Poster Presentation		
TT1- TT7 19-12-2024, 10:30-11:00 am	(Dr. Josep Ojo, USA and Dr. Abitha A, CDAC)	Venue: LHC-C, Ground Floor

Paper ID	Paper Details (Title & Authors)
134	**PSO-Based Optimised Type-III Controller for Dual-Input Bipolar Triple-Output Coupled Inductor Buck Converter;** Isac Daimary and Rajib Jana
247	**Non-Linear PID based Power Quality Improvement using Single-Phase Shunt Active Power Filter;** *Jotirmoy Samanta, Ralli Sangno, and Rajen Pudur*
436	**Performance optimization of FCL in DC Microgrid using Meta-Heuristic Techniques;** *Rachita R Sarangi, Prakash K. Ray, Sudarsan Swain, Monalisa Sahoo, and Asit Mohanty*
441	**Deep Reinforcement Learning enabled Voltage Control at Grid Edge Technologies;** *Shailendra Singh, Rajesh Kumar, Ashish Shaky, Bikram Dasand and Sohom Chakrabarty*
774	**d-axis Disturbance Injection and Wavelet Transform Based Islanding Detection;** *Senthil Kumar M, Suman Murugesan*
220	**Soft Switching Range Extension of Bidirectional DC-DC Converter for Applications Demanding Wide Voltage Gain;** *Roja Roy and Jayakumar P*
125	**Transformer Current Stress Minimization Using Voltage Matching Control in a Solar PV Fed Dual Active Bridge Converter;** *Vivek Agarwal and Shashank Kurm*
127	**Integrated Speed and Current Control with Adaptive Sliding Mode Based Deadbeat Predictive Strategy Considering Disturbances for In-Wheel PMSMs;** *Vinod Rajeshwar Chiliveri, Kalpana R, and Dharavath Kishan*
131	**A Simplified Primary Side Control Strategy for Resonant Inductive Power Transfer Systems;** *Avishek Munsi Sushan Pradhan and Kunwar Aditya*
138	**Development of FPGA-based Interface Card for Power Electronic Converter Control;** *Hitesh Malviya and Chandan Kumar*
627	**Current Ripple Analysis of 72◦ Phase-Clamping PWM Techniques for Five-Phase Drive;** *Sourabh Ashok Sadale, Devendra R Dhore and Ramsha Karampuri*
175	**Optimized IGWO based MPPT for High-Gain 13-Level Switched Capacitor Multilevel Inverter;** *Arya Singh, V. N Lal, and Ranjit Mahanty*
219	**Comparative Studies of Wire-wound and Planar Transformers in a PSFB Converter for Welding;** *Gourab Banerjee, Abhishek Kar, Dona Chakraborty, Sayantan Chanda, and Mainak .Sengupta*
911	**Design, Analysis and Comparison of 5kW Synchronous Reluctance Motor and Interior PM Synchronous Motor for EV Application;** *Anurag Sharma, Durgesh Kumar Banchhor, and Amit Kumar Jain*
279	**Sustainable Maritime Transportation through Modular Wireless Shore-to-Ship Charging;** *Gyanendra Tiwari, Rakesh Pulletikurthi, and Deepak Ronanki*
287	**Assessment of Unbalance Factor in Line Currents during Fault Tolerant Operation of Five Phase Induction Motor-Drive System;** *Jahera Shaik and R Chudamani*
417	**A Comprehensive Analyses of Single-Phase Grid-tied Bidirectional Electric Vehicle Charger;** *Satyabrata Behera and Venkata Ramana Naik N*
322	**Loop Shaping based Robust Controller Design for Boost Converter in DC Microgrid;** *Akanksha Dwivedi and Ahmad Ali*
332	**A New Control Scheme for V2G Power Transfer in Modified Series-Parallel Resonant Converter;** *N. J. Merlin Mary and Shelas Sathyan*
347	**Transient Stability Enhancement of a Synchronous Generator Using DFIG Considering its LVRT Capability;** *Jitendra Kumar Mahawar, Gururaj M Vishwanath, and Saikat Chakrabarti*
349	**Minimization of DC Bus Side Current Ripple in DFIG Supported DC Micro Grid;** ***S****aumya Tripathi and Amit Kumar Jain*
488	**Design of a Robust H-Infinity Plasma Position Controller for Aditya-U Tokamak;** *Sachin Kumar, Bidyadhar Subudhi, and Rohit Kumar*
364	**Comparative Analysis of Multiport Boost Converter and Z-Source Multiport Converter for EV Charging;** *Sneha Mahobiya and Jose Thankachan*
381	**A Critical Analysis of Flywheel Energy Storage Systems' Technologies, Applications, and Prospects;** *Rupesh Kumari and Kumkum Dubey*
149	**A Platform-less Voltage-Sourced Wind Energy Collection System for Offshore Wind Farms Using Single Active Bridge (SAB) Converters;** *Sakshi Singh, Dheeman Chatterjee, and Tanmoy Bhattacharya*
418	**A Novel Approach to Accurate Small Signal Modeling of Resonant Converters;** *Goutam Ghosh, Soumitro Vyapari, and Viju Nair*
576	**A Novel Control Technique for Dual Active Bridge Converter;** *Gudelli Shivakumar, Paila Lokanadham, Bighnaraj Panda, and Amarendra Edpuganti*
308	**Analysis of Power Deployment Characteristics and Costs of Energy Storage Systems for Frequency Regulation in Renewable-rich Power Grid;** *Khwrwmdao Basumatary, Hafiz Zubyrul Kazme, and Anup Shukla*
564	**Design and Analysis of High Torque Toroidal Motor for Low-speed Spacecraft Actuators;** *Smitha Krishnan, Srirama Srnivas, and Ravichandran MH*
