

National Institute of Technology Tiruchirappalli

Curriculum Vitae

Brief Profile:

M. P. Selvan is Professor in the EEE Department. He is associated with the Hybrid Electrical Systems Laboratory. He holds a Ph.D. degree from IIT Madras. He has 20 years of teaching and research experience in the field of power systems. He has published more than 150 research papers in various national, international conferences and journals. His research interests include Grid Interaction of Electric Vehicles, Demand Response & P2P Energy Transactions in Smart Grid, Distributed Generation & Micro-grid. He investigated research projects sponsored by DST, POWERGRID, NIWE and MeitY. He is also a recipient of Visvesvaraya Young Faculty Research Fellowship from MeitY. He supervised six Ph.D. and three M.S. scholars and co-supervised four Ph.D. scholars. He is holding three Indian Patents. He has co-authored four book chapters. He is a Life Member of ISTE, Fellow of IE (India), Senior Member of IEEE. Presently, he is the Faculty Advisor of Designers' Club, Associate Dean (Electrical) in the office of Dean (Planning & Development), NIT Tiruchirappalli and Secretary of IEEE PES Chapter, Madras Section.



1. Name **M.P. Selvan**
2. Designation: **Professor**
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Email (Secondary) : **selvanmp.psect@gmail.com**
6. Field(s) of Specialization: **Computer Applications in Power Systems**
7. Employment Profile

Job Title	Employer	From	To
Assistant Professor	NIT Tiruchirappalli	April 2006	March 2018
Associate Professor	NIT Tiruchirappalli	March 2018	Till Date

8. Academic Qualifications (From Highest Degree to High School):

Examination	Board / University	Year	Division	Subjects
Ph.D.	Indian Institute of Technology Madras	2006		Computer Applications in Power Systems
M.E.	Regional Engineering College Tiruchirappalli	2000	Institute First Rank	Power Systems
B.E.	Manonmanium Sundaranar University, Tirunelveli	1999	University Second Rank	Electrical and Electronics
HSC	S M R V Higher Secondary School, Nagercoil	1995	School First Rank	Mathematics, Physics, Chemistry, Biology
SSLC	S M R V Higher Secondary School, Nagercoil	1993	School First Rank	Mathematics, Science

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9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	To
Hostel Warden	Zircon C Hostel	2011	2015
Member	UG Admissions Committee	2018	2020
Counselor	IEEE Student Branch	2020	2022
Associate Dean (Electrical)	Office of Dean (Planning & Development)	2020	Till Date
Faculty Advisor	Designers' Club	2021	Till Date

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To
Member, Admission Committee	IIIT Tiruchirappalli	2016	2018
Secretary	IEEE PES, Madras Section	2021	Till Date

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization

12. Fellowships

Year of Award	Name of the Fellowship	Awarding Organization	From (Month/Year)	To (Month/Year)
2016	Visvesvaraya Young Faculty Research Fellowship	MeitY	2016	2019

13. Details of Academic Work

(i) Curriculum Development

B.Tech. (EEE) & M.Tech. (Power Systems)

(ii) Courses taught at Postgraduate and Undergraduate levels

Undergraduate	Basics of Electrical and Electronics Engineering Applied Electrical and Electronics Engineering Basics of Programming Electromagnetic Fields Transmission and Distribution of Electrical Energy Power System Analysis Power System Economics and Control Techniques Power Systems Engineering Electrical Machines Laboratory Electrical Technology Laboratory Power System Simulation Laboratory
Postgraduate	Power System Dynamics Electrical Distribution Systems Renewable Power Generation Sources High Voltage DC Transmission Distributed Generation and Microgrid Smart Grid Technologies Power System Simulation Laboratory

(iii) Projects guided at Postgraduate level

S.No.	Title	Student Name	Duration
1	Study of certain custom power devices for power quality improvement	S. Shaya Elsi	July – December 2006
2	Load flow analysis of distribution system incorporating wind energy conversion system as a dispersed generation.	J. Anuradha	July – December 2006
3	Study of unified series-shunt compensator for power quality improvement	S. Shaya Elsi	January – June 2007
4	A comparative study of Forward-backward sweep power flow methods for radial distribution system	J. Anuradha	January – June 2007
5	Wavelet base detection and AI based classification of power quality disturbances	S. Sudha	July – December 2007
6	Comparative Study on DSTATCOM Inverter Topologies for Source Current Balancing	Kotte Venkateswarlu	July – December 2007
7	Analysis and Simulation of Shunt Active Power Filter	G. Surendar	July – December 2007
8	Wavelet base detection and AI based classification of power quality disturbances	S. Sudha	January – June 2008
9	Study on D-Statcom current control techniques for source current balancing and harmonics reduction.	Kotte Venkateswarlu	January – June 2008
10	Performance comparison of SAPF and HAPF.	G. Surendar	January – June 2008
11	Simulation and Experimental Investigation on Interaction of OPTi-Slip Generator with Grid	Akoju Nageswara Rao	July – December 2008
12	Study on Doubly Fed Induction Generator Systems	A. S. Dwarakanadh	July – December 2008

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13	A Wavelet Transform Analysis for Fault Location	Sodagudi Suresh	July – December 2008
14	Simulation and Experimental Investigation on Interaction of Opti-Slip Generator with Grid	Akoju Nageswara Rao	January – June 2009
15	Investigations on Transient Stability of a Power System including Wind Generators	A. S. Dwarakanadh	January – June 2009
16	Classification and Location of Power System Faults using Wavelet Transform and Interpolation	Sodagudi Suresh	January – June 2009
17	Performance Analysis of Dynamic Voltage Restorer and Series Active Filter	S. Prabakaran	July – December 2009
18	Performance Analysis of Shunt Active Filter	K. Mohan	July – December 2009
19	Radial Distribution System Load Flow using Interval Arithmetic Method	Santosh Kumar	July – December 2009
20	Hardware Implementation of Single Phase Dynamic Voltage Restorer using LF2407	S. Prabakaran	January – June 2010
21	Hardware Implementation of Single Phase Shunt Active Filter using DSP LF2407	K. Mohan	January – June 2010
22	Distribution System Voltage Stability Analysis and its Enhancement using Distributed Generator	Santosh Kumar	January – June 2010
23	Small Signal Stability Analysis of Doubly Fed Induction Generator	Surya Prakash	July – December 2010
24	Simulation and Hardware Implementation of Three Phase Shunt Active Filter	Chandan Kumar	July – December 2010

