## DEPARTMENT OF ELECTRICAL ENGINEERING POWER SYSTEMS LABORATORY

## Ph. D. Projects Completed

SI.	Title	Research Scholar	Guide(s)	Year
1	Improved General Purpose and Distributed Load Flow Algorithms	E. Chandrasekharan	Dr. R. Sreerama Kumar & Dr. K.P. Mohandas	1996
2	Development of New Techniques for the design of Power System stabilizer	N Rajendran	Dr. R Sreerama Kumar	2006
3	Peak Load Management for Industries	Babu C A	Dr. Ashok S	2008
4	Optimum Electricity Pricing Strategies under Deregulation	Reji P	Dr. Ashok S	2008
5	Socially stable Least Loss Coordinated Multilateral trade Mechanism for Electricity	Sudha Balagopal	Dr. Ashok S & Dr. K P Mohandas	2009
6	Development of optimal pricing strategy for Renewable Energy	Jaimol Thomas	Dr. Ashok S & Dr. T L Jose	2010
7	Optimal Hybrid Energy System	Balamurugan P	Dr. Ashok S & Dr. T L Jose	2011
8	A TCSC Based Adaptive Ssr Damping Controller Using Real Time Recurrent Learning Algorithm	K C Sindhu Thampatty	Dr. M P Nandakumar & Dr. Elizabeth P Cheriyan	2011
9	Development of Hybrid Renewable Energy Systems for Microgrid Application	Kumaravel S	Dr. Ashok S	2013
10	"Investigations on Voltage Instability Monitoring, Assessment and Control	O Asokan	Dr. R Sreerama Kumar	2014
11	FACTS Controllers for Power Quality Improvement	John George	Dr.T. L. Jose & Dr. Jeevamma Jacob	2014
12	Reduced Order Model For Investigations Of Torsional Interactions In Large Power Systems	Vinod Pottakulath	Dr. Elizabeth P Cheriyan & Dr. R Sreerama Kumar	2014
13	Artificial Neural Networks and Distributed Computing Techniques for On-line Security Assessment of Large Power Systems	Sunitha R	Dr. R Sreerama Kumar & Dr. Abraham T Mathew	2014
14	Optimal fractional order controllers for Automatic Generation Control of power systems	Ismayil C	Dr. R Sreerama Kumar Dr. Sindhu T K	2014
15	Design and implementation of supplementary damping controller for	Maya G	Dr. Elizabeth P Cheriyan &	2015

	mitigation of interarea oscillations using FACTS devices		Dr.Jeevamma Jacob	
16	Development Of Energy Management Strategies For Hybrid Electric Vehicles	Ajay Babu	Dr. Ashok S	2016
17	Implementation Of Intelligent Controller Based Power Management And Pricing Strategies For A Grid Connected Wind- Battery System	Sony Kurian	Dr. Sindhu T K & Dr. Elizabeth P Cheriyan	2017
18	Facts And Microgrid Based Congestion Management In Restructured Power Systems.	Guguloth Ramesh	Dr. T K Sunil Kumar	2017
19	Heuristic Approach for Economic and Emission Generation Scheduling of Thermal-Hydro-Wind Power Systems	Suresh K Damodaran	Dr.T K Sunil Kumar	2019
20	Development of Optimal Framework for Resilience Enhancement of Power Systems	Rohit K. Mathew	Dr. S. Ashok, Dr. S. Kumaravel	2019
21	Assessment and Prediction of Power System Security Level using Markov Model and k-NN Classifier Technique	Jaya C K	Dr. Sunitha R, Dr. Abraham T Mathew	2019
22	Performance Improvement of Virtual Synchronous Machine for Grid Frequency Regulation	Vinu Thomas	Dr. S. Kumaravel, Dr. S. Ashok	2020
23	Adaptive Protection for Wind Integrated Substations	Sujo P George	Dr. Ashok S	2020
24	Synchrophasor Data Driven Islanding Detection Strategies and a Defensive Scheme for Microgrids	Rohika Micky R	Dr. Sunitha R, Dr. Ashok S	2021
25	Design, Optimization and Analysis of Stability Improvement Schemes for Droop Controlled Microgrid	Binu Krishnan U	Dr. Mija S J, Dr. Elizabeth P Cheriyan	2021
26	Reactive Power Management in a Deregulated power system	Mini V	Dr. T K Sunil Kumar	2021
27	Design and Development of Micro Compensators with a Composite Strategy for Improved Power Quality in Secondary Distribution Systems	Jino M Pattery	Dr. Elizabeth P. Cheriyan & Dr. Rijil Ramchand	2022
28	Modified Hysteresis Current Control Strategy for Cascaded Multilevel Inverter based STATCOM	Athira Raju	Dr. Elizabeth P Cheriyan, Dr. Rijil Ramchand	2022
29	Assessment of Dominant Oscillatory Modes in Power Systems using Advances	Rahul S	Dr Sunitha R	2023

	Signal Processing and Artificial Intelligence Techniques			
30	Optimal and Stable Operation of Hybrid Power Systems Integrated with Bulk Renewable Energy Sources and Storage Systems	M J Laly	Dr. Sunitha R & Dr. Elizabeth P Cheriyan	2023
31	Proactive Defense against Propagating Disturbance and its Real-time Mitigation in Emerging Deregulated Power Grids	Najda V M	Dr. Gopakumar P & Dr. Sunitha R	2023