



ICPC2T 2025

FOURTH INTERNATIONAL CONFERENCE ON
**POWER, CONTROL AND COMPUTING
TECHNOLOGIES**

Hybrid Conference

SCHEDULE

20th - 22nd January 2025



IEEE | Student Branch
NIT Raipur

SCHEDULE-IN-DETAIL (DAY-1)

DAY-1: JANUARY 20TH 2025 (* All timings are in IST)

TIME	PROGRAM
09:30 AM – 11:00 AM	Inaugural Function
11:00 AM – 11:15 AM	BREAK
11:15 AM – 12:00 PM	<p>Keynote Session-1 Prof. Akshay Kumar Rathore, Singapore Institute of Technology, Singapore</p> <p>Topic: Advanced & Simplified Power Electronic Systems for Transportation Electrification and Renewable Integration</p>
12:15 AM – 12:45 PM	<p>Keynote Session-2 Prof. Nilesh J. Vasa IIT Madras, India</p> <p>Topic: E-Mobility: Innovations and Advancements</p>
12:45 PM – 02:00 PM	LUNCH
02:00 PM - 03:30 PM	Technical Session-1 (Offline)
02:00 PM - 03:30 PM	Technical Session-2 (Offline)
02:00 PM - 03:30 PM	Technical Session-3 (Offline)
02:00 PM - 03:30 PM	Technical Session-4 (Online)
02:00 PM - 03:30 PM	Technical Session-5 (Online)
02:00 PM - 03:30 PM	Technical Session-6 (Online)
03:30 PM – 03:45 PM	BREAK
03:45 PM – 04:30 PM	<p>Keynote Session-3 Prof. Vinod Khadkikar Khalifa University, UAE</p> <p>Topic: Electric Vehicle to Vehicle (V2V) Power Transfer</p>
04:30 PM – 05:15 PM	<p>Keynote Session-4 Prof. Biplab Sikdar National University of Singapore, Singapore</p> <p>Topic: Security Challenges in AI-Driven 6G Networks</p>
07:00 PM onwards	<p>Gala Dinner Venue: Club Paraiso, Maruti Lifestyle</p>

Inaugural Function:

Venue: Sankalp Hall, DDU Auditorium- Physical

Meeting Link (Virtual):

<https://us06web.zoom.us/j/84837210386?pwd=1akLHkId79FBcMebuFW5dRLT9B4Lbr.1>

Keynote Session-1 and 2:

Venue: Sankalp Hall, DDU Auditorium- Physical

Meeting Link (Virtual):

<https://us06web.zoom.us/j/84332512532?pwd=j10CLuv1AuFLam7NTatYMYwmsktX9v.1>

Technical Session-4:

Meeting Link:

<https://us06web.zoom.us/j/81229950536?pwd=JLKEBGdrA2udKntO9EtwjWqpbafIM.1>

Technical Session-5:

Meeting Link:

<https://us06web.zoom.us/j/85070607842?pwd=ocbLz5P266jQ1KeAJHUE74SFGMxdgz.1>

Technical Session-6:

Meeting Link:

<https://us06web.zoom.us/j/86924020738?pwd=UMEai59Sby6JszbLFO6lcLOoVExbRR.1>

Keynote Session-3 and 4:

Venue: Sankalp Hall, DDU Auditorium- Physical

Meeting Link (Virtual):

<https://us06web.zoom.us/j/83182695572?pwd=q6salWzrK2aRjakZUeTpMaVbu5YPaA.1>

TECHNICAL SESSION DETAILS**Technical Session-1 (Power Electronics-1)**

Session Chair: 1. Dr. Rudranarayan Pradhan, Odisha University of Technology and Research, Bhubaneswar, Odisha
2. Dr. Varsha Singh, NIT Raipur

Venue: Sankalp Hall, DDU Auditorium

Timing: 02:00 PM – 03:30 PM

Paper ID	Paper Title and Corresponding Author	Authors
9	A Multilevel Inverter with Streamlined Components and Reduced THD using the Multicarrier Sine PWM Approach for Resistive and Inductive Loads Author: Annai Theresa A	Annai Theresa A, Dr. Malathi S Anna University, SRM Valliammai Engineering College
51	Customized Inverter Configuration for Multiple pole-Pair Stator Winding Induction Motor Drive with Reduced DC Bus Voltage Author: K K N V A Manikanta	K K N V A Manikanta, Kiran Kumar Nallamekala, G Jawahar Sagar, Tarkeshwar Mahto, Naresh Kumar Vemula, Pratikanta Mishra SRM University AP
119	Reliability Analysis of A Three-Port High Step-Down Converter Author: Dr. Allamsetty Hemachander	Kavitha Murugan, Praneeth Kumar Pedapati, Allamsetty Hemachander National Institute of Technology Puducherry
207	ANN-Based Switch Fault Detection and Localization in 3-Ø Five Level T-Type Inverter Author: Vikram Singh	Vikram Singh, Anamika Yadav, Shubhrata Gupta NIT Raipur
253	Novel Voltage Sorting Technique for Uniform Load Power Distribution and Stiff Utilization of DC sources in Modular Reduced Switch Count Multilevel Inverters Author: Hari Priya Vemuganti	Hari Priya Vemuganti NIT RAIPUR
342	Design and Simulation of High-Efficiency Three Level T - type Resonant Converter for the Charging of Electric Vehicle (EV) Battery Author: Duddu Rajesh	Duddu Rajesh, D. Suresh NIT RAIPUR
480	Switched inductor-based High Gain single switch DC-DC converter Author: B. Mounika	B. Mounika and D. Suresh NIT Raipur
485	Advanced Energy Management Strategies for Hybrid Energy Storage Systems in Electric Vehicles: A Comprehensive Review Author: Sneha Tibude	Sneha Tibude, Dr. Gaurav Goyal, Alok Ranjan, Dr. Sanjay Bodkhe Shri Ramdeobaba College of Engineering and Management, Nagpur

SCHEDULE-IN-DETAIL (DAY-1)

- 190 Integrated Filtering Solutions for Maitree Vaishnav, Swapanajit Pattnaik
Current Ripple in Single Phase EV NIT Raipur
Chargers
Author: Maitree Vaishnav
- 419 Performance Analysis of Direct Srinivasan Panneerselvam and Sindhu M.
Refrigerant Cooling Systems for EV R
Battery Pack Amrita School of Engineering, Amrita
Author: Srinivasan Panneerselvam Vishwa Vidyapeetham
-

SCHEDULE-IN-DETAIL (DAY-1)

Technical Session-2 (Power Systems-1)

Session Chair: 1. Dr. Krishna Murari, IIT Bhilai
2. Dr. Surajit Sannigrahi, NIT Raipur

Venue: Siddhi Hall, DDU Auditorium

Timing: 02:00 PM – 03:30 PM

Paper ID	Paper Title and Corresponding Author	Authors
38	Optimal Allocation and Droop Setting of Droop-Controlled Distributed Generations for Effective Operation of Islanded Microgrid with Solar PV and Wind Generator Author: Sk Muhammad Sorif	Sk Mohammad Sorif, Sandeep Kumar Das, Supriya Sarkar NIT Durgapur
135	Adaptive Protection Scheme Using Optimal Coordination of Directional Overcurrent Relays in Grid-Connected Mode by Applying Micro-Genetic Algorithm Author: Sukrit Das	Sukrit Das, Shubhrata Gupta National Institute of Technology Raipur
147	Order Reduction for Autonomous LFC Microgrid System using Grey Wolf Optimization Author: Kritika Sharma	Kritika Sharma, , P. D. Dewangan National Institute of Technology Raipur
266	An approach to Short-Term Load Forecasting using AI based Model- Artificial Neural Network Author: Pro. Anamika Yadav	Rashmi Bareth, Anamika Yadav National Institute of Technology Raipur
290	A Brief Review on Protection Challenges, DCCB, Solutions and Advancement on DC Microgrids Author: Tomeshvar Kumar Dhivar	Mr. Tomeshvar Kumar Dhivar, Dr. Monalisa Biswal, Dr. Papia Ray National Institute of Technology Raipur
297	A Computationally Efficient Phasor Measurement using Interpolation DFT for Distribution network Author: Mukesh kumar	Mukesh kumar, M Senthil Kumar NIT Patna
437	Impact of Data Preprocessing on Wind Forecasting Using Machine Learning Techniques Author: Payal Jangilwar	Nidhi Haribhau Gaikwad, Payal Jangilwar, Arghya Mitra, Soumyabrata Das, Ritesh Kumar keshari VNIT Nagpur
441	Cyber Security in Smart Grid - A Review Author: Ishika Chouhan	Ishika Chouhan, Hashiba Aman, Fanidhar Dewangan, Monalisa Biswal National Institute of Technology, Raipur, Chhattisgarh
471	Linear Discriminant Analysis based Scheme for Fault Detection and Classification of Internal and External Faults in Hybrid Transmission Line	Rupesh Singh, Ebha Koley National Institute of Technology, Raipur, Chhattisgarh