569	**Audio-Susceptibility in Peak Current Controlled CI-SIDO Buck Converter;** *Gayatri Nayak, Paban Bujor Barua, and Shabari Nath*
358	**Decentralized Frequency and DC-Voltage Deviation Control in Multi-Terminal HVDC (MTDC) Grids with High Penetration of Renewable Sources;** *Satish Kumar Ancha and Bibhu Prasad Padhy*
644	**Design of Ferrite Magnet assisted Synchronous Reluctance Motors for Electric Vehicle applications;** *Sandeep Reddy Tukkani, Sai Krishna Mulpuri , Om Jee Singh, and Praveen Kumar*
648	**Modified Field Oriented Control Based Kramer Drive for Wound Rotor Induction Motor with Sinusoidal Machine Current and Voltage;** *Indrasis Roy and Amit Kumar Jain*
698	**Modular Multilevel Converter Control by Using Sorting Algorithm and Smoothing Of Arm Inductor Current;** *Narayana Murthy Malladi, Mohd Alam, and Narendrababu A*
824	**Inspecting Cascaded Boost Configuration Linking LVDC and CDC Bus in DC Microgrid;** *Himansu Sahoo, Santanu Kapat, and Bhim Singh*

849	**Analysis of Integrated On-Board Charger for 400 V and 800 V EV Battery Using Dual-Mode Three-Leg LLC Resonant Converter;** *Dharavath Kishan, Bussa Vinusha, Marupuru Vinod, and Kalpana R*
816	**A Grid Resilient Wide EV Segment Portable DC Charger with Seamless Phase Transition Adaptability Over Consistent Power Processing;** *Saran Chaurasiya and Bhim Singh*
840	**Model Predictive Control of a New Common-Mode Current Free EV Charger with a Wide Output Voltage Range;** *Preetha Philip and Deepak Ronanki*
841	**Design of a Multi-Mode DC-DC Converter for High-Power Wireless Charging of Electric Vehicles;** *Dharavath Kishan, Mallikarjuna Balimidi, Md Waseem Ahmad, and Andrii Chub*
866	**DC Link Capacitor Loss Minimization for Medium Voltage High Power Railway Traction Converter;** *Pooja Kumari, Sourav Ghimirey, and Avanish Tripathi*
887	**Peak Current Mode Controlled Phase Shifted Multi-phase Buck Converter for 48V/72V EV Battery Charging;***.Amit Kumar Singh, Anirban Ghoshal, and Sukanta Das*
974	**Design and Analysis of Wide Bandgap Device Based DAB Converter for EV On-Board Chargers;** *Abhishek Kumar, Kalpana R, and Phaneendra Babu Bobba*
448	**Reconfigurable Type I And Type II Buck-Boost Partial Power Converter for EV Fast Chargers;** *Daniel Pesantez, Hugues Renaudineau, Samir Kouro, Sebastian Rivera, and José Rodríguez*
945	**Congestion Management in Distribution Systems Through Distribution Congestion Prices,** *Etesola Imchen and Dr.Dipu Sarkar*

Poster Presentation

TT1- TT7 **19-12-2024, 3.00-3.30 pm** **(Dr. Tulika Bhattacharya CPRI Banglore and Dr. Athira B P, CDAC)** **Venue: LHC-C, Ground Floor**

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139	**Digitally Controlled PWM Rectifier for Harmonic Reduction and Bidirectional Power Flow;** *Bonagiri Bhanuprakash, Manoj Leelachand Gandhi, Seema Singhai Sheth, and Dr. M S Ansari*
168	**A Fault Tolerant N-Level Isolated Inverter Topology to Handle All Open Circuit Switch Faults,** *Venkataramanaiah Jammala, Gulshan Yadav, Deep M. Gohil, and Suresh Lakhimsetty*
271	**Hybrid Converter with Simultaneous DC and AC Outputs;** *Jotirmoy Samanta, Ralli Sangno, Rajen Pudur, and Mohan Aware*
483	**Staircase Modulation for 17-level Packed E-Cell Multilevel Inverter;** *Mohammad Alhassan and Santosh K Singh*
608	**A Sensing Coil in Inductive EV Charging Systems for Estimating the Coupling Coefficient and Receiver Resonant Frequency;** *Nakkeeran R, Bharatiraja C*
786	**An Isolated High Gain Quadratic DC-DC Boost Converter for Fuel Cell Application;** *Soumyarupa Saha and Subhendu Dutta*
953	**A Unique Z-Source DC-DC Converter with Reduced Stresses on Passive Components;** *Roshan Pariyar and Aurobinda Panda*
970	**Universal Three-Phase On-Board EV Charger Using Bridgeless Non-Isolated Boost-Buck Converter Topology;** *Devachandra Pukhrambam Singh, Hage Kaku, and M Deben Singh*
19	**FPGA Based Digital Controller for Two Stage On-Board EV Charger;** *Pawan Kumar*
79	**Reduced Power Processing High Efficient LED Driver;** *Sai Rohit Chikatimarla, Haroon Saqib Mohammed, Ramesh Babu Pallapati, and Dr. Ramulu Chintam*
311	**Modelling and Analysis of A Dual-Loop Current Control Strategy For Grid-Tied Inverters With LCL Filter,** *Avinash V S N Bhamidipati and Krishna Vasudevan*
558	**A Novel Hybrid Harmonic Estimation Technique based on Recursive Least Square and Artificial Protozoa Optimizer;** *Ashok Bhoi, Ranjan Kumar Mallick, Pravati K Nayak, Sairam Mishra, Gayadhar panda, and Renu Sharma*