25	Simulation and Hardware Implementation of Three Phase Dynamic Voltage Restorer	Chandan Kumar	January – June 2011
26	Siting of FACTS Devices using Sensitivity Analysis	V Chiranjeevi	July 2010 – June 2011
27	Study on Full Scale Power Converter Based Wind Energy Conversion System	Krishna Kumar	July 2011– June 2012
28	Maximum Penetration Ranking Based DG Integration in Radial Distribution System	Lalit Negi	July 2011– June 2012
29	Hybrid State Estimation	Sheetla Prasad	July 2011– June 2012
30	Power Quality Improvement using Series Active Filter	Anu G Kumar	July – December 2011
31	Experimental Investigation on Unified Power Quality Conditioner for Harmonic Mitigation	Anu G Kumar	January – June 2012
32	An Investigation into the Control Approaches of DSTATCOM for Reactive Power Compensation in Three-Phase Four Wire System	Ajay K Mathew	July 2012– June 2013
33	State Estimation of Observable and Unobservable Power Systems	Soumya, N.K.	July 2012– June 2013
34	Optimal Sizing and Analysis of WTGS based DG in Distribution Networks Considering Wind Speed Variation	Vijitha, K.	July 2012– June 2013
35	Study on Performance of Custom Power Devices in SCIG based Wind-farms during Normal and Abnormal Grid Conditions	Hrishikesan, V. M.	July 2013– June 2014
36	Dynamic Analysis of Microgrid	Gijo YoYakey	July 2013– June 2014

37	Load Scheduling for Efficient Energy Management in Buildings with Renewable Power Generations	Asha Radhakrishnan	July 2013- June 2014
38	Energy Management in Smart Buildings Through Demand Response	Aravind Raj, A.	July 2014 - June 2015
39	Voltage Stability Analysis of Power System with Renewable Power Integration	Rajesh, G.	July 2014 - June 2015
40	Investigations on New Topologies for Multilevel Inverters	Shefeen, M.	July 2014 - June 2015
41	Decentralized Control of Interconnected Multi Area Power System	Surya Prakash	July 2014 - June 2015
42	Parallel Operation of Permanent Magnet Synchronous Generator Based Windmills	Kishore Reddy, S.	July 2015 - June 2016
43	Control of Modular Multilevel Inverter Based on Chopper-Cells by Phase Shifted Carrier Based PWM.	Saratbabu, B,	July 2015 - June 2016
44	Prototype Development of Energy Management in Smart Building Through Demand Response	Madura Dattatraya Potdar	July 2015 - June 2016
45	Adaptive PI Control of STATCOM for Voltage Regulation	Saidam Somanath	July 2015 - June 2016
46	Design of FPGA based Monitoring System for Microgrid	A Sunil Kumar Reddy	July 2015 - June 2016
47	Cost Effective Design of Power Distribution Systems and Protection Schemes in EPC Projects	Kush Deo Prajapati	July 2015 - June 2016
48	Short and Ultra Short Term Forecasting of Solar Irradiance and Wind Speed in Smart Grid Environment	Vanathi, M.	July 2016 - June 2017

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49	Comparison of Different Phase Shift Control Methods for Bidirectional DC-DC Converter	Sampada Sunil Sahare	July 2016 – June 2017
50	Prototype Demonstration of Priority based Load Scheduling for Demand Response in Smart Building	Amit Roy	July 2016 – June 2017
51	Protection and Identification of Fault Location in DC Microgrid	Romil Garg	July 2016 – June 2017
52	Grid Stability Analysis for High Penetration Solar Photovoltaic	Ajit Kumar K	July 2016 – June 2017
53	Dynamic Priority and Time of Use (ToU) Tariff based Demand Response in Smart Building	Aryesh Namboodiri	July 2017 – June 2018
54	Protection Scheme for DC Microgrid based on Local Measurements	Nanma P	July 2017 – June 2018
55	Game Theory based Demand Response in Smart Grid Environment	Navya Krishnan	July 2017 – June 2018
56	Voltage Profile Enhancement and Power Loss Reduction – Case study on Nashik Thermal Power Plant	Kamani Sawan Jayantilal	July 2017 – June 2018
57	Inertia Mimicking for Compensating Low Rotational Inertia on Power System due to High Penetration of Photovoltaic and Wind Power Generations	Vagadhani Gopinath	July 2017 – June 2018
58	Optimal Scheduling of EV Charging	T. Sornavel	July 2018 – June 2019
59	Demand Response in Smart Residential Building with Renewable Energy Generation	P K Kiran Kumar	July 2018 – June 2019
60	Demand Response Implementation in a Smart Locality using Game Theory	Pankil Kataria	July 2018 – June 2019

61	Locality Energy Sharing In Smart Grid Environment	Digambar Maske	July 2018 – June 2019
62	Transactive Energy Based Demand Response in a Smart Residential Locality	Abinraj R	July 2019 – June 2020
63	Scheduling of Charging of Electric Vehicles in a Shopping Mall Charging Station	Athulya M S	July 2019 – June 2020
64	Mitigating Voltage and Frequency Fluctuations in Micro-grid using Electric Springs	Rajeev Ranjan	July 2019 – June 2020
65	Smart Street Lighting and Residential Solar Power Generation Monitoring in a Smart City	A. Ramachandran	July 2019 – June 2020
66	Design and Analysis of Modular Multi-Level Converter for HVDC Applications	Prafulkumar Mulik	July 2020 – June 2021
67	Scheduling of Charging of Electric Vehicles	Raju Kumar	July 2020 – June 2021
68	Modeling for Quantification of Rear Shading, Rear Mismatch, Rear Soiling Losses for 1P/2P, Fixed-Tilt and Tracker Based Solar PV System.	Alok Kumar	July 2020 – June 2021
69	Non-Intrusive Load Monitoring for Residential Building	Raut Gaurav Pradip	July 2021 – June 2022
70	Smart Load Management of Plug-in Electric Vehicles in Residential Distribution Networks for Peak Shaving	Prasad P Gainewar	July 2021 – June 2022
71	V2G Discharging Control Scheme for Peak Shaving in Distribution System	Maya Yuvasri	July 2021 – June 2022
72	Wireless Connectivity for Traffic Management System	Armaan Gohil	July 2021 – June 2022

(iv) Other contribution(s)

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14. Details of Major R&D Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed
Power Quality Improvement using Unified Series Shunt Compensator (USSC)	Department of Science and Technology, Govt. of India	2009	2012	Completed
Development of Micro-Grid Controller Integrated with Multiple Types of Renewable Sources and Loads	Powergrid Corporation of India Ltd, Govt. of India	2013	2014	Completed
A Novel Hybrid Energy System for Supplying Isolated Loads with FPGA Based Energy Management Scheme	National Institute of Wind Energy	2013	2017	Completed
Development of Intelligent Residential Load Management System for Smart Grid Environment	Ministry of Electronics and Information Technology (MeitY), Govt. of India	2016	2019	Completed
Wireless Sensor Node for Online Data Transfer of Parameters from Electrical Machines and Drives	NaMPET III, Ministry of Electronics and Information Technology (MeitY), Govt. of India	2020	2023	Ongoing
Development of Metal 3D Printed Light Weight Flywheel and Novel Control Algorithm for Micro-Grid Energy Storage Applications	DST SERB, Govt. of India	2022	2024	Ongoing