SCHEDULE-IN-DETAIL (DAY-1)

Author: Rupesh Singh

568 A novel fault detection scheme based on a cumulative sum of superimposed positive sequence energy for microgrid protection
Author: Manohar Mishra Chinmayee Biswal, Manohar Mishra, Pravat kumar Rout, Binod kumar Sahu, Jai Govind Singh Siksha O Anusandhan (Deemed to be University), Bhubaneswar

560 Protecting Substation Differential Relays Against Cyber Attacks Using Convolutional Autoencoder
Author: Ravi Prakash Mahobia Ravi Prakash Mahobia, Dr. Baidyanath Bag, Dr. Swapnajit Pattnaik, Jagendra Kumar Narang NIT Raipur

562 Transition from AC to DC Residential Power Distribution: Deployment, Possibilities, and Challenges
Author: Govind Prasad Verma Govind Prasad Verma, Monalisa Biswal NIT Raipur

SCHEDULE-IN-DETAIL (DAY-1)

Technical Session-3 (Renewable Energy-1)

Session Chair: 1. Dr. Shailendra Kumar, IIT Bhilai
2. Prof. Sachin Jain, NIT Raipur

Venue: Samithi Hall, DDU Auditorium

Timing: 02:00 PM – 03:30 PM

Paper ID	Paper Title and Corresponding Author	Authors
14	A promising design to enhance the performance of HTL-free and Pb-free PSC Author: Adil Tanveer	Adil Tanveer, Kaushal Kumar Nigam, and Bandi Venkata Chandan NIT Raipur
21	Single Phase Transformerless Grid Connected PV Inverter Configurations: A Comparative Analysis Author: Vijaychandra Joddumahanthi	Vijaychandra Joddumahanthi, Niharika Sahu, Santi Behera Veer Surendra Sai University of Technology
47	A Robust Protection Scheme to Identify Ground Faults in DC Ring Microgrid Using Ensemble of LDA Based Algorithm Author: Shankarshan Prasad Tiwari	Shankarshan Prasad Tiwari National Institute of Technology Raipur; Ramdeobaba University
82	Techno-Economic Analysis of proposed 5kWp Floating Solar Plant with Battery Energy Storage System at Ambazari Lake, Nagpur, India. Author: Vrushali Burele	Vrushali Burele, P. S. Kulkarni Electrical Engineering Department, VNIT, Nagpur
236	Single-Phase Five-Level Common Ground Transformerless Switched Capacitor Inverters for PV Applications with Double Gain Author: Katroth Kalyan Singh	Katroth Kalyan Singh, Kirubakaran Annamalai Dept. of Electrical Engineering National Institute of Technology Warangal
288	Performance Analysis of 1MW Grid-Connected Solar Photo Voltaic Plant in India Author: Neelam Bora	Neelam Bora, Dr.Swapnajit Pattnaik, Dr.Baidyanath Bag, Dr. Hira Singh Sachdev National Institute of Technology Raipur
401	Line-to-Ground Fault Analysis in Series-Parallel Connected Solar Photovoltaic Panels Considering Partial Shading Effects Author: Ravikant Verma	Ravikant Verma, Shubhrata Gupta, Anamika Yadav National Institute of Technology Raipur
465	Neural Network based Identification of 3-Φ Battery Energy Storage Systems with Different Capacities Author: Anju Yadav	Anju Yadav, Nand Kishor, Richa Negi, Riccardo Lazzari Motilal Nehru National Institute of Technology Allahabad, Prayagraj
481	Two stage grid-connected T-type APF with improved power quality Author: D Suresh	D Suresh National Institute of Technology Raipur

SCHEDULE-IN-DETAIL (DAY-1)

460 Blockchain for Secure and Decentralized Power System Operation in Smart Grid Systems Brundavanam Seshasai, Ebha Koley, Subhajit Ghosh National Institute of Technology Raipur
Author: Brundavanam Seshasai

490 Optimal PMU allocation for system observability considering the effect of Zero Injection Buses Soma Bhattacharya, Ebha Koley National Institute of Technology Raipur
Author: Soma Bhattacharya

SCHEDULE-IN-DETAIL (DAY-1)

Technical Session-4 (Power Electronics-2)

Session Chair: 1. Dr. Ramsha Karampuri, VNIT Nagpur
2. Dr. Rajan Kumar, NIT Raipur

Session Link:

<https://us06web.zoom.us/j/81229950536?pwd=JLKEBGdrA2udKnt09EtwjWqpba1FIM.1>

Timing: 02:00 PM – 03:30 PM

Paper ID	Paper Title and Corresponding Author	Authors
58	A Comprehensive Examination of Bipolar Coil with and without Ferrite Couplers Author: Ankur Yadav	Ankur Yadav and Tushar Kanti Bera NIT Durgapur
63	Predictive PFM-based Digital Control Algorithm for LLC DC-DC Converter for Automotive Applications Author: Rakesh Kumar	Mridul Mishra, Rakesh Kumar, Kranthi Kumar Nidubrolu Varroc Engineering Limited
66	Machine Learning-Based DC to AC Dual Quasi Z-source Converter for Distribution Generation Applications Author: Priya S	Rajeah Uppara, Priya S Siddaganga Institute of technology
73	Optimizing Plug-in Electric Vehicle Charging with Dyna-Q Reinforcement Learning Author: Arvind S K	Arvind S Rabi Rayan Rahul S Asha Rani G S K, S, Satheesh,
		Amrita school of Intelligence, Amrita Vishwa Vidyapeetham, Coimbatore
80	Comparative Evaluation of Conventional and Modified Single-Phase Vienna Rectifiers for Power Supply Applications Author: Lekshmi Nirappuravilayil Harilal	Lekshmi Harilal Nirappuravilayil, Harish Sudhakaran Nair, Nasirul Haque National Institute of Technology, Calicut
97	Enhanced Normalized Proportionate LMS Control for Solar PV-based EV Charging Station Author: Rajeswari Panigrahi	Rajeswari Panigrahi, Kaibalya Prasad Panda Pandit Deendayal Energy University, Gandhinagar
143	Mutual Inductance Estimation for Series Parallel Compensation Topology in Drone's Wireless Power Transfer System Author: Vinotha J	Vinotha J, Vijjapu Sai Mukund Amogh, Shreelakshmi MP and Rakesh R Warier Electrical Engineering Department, National Institute of Technology Calicut
152	Application of Spread-Spectrum Modulation in EV Battery Charging Systems for the Enhancement of Power Quality	Rajalakshmi Alavanthan Rajalakshmi Engineering College

SCHEDULE-IN-DETAIL (DAY-1)

	Author: Rajalakshmi Alavanthan	
300	Enhanced multi-carrier level shift pulse width modulation using a variable amplitude carrier scheme for multilevel Inverters Author: Krishna Kumari Karri	Krishna Kumari Karri, Varsha Singh, Swapnajit Pattnaik NIT Raipur
363	Comparative Analysis of Various SoC Estimation Techniques for EV Batteries Author: Dr. V. Sandeep	Rupesh Rayalu Onteru, Raseel Samah C, Velumuri Jayanth, V Sandeep Department of Electrical Engineering, NIT Andhra Pradesh
155	A SPWM Strategy Based Dual-Inverter Control for Electric Vehicle with Open End Winding Induction Motor Author: Duriya Murali	Duriya Murali, Hritik Kumar, Ranajan Kumar Behera IIT Patna