956	**Optimized Power Quality Using Integrated Current and Voltage PFC for Energy Storage Application,** *Mahi Teja Talluri, Amalina Das, Suman Murugesan, and V. Karthikeyan*
799	**Taxonomy of Fault Analysis Methods for Protection of Transmission Lines;** *Mallikarjuna Balimidi, Gopakumar P, and Dharavath Kishan*
216	**Intelligent Algorithms for Fault Localization in Unbalanced Active Distribution System;** *Archana Tamrakar and Saumendra Sarangi*
896	**Analysis of the Correlation Between Axial Force And Movement of A Rotor Magnet In A Four-Layered Stack Structured Permanent Magnet Bearing Using The Finite Element Method,** *RAJEEV KUMAR, PABITRA KUMAR BISWAS, and Suraj Gupta*
710	**Dual LUT-based DTC Strategy for Optimized Energy Efficiency in Electric Vehicles Powertrains;** *Amit kumar and Ranjan Kumar Behera*
768	**Detection and Discrimination between Stator Winding Faults and Unbalanced Supply Voltage by Monitoring Rotor Bar Voltage;** *Tushar Gulabrao Vilhekar and Makarand Ballal*
807	**Optimized Super Twisting Sliding Mode Based Direct Torque Control for BLDC Motor;** *Utkal Ranjan Muduli*
854	**Grid Power Quality Management with SCR-Based CSI fed Medium Voltage Induction Motor Drive,** *Pratyush Pandey, Harikrishnan P, and Kamalesh Hatua*
467	**Multi-Stage CC-CV Charging of an Off-board Charger using Modulated Model Predictive Control;** *Durga Prasad Pilli, Deepak Ronanki, and Jose Ramon Rodriguez Perez*
550	**Planar Magnetics based Onboard Electric Vehicle Charger with Auxiliary Supply;** *Vrundesh S Pawde, Ritesh Kumar Keshri, Suman Saurav, Pankaj R. Sawarkar, Hiralal Suryawanshi, and VP Shamal*
556	**Triple Active Bridge Converter for Electric Vehicle Applications,** *Amit Upadhyay, Dr. Venkata Ramana Naik N, Satyabrata Behera, and Markala Karthik*
562	**Real-Time Experimental Validation for Assessing Efficiency of On-Board Chargers,** *Archana A N, Priya Poulose, Sruthimol T, Megha V Thomas, and Bharath Vinod*
757	**Grid Forming control of THSSC under unbalanced grid condition,** *Ajay Singh Negi, IbhanChand Rath, and Siba Kumar Patro*
610	**Model Order Reduction of A Single Area Power System using Direct Truncation with Mihailov Criteria Technique,** *Salik Ram Dewangan, Pushkar Dewangan, Vinay Pratap Singh, And Umesh Kumar Sahu*
673	**Circulating Current Mitigation Among Sources in DC Microgrid Using Distributed Secondary Controllers;** *Ayman Khalfalla, Shirazul Islam, Atif Iqbal, and Farhad Ilahi Bakhsh*
705	**Enhanced Finite Control Set Predictive Current Control for Modular Multilevel Converters;** *Vempali Bhuma Naga Satya Sai, Deepak Ronanki, and Apparao Dekka*
869	**AI-Driven Control of Flexible Bevel-tip Needles in Minimally Invasive Surgery Utilizing Adaptive Multi-layer Perceptron Architecture,** *Kaushik Halder, Felix Orlando Maria Joseph, and Radhey Shyam Anand*
385	**Charging Area Based State of Health Estimation of Lithium-Ion Battery Pack for EV Applications,** *Monu Kumar, Makarand Ballal, and Devang Pramod Kubitkar*
396	**Experimental Study and State of Charge Estimation of A123 Li-Ion Cylindrical Cell Using Passivity Observer in Different Temperatures,** *Aakash P.A, and Manivannan R*
400	**Modelling and Simulation Analysis of Innovative Offshore Wind Energy Plant;** *Kundan Kumar, Wairokpam Dhanraj, Sanjeet K Dwivedi, Vima P Mali, and Subrata Banerjee*
401	**State Space Mathematical Modeling and State of Charge Estimation of 18650 Panasonic Li-ion Battery Using L2-L1 Observer Design,** *Ajay Kumar R.B and Manivannan R*
478	**Integration of Fuel Cell with Doubly Fed Induction Generator for Distributed Power Generation with Improved Power Quality,** *Kushal Verma, Shailendra Kumar, Suryansh Pandey, and Tanu Prasad*

497	**A Smart Control for Multi-Functional 3P4W Grid Interfaced PV-BES System,** *Rajesh Poola, Sumit Ghatak Choudhuri, and Dr. R N Patel*
520	**Enhancing The Frequency Deviation in MPS Utilizing Demand Response Techniques for Irregularity Between Sources and Load.** *Prabhat Kumar Vidyarthi, Ashiwani Kumar, and Ravi Shankar*
528	**A Multi-Objective Approach for Energy Management of Data Center Microgrid Considering Carbon Emission and Operational Cost,** *Rahul Khajuria, Ravita Lamba, and Rajesh Kumar*
542	**Validation of a Novel Hybrid On-Board Charging System for Light Electric Vehicles in Hilly Terrain;** *Shyamantak R Barman, Anish Ahmad, and Asim Datta*
289	**Secondary side control of Multi-vehicle Inductive charger by using a Semi-Active Bridge Rectifier for Constant Power;** *Bibek Kumar and Avik Bhattacharya*
906	**Accurate Modeling Approach of Litz-Wire based Planar DD Spiral Coils for WPT Applications;** *Avanish Pandey, Suvendu Samanta, and Amarendra Edpuganti*
