:</i> Pothabathula Vijay Naga Krishna, Hemanth Kumar Raju Alluri
PS-S2-P25	1329	Power Quality and Energy Management in Grid-Tied Dual-Stage PV-Battery Systems using ASSLMS algorithm <i>Authors:</i> Mathewos Lolamo, Rajan Kumar, Veena Sharma, Aschalew Tirulo, Lukas Gebremariam, Raj Kumar Jarial
PS-S2-P26	1036	Cost-Effective Deployment of EV Charging Infrastructure Using MIZOA and Dynamic Tariff Pricing <i>Authors:</i> Yashwanth Goud Donikeni; Soumyabrata Das
PS-S2-P27	1207	Solution of stochastic Dynamic economic load dispatch problem using Pelican Optimization Algorithm <i>Authors:</i> Nibha Rani; Soumyabrata Das; Suraj Gupta
PS-S2-P28	1161	Performance Analysis of a Dynamic Multi-Loop Thermal Management System for EVs in Diverse Ambient Conditions <i>Authors:</i> Vikas Verma; Bhavnesh Kumar
PS-S2-P29	1308	Stability and Power Quality Reinforcement in Offshore Wind Farms Using Battery-Supported E-STATCOM <i>Authors:</i> Vivek Gedam; S.P. Gawande; Mukesh Yadav; Ajinkya Sonawane; Pradyumn Chaturvedi



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Day 2		Date: 11-12-2025	Poster Session – 3	Time: 17:30 to 18:00
Venue :				
ID	Paper ID	Paper Title		
PS-S3-P1	415	ZA-ASFE Based Advanced Technique for 1-Phase Grid Connected SPV System <i>Authors:</i> Dheeraj Kumar, Sanjeev Singh, Shailendra Kumar, Rahul Arora		
PS-S3-P2	502	Time Domain Dielectric Response of Transformer Oil-Paper Insulation Retrofilled with Natural Ester Oil <i>Authors:</i> Brahma Swarup Laha, Soumya Chatterjee, Sandip Kumar		
PS-S3-P3	633	Boosting Planar Perovskite Solar Cell Efficiency Using ZrS₂ as a Novel ETL <i>Authors:</i> Mohamed Moustafa		
PS-S3-P4	1026	Taxonomy and Detection of Faults in Lithium-Ion Batteries for EV Applications: A Review <i>Authors:</i> Twinkle Pattnaik, Devang P. Kubitkar, Ragiree Shusmashalini, Dr. Makarand S. Ballal		
PS-S3-P5	1319	Development of a Real-Time Battery Monitoring System for SoC Estimation Using Arduino <i>Authors:</i> Sumit Dudhe, Tikam Bhardwaj, Murali Manohar, Vijay Kale, Om Kharat, Girish Mittal		
PS-S3-P6	1493	Performance Analysis of INC, VCPSO, CFPSO, CS and SSAMPPT Methods for Maximizing Power Output of Solar PV Arrays under Dynamic Shading <i>Authors:</i> Abhinav Bhattacharjee, Suresh Mikkili, Gaurav Kumar		
PS-S3-P7	676	Mathematical Modeling and Experimental Approach for State of Charge Estimation in Samsung 30Q Li-Ion Batteries Using a Passivity Observer <i>Authors:</i> Manivannan R, Vinothini K		
PS-S3-P8	542	Energy Management in Grid-Connected Microgrid by using Hippopotamus Optimization Algorithm <i>Authors:</i> Himanshu Raj, Supriya Jaiswal		
PS-S3-P9	700	Feasibility and Economic Assessment of a Rooftop Solar Photovoltaic System Using Homer Pro Software <i>Authors:</i> Jay Tembhekar, PS Kulkarni, A Nehemiah Joshi Varma		
PS-S3-P10	1592	Zero Sequence Voltage Control for Handling Unbalances in Multiport Charging Station Based Transformerless Series Hybrid Converter and DAB <i>Authors:</i> Jayant Kumar; Ibhan Chand Rath; Siba Kumar Patro		
PS-S3-P11	284	Social Spider Algorithm assisted LSTM Network towards the SoC estimation of lithium-ion batteries <i>Authors:</i> Saneep K; Sundareswaran K; P Srinivasa Rao Nayak; Gireesh V Puthusserry; Kannan M; Midhun E K		
PS-S3-P12	746	Design, Analysis and Control of Dual-Mode Voltage Equalizer using Switched-Capacitor and Fly-back Converter for Series-Connected Battery String <i>Authors:</i> Abhaya Kumar Sahoo; Sashwathkumar S; Lizanne Fernandes; Keerthi Saladi; V. Sankaranarayanan		
