INTERNATIONAL CONFERENCE [SUSTAINABILITY IN DESIGN, ENGINEERING AND ARCHITECTURE**]** **VENUE: ROOM NO. ML 10**

31 OCTOBER 2026 [Saturday]

TECHNICAL SESSION II (2:30-4:00 pm)- ELECTRICAL ENGINEERING

SESSION CHAIR: Prof Imtiaz Ashraf Prof.; SESSION CO-CHAIR: Dr Mohd Tariq & Dr SM Ashraf

S. No.	TRACK ID	TOPIC AND AUTHOR	
1	SDEA-2026-005	**Optimization of Hybrid Renewable Energy Sources for Sustainable Electrification of remote Village in Western India** Sanghamitra T. Kamble, M. Sujith	
2	SDEA-2026-0013	**Optimization of charging energy in electric vehicles using MVPA algorithm** Faris Khan, Dr Mohammad Sarfraz	
3	SDEA-2026-0093	**Energy Storage Technologies for Renewable Energy: A Comparative Review of Performance, Applications, and Limitations** Syed Ahmad Maaz Asad	
4	SDEA-2026-0096	**Overcurrent Protection Challenges in Grids Dominated by Inverter-Based Resources** Mohammad Zaid*, Mohammad Tayyab**, S. M. Suhail Hussain***	
5	SDEA-2026-0140	**Real-Time Physics-Informed Fault Detection and Classification in Smart Grids Using XGBoost with Uncertainty-Aware Edge Deployment** Tanishka Bhardwaj, Gaurisha Singhal	
6	SDEA-2026-0174	**Investigation of Electrical and Thermal Property Enhancement in Mineral Oil Nanofluids for Improved Dielectric Strength** Waquar Ahmad, Mujib Ullah Zuberi, Aejaz Masood, Safia Akhtar Kazmi, Mohd Farid Alam	
7	SDEA-2026-0203	**AI-Based Energy Management System for Dual-Battery Electric Vehicles with Solar Energy Harvesting and Regenerative Braking** Manish Kumar, Dipanshu Dixit	
8	SDEA-2026-0209	**Switched-Capacitor Multilevel Inverters: Recent Advances, Topological Developments, and Future Perspectives** Asim Rahman Ansari, Mohd. Aslam Ansari	
9	SDEA-2026-0226	**Optimal Planning and Techno-Economic Assessment of a Grid-Connected PV–Wind Hybrid Microgrid** Tariq Bashar, Md Shahbaz Khan, Rahul Verma, Riya Singh, Mohd Bilal, Salman Hameed	