910	**Review and Comparison of Modulation Schemes for Inductive Power Transfer Systems;** *Rakesh Pulletikurthi and Deepak Ronanki*
930	**An Optimized Hexagonal Geometry Magnetic Coupler for Floor-Mounted Electric Vehicles Wireless Charging System;** *Bharatiraja C, Nakkeeran R, and Mahesh Aganti*
560	**A Novel Signal Processing and Deep learning Approach for Fault Diagnosis in Grid integrated AC microgrid,** *Nityananda Giri, Ranjan Kumar Mallick, Pravati K Nayak, Sairam Mishra, Debadatta Amaresh Gadanayak, and Anasuya Roy Choudhury*

Poster Presentation		
TT1- TT7	**20-12-2024, 10:30-11:00 am (Dr. Swetha C, CDAC and Dr. Manju R CDAC)**	**Venue: LHC-C, Ground Floor**
Paper ID	**Paper Details (Title & Authors)**	
181	**Coded Power Transfer for Power Electronic Converter System,** *Visuno Naleo, Hitesh Malviya, Anandh N, and Chandan Kumar*	
265	**A Novel Five-Level Double Boost Inverter with Reduced Spike Current,** *Gudipati Maheswari, K Manjunatha Sharma, and Prajof P*	
419	**Common-Mode Voltage Mitigation in 3-Phase 3-Level VSI with DC-bus Midpoint switching,** *S S Phaniram Musti, and Ravikumar Bhimasingu*	
493	**Switch Fault Diagnosis in Single Switch DC-DC Converters,** *Vaishali Chapparya, Anubrata Dey, P Singh, Jose Rodriguez, and Cristian Garcia*	
523	**Diamond(m-switch) converter topology for four-phase switched reluctance motor(SRM) drives,** *Sagar Gupta and Amit Kumar Jain*	
555	**High Step-Down Gain Bridgeless Cuk PFC Converter for Battery Charging Applications,** *Balaram Jena and Sumit GhatakChoudhuri*	
566	**Modelling of Coupled Inductor-Based Single Input Triple Output Boost Converter,** *Paban Bujor Barua and Shabari Nath*	
802	**A Non-Isolated Multiport Converter with Wide Input Voltage Range to Enhance Ultracapacitor Utilization for Electrified Vehicles,** *Siddheswar Sen, Pratim Bhattacharyya, Santu Kumar Giri, Subrata Banerjee, and Hanumath Prasad Ikkurti*	
861	**Coupled Inductor Based Regenerative Cascaded Multicell Converter for Drives with Reduced Transformer VA Rating and DC-link Capacitor,** *Satyam Jha and Shambhu Sau*	
267	**An Effective Fault Detection Technique for Grid Connected Electric Vehicle Charging Station,** *Md Sajid Alam, Javeed Bashir, Mir Uzair Kanth, and Premalata Jena*	
411	**A Data-Driven Deep Learning-based Prognostication for Power Grid Stability,** *Abhishek Saxena, Prashant Kumar, Kalpana Beura*	
598	**Harmonic Profile of Various Loads used in Distribution System of Qatar Utility,** *Abdulkarim Chemidi, Shirazul Islam, and Dr. Farhad Ilahi Bakhsh*	
363	**Improved Active Frequency Drift Islanding Detection Method for Grid-Tied Distributed Energy Resources;** *Vijay Mohale, Rajkumar Chougale, Praveenkumar A Patel, and Vilas Bugade*	
182	**Model Reference Adaptive System Based on Ultra-Local Model for Induction Motor Drives.** *Md Asif Hussain, Ananda Shankar Hati, and Vinod Khadkikar*	
226	**Development of Multi-Pulse Rectifier System Based on Multi-phase Conversion and Phase Displacement Technique for Medium Voltage Motor Drive;** *Rohit Kumar and Bhim Singh*	
309	**Investigation of the Impact of Holes on the Performance of Multilayer Interior Permanent Magnet Synchronous Machines,** *Abhishek Shukla and Saptarshi Basak*	
372	**Enhancing Drive Performance using Mixed-Order Flux Observer driven Sensorless Control of PMSM,** *Alok Ranjan and Vijaya Bhaskar Devara*	
642	**Design and Analysis of Linear Electromagnetic Actuator for Automobile Active Suspension System,** *Don Vinit X V, Sai Krishna Mulpuri, and Praveen Kumar*	
857	**Realization of Machine Learning Algorithms for Diagnosing Winding Faults in Induction Motors,** *Abitha Memala W, Mercy Paul Selvan, Mohan Ram S, Brindavan T.V, and Raja Singh R*	
45	**MTPA Control of Interior PMSM and BLDC Motor using FE and MATLAB Co-simulation,** *Akriti Sonkar, Sashidhar Sampathirao, and Bidyadhar Subudhi*	
201	**Finite Element-Based Inter-turn Fault Analysis in Closed Loop Induction Motor Drive Using Machine Learning,** *Praveen Kumar N*	
37	**Modelling of Cross-Saturation in a PMa-SyRM using Polynomial Reduction Method,** *Saipriya Chelluboyina and Sashidhar Sampathirao*	
57	**Enhanced Direct Torque Control Strategies for In-Wheel Switched Reluctance Motors: Evaluating Sector and Voltage Vector Selection Techniques,** *Deepak M and Bharatiraja C*	
646	**Load Matching in Single-Stage Constant Power Series-Parallel Compensated Inductive Charging with High Voltage Gain,** *Rohan Sandeep Burye and Sheron Figarado*	
667	**Comprehensive Analysis of Thermal Effects on PMSM Drive Control in Small Commercial Vehicles,** *Alok Ranjan, Vijaya Bhaskar Devara, Prashant Kumar, and Utkal Ranjan Muduli*	