SCHEDULE-IN-DETAIL (DAY-1)

Technical Session-5 (Renewable Energy-2)

Session Chair: 1. Dr. Ch. Ramulu, NIT Warangal
2. Dr. Ebha Koley, NIT Raipur

Session Link:

<https://us06web.zoom.us/j/85070607842?pwd=ocbLz5P266jQ1KeAJHUE74SfGMxdgz.1>

Timing: 02:00 PM – 03:30 PM

Paper ID	Paper Title and Corresponding Author	Authors
74	A Study of Power Electronic Converters for Wind Energy Conversion System Author: Supriya Choubeyp	Supriya Choubeyp IIT Roorkee
77	A Finite Control Set based Model Predictive Controller for Load Power Sharing Applications in Inverter Fed Microgrids Author: V. Naresh Kumar	Devarapalli Vimala, B.Lokeshgupta, V. Naresh Kumar SRM University, AP
103	Voltage Stability Enhancement of Self-Excited Induction Generator based Wind Energy System using Closed Loop Control of STATCOM Author: Gunde Purushotham	Venu Yarlagadda, V Ramesh Babu, Purushotham Gunde and Shashivardhan Bagari VNR Vignana Jyothi Institute of Engineering & Technology
118	Agriculture Waste and Bioenergy: A Content Analysis Review and Visualization Author: Swapandeep Kaur	Swapandeep Kaur, Raman Kumar, Kanwardeep Singh Guru Nanak Dev Engineering College, Ludhiana, 141006 India (I. K. G. Punjab Technical University, Kapurthala-Jalandhar, Punjab, India)
138	Protection Challenges in Photovoltaic Systems: A Review of Recent Innovations Author: Dr. Kasimala Venkatanagaraju	Kasimala Venkatanagaraju, Karimulla Shaik, Abdul Kalam Shaik, Hari Madhava Reddy Y, Anil Kumar Chinta, Kumarraja Andanapalli Vignan's Institute of Information Technology (A), Visakhapatnam.
262	Comparative analysis of ANN, Fuzzy MPPT in PV system with Traditional Techniques Author: L Bhavani Sanker Prasad	Srinivasa Rao Jalluri , L Bhavani Sanker Prasad, S Bharath Reddy, Bandalinti Vignesh VNR VJET
361	Exploring the Influence of Kesterites as Hole Transport Layers in Cs ₂ TiBr ₆ -Based Eco-Friendly Solar Cells Author: Raja Agarwala	Raja Agarwala, Safra Binte Sabbir, Mehedi Hasan Tanim, Prince Kumar Department of Electrical and Electronic Engineering, Hajee Mohammad Danesh Science and Technology University

SCHEDULE-IN-DETAIL (DAY-1)

375	Enhancing the Efficiency of Lead-Less Cs_2TiBr_6 Solar Cells through Dual Hole Transport Layer Integration Author: Raja Agarwala	Raja Agarwala, Safra Binte Sabbir, Mehedi Hasan Tanim, Prince Kumar Department of Electrical and Electronic Engineering, Hajee Mohammad Danesh Science and Technology University
400	A Novel Cascaded FLC-FPID Based Maximum Power Point Tracking Technique For PV Systems Author: Boosa Venkatanarayana	Boosa Venkatanarayana, Mercy Rosalina K VIGNAN'S FOUNDATION FOR SCIENCE, TECHNOLOGY AND RESEARCH
566	Integrated decision support framework architecture for rolling stock maintenance management - sustainable software perspective Author: Izabela Rudek	Izabela Rudek Wrocław University of Economics and Business
125	Variable Step Size ZALMS with Optimized PI for Power Quality in Wind Integrated PMSG System Author: Sabha Raj Arya	Chirisavada Jagadeesh, Sabha Raj Arya, Ashutosh k. Giri and Papia Ray Dept. of Electrical Engg, Sardar Vallabhbhai National Institute of Technology, Surat, India

SCHEDULE-IN-DETAIL (DAY-1)

Technical Session-6 (Power Systems-2)

Session Chair: 1. Prof. R. C. Bansal, University of Sharjah, UAE
2. Prof. Anamika Yadav, NIT Raipur

Session Link:

<https://us06web.zoom.us/j/86924020738?pwd=UMEai59Sby6JszbLF06lcL0oVExbRR.1>

Timing: 02:00 PM – 03:30 PM

Paper ID	Paper Title and Corresponding Author	Authors
64	Strategic Deployment of Phasor Measurement Units in Power Networks Using Binary Brown-Bear Optimization Algorithm Author: Anand K	Anand K, Tapan prakash Vellore institute of technology, vellore
65	A Bidirectional-LSTM-Based Fractional Power System Stabilizer for Effective Power Oscillation Damping Author: Dr. Devesh Umesh Sarkar	Devesh Umesh Sarkar, Dr. Tapan Prakash, Shradha Umathe, Rutuja Hiware, Vishant Naik, Saurabh Singh, Dr. Chethan H R, Dr. Mahesh Kumar K M
70	Logic OR Based Forward Backward Load Flow Method for DG Placement and Sizing with Modified Fuzzy Max-Min Principle for Different Load Types Author: Anagha Rajendran K P	VIT University, Vellore Anagha Rajendran K P, Dr. Soumyabrata Barik, Dr. Sudarshan Swain BITS Pilani, K K Birla Goa Campus
106	Coordination Control of PSS and SVC for Dynamic Stability Improvement of Steam Power System Author: Shashivardhan Bagari	Venu Yarlagadda, V Ramesh Babu, Purushotham Gunde and Shashivardhan Bagari VNR Vignana Jyothi Institute of Engineering & Technology
241	Energy Management in Multi Generator Isolated Microgrid System Using Tyrannosaurus Optimization Algorithm Author: Toshi Mandloi	Toshi Mandloi, Dr. Shailendra Kumar Sharma and Prof. S. C. Choube RGPV, Bhopal
374	EV Charging Station Integrated Microgrid Planning by Using Fuzzy Adaptive DE Algorithm Author: Yasmeena	Yasmeena, Shubh Lakshmi, Tarkeshwar Mahto, Somesh Vinayak Tewari, Veerakotlu Lella SRM University AP
404	Navigating the Smart Grid Landscape: A Comprehensive Review of Recent Advances Author: Sree Sai V G	Sree Sai V G, Dr. Divya R, Dr. Manjula G Nair Amrita School of Business, Amrita Vishwa Vidyapeetham, Amritapuri
470	A Neural Network Based Framework for Load and Loss Estimation Author: Tamalika Chowdhury	Apoorva Shegunashi, Tamalika Chowdhury, Debraj Sarkar, Arpita Bhaumik KLE Technological University Dr. M S. Sheshgiri Campus, Belagavi

SCHEDULE-IN-DETAIL (DAY-1)

499	"Optoelectronic study of Rb ₂ NalnI ₆ for solar cell efficiency" Author: Amit Soni	Nidhi Choudhary, Amit Soni, Jagrati Sahariya, Kishor Kumar Manipal University Jaipur
559	Efficiency Enhancement of Perovskite Photovoltaic Cells by Incorporation of NiO ₂ HTL Author: Raushan Kumar	Raushan Kumar, Alok Priyadarshi, Shivam Kumar, Abhishek Kumar Department of Electronics and Communication Engineering, School of Engineering, SR University Warangal, Telangana-506371, India

SCHEDULE-IN-DETAIL (DAY-2)

DAY-2: JANUARY 21ST 2025 (* All timings are in IST)

TIME	PROGRAM
10:00 AM – 10:45 AM	Keynote Session-5 Prof. Sze Sing Lee Newcastle University, Singapore Topic: Boost Inverters for Single-Stage DC–AC Power Conversion
10:45 AM – 11:00 AM	BREAK
11:00 AM – 01:00 PM	Technical Session-7 (Offline)
11:00 AM – 01:00 PM	Technical Session-8 (Offline)
11:00 AM – 01:00 PM	Technical Session-9 (Online)
11:00 AM – 01:00 PM	Technical Session-10 (Online)
11:00 AM – 01:00 PM	Technical Session-11 (Online)
01:00 PM – 02:30 PM	LUNCH
02:30 PM - 04:30 PM	Technical Session-12 (Offline)
02:30 PM - 04:30 PM	Technical Session-13 (Offline)
02:30 PM - 04:30 PM	Technical Session-14 (Offline)
02:30 PM - 04:30 PM	Technical Session-15 (Online)
02:30 PM - 04:30 PM	Technical Session-16 (Online)
02:30 PM - 04:30 PM	Technical Session-17 (Online)
04:30 PM – 04:45 PM	BREAK
04:45 PM – 05:30 PM	Keynote Session-6 Prof. Kleber Melo E Silva University of Brasilia, Brazil Topic: Challenges to Operate Interconnected Power Grids with Large Penetration of IBRs: Lessons Learned from the Brazilian Experience with a Major Blackout in 2023.