15. Number of PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor/ Co-Supervisor)	Year of Award
K. Vinothkumar	Investigations on Distributed Generation Planning and Certain Grid Interaction Issues of Wind Turbine Generator System	Supervisor	2011
S. Srinath	Investigations on Performance of Unified Power Quality Conditioner with Combined Mode Control	Supervisor	2012
S. Sreejith	Scheduling of Thermal Generating Units Incorporating FACTS Devices using Bee Colony Intelligent System	Co-Supervisor	2013
B. Dastagiri Reddy	Investigations on Certain Multistring Inverter Topologies for Single-phase Micro-grid Applications	Supervisor	2016
K. Venkatraman	Design and Development of FPGA based Embedded Systems for Online Monitoring, Power Management and Control of Power Quality Conditioners in a Micro-grid	Co-Supervisor	2016
S.L. Arun	Investigations on Various Demand Response Frameworks for Smart Residential Buildings	Supervisor	2018

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A. Dheepanchakkravarthy	FPGA Controlled Four-Leg DSTATCOM for Multifarious Load Compensation in Power Distribution System	Co-Supervisor	2019
Suryanarayana Gangolu	Effective Relaying Schemes for Long Transmission Line Protection	Co-Supervisor	2019
B. Hanumantha Rao	Investigations on Framework of Transactive Energy Market for Residential Community Microgrid	Supervisor	2021
P. Kaliappan	Investigations on Protection Schemes of Certain Operational Windfarms in India, Monitoring using Phasor Measurement Unit and its Compliance	Supervisor	2022

16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc. (mentioning the role)

Date (s)	Title of Activity	Level of Event (International/ National/ Local)	Role	Event Organized by	Venue
20 th – 21 st November 2003	Power System Data Repository and Load Research	National	Participant	CPRI	Bangalore
2 nd – 6 th December 2003	Artificial Intelligence Techniques in Power Systems (AIPS 2003)	National	Participant	IIT Madras and Tennessee Tech University, USA	Chennai
5 th – 6 th January 2007	National Workshop on Technology Enhanced Learning for Enriching Engineering Education	National	Participant	Indian Institute of Information Technology and Management	Kerala
09 th -11 th August 2007	Modeling and Analysis of Electrical Machines	National	Participant	College of Engineering, Anna University	Chennai
20 th – 27 th August 2007	Wind Power Integration	National	Participant	NIT Tiruchirappalli	Trichy
28 th – 29 th August 2007	Recent Trends in Wind Power Generation and FACTS	National	Participant	NIT Tiruchirappalli	Trichy
28 th -29 th September 2007	Electronic Circuit Design Techniques	National	Participant	NIT Tiruchirappalli	Trichy
12 th -13 th October 2007	All India Workshop on Recent Trends in Energy Management	National	Participant	The Institute of Engineers (India)	Trichy
28 th January 2008 – 1 st February 2008	Electrical Machines and Power Electronics in Renewable Energy Systems	National	Participant	NIT Tiruchirappalli	Trichy
29 th February, 2008	Multivariable Control Systems	National	Participant	NIT Tiruchirappalli	Trichy

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16 th June – 28 th June 2008	Power Electronics and Renewable Energy Electric Conversion Systems	National	Participant	NIT Tiruchirappalli	Trichy
7 th July – 12 th July 2008	Wavelet Transforms for Data Analysis-Theory and Applications	National	Participant	IIT Madras	Chennai
21 st August – 27 th August 2008	Instructional Design and Delivery Systems	National	Participant	National Institute of Technical Teachers Training & Research	Chennai
12 th November – 14 th November 2008	National Workshop on Power Electronics NWPE 2008	National	Participant	NIT Tiruchirappalli	Trichy
19 th February 2009	Computer Networking- Hardware & Software	National	Participant	M/s. SANAT Technologies	NIT Trichy
12 th & 13 th March 2009	Practical Aspects of Computer Networking	National	Participant	M/s. Extreme Networks	NIT Trichy
4 th May 2009	Power Electronic Simulation-SEQUEL	National	Participant	NIT Tiruchirappalli	Trichy
15 th June – 27 th June 2009	Engineering Practices on Fuzzy Logic, Neural Networks and Hybrid Intelligent Systems	National	Participant	NIT Tiruchirappalli	Trichy
22 nd May – 4 th June 2011	Smart Grid Engineering	National	Participant	NIT Calicut	Kozhikode
12 th December – 22 nd December	Solar Photovoltaics: Fundamentals, Technologies and Applications	National	Participant	IIT Bombay	Mumbai
08 th April 2014	TEQIP Industrial Workshop on Understanding IGBT: from Device to Inverter	National	Participant	NIT Tiruchirappalli	Trichy
12 th – 13 th May 2014	TEQIP Industrial Workshop on Power System Modeling and Simulation with PSCAD	National	Participant	NIT Tiruchirappalli	Trichy
20 th – 21 th June 2014	TEQIP-II Workshop on Low Power Controller using MSP 430 Microcontrollers	National	Participant	NIT Tiruchirappalli	Trichy
26 th – 28 th September 2014	Short Term Course on Real Time Controller Design Using TI C2000 Microcontroller	National	Participant	NIT Tiruchirappalli	Trichy
04 th – 05 th March 2016	Short Term Course on Role of Power Electronics in Power Engineering	National	Participant	NIT Tiruchirappalli	Trichy

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23 rd – 24 th April 2016	Workshop on Embedded System Design using FPGA Board	National	Participant	NIT Tiruchirappalli	Trichy
09 th – 10 th December 2016	Short Term Course on Realisation of Internet of Things using Raspberry Pi	National	Participant	NIT Tiruchirappalli	Trichy
20-21, February 2017	Second Workshop for Presentation of Research Work under Visvesvaraya PhD Scheme for Electronics and IT/ITES	National	Participant	IISc Bangalore	Bengaluru
28 July 2017	One day Workshop of Young Faculty Research Fellows	National	Participant	IISc Bangalore	Bengaluru
28-29, May 2018	Technical Planning & Evaluation Meet and Workshop of Young Faculty Research Fellows of the Visvesvaraya PhD Programme	National	Participant	IISc Bangalore	Bengaluru
28 th December 2020 – 1 st January 2021	ATAL Online FDP on Energy Engineering	National	Participant	NIT Tiruchirappalli	Trichy

17. Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convener / Co-Convener)