674	**FPGA Based Improved State-of-Charge Estimation Using Modified Coulomb Counting method for Lithium-Ion Battery,** *Sourabh Das, Susovon Samanta, and Supratim Gupta*	
722	**Advanced Control and Modeling for Enhanced BLDC Motor Efficiency and Performance,** *Amitesh Prakash, Vijaya Bhaskar Devara, Alok Ranjan Prashant Kumar, and Utkal Ranjan Muduli*	
749	**Enhancing Efficiency in Dual-Motor Four-Wheel Drive Electric Vehicles via Power Sharing Optimisation,** *Amit kumar, Ranjan Kumar Behera*	
835	**MRAS and α'β'- framed SVPWM based modified FS-MPC for PMSM Drive Powered by Five-Level TF-type Inverter for EV Applications,** *Priyankar Roy, Haricharan Nannam, Pothuraju Ramakrishna, and A Bandyopadhyay*	
581	**ISTE and IST2E Based PID Control for Frequency Control of Shipboard Microgrid,** *Akanksha V Waghmare, Vinay Pratap Singh, Akhilesh Mathur, Subho Paul, and Krishna Murari*	
609	**Adaptive Neuro-Fuzzy Inference-Based Control of Parallel Connected DC-DC Converters for DC Microgrid Application,** *Musharraf Ali Haider Ali Saddriwala, Mohd Alam, Narayana Murthy Malladi*	
615	**Modelling and Identification of Lithium-Ion Battery Using Relay Feedback Response,** *Saurabh Pandey, Bheemaiah Chikondra, and Vijay Kumar Singh*	

653	**Improved Boost Type-ANPC 5L Inverter Topology;** *Jagabar S Sathik, Arpan Hota, Vigna K Ramachandaramurth, Mamdouh L. Alghayth, and Vivek Agarwal*
640	**Data-Driven Performance Degradation Prediction of PEM Fuel Cell using Bi-GRU,** *Janvi Sharma, Rahul Khajuria, Ravita Lamba, Rajesh Kumar, and Surender Hans*
641	**Inertia Synthesis for AHO Controlled Converters in Smart Transformer Based Distribution Systems,** *Sahil Gaurav and Chandan Kumar*
643	**Frequency Response Assessment of Inverter Dominated Power System under Grid Abnormalities,** *Komal Singh, Abhishek Dilipbhai Tank, Rabindra Mohanty, Avanish Tripathi, and Ashu Verma*
663	**A Practical Approach for Estimating State of Health of Li-Ion Batteries in Electric Vehicles,** *Prashant K Aher, Taufiq Ansar Patel, S.L. Patil, Abhishek Mandhana, and Rhugved Rane*
790	**A Regenerative Weak-Grid Emulator for Distributed Generation Test Benches;** *Aravind G, Divyanshu Bansal, and L. Umanand*
458	**Voltage Stabilization of a SEIG-based micro-hydro System using Static Synchronous Series Compensator;** *Swagat Pati, Amar Bijaya Nanda, Binod Sahu, Abhijeet Choudhury, and Subinay Das*
978	**Predictive Phase-Shift Control of Interleaved Quadratic Buck Converter as the Power Supply of the Electrolyzer in Green Hydrogen Technology;** *S. Alireza Davari, Freddy Flores, Mahdi S. Mousavi, Shirin Azadi, Samir Kouro, Cristian Garcia, and Jose Rodriguez*
677	**Machine Learning Based State of Charge Estimation and Real-Time Battery Monitoring System,** *Sourabh Das, Shirsaa Mishra, Uttam Raghab, and Susovon Samanta*
683	**Parameter Estimation and Optimal Charging Discharging Pattern for Supercapacitor,** *Subash M, and Selvajyothi K*

Poster Presentation		
TT1- TT7	**20-12-2024, 3:00-3:30 pm (Dr. Janani T, NITK and Dr. Lekshmi K R, CDAC)**	**Venue: LHC-C, Ground Floor**
Paper ID	**Paper Details (Title & Authors)**	
31	**An Improved Soft Switched SEPIC Topology for High Gain Static Power Supply,** *Tapas Halder*	
113	**A Novel Sampling Mechanism for a Digital Average Current-Mode Controlled Buck Converter Under Leading-Edge Modulation,** *Snehamoy Patra and Amit Kumar Singha*	
831	**Seamless Mode Transition of a VSI in a 3-Phase Standalone Microgrid,** *Sounavo Ghosh and Parthasarathi Sensarma*	
244	**A Quadruple Boost Nine Level Inverter Performance in Power Conversion,** *Biswajit Sarangi, Sukhdev Singh Neti, and Varsha Singh*	
262	**Fixed Frequency-Based Oscillation Mitigation Technique for Solid State Circuit Breaker in DC Microgrid Applications,** *Salai Thavakkodi S V, Senthil Kumar Subramaniam, and Aravind C K*	
274	**Amplitude Error Based Frequency Deviation Detection for Grid Voltage Parameters Tracking,** *Chandrasekaran S and Sandeep Negi*	
283	**Implementation of a Novel Nine-Level Quadruple Boosting Inverter,** *Gudipati Maheswari , K Manjunatha Sharma, and Prajof P*	
300	**Third harmonic injection with carrier-reassignment PWM for a nine-level grid connected CHB inverter,** *Little Pradhan and Abhijit Kshirsagar*	
371	**Adaptive Model Predictive Control of Dual Output Three-Level Inverter,** *Rangoli Singh, Dhawal Dwivedi, Sandip Ghosh, and Chinmaya K A*	
404	**OPTIMAL DESIGN AND PERFORMANCE ANALYSIS OF MODEL PREDICTIVE CONTROL FOR EV CHARGING APPLICATION,** *Kaumudi Kumari and Mukhtiar Singh*	