Keynote Session-5:

Venue: Vishweshwaraya Hall (E-Hall) - Physical

Meeting Link (Virtual):

<https://us06web.zoom.us/j/83986175933?pwd=00fgFaCiyut3frK3pNanOZwICpaIp7.1>

Technical Session-9:

Meeting Link:

<https://us06web.zoom.us/j/82985770914?pwd=cqddCamQuBSwaAcNUfe49UKUfSDw3t.1>

Technical Session-10:

Meeting Link:

<https://us06web.zoom.us/j/83290570659?pwd=cujRoZAwafxgjiOTVC8fBpH4kaMiIq.1>

Technical Session-11:

Meeting Link:

<https://us06web.zoom.us/j/89813410488?pwd=TTKd5RoYajW7t93Y08vvcFuhaxA0az.1>

Technical Session-15:

Meeting Link:

<https://us06web.zoom.us/j/89723578954?pwd=bxKcRSCbiE6l9uN84tXNadrf3gCe2.1>

Technical Session-16:

Meeting Link:

<https://us06web.zoom.us/j/89969195643?pwd=mujCG1PFhjdB7nv8bnVpnHNbqbmHAW.1>

Technical Session-17:

Meeting Link:

<https://us06web.zoom.us/j/81428028491?pwd=7ftyPKno2dklesaPHJ339OjavPhjb.1>

Keynote Session-6:

Venue: Vishweshwaraya Hall (E-Hall) - Physical

Meeting Link (Virtual):

<https://us06web.zoom.us/j/83498680412?pwd=4Ss7RtHjkMjboAfIRzGEYEWXR11ye5.1>

TECHNICAL SESSION DETAILS**Technical Session-7 (Artificial Intelligence-1)**

Session Chair: 1. Prof. Manohar Mishra, SOA Bhubaneswar
2. Dr. Monalisa Biswal, NIT Raipur

Room No: Vishweshwaraya Hall (E-Hall)

Timing: 11:00 AM – 01:00 PM

Paper ID	Paper Title and Corresponding Author	Authors
23	Insulator Fault Detection Using Deep Neural Network Based Image Features Author: Abhinav Kumar Nirala	Abhinav Kumar Nirala, Anamika Yadav and Aleena Swetapadma Department Of Electrical Engineering, NIT Raipur
40	Enhancing Cardiac Diagnosis: Comparative Analysis of Machine Learning Techniques for ECG Signal Classification Author: Satvik Yadav, Anoushka Koul, Srujan	Satvik Anoushka Avasarala Nirupam Laxmi Srujan Srivastava IIIT Naya Raipur
79	Fault Localization Technique in Smart Active Distribution System with Data Uncertainties Author: Archana Tamrakar	Arya Bharti, Archana Tamrakar, Saumendra Sarangi MNNIT Allahabad, Prayagraj (U.P.)
126	Prediction of Remaining Useful Life in MEMS Devices Using a Stacking Model Approach Author: Satish Reddi	Sanjay Mummana and Satish Reddi National Institute of Technology Karnataka, Surathkal
154	TCP SYN Flood Attack Detection Using Logistic Regression and Multi-Agent Reinforcement Learning Author: Sanjay Mummana	Sanjay Mummana and Arun Raj Kumar P National Institute of Technology Karnataka, Surathkal
259	Reinforcement Learning Based Recommendation System: An In-Depth Review of Models and their Limitations Author: Dhaval Mehta	Dhaval Mehta, Nipun Dahiya, Soni Sweta, Ishaan Atre Mukesh Patel School of Technology Management & Engineering
301	Magnetic Levitation Control Using Deep Reinforcement Learning and Prioritized Experience Replay with Action Noise Variations Author: Gopala Pare	Gopala Pare, Manas Shil, G.N. Pillai, Arnab Dey IIT Roorkee
358	Deepfake Detection in Facial Images Using Convolutional Neural Networks Author: Atharva Jagam	Atharva Jagam, Nomesh Patel, Bharathi Chidirala, Bibhudendra Acharya NIT Raipur

SCHEDULE-IN-DETAIL (DAY-2)

376	Accident Liability Assessment Using Traditional Machine Learning Classification Algorithms Author: Bidhan Chandrow Barmon	Aaron D'Souza, Ashutosh Mishra, Bidhan Chandrow Barmon National Institute of Technology, Warangal
420	Precise Fault Distance Prediction in Distributed Generator-Integrated Transmission Lines Using CNN-LSTM Ensemble Networks Author: Pavan Kumar Bais	Pavan Kumar Bais, Narendra D. Londhe National Institute of Technology Raipur

SCHEDULE-IN-DETAIL (DAY-2)

Technical Session-8 (Special Session-1)

Session Chair: 1. Dr. R. N. Patel, CSVTU Bhilai

2. Dr. Swapnajit Pattnaik, NIT Raipur

Venue: Vikram Sarabhai Hall (D2)

Timing: 11:00 AM – 01:00 PM

Paper ID	Paper Title and Corresponding Author	Authors
87	Design and Comparative Analysis of SRM Drive Based on Two Novel Power Converter Topologies Author: Sandeep Dehuri	Sandeep Dehuri, Makarand M. Lokhande Visvesvaraya National Institute of Technology, Nagpur
139	Innovative Eleven-Level Active Neutral Point Clamped (ANPC) Multi-Level Inverter for Enhanced High-Voltage Gain Author: Yogesh Kumar Lahre	Yogesh Kumar Lahre and Varsha Singh National Institute of Technology Raipur
142	Optimizing Electrical Infrastructure The Benefits of Ultrasound Technology in Maintenance Practices Author: Alok Kumar	Alok Kumar
284	PV and Battery Driven Electric Vehicle with SEPIC/ZETA Bidirectional Converter Author: Lanka Ram Sai	Lanka Ram Sai, Venkata Ramana Lakshmi Kumari Sali , Revanth Kumar Desavathu, Sravani Podiyam, Komal Sai Jonnalagadda V. R. Siddhartha Engineering College
370	Solar-Powered VSI Speed Control of PMSM with Performance Analysis &Controller Optimization Author: G Jawahar Sagar	G. Jawahar Sagar,Tarkeshwar Mahto,Somesh Vinayak Tewari,Jyoshila vinathi Adari,Mounika Nagabushananam SRM AP
447	Modeling and Simulation of Three-Phase Grid Integrated Photovoltaic System Author: Shweta Singh	Shweta Singh, Dr. Shubhrata Gupta, Dr. Anamika Yadav National Institute of Technology, Raipur
541	A nine level switched capacitor multilevel inverter with soft switching techniques Author: Pankaj Kumar Yadav	Pankaj Kumar Yadav, Haripriya Vemuganti, Monalisa Biswal National Institute of Technology Raipur
57	THD reduction with 5-level inverter using SPWM Technique for Solar Array connected to Load Author: Vijaychandra Joddumhanthi	Niharika Sahu, Vijaychandra Joddumhanthi, Santi Behera EEE Department, VSSUT, Burla
542	Detection of Data Integrity Attack During Load Forecasting in Renewable Penetrated Smart Grid Author: Fanidhar Dewangan	Fanidhar Dewangan, Monalisa Biswal National Institute of Technology Raipur

SCHEDULE-IN-DETAIL (DAY-2)

Technical Session-9 (Instrumentation and Control-1)

Session Chair: 1. Dr. R. Periyasamy, NIT Tiruchirappalli
2. Dr. Ramya Selvaraj, NIT Raipur