Title of Activity	Level of Event (International/ National/ Local)	Date (s)	Role	Venue
Workshop on Electrical Science and Electronics for Physics Teachers of Higher Secondary Schools	National	28 th and 29 th October 2006	Convener	NIT Tiruchirappalli
Workshop on C++ Programming for PG students	National	30 th November 2006 and 1 st December 2006	Convener	NIT Tiruchirappalli
Workshop on Computer Fundamentals	National	24 th and 25 th March 2007	Convener	NIT Tiruchirappalli
Short Term course on Electrical Machines and Power Electronics in Renewable Energy Systems	National	28 th January 2008 and 1 st February 2008	Convener	NIT Tiruchirappalli
National Workshop on	National	12 th November 2008	Convener	NIT

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Power Electronics - NWPE 2008		to 14 th November 2008		Tiruchirappalli
Workshop on Power System Protection – Level 1 Course	National	16 th – 17 th March 2011	Convenor	NIT Tiruchirappalli
Short Term Course on Power System Stability Issues with Distributed Generators	National	29 th – 30 th June 2012	Convenor	NIT Tiruchirappalli
TEQIP-II Industrial Workshop on Understanding IGBT: from Device to Inverter	National	08 th April 2014	Convenor	NIT Tiruchirappalli
TEQIP-II Industrial Workshop on Power System Modeling and Simulation with PSCAD	National	12 th – 13 th May 2014	Convenor	NIT Tiruchirappalli
TEQIP-II Workshop on Low Power Controller using MSP 430 Microcontrollers	National	20 th – 21 th June 2014	Convenor	NIT Tiruchirappalli
Short Term Course on Real Time Controller Design Using TI C2000 Microcontroller	National	26 th – 28 th September 2014	Convenor	NIT Tiruchirappalli
TEQIP-II Short Term Course on Role of Power Electronics in Power Engineering	National	04 th – 05 th March 2016	Convenor	NIT Tiruchirappalli
TEQIP-II Industrial Workshop on Embedded System Design using FPGA Board	National	23 rd – 24 th April 2016	Convenor	NIT Tiruchirappalli
Short Term Course on Realisation of Internet of Things using Raspberry Pi	National	9 th – 10 th December 2016	Convenor	NIT Tiruchirappalli
Two-day workshop on Basics of Information & Network Security and Emerging Trends in Smart Grid Security	National	20 th – 21 st January 2017	Convenor	NIT Tiruchirappalli
Short-Term Course on Digital Controllers for Power Applications	National	03 rd – 04 th November 2017	Convenor	NIT Tiruchirappalli
Intelligent Electrical Power Grids	National	27 th November – 01 st December 2017	Convenor	NIT Tiruchirappalli
Two-day workshop on Information & Network	National	08 th – 09 st March 2019	Convenor	NIT Tiruchirappalli

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Security and Emerging Trends in Smart Grid Security				
Workshop on Operation and Control of Wind-Solar Hybrid Systems	National	22 nd – 26 th April 2019	Convenor	NIT Tiruchirappalli
Online Short Term Course on Deep	National	06 th – 10 th July, 2020	Convenor	NIT Tiruchirappalli
Online Faculty Development Programme on Smart Grid Features and Blockchain Technology for Smart Grid	National	16 th – 20 th November, 2020	Convenor	NIT Tiruchirappalli
AICTE ATAL Online Faculty Development Programme on Energy Engineering	National	28 th December 2020 – 1 st January 2021	Convenor	NIT Tiruchirappalli
Online Workshop on Cyber Security and Ethical Hacking	National	12 th – 16 th April, 2021	Convenor	NIT Tiruchirappalli
Online Workshop on Cloud Computing and Big Data	National	17 th – 21 st May, 2021	Convenor	NIT Tiruchirappalli
AICTE Margdarshan Online Faculty Development Programme on Teaching Perspectives of Power System	National	17 th – 21 st May, 2021	Convenor	NIT Tiruchirappalli
AICTE Margdarshan Online Faculty Development Programme on Teaching Perspectives of Power System	National	24 th – 28 th May, 2021	Convenor	NIT Tiruchirappalli
Alumni Interactive Workshop on Electric Power Engineering	National	13 th – 17 st September, 2021	Convenor	NIT Tiruchirappalli

18. Invited Talks delivered

Topic	Date	Inviting Organization
Object-Oriented Programming in Engineering Applications	19 th October 2007	Institution of Engineers (India), Tiruchirappalli local center
Distributed Generation Planning	27 th May 2011	NIT Calicut
Distributed Generation Planning for Smart Grid	26 th August 2011	Coimbatore Institute of Technology, Coimbatore
Wind Energy Conversion Systems	26 th January 2012	Coimbatore Institute of Technology, Coimbatore
Soft Computing Applications to FACTS	18 th May 2012	Government College of Technology, Coimbatore
Distributed Generation Planning for Smart Grid	28 th July 2012	Anna University of Technology Madurai
Power Electronic Applications in Wind Turbine Generator Systems	10 th November 2012	A.C. College of Engineering and Technology, Karaikudi
Object-Oriented Methodology	3 rd March 2013	BSNL Tiruchirappalli Office
Optimization Applications to Grid Connected DGs	11 th May 2013	Government College of Engineering, Tirunelveli

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Rotor Speed Stability and Fault Ride Through Capability of DFIG	23 rd May 2013	Government College of Technology, Coimbatore
Operation and Control of UPQC for mitigation of PQ Problems	29 th May 2013	Pondicherry Engineering College, Pondicherry
Soft Computing Applications in Distributed Generator Planning	21 st August 2013	Anna University Chennai, Tiruchirappalli Regional Office
Operation and Control of UPQC for mitigating power quality problems	27 th November 2013	Thiagarajar College of Engineering, Madurai
Application of Power Electronics in SCIG based Windfarms	12 th December 2013	Anna University Chennai, Tiruchirappalli Regional Office
Different Topologies of Wind and Solar Based Distributed Generation	21 st May 2014	Government College of Engineering, Bargur
Soft Computing Applications to Grid Connected DGs	12 th June 2014	National Institute of Engineering, Mysore
Smart Grid	19 March 2015	Anna University, Tirunelveli Regional Office
Embedded Control of Microgrid with Solar Hybrid System	27 th March 2015	PSG College of Technology, Coimbatore
Microgrid Benefits & Challenges and Associated Control	21 st September 2015	Anna University Chennai, Tiruchirappalli Regional Office
Advanced Metering Infrastructure & Net Metering	26 th November 2015	Central Power Research Institute Bangalore
Role of Embedded Systems in Smart Grid	27 th November 2015	Coimbatore Institute of Technology, Coimbatore
Introduction to GIS and its Applications to Power Sector	25 th January 2016	National Power Training Institute, Neyveli
Introduction to GPS and its Applications to Power Sector	25 th January 2016	National Power Training Institute, Neyveli
Demand Response and Residential Energy Management System	12 th March 2019	Pondicherry Engineering College, Pondicherry
IoT Applications in Power Industries	17 th February 2020	NLC India Limited
Smart Grid	07 th March 2020	NLC India Limited
Smart Metering – Technology and Benefits	05 th May 2020	Institution of Engineers (India), Tiruchirappalli Local Center
Advanced Metering Infrastructure for Smart Grid	29 th May 2020	Government College of Technology Coimbatore
IoT for Thermal and Mines Applications	22 nd August 2020	NLC India Limited
Smart Grid	11 th September 2020	NLC India Limited
Role of EMS and DMS in Power System Operation	17 th September 2020	NLC India Limited
Impact of Large Scale Integration of Renewable Energy in Power Systems	18 th September 2020	Dr. B. R. Ambedkar National Institute of Technology Jalandhar
Applications of IoT in Smart Metering	22 nd October 2020	Thiagarajar College of Engineering, Madurai