503	**Triple Active Bridge Converter for Solar PV-Assisted EV Charging,** *Gudelli Shivakumar, Bighnaraj Panda, and Amarendra Edpuganti*	
189	**Improved ANPC Three-Level Inverter with Voltage Boosting Ability;** *Jagabar S Sathik, Vigna K Ramchandramurthy, Dhananjaya M, Mamdouh L. Alghaythi, and Meshari Alshammari and Saad Mekhilef*	
623	**A Multiport Converter as an Onboard Electric Vehicle Charger: Enabling 800V Battery Charging from 400V EVSE,** *Jay Damodar Pandya, Arun Chandrasekharan Nair, Anilkumar Davu, and Surender Elumalai*	
748	**Single Source Floating Capacitor Fed Multi-Level Open-End Winding Induction Motor Drive with Extended Linear Modulation Range and Minimum Number of Switches,** *Vasuda K V, Remya K P, and Jaison Mathew*	
815	**Voltage Multiplier Cell-Based Enhanced Quadratic Buck-Boost DC-DC Converter with Reduced Switch Current Stress,** *Kumaravel S and NINU JOY*	
813	**Volt/Var Control of Smart Transformer fed Active Distribution Networks,** *Arunima Dutta, Sanjib Ganguly, and Chandan Kumar*	
884	**Impact Analysis of EV Charging System on Grid With and Without Solar PV Integrated System,** *Akash Prakash Ganne, Lalit Kumar Sahu, and Hemachander Allamsetty*	
356	**An Enhanced Voltage Support Control strategy with Improved Active Power Deliverability of a DG During Unbalanced Microgrid Faults;** *Suresh Maganti, Naveen Yalla, Jayaram Nakka, Ali Hussain Almarzooqi, Sajan K Sadanandan, and Tareg Ghaoud*	
272	**Performance of Distributed OPF Algorithm with ZIP Loads and Different PV Inverter Modes;** *Subho Paul*	
115	**Closed Loop Control of Induction Motor Operated with Hybrid PWM(SVM+SOPWM) at Low Switching Frequency for Traction Applications;** *Gudaru Venkaiah Katuri and Amit Kumar Jain*	
280	**Vulnerability Analysis of Torque Controlled PMSM Drives against Sophisticated Data Integrity Attacks,** *Chandni Asok, Easwar Veeragandham, Deepak Ronanki, and Apparao Dekka*	
360	**Sliding Mode Observer based Predictive Torque Control of PMa-SynRM,** *Bharath Kasoju and V Praveenkumar Kunisetti*	
863	**Peer-to-Peer Energy Trading among Electricity-Hydrogen DC Microgrids;** *Avirup Maulik, Alok Kumar, and Chinmaya K A*	
745	**Robust Sliding Mode Observer based Speed Sensorless Control of FPIM for Wide range of Speed Operation,** *Seshadri Bhusan Sahoo and Ranjan Kumar Behera*	
838	**Fractional Order Relaxation Model for Supercapacitors**, *Geethi Krishnan and Vivek Agarwal*	
689	**Sliding Mode Current Control in Multiple Batteries based DC Microgrid,** *Rohan Lalwani, Barjeev Tyagi, and Vishal Kumar*	
690	**Enhanced Grid Stability using Virtual Inertia Control Strategy for DC Microgrids,** *Suryakant Kumar, Gauri Shankar, Lakshmi Srinivas Vedantham and Prashant Kumar*	
712	**An Islanding Identification Strategy based on Disturbance Injection and Wavelet Transform,** *Suman Murugesan and Senthil Kumar M*	
716	**Pre-Processing Measurement Data for Computing Internal DC Resistance with Anomaly Detection Techniques,** *Shaurya Pandey, Sarbani Mandal, Bikash Sah, Sai Krishna Mulpuri, and Praveen Kumar*	
720	**Performance Evaluation of Charging Techniques for Lithium-Ion Batteries,** *Sanjeev S Raja, Harish Karneddi, and Deepak Ronanki*	
743	**Enhanced Power Management in a DC Microgrid through Virtual Inertia Integration,** *Suryakant Kumar, Gauri Shankar, Lakshmi Srinivas Vedantham, and Prashant Kumar*	
761	**An Improved Maximum Power Point Tracking of PV Source using Parametric Estimation,** *Seelam Poornima, Kotapati Anuradha, Shiva Prasad, and Vamshi Krishna Bandaru*	
764	**A Novel Passive Islanding Detection Strategy for DC Microgrid,** *Suman Murugesan and Sweety Yadav*	
770	**Performance Characteristics Assessment of Dual Rotor Single Stator Five-Phase Surface-Inset PMSG for Hydroelectric Systems,** *Raja Ram Kumar, Arpita Roy, Priyanka Pal, Kundan Kumar, and Shekha Rai*	
775	**Modeling & Control of SPV Integration with HESS,** *Annavarapu Ankamma Naidu, Barjeev Tyagi, and Vishal Kumar*	
776	**Modeling and Analysis of Frequency Modulated LLC Resonant Converter for Deeply Depleted Battery Charging Applications,** *Anil Marneni, Thatipelli Shivaji, Pravin Murugesan, and Senthil Kumar Subramaniam*	

778	**An agile solution to estimate the capacity of virtual energy of refrigerator using ANN,** *Praveenkumar Rajendiran and Vijayakumar Krishnasamy*
785	**Minimization of Simple Payback Time Through Reactive Power Injection & KVA Billing in MW Scale Solar PV Power Plant,** *Dev Kumar Manhar , Avanish Tripathi, Rabindra Mohanty*
969	**Design and Analysis of IPMSM with Modular Stator Structure for Electric Vehicular Applications;** *Gowtham Vegireddy, Deepak Ronanki, and Apparao Dekka*