PS-S3-P13	910	Thermal Analysis of Multiphase Electromagnetic Coupler for High Power Contactless Charging System Considering Core and Shielding Effects <i>Authors:</i> Apurv Kumar Yadav; Sukumar Das		
PS-S3-P14	1111	Value of Lost Load Computation Framework for Vehicle to Load Applications considering Life Cycle Techno-economic Analysis <i>Authors:</i> N S Ramanathan; Pallavi Bharadwaj		



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PS-S3-P15	1375	Performance Investigation of CLLC and DAB Modules for Configurable 400V and 800V EV Charging System <i>Authors:</i> Satish Belkhode; Shashank Dabral
PS-S3-P16	1467	High-Efficiency Integrated Inductive-Capacitive Wireless Charging for Electric Vehicles. <i>Authors:</i> Maria Loukrakpam; Ngangoiba Maisnam; Piyush Pratap Singh; Ksh Milan Singh
PS-S3-P17	1590	Delta Cascaded H Bridge converter for STATCOM and multiport EV charging applications and its capacitor voltage balance technique during Uneven Loading Conditions <i>Authors:</i> Ibhan Chand Rath; Siba Kumar Patro
PS-S3-P18	112	Optimization of Battery Thermal Management in Electric Vehicles: A Model Predictive Control Approach Integrated with Particle Swarm Optimization <i>Authors:</i> Sindhu M R Amrita
PS-S3-P19	1059	Real-Time Power Balancing in Bidirectional Vehicle-to-Vehicle Wireless Power Transfer Modulation and Control Strategy Development <i>Authors:</i> Bharatiraja C ; Nakeeran R
PS-S3-P20	1082	Fuzzy-Driven Electro-Mechanical Control for Stable and Efficient Electric Car Operation <i>Authors:</i> Buddhadeva Sahoo; Sarthak Mohanty; Pravat Kumar Rout; Prakash Chandra Sahu; Manoj Kumar Debnath; Subhasis Panda
PS-S3-P21	600	State-of-Charge Estimation for EV Li-Ion Batteries Using ResNet: A Robust Deep Learning Approach with Real-World Driving Data <i>Authors:</i> Manivannan R; Vigneswar N
PS-S3-P22	889	Enhanced Modeling and Implementation of Incremental Encoder-Based FOC for PMSM Drives <i>Authors:</i> Shilpa Ranjan, Brijendra Sangar
PS-S3-P23	764	Kalman-based Forecasting of Stock Market Trend <i>Authors:</i> Neelanshu Garg; Amit Naik; Abhinoy Kumar Singh
PS-S3-P24	241	Series Cascade Control Loop For Double Integrating Processes Based On Smith Predictor <i>Authors:</i> Prabir Singha; Sudipta Chakraborty; Vipin Chandra Pal
PS-S3-P25	244	A Modified Smith Predictor Approach for Controlling Unstable Cascade Processes <i>Authors:</i> Prabir Singha; Sudipta Chakraborty; Vipin Chandra Pal
PS-S3-P26	883	Computational Fluid Dynamics Driven Sensor Optimization for Early Hydrogen Leak Detection Enhancing FCEV Safety <i>Authors:</i> Bharatiraja C; J Nithish Nithish; navinkumar TM
PS-S3-P27	695	Design and Performance Evaluation of an Interior Permanent Magnet Synchronous Motor for EV Applications <i>Authors:</i> Bharatiraja C, Dilsha Purushothaman, Sanjeev Guhan K S, Nagarajan V S
PS-S3-P28	1235	Orthogonal Deep Convolutional Neural Network for Incipient Inter-Turn Fault Diagnosis in Electric Drive System <i>Authors:</i> Jeevanand Seshadrinath, Fatimatelbatoul Husari
PS-S3-P29	1020	High Voltage Conversion Ratio Non-Isolated Common-Ground Bidirectional DC-DC Converter <i>Authors:</i> Kaibalya Panda; Preeti Sharma; Jinisha Singhal; Vedant Patel



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Day 3		Date: 12-12-2025	Poster Session – 4	Time: 10:00 to 10:30
Venue :				
ID	Paper ID	Paper Title		
PS-S4-P1	713	Design and Implementation of a Multi-Protocol Architecture for Scalable IoT Systems <i>Authors:</i> V Kavın Ishwar; Suresh Kumar Gawre		