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Integration of Renewable Energy Sources in the Smart Grid	10th March 2021	National Institute of Technology Uttarakhand
Grid Interaction of Electric Vehicles in Smart Grid	18th January 2022	College of Engineering, Perumon, Kerala
Demand Side Management & Community Energy Trading	25th February 2022	National Institute of Technology Puducherry
Symmetrical Fault Analysis	6th July 2022	Government College of Engineering Tanjavur

19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member)	Organization	Membership No. with date
Life Member	Indian Society for Technical Education	LM-31309
Fellow	Institution of Engineers (India)	F-1275905
Senior Member	Institute of Electrical and Electronics Engineers (IEEE)	SM-92598409

20. Academic Foreign Visits

Country	Duration of Visit	Programme
Malaysia	25-28, November 2007	International Conference on Intelligent and Advanced Systems (ICIAS 2007)
Singapore	December 4, 2008 to January 3, 2009	TEQIP Training

21. Publications

(A) Refereed Research Journals:

Author(s)	Title of Paper	Journal	Vol. (No.)	Pages	Year
Arjun Visakh and Selvan, M.P.	Feasibility Assessment of Utilizing Electric Vehicles for Energy Arbitrage in Smart Grids Considering Battery Degradation Cost	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects	44(2)	4664-4678	2022
Arjun Visakh and Selvan, M.P.	Energy-cost Minimization with Dynamic Smart Charging of Electric Vehicles and the Analysis of its Impact on Distribution System Operation	Electrical Engineering	-	-	2022

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Arjun Visakh and Selvan, M.P.	Smart Charging of Electric Vehicles to Minimize the cost of Charging and the Rate of Transformer Aging in a Residential Distribution Network	Turkish Journal of Electrical Engineering and Computer Sciences	30(3)	927-942	2022
B. Hanumantha Rao, Shashank Singh, Ritesh Mohan Acharya, and Selvan, M.P.	Blockchain-based Peer-to-Peer Transactive Energy System for Community Microgrid with Demand Response Management	CSEE Journal of Power and Energy Systems	8(1)	198-211	2022
B. Hanumantha Rao and Selvan, M.P.	Framework of Transactive Energy Market Pool for Community Energy Trading and Demand Response Management using an Auction-Theoretic Approach	International Journal of Electrical Power and Energy Systems	137		2022
Ritesh Mohan Acharya, B. Hanumantha Rao and Selvan, M.P.	Aggregator Free Ancillary Services e-Market for Electric Vehicles using Smart Contracts	International Transactions on Electrical Energy Systems	31(11)		2021
B. Hanumantha Rao and Selvan, M. P.	Effective Community Energy Management through Transactive Energy Marketplace	Computers & Electrical Engineering	93		2021
Kaliappan, P. and Selvan, M.P.	M Class Synchrophasor Compliance for Real-time Monitoring of Smart Power Systems	Journal of The Institution of Engineers (India): Series B,	-	-	2021
Kaliappan, P., Meera, K.S. and Selvan, M.P.	Assessment of Compliance of Phasor Measurement Units (PMUs) for Smart Grid Applications	International Transactions on Electrical Energy System	31(4)	-	2021
Dheepanchakkravathy, A., Muthuvel, P., Selvan, M.P. , Moorthi, S. and Chitti Babu, B.	Predictive Current Control of FL-Shunt Active Filter for Dynamic and Heterogeneous Load Compensation	Electrical Engineering	-	-	2021
Hanumantha Rao, B., Arun, S.L. and Selvan, M.P.	Framework of Locality Electricity Trading System for Profitable Peer-to-Peer Power Transaction in Locality Electricity Market	IET Smart Grid	3(3)	318-330	2020
Selvan, M.P.	Smart Residential Electricity Distribution System for Demand Response under Smart	CSI Transactions on ICT	8(2)	231-234	2020

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	Grid Environment				
Vijayapriya, R., Raja, P. and Selvan, M.P.	Systematized Active Power Control of PMSG-Based Wind-Driven Generators	IEEE Systems Journal	14(1)	708-717	2020
Shashank Singh, Aryesh Namboodiri and Selvan, M.P.	Agent-based System to Control the Air-Conditioner and EV Charging for Residents in Smart Cities	IET Smart Cities	1(2)	71-80	2019
Hanumantha Rao, B., Arun, S.L. and Selvan, M.P.	An Electric Power Trading Framework for Smart Residential Community in Smart Cities	IET Smart Cities	1(2)	40-51	2019
Dheepanchakkravathy, A., Jawahar, M.R., Venkatraman, K., Selvan, M.P. and Moorthi, S.,	Performance Evaluation of FPGA based Predictive Current Controller for Four-leg DSTATCOM in Electric Distribution Systems	IET Generation, Transmission and Distribution	13 (19)	4400-4409	2019
Sekhar Nindra, Lakshmana Rao Paila, Kumaresan, N. and Selvan, M.P.	Experimental Investigation on a New Hybrid System Employing Wind-Driven DFIG and Solar PV Panels	Journal of The Institution of Engineers (India): Series B	100 (6)	561-574	2019
Suryanarayana Gangolu, Raja, P., Selvan, M.P. and Venkata Kirthiga M.	Effective algorithm for fault discrimination and estimation of fault location in transmission lines	IET Generation, Transmission and Distribution	13 (13)	2789-2798	2019
Shashank Singh, Amit Roy and Selvan, M.P.	Smart Load Node for Non-Smart Load under Smart Grid Paradigm	IEEE Consumer Electronics Magazine	8(2)	22-27	2019
Dheepanchakkravathy, A., Selvan, M.P. and Moorthi, S.	Alleviation of Power Quality Issues Caused by Electric Arc Furnace Load in Power Distribution System using 3-Phase Four-Leg DSTATCOM	Journal of The Institution of Engineers (India): Series B	100 (1)	9-22	2019
Nikhil, K. A., Bharath Chandra, P., Jawahar, M.R., Moorthi, S., Selvan, M.P. and Kumaresan, N.	FPGA-based Closed Loop Monitoring and Control of Doubly Fed Induction Generator with Single Inverter and Battery for Wind Energy Conversion	Australian Journal of Electrical and Electronics Engineering	-	-	2018
Arun, S.L. and Selvan, M.P.	Smart Residential Energy Management System for Demand Response in Buildings with Energy Storage Devices	Frontiers in Energy	-	-	2018
Dheepanchakkravathy, A., Akhil, S., Venkatraman, K., Selvan, M.P. and Moorthi, S.	Performance Analysis of FPGA Controlled Four-leg DSTATCOM for Multifarious Load Compensation in Electric Distribution System	Engineering Science and Technology	21(4)	692-703	2018
Arun, S.L. and Selvan, M.P.	Intelligent Residential Energy Management	IEEE Systems Journal	12(2)	1329-1340	2018