729	**Reduced Order Modeling of Higher Order Fuel Cell System for Electric Vehicle Application;** *Rahila Parveen, P. D. Dewangan, S. L. Sinha, and Vinay Pratap Singh*
740	**Resilient PMSM Motor Control: Advanced Fault-Tolerant Strategies for Open-Phase Faults;** *Alok Ranjan and Vijaya Bhaskar Devara*
180	**Design and Testing of Coordinated Controller for PV Assisted Municipal Solid Waste Fueled EV Charging Station;** *Perwez Alam and Thanga Raj Chelliah*
806	**Real Coefficient Assessment with Improved Adaptive Control for Grid-Tied DSTATCOM,** *Utkal Ranjan Muduli*
905	**Comparative Analysis of optimal PV Array Reconfiguration under Partial Shaded Condition;** *Kayalvizhi Selvam, Sujeet Kumar Patel, and Arulraj R*
873	**Three-Phase Interleaved Bidirectional Resonant Converter for Charging / Discharging Infrastructure,** *Nishant Kumar, Mayank Kumar*

Poster Presentation		
TT1- TT7	**21-12-2024, 10:30-11:00 am (Dr. BharthiRaj,SRM University and Dr. Dastagiri Reddy NITK)**	**Venue: LHC-C, Ground Floor**
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810	**A PV Grid Tied Modified Z-Source Inverter for an Inductive Wireless EV Charging System,** *Bharatiraja C and Ramanathan G*	
40	**Optimized Design of The CUK Power Converter Topology,** *Tapas Halder*	
56	**A Novel High-Gain Non-Inverted Voltage-Lift Switched-Capacitor DC-DC Step-Up Converter,** *Miteshkumar Bharatbhai Patel, Jayaram Nakka, and Gaurav*	
66	**A novel six-switch isolated DC-DC converter with an isolated port providing DC Transformer gain and two non-isolated ports serving reciprocal non-inverting buck-boost voltage gain for EV applications,** *Arkabrata Dattaroy and Avik Bhattacharya*	
75	**Efficient Dual-Input DC-DC Converter Design for Fuel Cell Electric Vehicle Integration,** *Kalpana Chaudhary and Aman Gope*	
166	**Advanced Modulation Control for Three-Phase Single-Stage DC-AC Conversion with Optimized Filter Reduction,** *Venkataramanaiah Jammala and Anvi Gajjar*	
169	**Full Order Discrete Time Modelling of High Gain Switched Capacitor Converter,** *Ishita Biswas and Debaprasad Kastha*	
223	**Common-Ground-Type Dual-Source Switched-Capacitor Multilevel Inverter,** *Deepak Singh and Sandeep N*	
276	**Inductor current feed-forward based Single-loop dq control scheme for Standalone Inverter System,** *Vaishnavvignesh G Iyer, Cilaveni Satish Chandra, Ravindranath Adda, and Sreenath J G*	
482	**Optimized Dual Phase Shift Control for Dual Active Bridge DC-DC Converter,** *Pradyumn Chaturvedi, Harish R Bhawane, Saurabh P Kamble, and Aditya S Kulkarni*	
579	**Fault-Tolerant Operation of Hybrid Modular Multilevel Converter for MVDC Applications,** *Akshaya D Bonde, Pradyumn Chaturvedi, and Vijay Borghate*	
599	**Design of Input and Output Filter Capacitors of a DC-DC Dual Active Bridge Converter With Time-domain Analysis of Voltage Ripple,** *Prosen Dey, Sayan Paul, and Kaushik Basu*	
624	**Disturbance Observer-based Sliding Mode Control of Boost-Flyback SIDO Converter,** *Somesh K Thanvi, Aditya R. Gautam, and Hari Om Bansal*	
632	**Comparative Effects of Gate Pulse Shifting on CCM/DCM Boundary Current in CI-SIDO Converters,** *Angan Sarkar, and Shabari Nath*	
752	**Grid Forming Control of Delta-H Bridge Module Under Unbalanced Conditions** *Ajay Singh Negi, IbhanChand Rath, and Siba Kumar Patro*	
830	**Extending the ZVS Range of Phase-Shifted Full-Bridge DC-DC Converters with a Variable Inductor,** *Mohammadreza Adib, Salar Sadeghian, Nazilasadat Talebi, and Prajof P*	
94	**A list of three novel dissimilar voltage multi-input isolated high gain DC-DC converters supplying multiple outputs with widely varying characteristics,** *Arkabrata Dattaroy and Avik Bhattacharya*	
147	**Electrolytic Capacitor-less Isolated Resonant Converter-fed BLDC Drive for Solar Water Pumping Application,** *Prakash Ji Barnawal, Manish Kumar Kumar, Manash Kumar Mishra, V. N Lal, and Rajeev Kumar Singh*	
258	**A Novel 7-Level Triple-Boost Common-Ground Switched Capacitor Based Inverter,** *Ajit Kumar Upadhiya, N. Lakshmi Narasamma, and Mahesh K. Mishra*	
359	**Bidirectional DC-DC Dual-Active-Bridge Converter with Symmetric Bipolar Outputs Using Triangular Modulation,** *Priyatosh Jena, Rajeev Kumar Singh, and V. N Lal*	
67	**A novel three-output port isolated DC-DC converter with four switches providing high gain quadratic non-inverting buck-boost or derived boost characteristics along with continuous input battery current operation,** *Arkabrata Dattaroy and Avik Bhattacharya*	
461	**Practical Considerations and Error Estimation in Hall Effect Current Sensors using 2D-FEMM,** *Ranjit A Farakate and Shashank Wekhande*	