PS-S4-P2	734	Coordinated Three-Axis Linear Slide Stage Control: A Case Study <i>Authors:</i> setti suresh; R Mithun Kumar; T Narendra Reddy; Prakash Vinod ; Dr. Nagahanumaiah		
PS-S4-P3	423	Smart Accident Prevention System for Electric Vehicles Using Speed Regulation and Drowsiness Detection <i>Authors:</i> Alok Vardhan; Dinanath Prasad; Mahendra Dutt Dwivedi; Muchkund Choudhary; Neeraj Maurya		
PS-S4-P4	1469	Advanced Phase-Lead Augmented PI Control for High-Precision 2-DOF Turret Positioning <i>Authors:</i> Girish Lakhekar; Vivek Lingade; Dhiraj Pawar; Sarthak Shukla; Shantipal Ohol; Ajay Lohia; Ramesh Agnihotri		
PS-S4-P5	1104	Gramian Angular Field-Assisted Deep Learning Approach for Fault Detection and Localization in Electrical Power Network <i>Authors:</i> Lidia Ghosh, Sayantan Das, Biswarup Ganguly, Pranav Raval, Wanath Chakraborty		
PS-S4-P6	1297	Real-Time Vital Sign Monitoring with Dashboard Integration <i>Authors:</i> Harinath Airedy		
PS-S4-P7	839	Distributed ledger technology enables deep convolutional neural network CNN based intrusion detection to enhance the secure collection and storage of health data <i>Authors:</i> Sandeep Kumar Mathariya, Deepak singh Jadon, Hemang Shriwastava, Anjali Soni, Rishi kushwah		
PS-S4-P8	316	Frequency Control of Multi-Area Power Systems Using a Novel Hippopotamus Optimization-Based Cascaded Controller Incorporating Renewable Energy Sources and Electric Vehicles <i>Authors:</i> Hiramani Shukla; Shailendra Kumar		
PS-S4-P9	1143	Hybrid MPPT Strategy for PV Energy Integration in EV Charging <i>Authors:</i> Gudipati Jawahar Sagar; Tarkeshwar Matho		
PS-S4-P10	249	State of Health Prediction of Lithium-ion Batteries Using an Attention-based LSTM Model <i>Authors:</i> Bhimireddy Lakshminarayana; Satyavir Singh		
PS-S4-P11	574	RF-Based Detection and Classification of Drone Communications Using SDR and Machine Learning <i>Authors:</i> Leo Prasanth L; Jenila Vincent M; Susi E		
PS-S4-P12	704	A Framework for Robotic Harvesting of Apples in Structured Orchards: fruit localization and robot path planning <i>Authors:</i> Somsukla Maiti; Rupnar Dutta; Deepak Yadav; Gurloveen Phull; Firdoous Mir; Chandan Har; Soumen Sen		
PS-S4-P13	780	Graph-Temporal Actor-Critic: A Hybrid Architecture for UAV Navigation in Dynamic Environments <i>Authors:</i> Selvam E; Surya Raj; Shanmugam Palaniswamy; Kaushal Kishore		



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PS-S4-P14	1239	Adaptive Control for Enhancing Fault Ride-Through in DFIG-Based Wind Energy Systems Under Variable Operating Conditions <i>Authors:</i> Jawaharlal Bhukya; Rishav Dutta
PS-S4-P15	1564	Estimation of Storage Depletion Outage Time for Energy Harvested Microgrid Systems <i>Authors:</i> Ritwik Halder
PS-S4-P16	1531	Assessment of Classical and Advanced Control Techniques for Battery-Integrated DAB Converter <i>Authors:</i> Jayadev Meher; Krishna Roy; Arnab Ghosh
PS-S4-P17	623	Performance Analysis of Non-Isolated Bidirectional DC-DC Converters for Renewable Energy Applications <i>Authors:</i> Riju Nandi; Arnab Ghosh; Krishna Roy
PS-S4-P18	1371	Localization of Arcing Faults in Low-Voltage AC Distribution Systems <i>Authors:</i> Ratnakar Nutenki, Haraprasad Badajena, Aurobinda Routray, Ashok Kumar Pradhan
PS-S4-P19	1374	Cybersecurity Threats to Sampled Values and Transfer Trip Communication in IEC 61850-Based Distance Protection Systems <i>Authors:</i> Jayesh Ghumaliya; Siddhartha Deb Roy; Gumpu Srinivasulu
PS-S4-P20	621	Electricity Theft Detection Model Using CNN-BiLSTM with Attention Mechanism in Smart Grid Environment <i>Authors:</i> Ravivarma Kamireddy; Lokeshgupta Bhamidi; Ramanjaneya Reddy U