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	System for Dynamic Demand Response in Smart Buildings				
Vijayapriya, P, Raja, P. and Selvan, M.P.	A Modified Active Power Control Scheme for Enhanced Operation of PMSG based WGs	IEEE Transactions on Sustainable Energy	9(2)	630-638	2018
Dheepanchakkravathy, A., Venkatraman, K., Selvan, M.P. , Moorthi, S. and Venkatakirthiga, M.	Capability Evaluation of Four-leg DSTATCOM for Compensating Multifarious Loads	Australian Journal of Electrical and Electronics Engineering	-	-	2017
Vijayapriya, R., Raja, P. and Selvan, M.P.	Enhanced Method of Rotor Speed and Position Estimation of Permanent Magnet Synchronous Machine based on Stator SRF-PLL	Engineering Science and Technology	20(5)	1450-1459	2017
Arun, S.L. and Selvan, M.P.	Dynamic Demand Response in Smart Buildings using an Intelligent Residential Load Management System	IET Generation, Transmission and Distribution	11 (17)	4348-4357	2017
Venkatraman, K., Selvan, M.P. , Moorthi, S., Raja, P. and Deepa Kurup	Predictive Current Control of DSTATCOM for VAR Compensation of Grid Connected Wind Farms	Journal of Renewable and Sustainable Energy	-	-	2017
Venkatraman, K., Moorthi, S., Selvan, M.P. and Raja, P.	A Comprehensive Embedded Solution for Data Acquisition and Communication using FPGA	Journal of Applied Research and Technology	15(1)	45-53	2017
Venkatraman, K., Moorthi, S. and Selvan, M.P.	Modelling and Control of Transformer-less Universal Power Quality Conditioner (TUnPQC): An Effective Solution for Power Quality Enhancement in Distribution System	Journal of Control, Automation and Electrical Systems	28(1)	123-134	2017
Venkatraman, K., Dastagiri Reddy, B., Selvan, M.P. , Moorthi, S., Kumaresan, N. and Ammasaigounden, N.	Online Condition Monitoring and Power Management System for Standalone Micro-grid using FPGAs	IET Generation, Transmission and Distribution	10 (15)	3875-3884	2016
Venkatraman, K., Selvan, M.P. and Moorthi, S.	Predictive Current Control of Distribution Static Compensator for Load Compensation in Distribution System	IET Generation, Transmission and Distribution	10 (10)	2410-2423	2016
Venkatraman, K., Moorthi, S., Selvan, M.P. , Raja, P. and Deepa Kurup	Performance Evaluation of FPGA-Controlled DSTATCOM for Load Compensation	Arabian Journal of Science and Engineering	41(9)	3355-3367	2016

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Dastagiri Reddy, B., Selvan, M.P. and Moorthi, S.	Design, Operation and Control of S3 Inverter for Single-Phase Micro-Grid Applications	IEEE Transactions on Industrial Electronics	62(9)	5569-5577	2015
Dastagiri Reddy, B., Anish, N.K., Selvan, M.P. and Moorthi, S.	Embedded Control of n-Level DC-DC-AC Inverter	IEEE Transactions on Power Electronics	30(7)	3703-3711	2015
Sandhyarani, M., Ashfaq, M., Arunnellaiappan, T., Selvan, M.P. , Subramanian, S. and Rameshbabu, N.	Effect of Electrical Parameters on Morphology and In-vitro Corrosion Resistance of Plasma Electrolytic Oxidized Films Formed on Zirconium	Surface & Coatings Technology	269	286-294	2015
Sreejith, S., Sishaj P. Simon and Selvan, M.P.	Analysis of FACTS Devices on Security Constrained Unit Commitment Problem	International Journal of Electrical Power and Energy Systems	66	280-293	2015
Dastagiri Reddy, B. Selvan, M.P. and Moorthi, S.	Simplified Embedded Control Scheme for Two-Stage Multistring Off-Grid Inverter	IET Power Electronics	7(12)	2954-2963	2014
Vinothkumar, K. and Selvan, M.P.	Hierarchical Agglomerative Clustering Algorithm Method for Distributed Generation Planning	International Journal of Electrical Power and Energy Systems	56	259-269	2014
Srinath, S., Chandan Kumar and Selvan, M.P.	A Simple Digital Control Algorithm for Three Phase Shunt Active Filter: Simulation and Experimentation	Frontiers in Energy	-	-	2013
Raja. P, Selvan M. P. and Kumaresan N.	Enhancement of voltage stability margin in Radial Distribution system with Squirrel Cage Induction Generator based DGs	IET Generation, Transmission and Distribution	7(8)	898-906	2013
Srinath, S. and Selvan, M.P.	Performance Analysis of UPQC with Heterogeneous Control during Load Power Factor Variation	European Transactions on Electrical Power	22	937-960	2012
Srinath, S. and Selvan, M.P.	UPS Mode Operation of UPQC with Mixed Mode Control	International Review of Automatic Control	5(3)	342-348	2012
Sreejith, S., Sishaj P. Simon and Selvan, M.P.	Performance Comparison of FACTS Devices for Steady State Power Flow Control	International Review of Modelling and Simulations	5(2)	576-588	2012
Sreejith, S., Sishaj P. Simon and Selvan, M.P.	Optimal Location of Interline Power Flow Controller in a Power System Network using DE Algorithm	International Review of Modelling and Simulations	5(2)	690-701	2012
Vinoth Kumar, K. and Selvan, M.P.	Distributed Generation Planning- A New Approach based on Goal Programming	Electric Power Components and Systems	40(5)	497-512	2012