Session Link:

<https://us06web.zoom.us/j/82985770914?pwd=cqddCamQuBSwaAcNUfe49U>
[KUfSDw3t.1](#)

Timing: 11:00 AM – 01:00 PM

Paper ID	Paper Title and Corresponding Author	Authors
72	Analyzing the Performance of 3D PCB Rogowski coil in Pulsed Current Measurement Using Finite Element Method Author: Priti Bawankule and Kandasamy Chandrasekaran	Priti Bawankule and Kandasamy Chandrasekaran National Institute of Technology, Raipur
129	IoT-Enabled Drowsiness Detection Systems for Enhanced Road Safety Across Diverse Vehicle Types Author: Bhushan Naik	Bhushan Naik, Tanish Khot, Bliss Machado, Ronak Raut Fr. Conceicao Rodrigues College of Engineering, Mumbai
455	Analysis and Design of A Third-Order Sallen-Key and Multiple Feedback Low Pass Filter for EEG Signal Acquisition System Author: SUNIL KUMAR CHOUDHARY	SUNIL KUMAR CHOUDHARY; TUSHAR KANTI BERA NIT DURGAPUR
526	Gesture-Controlled Robotic Arm for Real-Time Surgical Tool Assistance Author: Abdul Rahman Khan	Abdul Rahman Khan Aliya Amzaar faisal Aligarh Muslim University
545	Automated Aeroponics System: IoT-Based Monitoring and Control for Optimized Plant Growth Author: Sanjay Kumar Gollavilli	1. Rajesh Tanna, 2. Talada Santhosh , 3. Sanjay Kumar Gollavilli, 4. Lagudu Suri Demudu, 5. Ratala Koteswara Naik, 6.Cheepurupalli Raghuram Vignan's Institute of Information Technology, Duvvada
547	Comparative Analysis on Prediction Model of Hate Speech Detection Based on Social Media Data Using Artificial Intelligence Author: Pravin D. Kaware	Pravin D. Kaware and Anjali B. Raut Department of Computer Science & Engineering H.V.P.M's College of Engineering & Technology Amravati
553	Providing Security Solutions to IoT Devices Using Micro Version of Security Protocols over Wireless Networks Author: SATISHA C	SATISHA C, Dr RAGHAV MEHRA, Dr. M.Giri Research Scholar, Department of Computer Science, Bhagwant University, Ajmer, Rajasthan, India
208	Development and Performance Analysis of a tunable LED luminaire	Prasanjit Ghosh Pranta, Shaheen wasif, Sangita Sahana

SCHEDULE-IN-DETAIL (DAY-2)

Author: Prasanjit Ghosh Pranta

Electrical Engineering Dept, Jadavpur
University

SCHEDULE-IN-DETAIL (DAY-2)

Technical Session-10 (Signals and Image Processing-1)

Session Chair: 1. Dr. Sachin Agarwal, NIT Delhi
2. Dr. Deboraj Muchahary, NIT Raipur

Session Link:

<https://us06web.zoom.us/j/83290570659?pwd=cujRoZAwafxgjiOTVC8fBpH4kaMilq.1>

Timing: 11:00 AM – 01:00 PM

Paper ID	Paper Title and Corresponding Author	Authors
101	Theta- λ Optimization for Network Performance in Ricean Fading and Multi-User Interference Scenarios Author: Kunj Bihari Sharma	Deepak Upadhyay, Kunj Bihari Sharma, Nookala venu Graphic Era Deemed to be University
112	A Prototype of an Intelligent Door Lock Device with Hybrid Security Integration Author: Durga K Prasad Gudavalli	Durga K Prasad Gudavalli ,Kusuma Gottapu ,V V S Narayana Yirrinki Birla Institute of Technology and Science Pilani, Hyderabad
133	Optimized Adaptive Technique For Denoising ECG Author: Chandan Nayak	Chandan Nayak, Bhanu Vasanth Butti VIT-AP University, Amaravati, Andhra Pradesh
226	A Novel Approach to Classification of EEG subjects using Hybrid Machine Learning algorithm Author: Mohebbanaaz	Mohebbanaaz, A Rajendra Babu, S. Bhargav, S. Lakshmikanth Reddy, B. Muralidhar Maick Ravindra College of Engineering for Women,
237	Deep Learning-Based Spectrum Sharing for Dynamic Resource Allocation in 6G Cognitive Radio Networks Author: Kamlesh Kukreti	Deepak Upadhyay, Kamlesh Kukreti, Nookala venu Graphic Era Deemed to be University
328	Transforming Ophthalmology: A CNN-Based Mechanism for Diabetic Retinopathy Screening Author: N. Sai Varshini	Dasari Naga Vinod, N. Sai Varshini, M. Shukriya and G. Sai Manusha Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology
373	Development of Ratio Water Index for Surface Water Mapping using Landsat 8 OLI Imagery Author: R. Nagaraj	R. Nagaraj and Lakshmi Sutha Kumar Sri Sairam Engineering College
464	Super-resolution of Brain MRI Images Author: Madhuri Padwekar	Madhuri Padwekar NIT Rourkela
569	Use of L band SAR data together with GPR readings for validation of buried channels in the Jaisalmer region of Rajasthan, India Author: Pralay Bhaumik	Pralay Bhaumik National Institute of Technology Raipur

SCHEDULE-IN-DETAIL (DAY-2)

273	Tunable Q-factor Wavelet Transform Based Features for Classification of Emotions Using EEG Signals <i>Author: Dr. Kaushik Das</i>	Kaushik Das and Moumita Saha National Institute of Technology Jamshedpur
367	Backstepping-enabled Fixed-time Terminal Sliding Mode Control of Robot Manipulators <i>Author: Km Seema Chaudhary</i>	Km Seema Chaudhary, Dipayan Guha, Roshni Maiti MNNIT Allahabad, Prayagraj (U.P)

SCHEDULE-IN-DETAIL (DAY-2)

Technical Session-11 (Artificial Intelligence-2)

Session Chair: 1. Mr. Nikhil Jain. Sr. Global Manager Samsung USA
2. Dr.B. N. Bag, NIT Raipur

Session Link:

<https://us06web.zoom.us/j/89813410488?pwd=TTKd5RoYajW7t93Y08vvcFuhaXa0az.1>

Timing: 11:00 AM – 01:00 PM

Paper ID	Paper Title and Corresponding Author	Authors
59	Bi-Lstm based electrical load prediction model for a microgrid community area of Panama city Author: Ravarma kamireddy	Ravarma Kamireddy, Lokeshgupta Bhamidi, Veerakotlu Lella, Yasmeena, D S R S L Avanthika. SRM University
68	Random Forest based Machine Learning Algorithm for Estimating State of Charge in Lithium-ion Batteries Author: Ramanjaneya Reddy Udomula	D S R S L Avanthika, Bhamidi Lokeshgupta, Ramanjaneya Reddy Udomula
89	AI-Based Fault Detection, Classification, and Localization in Power Distribution Systems Author: Rupesh Kumar Sah	Rupesh Kumar Sah, Rujan Maharjan, Sohil Maharjan, Nirjal Shrestha, Bhaskar Kc, Bronish Singh Maharjan, Pritam Kumar, Prashant Lamsal, Surender Reddy Salkuti. Tribhuvan University
137	Dual Estimation of State of Charge and State of Health of a Battery: Leveraging Machine Learning and Deep Neural Networks Author: D S R S L Avanthika	D S R S L Avanthika, Ramanjaneya Reddy Udomula, Bhamidi Lokeshgupta, Mahesh Kumar Morampudi SRM University AP
160	DenseNet201-Powered Dental Radiograph Classification: A Deep Learning Approach for Multi-class Dental Pathology Detection Author: Pratham Kaushik	Pratham Kaushik, Pooja Sharma Centre for Research Impact & Outcome, Chitkara University Institute of Engineering and Technology Chitkara University, Rajpura-140401, Punjab, India
161	Bone Age Classification Using Deep Learning: A ResNet50 Model Approach Author: Pratham Kaushik	Pratham Kaushik, Saniya Khurana Centre for Research Impact & Outcome, Chitkara University Institute of Engineering and Technology Chitkara University, Rajpura-140401, Punjab, India
162	Breast Cancer Detection using MobileNetV3: A Deep Learning Approach for Ultrasound Image Classification Author: Pratham Kaushik	Pratham Kaushik, Pooja Sharma Centre for Research Impact & Outcome, Chitkara University Institute of Engineering and Technology Chitkara University, Rajpura-140401, Punjab, India