PS-S4-P21	274	Securing the Smart Drive: AI-Powered Anomaly Detection in EVs <i>Authors:</i> Shubhreet Dhaliwal; Pratham Sharma; Samrath Singh Kharbanda; Danish Sharma; Ashima Anand; Amit Kumar
PS-S4-P22	1078	Quantum Grey Wolf Optimized Hybrid Deep Net Structure for Day-Ahead Wind Speed Forecasting <i>Authors:</i> Sohom Banerjee; Dipayan Nath; Ujjal Sur
PS-S4-P23	1092	Resilient Load Frequency Control for Enhancing Power Grid Security Against Cyber-threats <i>Authors:</i> Pranav Singh; Ravi Shankar; S N Singh
PS-S4-P24	529	Parameter Estimation of a PV Model through Multi-Objective Optimization: Towards an Economically Viable Identification <i>Authors:</i> Arabinda Ghosh; Kukil Khanikar; Ankita Sarmah; Arjab Roy; Omkar Singh; Anjan Kumar Ray
PS-S4-P25	800	Dynamic MPPT for PV Systems Using Advanced Interval Type 2 Fuzzy Logic Control <i>Authors:</i> V. V. Mukherjee; Nirmalya Mallick; Chandan Kumar Shiva; Sachidananda Sen; Shriram S. Rangarajan; Vedik Basetti
PS-S4-P26	876	Loss Minimization Through Non-dispatchable Distributed Generators in Distribution System <i>Authors:</i> Aditya Kumar; Alexander Aguila; Anurag Sharma; Gulshan Sharma; Tomonobu
PS-S4-P27	821	Countering Disturbances in Single Phase Grid Integrated PV System under Abnormal Grid Conditions <i>Authors:</i> Ilka Shawl; Ikhlal Hussain
PS-S5-P28	1386	Oil-Paper Insulation Diagnosis using Time-Varying Capacitance Profile of Modified TVM <i>Authors:</i> Somesh Ganguly
PS-S3-P30	1120	Economic and Operational Analysis of Virtual Energy Storage in Energy Communities <i>Authors:</i> Vishal Sharma, Shubham Patwari, Satish Sharma, Prerna Jain



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Day 4		Date: 13-12-2025	Poster Session – 5	Time: 11:15 to 12:00
Venue :				
ID	Paper ID	Paper Title		
PS-S5-P1	826	Modern Hybrid Cross-Tied BIPV Interconnections for Smart Infrastructures with improved Global MPP under extreme Non-uniform Shading <i>Authors:</i> Nikhil Arunrao Bodkhe; Debayan Sarkar; Risha Mal		
PS-S5-P2	1227	Protection of Battery Management System of Electric Vehicles during charging using Hyperledger Fabric Blockchain <i>Authors:</i> Gaurav Kumar; Suresh Mikkili		
PS-S5-P3	481	Distributionally Robust Optimization for Virtual Power Plant with Vehicle-to-Grid Integration Under Multi-Source Uncertainties <i>Authors:</i> Jibin Kuriakose; Vinay Kumar Jadoun; Jayalakshmi N.S.; Soham Dutta		
PS-S5-P4	616	Analysis and Comparison of Control Strategies for Improved Dynamic Response in DC-DC Luo Converters <i>Authors:</i> Riju Nandi; Arnab Ghosh; Krishna Roy		
PS-S5-P5	986	Optimal Planning of EV Charging Stations in Distribution Network using Monte Carlo-based Probabilistic EV Load Forecasting <i>Authors:</i> Giriwar Chaurasia; Sneha Singh; Subho Paul; M K Verma		
PS-S5-P6	400	Dynamic Simulation and Performance Evaluation of an Electric Two-Wheeler Powertrain <i>Authors:</i> Kumar Amartya Dev; Aldrin Vaz; Vinaya Basavaraaj Koradoor; Navya Hegde		
PS-S5-P7	433	Digital Twin-Based Thermo-Electric Modeling and Analysis of Lithium-Ion Battery Packs for E-Mobility Applications <i>Authors:</i> Sahitya; Mahipal Bukya; Rajesh Kumar; Jayalaxmi Rajesh Hanni		
PS-S5-P8	1557	Digital Twin-Enabled Adaptive Control and Thermal Management for EV Power Converters <i>Authors:</i> Anubhav Agrawal, Ranbir Singh, Aditya Rastogi, Tanmay Gupta		
PS-S5-P9	1470	Life Cycle Assessment of Prismatic Lithium Iron Phosphate Batteries for Autonomous Vehicles in India: Tool Benchmarking and Environmental Impact Mitigation Strategies <i>Authors:</i> Souvik Ganguli		