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Srinath, S. and Selvan, M.P.	A Combined Mode of Control for UPQC Connected to a Low Voltage Distribution System	Australian Journal of Electrical and Electronics Engineering	8(3)	-	2011
Srinath, S. and Selvan, M.P.	Effect of Reference Generation Schemes on the Performance of Shunt Active Filter : A Comparison	Advances in Electrical Engineering and Electrical Machines	134	253-259	2011
Vinoth Kumar, K. and Selvan, M.P.	Novel Coordinated Converter Control (3C) Strategy for Enhancement of Fault Ride Through Capability of DFIG Based Wind Farms	Electric Power Components and Systems	39 (14)	1493-1506	2011
Vinoth Kumar, K. and Selvan, M.P.	Capacity Evaluation and Identification of Grid Integration Points of Distributed Generation in Distribution System	Australian Journal of Electrical and Electronics Engineering	8(2)	137-153	2011
Vinoth Kumar, K. and Selvan, M.P.	Fuzzy Embedded Genetic Algorithm Method for Distributed Generation Planning	Electric Power Components and Systems	39(4)	346-366	2011
Vinoth Kumar, K. and Selvan, M.P.	Novel Scheme for Enhancement of Fault Ride Through Capability of Doubly Fed Induction Generator based Wind Farms	Energy Conversion and Management	52(1)	2651-2658	2011
Vinoth Kumar, K. and Selvan, M.P.	Grid Integration of Distributed Generation- Consequences on Node Voltage under Grid Perturbations	Wind Engineering	34(5)	579-594	2010
Vinoth Kumar, K. and Selvan, M.P.	Control Scheme for Mitigation of Output Power Fluctuations in Grid Connected Wound Rotor Induction Generator	Wind Engineering	34(5)	579-594	2010
Vinoth Kumar, K. and Selvan, M.P.	Enhanced Fault Ride-through Scheme for Mitigating Rotor Speed Instability of Doubly Fed Induction Generator Based Wind Farms	Wind Engineering	34(4)	445-460	2010
Selvan, M.P.	Object Oriented Optimal Power Flow-A New Approach Based on Design Patterns	Electric Power Components and Systems	38(2)	197-211	2010
Vinoth Kumar, K. and Selvan, M.P.	A simplified approach for load flow analysis of radial distribution network	International Journal of Electrical, Computer, Energetic, Electronic and Communication Engineering	2(3)	439-450	2008

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Selvan, M.P. and Swarup, K.S.	Modelling and analysis of unbalanced distribution system using object-oriented methodology	Electric Power Systems Research	76 (11)	968-979	2006
Selvan, M.P. and Swarup, K.S.	Development of power flow software using design patterns	IEEE Transactions on Power Systems	21(2)	611-618	2006
Selvan, M.P. and Swarup, K.S.	Dynamic topology processing in a radial distribution system	IEE Proceedings Part C, Generation, Transmission and Distribution	153 (2)	155-163	2006
Selvan, M.P. and Swarup, K.S.	Object modelling of balanced and unbalanced distribution systems for power flow analysis	Electric Power Components and Systems	34(2)	191-215	2006
Selvan, M.P. and Swarup, K.S.	Object Methodology– Method and Design for Topological Processing	IEEE Power & Energy Magazine,	3(1)	18-29	2005
Kumaresan, N., Selvan, M.P. and Subbiah, M.	Design Optimisation and Speed Extension of Wind Driven Self-Excited Induction Generators- A New Approach	Electric Power Components and Systems	32(2)	215-228	2004
Ajit Kumar, K. and Selvan, M.P.	Impact of Solar PV Penetration on Grid	Electrical India	57 (10)	30-36	2017
Venkata Hareesh, S., Raja, P. and Selvan, M.P.	Need and Challenges of Smarter Power Systems	Electrical India	56(1)	82-84	2016
Asha Radhakrishnan and Selvan, M.P.	A Load Scheduling for Smart Energy Management in Buildings with Renewable Power Generations	Electrical India	55(5)	76-90	2015
Vinoth Kumar, K. and Selvan, M.P.	Effect of Distributed Generator Model on Placement of Multiple DGs in Radial Distribution System	Electrical India	50(8)	130-136	2010
Selvan, M.P. and Swarup, K.S.	Object-Oriented Power System Analysis	Journal of Indian Institute of Science	84(5)	141-154	2004

(B) Conferences/Workshops/Symposia Proceedings

Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Pages	Venue	Year
Arjun Visakh and Selvan, M.P.	A Smart Charging Strategy for Electric Vehicles to Improve the Load Factor of Distribution Systems	7 th Student's Conference on Engineering & Systems (SCES-2022)	-	MNNIT Allahabad	2022
Arjun Visakh and Selvan, M.P.	Voltage Dependent Load Models for EV Chargers to Improve the Accuracy of Grid-Impact Studies	International Virtual Conference on Power Engineering Computing and Control (PECCON-	-	VIT Chennai	2022

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		2022)			
Arjun Visakh and Selvan, M.P.	Charging-Cost Minimization of Electric Vehicles and its Impact on the Distribution Network	9 th International Conference on Power Systems (ICPS 2021)	1-5	IIT Kharagpur	2021
Arjun Visakh and Selvan, M.P.	Seasonal Effects of Electric Vehicle Charging on the Aging of Distribution Transformers	13 th IEEE PES Asia Pacific Power & Energy Engineering Conference (APPEEC 2021)	1-6	Trivandrum	2021
Arjun Visakh, T Sornavel and Selvan M.P.	Priority-based charging of electric vehicles to prevent distribution transformer overloading	2 nd Electric Power and Renewable Energy Conference (EPREC-2021)	1-5	NIT Jamshedpur	2021
Sandipan Roy, Arjun Visakh and Selvan M. P.	Coordinated Charging of Electric Vehicles in Smart Grids to Minimize Distribution Loss	International Online Conference on Smart Grid Energy Systems and Control (SGESC-2021)	1-7	NIT Kurukshetra	2021
Ritesh Mohan Acharya, Arjun Visakh and Selvan, M.P.	Non-intrusive Bilateral EV-to-EV Energy Trading Using Blockchain	Online International Conference on Challenges and Applications in Clean Energy (ICCACE 2020)	1-7	NIT Kurukshetra	2020
Ritesh Mohan Acharya and Selvan, M.P.	Privacy Preserving Market for Smart Grid Data Trading	7 th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON 2020)	1-6	MNNIT Allahabad	2020
Hanumanthan Rao, B. and Selvan, M.P.	Prosumer Participation in a Transactive Energy Marketplace: A Game-Theoretic Approach	IEEE International Power and Renewable Energy Conference (IPRECON 2020)	1-6	Kollam	2020
Shashank Singh, Sudharsan Thirumalai and Selvan, M.P.	Realization of Self-Demand Response Through Non-Intrusive Load Monitoring Algorithm	IEEE International Conference on Electronics, Computing and Communication Technologies IEEE (CONECCT-2019)	1-6	IIIT Bangalore	2019
Shashank Singh, Aryesh Namboodiri and Selvan, M.P.	Simplified Algorithm for Dynamic Demand Response in Smart Homes Under Smart Grid Environment	IEEE PES GTD Grand International Conference and Exposition Asia GTD Asia-2019	259-264	Bangkok	2019
Shashank Singh and Selvan, M.P.	A Smart Energy Meter Enabling Self-Demand Response of Consumers in Smart Cities of Tamil Nadu	IEEE International Conference on Smart Cities Model ICSCM-2019	1-6	IIT Madras	2019