SCHEDULE-IN-DETAIL (DAY-2)

163	Enhanced EfficientNetB3 Framework for Accurate Multi-Class Eye Disease Classification Using Deep Learning Author: Pratham Kaushik	Pratham Kaushik, Pooja Sharma Centre for Research Impact & Outcome, Chitkara University Institute of Engineering and Technology Chitkara University, Rajpura-140401, Punjab, India
169	Automated Retinal Disease Detection: VGG16-Based Deep Learning Approach for OCT Image Classification Author: Pratham Kaushik	Pratham Kaushik, Sunila Choudhary Centre for Research Impact & Outcome, Chitkara University Institute of Engineering and Technology Chitkara University, Rajpura-140401, Punjab, India
172	Advancing Waste Classification for Sustainable Recycling: A Deep Learning Approach Using VGG-16 Author: Pratham Kaushik	Pratham Kaushik, Savinder Kaur Centre for Research Impact & Outcome, Chitkara University Institute of Engineering and Technology Chitkara University, Rajpura-140401, Punjab, India
37	Improving Faster R-CNN for Vehicle Detection under Varying Conditions with Domain Adaptation Technique Author: Hemant Kumar	Hemant Kumar, Pushpa Mamoria, Deepak Kumar Dewangan Chhatrapati Shahu Ji Maharaj University Kanpur, India

SCHEDULE-IN-DETAIL (DAY-2)

Technical Session-12 (Energy Conservation-1)

Session Chair: 1. Dr Shashank Kurm, IIT Bhilai
2. Dr. Chilaka Ranga, NIT Raipur

Venue: Vishweshwaraya Hall (E-Hall)

Timing: 02:30 PM – 04:30 PM

Paper ID	Paper Title and Corresponding Author	Authors
24	Seasonal Autoregressive Integrated Moving Average Model for Forecasting Electrical Load of Chhattisgarh State. Author: Aryan Soni	Dr. (Mrs.) Anamika Yadav , Aryan Soni NIT Raipur
251	Real-Time IoT Driven Energy Monitoring System for Eight Meter Gear Hobbing Machine Author: Ram Sai Lanka	Ram Sai Lanka, Rama Devi Alapati, RamaKoteswara Rao Baratam, Sreedevi Kondaveeti, Jagadessh Kalisetti V. R. Siddhartha Engineering College
563	Common Mode Voltage Mitigation using H12 Topology for Two Level Five Phase Inverter Author: Nazeer Ahmad	Nazeer Ahmad, Himani, Venu Sonti, Sachin Jain NIT Raipur
565	Speed Control of Single Stage Solar PV Fed BLDC Motor-Driven Water Pumping Author: Rahul Kumar Verma	Rahul Kumar Verma and Rajan Kumar Department of Electrical Engineering
567	A Simple High frequency Model of PMSM Drive with Device Junction Capacitance Effects Author: Ayushi Sharma	Ayushi Sharma, Venu Sonti, Basam Venkata Rao, Sachin Jain National Institute of Technology Raipur
278	Modeling, Analysis, and Prototyping of a Cascaded H-Bridge Multilevel Inverter System Using TI F28379D Microcontroller for High-Voltage Applications Author: Kumar Saurabh	Kumar Saurabh, Patel Krunalkumar Lalabhai, Ashok Mankani, Aritra Chakraborty, Aditya Naugraiya, Medii Tharun, Amal S, Paul D Christain, Ujjwal Kumar Baruah Institute for Plasma Research
36	Introducing a New Leg-Integrated Switched Capacitor Inverter Structure for Three-Phase Induction Motor Operations Author: Tarkeshwar Mahto	G. Jawahar Sagar, Satish Koda, Harshitha Puli, K K N V A Manikanta, Pratikanta Mishra and Tarkeshwar Mahto SRM University AP, Amravati, Andhra Pradesh
564	Integrated Design of MPPT and DC-DC Buck Converter for Efficient Battery Charging Author: Kamal Kant Patel	Kamal Kant Patel, Lalit Kumar Sahu, Ajay Kumar Sahu NIT Raipur

SCHEDULE-IN-DETAIL (DAY-2)

Technical Session-13 (Signals and Image Processing-2)

Session Chair: 1. Dr. Kavita Thakur, Pt.Ravishankar Shukla University, Raipur
2. Dr. Sukeshni Tirkey, NIT Raipur

Venue: Vikram Sarabhai Hall (D2)

Timing: 02:30 PM – 04:30 PM

Paper ID	Paper Title and Corresponding Author	Authors
61	A Multi-Agent Symbiotic Organisms Search based Modified Fractional-Order PID Controller for Magnetic Levitation Plant Author: Harideo Ram	Harideo Ram, Deep Shekhar Acharya, Shradha Kishore BIRLA INSTITUTE OF TECHNOLOGY, MEASRA, RANCHI
523	Smart Home Automation with MQTT Using ESP32 and Node-RED Author: Pratik Chouragadey	Pratik Chouragadey , Bhavna Rathore, Gaurav Khare Madhav Institute of Technology & Science, Gwalior
186	Electrical Impedance Tomography (EIT) for Manufacturing Technology: The Possibilities and Challenges Author: Tushar Kanti Bera	Tushar Kanti Bera NIT Durgapur
573	Experimental Investigation for GPR Detection of Buried Objects with Varied Sizes and Orientation Author: Sujeeet Roy	Sujeet Roy, Himanshu Govil, Sandip Mukherjee, Prabhat Diwan National Institute of Technology, Raipur
140	Development of a power controller for simulating decay heat in degraded nuclear core materials Author: Muthukumar G	Muthukumar G, Avinash Kumar Acharya, Prabhat Kumar Shukla, E Hemanth Rao, Sanjay Kumar Das, Sreedhar BK Indira Gandhi Centre for Atomic Research

SCHEDULE-IN-DETAIL (DAY-2)

Technical Session-14 (Cyber Security-1)

Session Chair: 1. Dr. Satyanarayana Vollala, IIIT Naya Raipur
2. Dr. Gyanendra Kumar Verma, NIT Raipur

Venue: IEM Lab (Mechanical Engineering, Ground Floor)

Timing: 02:30 PM – 04:30 PM

Paper ID	Paper Title and Corresponding Author	Authors
22	Cyber Attack Detection using Stacking Ensemble Model for Internet of Vehicle Author: Monika Sahu	Monika Sahu, Govind.P. Gupta NIT Raipur
357	A Frequency Optimized Architectural Approach to Lightweight Authenticated Encryption Algorithm ACE-128 Author: Medaboyina Srikanth	Medaboyina Srikanth, Bijayananda Patnaik, Bibhudendra Acharya National Institute of Technology Raipur
427	High frequency Area efficient architecture of lightweight authenticated encryption algorithm GIFT-COFB for resource-constrained IOT devices Author: Pankaj Ku Choubey	Pankaj Ku Choubey, Bijayananda Patnaik, Bibhudendra Acharya National Institute of Technology, Raipur
456	Enhanced Quantum Key Distribution Protocol for Secure Smart Grid Communication using Quantum Gates Author: Anagani Navya Sree	Anagani Navya Sree, Jaykumar Lachure, Rajesh Doriya, Chandrasekar Jatot National Institute Of Technology, Raipur
476	Advanced Temperature Forecasting in Major Indian Cities: A Comparative Study of SARIMA, Prophet, and XGBoost Models Author: Aaron D'Souza	Ashutosh Mishra, Aaron D'Souza National Institute of Technology, Warangal

SCHEDULE-IN-DETAIL (DAY-2)

Technical Session-15 (Artificial Intelligence-3)

Session Chair: 1. Dr. Papia Ray, Veer Surendra Sai University of Technology, Burla
2. Dr. K Chandrasekaran, NIT Raipur

Session Link:

<https://us06web.zoom.us/j/89723578954?pwd=bxKcRSCbiE6l9uN84tXNadrpf3gCe2.1>

Timing: 02:30 PM – 04:30 PM

Paper ID	Paper Title and Corresponding Author	Authors
178	Breast Cancer Prediction Using Artificial Neural Networks: A Comprehensive Evaluation of Diagnostic Accuracy and Performance Author: Eshika Jain	Eshika Jain, Aseem Aneja Centre for Research Impact & Outcome, Chitkara University Institute of Engineering and Technology Chitkara University, Rajpura-140401, Punjab, India
179	Diabetic Retinopathy Detection Using InceptionV3: A Deep Learning Approach for Automated Diagnosis Author: Eshika Jain	Eshika Jain , Abhinav Rathour Centre for Research Impact & Outcome, Chitkara University Institute of Engineering and TechnologyChitkara University, Rajpura-140401, Punjab, India
181	Automated Cardiomegaly Detection from Chest X-rays Using InceptionV3: A Deep Learning Approach Author: Eshika Jain	Eshika Jain, Rishabh Bhardwaj Centre for Research Impact & Outcome, Chitkara University Institute of Engineering and Technology Chitkara University, Rajpura-140401, Punjab, India
254	State of Health Estimation of Lithium-ion Batteries Using Deep Learning Techniques Author: Rishi Raajha A, Naveen Sankar RS	Harshvardhan V, Rishi Raajha A, Naveen Sankar R S, Tanguturi Vinay Krishna Chetty, Malathi M, Rahul Satheesh Amrita Vishwa Vidyapeetham
295	Temporal Fusion Transformer -LSTM-based Improved State of Charge Estimation of Li-ion Battery for Real Drive Cycle Author: Sriranganayaki Sundararajan	Anbumalar Pandian, Sriranganayaki Sundararajan, Shruthi S, Dhanush V, Abishek P, Sutha Subbian, Pappa Natarajan Meenakshi Sundararajan Engineering College
306	Detection of Islanding in AC Microgrid Using Random Forest And Scalogram Image Based Local Binary Pattern Author: Kumares Pal	Kumares Pal, Kumari Namrata, Ashok Kumar Akella, Veerpratap Meena and Sanjeevikumar Padmanaban Department of Electrical Engineering, National Institute of Technology, Jamshedpur, Jharkhand

359	Detecting Butterfly species and finding the optimal classifier of the world's rarest butterfly using AI image processing Author: Tushar Kanti Bera	Sagnik Mazumdar, Soham Banerjee, Sarthak Mandal and Tushar Kanti Bera NIT Durgapur
362	Comparative Analysis of Machine Learning Algorithms for Load Forecasting Author: Dr. Sandeep V	Rupesh Rayalu Onteru, Sandeep Vuddanti Department of Electrical Engineering, NIT Andhra Pradesh
534	AI-Powered CNC Digital Twin for Predictive Maintenance Author: Sujay Singh	Sujay Singh, Suhasi Sethi, Raghav Sharma, Dikshita Vaibhavi, Abhishek Tiwari Chandigarh University
13	Application of Intelligent Techniques in Smart Grid Automation Author: Manish Kumar Babu	Manish Kumar Babu, Papia Ray, Anita Swain VSSUT, Burla

Technical Session-16 (Power Electronics-3)

Session Chair: 1. Dr. K. Sateesh, NIT Tiruchirappalli
2. Dr. D. Suresh, NIT Raipur

Session Link:

<https://us06web.zoom.us/j/89969195643?pwd=mujCG1PFhjdB7nv8bnVpnHNbqbmAHW.1>

Timing: 02:30 PM – 04:30 PM

Paper ID	Paper Title and Corresponding Author	Authors
488	Intelligent Fault Detection in AC Microgrid Using Ensemble Learning Technique and Data Driven Clustering Author: Dr.Rudranarayan Pradhan	Rudranarayan Pradhan , Sushant Kumar Meher , Jeeban Jyoti Mohanty , Omkar Mohanty Odisha University of Technology and Research, Bhubaneswar, Odisha
550	Intelligent Fault Diagnosis in AC Microgrids Using Short Time Fourier Transform and kernel based algorithms Author: Dr.Rudranarayan Pradhan	Rudranarayan Pradhan, Prem Prakash Agarwal , Jyotishree Behera ,Sibani Sen Odisha University of Technology and Research, Bhubaneswar, Odisha
128	Predictive Modeling of Stability Indices in Wind-Integrated Multi-Machines Power Systems Using Machine Learning Techniques Author: Binayak Dash	Binayak Dash, Manish Tripathy and Rajat Samal Mr. Binayak Dash currently working as a Project Associate-1 in the Department of Electrical Engineering at VSSUT, Burla, while pursuing a PhD in Electrical Engineering with a specialization in Power System Engineering.
158	Anomaly detection in Cyber-Physical Electrical Systems Using AI-enhanced PUFs Author: Preetisudha Meher	Lukram Dhanachandra Singh, Preetisudha Meher NIT Arunachal Pradesh
436	On-Board Charger for Electric Vehicles: An LLC Resonant Converter Approach Author: Prashansaa Waghray	Parvathy.S, Prashansaa Waghray, S Lakshmi Sai Jahnvi, Vatsalya Nag Amrita Vishwa Vidyapeetham, Coimbatore, India
443	A power flow control unit for Vehicle-to-Grid (V2G) and Grid-to-Vehicle (G2V) modes of Electric Vehicles Author: NARENDRAMUDRA N G	Narendramudra N G, Devika Harikumar, Rajeev T. Department of Electrical Engineering, College of Engineering Trivandrum
572	A Dual Switch DC/DC Convertor for Extensive Voltage Conversion Applications Author: Nandini Nitin Pandhare	Kodumur Meesala Ravi Eswar, Kubendran V, Siva Prasad Athikkal, Mohit Verma, Chandan Thakur, Nandini Nitin Pandhare

SCHEDULE-IN-DETAIL (DAY-2)

		Department of Electrical and Electronics Engineering, SRM Institute of Science and Technology-Kattankulathur
31	A Robust Controller of a New Transformer-Less Quasi-Switched Converter with Low Current Ripples for Electric Vehicle Applications Author:V.Rajeswari	V.Rajeswari, Nalin Kant Mohanty Sri Venkateswara College of Engineering
151	Dead-Time Compensation for VSI-fed Induction Motor System Considering Snubber and Parasitic Capacitance and Resistance Author: Xiaoying Tuyu	Xiaoying Tuyu Wenzhou Polytechnic China
270	Grid Integrated Solar Photovoltaic and Battery Storage System Interfaced EV Charging Station and Healthcare Centre Load Author: Kamlesh Gupta	Kamlesh Gupta IPS Academy IES Indore / RGPV Bhopal
231	A Novel X type Six time boost switched capacitor 13 level Inverter Author: Biswajit Sarangi	Varsha Singh, Biswajit Sarangi National Institute of Technology Raipur
551	Decentralized Robust Control of Uncertain SIDO DC-DC Buck Converter Author: Shreyansh Upadhyaya	Shreyansh Upadhyaya, Dr. M. Veerachary Indian Institute of Technology (IIT), Delhi

SCHEDULE-IN-DETAIL (DAY-2)

Technical Session-17 (Cyber Security-2)

Session Chair: 1. Dr Talar Ganesh, NIT Hamirpur
2. Dr. Chandrashekhar Jatot, NIT Raipur

Session Link:

<https://us06web.zoom.us/j/81428028491?pwd=7ftyPKno2dklesaPHJ3390javPhjb.1>

Timing: 02:30 PM – 04:30 PM

Paper ID	Paper Title and Corresponding Author	Authors
11	Integrative Automation of Cybersecurity Systems through Advanced Data Science Methodologies: Enhancing Predictive Analytics and Real-Time Threat Mitigation Author: Subhranil Das	Subhranil Das, Rashmi Kumari, Raghwendra Kishore Singh School of Computer Science, UPES, Dehradun
146	Unified Kill Chain Model for Executing MITM Attacks in Microgrids with DERs Author: Suresh Mogilicharla	Suresh Mogilicharla, Tony Kondety, Manoj Tripathy, Mital Kanabar Indian Institute of Technology Roorkee
211	Optimizing Continuous Integration and Continuous Deployment Pipelines for Enhanced Interactive Streaming Experiences Author: Sujal Dua	Er. Azhar, Sujal Dua, Manish Singh, Dhruv Sharma Chandigarh University
271	Adaptive Defense Against Cyberattacks in Power Grid Frequency Control Author: Utkarsh Raj	Utkarsh Raj, Chandrabhanu Kumar, Bablu Kumar, Ravi Shankar Government Engineering College, Buxar
356	A Comparative Analysis of Kernel Methods in Quantum Support Vector Machines for Network Anomaly Detection Author: Vishwa Bharathi J	Vishwa Bharathi J , M. Vijayalakshmi, S. Mercy Shalinie Thiagarajar College of Engineering
408	Application Deployment: The Game-Changing Impact of Containerization Author: Zafarul Hasan Parth Galhotra Kumar Aniruddh Singh	Narendramudra N G, Devika Harikumar, Rajeev T. Zafarul Hasan Parth Galhotra Kumar Aniruddh Singh
SRMIST KTR		
462	Eco-Connect: Examining Consumer Behavior and Sustainability in E-Commerce Author: Koraboina Sumith Sai	Koraboina Sumith Sai, Dubba Manjunatha Reddy, Simran Pradhan, Angayarkanni S A, Rajaram V, Balakiruthiga B SRM Institute of Science and Technology

SCHEDULE-IN-DETAIL (DAY-2)

508	Evaluating Lightweight Asymmetric Cryptography for Secure Communication in Internet of Drones Author: Srihari Reddy Marukanti	Ashok Kumar Nanda, Srihari Reddy Marukanti, Upendram Harish, Bavanari Venkata Dheeraj, Bindu Sree Adoni, Chadala Raghavendar Reddy, and Shivangi Nanda B V Raju Institute of Technology
537	Efficient Dual-Hop Routing in Underwater Optical Wireless Networks Using Honey Bee Optimization Author: Sanat Thakur	Sanat Thakur, Ankush Kumar, Dr. Dharmendra Prasad Mahato NIT Hamirpur
538	Bio-Inspired Adaptive Routing for Enhanced Data Transmission in Underwater Optical Wireless Networks Author: Ankush Kumar	Ankush Kumar, Sanat Thakur, Dr. Dharmendra Prasad Mahato NIT Hamirpur
205	3DAES: An Ensemble of Symmetric cryptographic protocol for Data security Author: Sagnik Mazumdar	Deepraj Chowdhury, Sagnik Mazumdar, TUSHAR KANTI BERA IIIT Naya Raipur
19	A Multi - Variate Feature Selection Framework for Comparing Performance of RNN And LSTM For Aspect-Level Sentiment Analysis Author: Nikhat Fatma Mumtaz Husain Shaikh	Nikhat Fatma Mumtaz Husain Shaikh, Prasenjit Bhavathankar Bharatiya Vidya Bhavans Sardar Patel Institute of Technology
555	Efficient Grid and Density based EGDBSCAN Clustering Method to Identify Global Noisy Points Author: S Mallesh Babu	S Mallesh Babu, Dr V.K. Sharma, Dr.M.Giri Research scholar, Department of CSE, Bhagwant University, Ajmer
277	Machine Learning Approaches for Process Automation: A Case Study Using Q-Learning and Supervised Learning Author: R Sireesha	SMAK Azad, P Suresh, Sireesha R Sri Venkateswara College of Engineering Tirupati

DAY-3: JANUARY 22ND 2025 (* All timings are in IST)

TIME	PROGRAM
09:00 AM – 10:30 AM	Technical Session-18 (Online)
10:30 AM – 12:00 PM	BREAK
12:00 PM – 01:00 PM	Valedictory Function
01:00 PM – 02:30 PM	LUNCH

Technical Session-18:

Meeting Link:

<https://us06web.zoom.us/j/89632340795?pwd=mCaq345C5HNbGbi0pxmnfoBbpIriaJ.1>

Valedictory Function:

Venue: Vishweshwaraya Hall (E-Hall) - Physical

Meeting Link (Virtual):

<https://us06web.zoom.us/j/84065942347?pwd=mlZa1e0sywXkjpzONs1giarTDkTGfb.1>

TECHNICAL SESSION DETAILS**Technical Session-18 (Special Session-1)**

Session Chair: 1. Prof. Dr. V.S. Kale, VNIT Nagar
2. Dr. V. Hari Priya, NIT Raipur

Session Link:

<https://us06web.zoom.us/j/89632340795?pwd=mCaq345C5HNbGbi0pxmnfoBbplriaJ.1>

Timing: 09:00 AM – 10:30 AM

Paper ID	Paper Title and Corresponding Author	Authors
127	Motion Detection Based IoT System for Optimizing Power Consumption Author: Viren Sharma	Viren Sharma, Kartik Khandelwal, M. V. Deepak Nair The LNM Institute of Information Technology Jaipur-302031, Rajasthan, India
193	Energy Management System for Electric Vehicle Charging Station using Deep Learning and Model Predictive Control Author: Asha Rani G.S	Asha Rani G.S, Lal Priya P.S College of Engineering Trivandrum, APJ Abdul Kalam Technological University, Kerala
338	Novel Enhanced Astacus optimization algorithm for real power loss diminution in grid-connected renewable energy system Author: Dr. Lenin Kanagasabai	Dr. Lenin Kanagasabai Prasad V. Potluri Siddhartha Institute of Technology
536	Analysis and Design of Grid-Tied Solar PV System using Machine Learning Algorithm Author: Anakapalli Vasu Deva	Anakapalli Vasu Deva, Satish Kumar Gudey, Syamnaresh Garlapati IIT Madras
543	Enhancement of Ambulatory Monitoring Systems with Active and Passive Intelligent Reflecting Surfaces for Next-Generation Communication Systems Author: Savithri Padma Priya V	Savithri Padma Priya V, Dr Thaherbasha Shaik, Dr Nageena Parveen Syed SR University, Warangal, Telangana, India, 506371. Geethanjali College of Engineering and Technology, Hyderabad, India, 501301.
88	Weather Image Recognition Based on Convolutional Neural Network and Transfer Learning Author: Papia Ray	Papia Ray, Pratikhya Tripathy, Sabha Raj Arya, Monalisa Biswal Veer Surendra Sai University of Technology, Burla
76	Design and Analysis of DC-DC Boost converter using Model Predictive Controller Author: Devarapalli Vimala	Devarapalli Vimala, B.Lokeshgupta, V. Naresh Kumar SRM University
98	Non-isolated High-Gain DC-DC Converter with Moderate Gain for	Maya Vijayan, Ramanjaneya Reddy Uдумula, Tarkeshwar Mahto

SCHEDULE-IN-DETAIL (DAY-3)

Hybrid Energy System Applications on SRM University-AP DC Microgrids Author: Maya Vijayan		
113	Harmonic Analysis of Nonisolated DC/DC Boost Converter for Photovoltaic Systems Author: Barış ÇAVUŞ	Barış ÇAVUŞ, Seçil GENÇ, Kübra Nur AKPINAR Ondokuz Mayıs University
232	Enhancement of Dynamic Performance and stability of Autonomous Microgrid Utilizing Adaptive HBO-Power System Stabilizer Author: Andrew Joseph Mbusi	Andrew Joseph Mbusi Idris Abdallah Nasreldin Naresh Kumar Vemula SRM University-AP
234	A Simple Non-Isolated High Gain Three port DC-DC converter for Standalone PV Applications Author: Nagaraju Kothapalli	Nagaraju Kothapalli, Sateesh Kumar Kuncham Research Scholar
327	An Integrated EV Charging System with Solar Energy and LLC Converter Topology Author: Azad Singh Thakur	Azad Singh Thakur, Shailendra Sharma Shri Govindram Seksaria Institute of Technology and Science, Indore, M.P.
371	Design of Nine-Level Switched Capacitor-Based Inverter with Low Voltage Stress Author: Gayathri P	Gayathri P, Gopinath N P, Jagabar Sathik M, Vijayakumar K St. Joseph's Institute of Technology