656	**A Variable Switching Frequency PWM Technique to Reduce Conducted Emissions of SiC MOSFET Based Active Front End Converter,** *Tanmoy Dey, Vibhav Pandey, Kamalesh Hatua, and Arunava Mitra*	
340	**Analysis and Experiments on a lab-fabricated Inductor of improved composite material core in a High-Frequency Synchronous Buck Converter,** *Gourab Banerjee, Sunil Meti, Dona Chakraborty, Dibyendu Mandal, Sayantan Chanda, Navakanta Bhat, Ranajit Sai, Srinivasrao Shivashankar, and Mainak Sengupta*	
812	**Comprehensive Analysis of Grid Synchronization Enhancement in DFIG-Driven Wind System,** *Alok Ranjan, Vijaya Bhaskar Devara, Anish Kumar, and Utkal Ranjan Muduli*	
844	**Hybrid Renewable Energy Sources for Grid Connected System with Model Predictive Control for Maximum Power Extraction,** *Mahmoud F. Elmorshedy, Sagar B Mahajan, Seshagiri Rao Vemparala, Dhafar Almakhles, and Kumaravel S*	
845	**Addressing Fault Ride-Through Challenges in DC Microgrids via Supercapacitor Integration,** *Ankit Mishra, Narayana Prasad Padhy, and Abdul Saleem Mir*	
855	**Enhancing Ancillary Grid Services with Integrated PV System under Unbalanced Load and Weak Grid Scenario,** *Pranay Krishna Sahay and Vedantham Laksmi Srinivas*	
862	**Control of a Microgrid Integrated PV-Assisted EV Charging Station for Active Power Management,** *Nirmal C M Mukundan, Prabhakaran Koothu Kesavan, Umashankar Subramaniam, and Dhafar Almakhles*	
894	**Active Disturbance Rejection Controller Approach for Boost Converter in PV Application,** *Surya Prakash, Mohamed Alkhatib and Utkal Ranjan Muduli*	
923	**Ultra High Gain DC-DC Converter With Reduced Voltage Stress for DC Microgrids,** *Sahendara Kumar, Sarita Kumari, and Avneet Kumar*	
942	**Design of Stand-Alone PV System for Interior Village of Mizoram, Chandersen Yadav (NIT Mizoram);** *Pabitra Kumar Biswas, Avinash Kumar, and Debarghya Dutta*	
972	**Adaptive Proportional Integral Regulator for the PV-Shunt Active Power Filter under Stochastic Solar PV System Behavior,** *Surya Prakash, Mohamed Alkhatib, and Utkal Ranjan Muduli*	

708	**A Simple Triple Phase Shift Control to Minimize Inductor RMS Current Maintaining ZVS for Dual Active Bridge Converter;** *Abdul Rahman, Kousik Ghosh, Kamalesh Hatua and Arunava Mitra*
543	**Bidirectional Power Flow in Direct AC/AC SST with Selective Harmonic Elimination and Pulse Density Modulation** *Archit Joshi and Shabari Nath*
409	**Switched-Capacitors Based Five-Level Boost Common-Ground Type Inverter;** *Anil Jakhar, Sandeep N and Arun Kumar Verma*
224	**Extendable Multisource Multilevel Boosting Inverter;** *Deepak Singh and Sandeep N*
445	**A user-friendly reconfigurable testbed system and method to test and validate the power electronics circuits for educational and research purposes,** *Samsaptak Ghosh and Sohom Chakrabarty*
496	**Design and Development of Intelligent Power Module based Power Electronics Learning Kit,** *Aaron P Barboza, Nishant Sharma, Kuppili Anirudh, Himanshu Bahirat (Indian Institute of Technology Bombay)*
132	**A 25-Level Hybrid Cascaded Multilevel Converter with Capacitor Voltage Balancing Scheme;** *Satyabrata Sahoo, Indrajit Sarkar and Venkata Ramana Naik N*
897	**Hybrid Compensation System Using PV-DSTATCOM and SVC for Enhanced Power Quality in Low Voltage AC Distribution Grid** *Anupriya K, Sooraj Suresh Kumar, Manoj Kumar M V, Jayaprakash P, Umashankar Subramaniam, and Dhafar Almakhles*
898	**Shunt Active Power Filter Using Asymmetric Cascaded Multilevel Converter,** *Mohsin Karim Ansari, Neha Tak, and Sumit Kumar Chattopadhyay*
920	**A Bi-level Decision Support System for Home Energy Management in Smart Homes,** *Ponraj P and Suman Murugesan*
944	**Tilt Integral Derivative Frequency Controller for Isolated Microgrid,** *Deepak Kumar, G. Lloyds Raja, Mohamed Alkhatib, Omar Al Zaabi, Khalifa Hassan Al Hosani, and Utkal Ranjan Muduli*
936	**A Three-Port Converter for Integrating Solar PV-Battery Systems with DC Loads;** *Sourav Prasad, Prajof P, and Arun Dominic D*
950	**A Four-Port Buck-Boost Converter with Dual-Input and Bipolar-Output;** *Sourav Prasad, Prajof P, and Arun Dominic D*
846	**PHIL Study on Fault Ride-Through Performance of Photovoltaic Converter in Active Distribution Networks** *Ankit Mishra, Narayana Prasad Padhy, and Abdul Saleem Mir*
571	**Symmetrical ASL Hybrid DC-DC Converter with Low Voltage Stress,** *Motiur R Mohammed; Vinod Khadkikar; Bashar Zahawi and Omar Alzaabi*
565	**Power Transfer from 400V Charging Piles to 800V Electric Vehicles Using Motor Winding and Inverter** *Guanqun Qiu* **,** *Vinod Khadkikar, Motiur Reza Mohammed and Bashar Zahawi*