PS-S5-P10	530	A Computational Study on CT-CV Charging of Lithium-Ion Batteries with Temperature Regulation <i>Authors:</i> Sahil Yadav; Subham Khange; Vivek Kumar Chaudhary; Ashwini Kumar Sharma		
PS-S5-P11	1007	Optimal Site Selection for Hydrogen Production Unit using MCDM Approach <i>Authors:</i> Avinash Gaurav; Arjun Tyagi; Bhavnes Kumar		
PS-S5-P12	569	A Hybrid Regression-PCNN Model for Detecting False Data Injection Attacks in Smart Grids Using Image Encoding <i>Authors:</i> Makhavarapu Yaswanth		
PS-S5-P13	1552	Efficient Frequency Regulation of Shipboard Microgrid Utilizing One-third Method Based Tuning Rules <i>Authors:</i> Akanksha Waghmare, V. P. Singh		
PS-S5-P14	1450	A Node Specific Dynamic Image-Based Watermarking for Secure DC Microgrid Control <i>Authors:</i> Sriranga Suprabhath Koduru, Mitikiri Sagar Babu, Vedantham Lakshmi Srinivas, Sukumar Mishra,		



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PS-S5-P15	1219	Energy Management of a PV-Battery-Fuel Cell-Diesel Hybrid System for DC Microgrid Applications <i>Authors:</i> Pranati Purohit
PS-S5-P16	1140	1 Grid-Connected Battery Charging System Using Buck-Boost Converter and dq- Frame Inverter Control <i>Authors:</i> Gudipati Jawahar Sagar, Tarkeshwar Matho
PS-S5-P17	1404	Fuzzy Logic-based hybrid electric vehicle with battery and PEMFC source for performance enhancement <i>Authors:</i> Lavudya Swathi, Sachidananda Sen, Basetti Vedik, Chandan Kumar Shiva
PS-S5-P18	1453	RTS-Based Validation of Advanced Control Strategies for Grid-Integrated Electric Vehicle Chargers <i>Authors:</i> Gaurav Yadav, Sudhanshu Mittal
PS-S5-P19	608	Performance Enhancement of a PV Array Operating in Partial Shading Conditions using L-propagated Odd-Even Approach <i>Authors:</i> Mohd Faraz Ahmad; Mohd Faisal Jalil; M Saad Bin Arif, India; Masood Rizvi
PS-S5-P20	1225	Electromagnetic Regenerative Shock Absorber for Heavy-Duty Vehicles <i>Authors:</i> Siddharth Raj; Anil Jakhar; Amarendra Edpuganti
PS-S5-P21	1274	A Novel High-Gain Switched Capacitor-Based Quadratic DC-DC Converter for Fuel Cell Electrical Vehicles <i>Authors:</i> Yasir Bashir, Prakash Ji Barnawal, Amarendra Edpuganti
PS-S5-P22	956	A Variable Duty Cycle-Controlled Hybrid Metaheuristic MPPT Approach for Photovoltaic Power Optimization <i>Authors:</i> Sampatirao Nanibabu; Shakila Baskaran; Prakash Marimuthu
PS-S5-P23	1553	Enhanced Load Regulation Performance in Single Inductor SIDO Buck Converter using Honey Badger Optimized PI Control <i>Authors:</i> Vijayasri Avemeni; Arghya Chakravarthy; Tousif Khan; Sasank Das Gangula; Jawahar Sagar; Naguru Mohamood
PS-S5-P24	272	Impact of Activation Functions and Optimizers on GNN-based Reduced Optimal Power Flow <i>Authors:</i> Sreenu Sreekumar
PS-S5-P25	1251	Subsynchronous Oscillations Identification in Series-Compensated DFIG-Based Wind Farm Using Machine Learning Algorithms: A Comprehensive Review <i>Authors:</i> Jawaharlal Bhukya; Sameer P. Meshram; Soumyabrata Das
PS-S5-P26	998	ML-Enabled Data-Driven Digital Twin for Component Degradation Monitoring in Grid-Tied DC-AC Inverters <i>Authors:</i> Naresh Kumar Kumawat; Nishant Kumar
PS-S5-P27	1348	Investigation on Electric Vehicle Charging and Strategies to Mitigate its Negative Impact on Distribution Grid <i>Authors:</i> Krishan Chopra; Mukesh Kumar Shah; Laxmi Narayan Malaviya
PS-S5-P28	1090	Flexible Mode Totem Pole PFC Rectifier Using Sic-MOSFET <i>Authors:</i> Srinivas Karatlapelly