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Dinesh, P., Kumar Teja, K., Shashank Singh, Selvan, M.P. and Moorthi, S.	FPGA Based SoC Estimator and Constant Current Charging/Discharging Controller for Lead-Acid Battery	IEEE International Conference INDICON-2018	1-6	Coimbatore	2018
Akshay Anantharaman, Sarang Sharan, Naveen K and Selvan, M.P.	Hydro-Thermal-Wind Coordination for Short Term Unit Commitment using Lambda-Gamma Iteration and Particle Swarm Optimization	IEEE International Conference INDICON-2017	1-6	IIT Roorkee	2017
Ajit Kumar, K., Selvan, M.P. and Rajapandiyam, K.	Grid Stability Analysis for High Penetration Solar Photovoltaics	International Conference on Large-Scale Grid Integration of Renewable Energy in India	1-8	New Delhi	2017
Shashank Singh, Arun, S.L. and Selvan, M.P.	Regression Based Approach for Measurement of Current in Single-Phase Smart Energy Meter	IEEE Region 10 Symposium (TENSYP-2017)	1-5	Kochi	2017
Arun, S.L., Aravind Raj, A. and Selvan, M.P.	Demand Response in Smart Buildings Through Time-Varying Priority of Household Appliances	IEEE Region 10 Symposium (TENSYP-2017)	1-5	Kochi	2017
Jawahar, M.R., Ajay Kumar, V., Moorthi, S. and Selvan, M.P.	FPGA based SHEPWM Switching Scheme for Single Phase Cascaded H-Bridge Multi-Level Inverter	IEEE International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES-2016)	3257-3261	DTU Delhi	2016
Venkata Hareesh, S., Raja, P. and Selvan, M.P.	Design and Implementation of a Robust Fault Detection Mechanism for EHV Lines	IEEE International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES-2016)	3257-3261	DTU Delhi	2016
Venkata Hareesh, S., Raja, P. and Selvan, M.P.	An effective implementation of Phasor Measurement Unit (PMU) by using non-recursive DFT Algorithm	IEEE International Conference on Condition Assessment Techniques in Electrical Systems (CATCON-2015)	195-199	CPRI Bangalore	2015
Soumya, N. K. and Selvan, M.P.	State Estimation of Observable and Unobservable Power Systems	IEEE International Conference on Energy, Power and Environment (ICEPE-2015)	-	NIT Meghalaya	2015
Vijitha, K., Selvan, M.P. and Raja, P.	Short Circuit Analysis and Adaptive Zonal Protection of Distribution System with Distributed Generators	IEEE International Conference on Energy, Power and Environment (ICEPE-2015)		NIT Meghalaya	2015

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Hrishikesan, V.M., Venkatraman, K. and Selvan, M.P.	Performance of Custom Power Devices in SCIG based Windfarms during Abnormal Grid Conditions	IEEE International Conference INDICON-2014	-	Pune	2014
Arun, S.L., Kumaravel, S. and Selvan, M.P.	Unit Size Optimization of Hybrid Energy System	IEEE International Conference on Innovative Smart Grid Technologies-Asia (ISGT ASIA-2014)	79-83	Kuala Lumpur	2014
Vijitha, K. and Selvan, M.P.	Performance Analysis of Distribution Network with Optimally Sized WTGS based DGs Considering Wind Speed Variation	IEEE International Conference INDICON-2013	-	IIT Bombay	2013
Anish N. K., T. Murali Chakkravarthy, Dastagiri Reddy, B., Moorthi, S. and Selvan, M.P.	FPGA Based Control Scheme for a Single-Stage Grid-Connected Solar Photovoltaic System	IEEE International Conference AFRICON 2013	9-12	Mauritius	2013
Vinothkumar, K. and Selvan, M.P.	DG Planning Method for Enhancement of Voltage Stability Margin in Distribution System	IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES 2012)	1-6	CPRI Bangalore	2012
Ranjith Kumar, S., Raja, P. and Selvan, M.P.	Virtual Laboratory Environment using MATLAB GUI for Teaching of Induction Generators	IEEE International Conference INDICON-2012	676-681	Kochi	2012
Rao, V M Sandeep, Natarajan Aravind, Moorthi, S. and Selvan, M.P.	Real-time Object Tracking in a Video Stream using Field Programmable Gate Array	IEEE International Conference INDICON-2012	167-170	Kochi	2012
Selvan, M.P. and Chiranjeevi, V	A Method for Siting of STATCOM and SSSC for Power Transfer Capacity Enhancement	IEEE International Conference INDICON-2012	367-372	Kochi	2012
Venkatraman, K., Aasish, T.R., Selvan, M.P. and Moorthi, S.	Experimental Verification of FPGA Controller based Series Active Filter	IEEE Asia Pacific Conference on Postgraduate Research (PRIMEASIA-2012)	197-200	Hyderabad	2012
Anish, N.K., Deepak Krishnan, Moorthi, S. and Selvan, M.P.	FPGA Based Microstepping Scheme for Stepper Motor in Space-Based Solar Power Systems	International Conference on Industrial and Information Systems (ICIIS 2012)	1-6	IIT Madras	2012
Srinath, S. Chandan Kumar and Selvan, M.P.	Digital Feedback Control based Dynamic Voltage Compensator for Voltage Sag Mitigation: Simulation and Experimental Validation	International Conference on Industrial and Information Systems (ICIIS 2012)	1-6	IIT Madras	2012

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Venkatraman, K., Selvan, M.P. and Moorthi, S.	Investigation on Series Active Filter with Small Energy Source for DC Voltage Control	International Conference on Control, Communication and Power Engineering (CCPE-2012)	454-459	Bangalore	2012
Sreejith, S., Sishaj P. Simon, and Selvan, M.P.	Optimal Power Flow Incorporating Thyristor Controller Series Compensator Using Differential Evolution	IEEE International Conference on Computing, Electronics and Electrical Technologies (ICCEET-2012)	174-179	Kumaracoil	2012
Sreejith, S., Sishaj P. Simon, and Selvan, M.P.	Comparative Evaluation of Modelling Methods for TCSC in Optimal Power Flow Studies	IEEE International Conference on Power, Signals, Controls and Computation (EPSCICON-2012)	1-6	Thrissur	2012
Anish, N.K., Deepak Krishnan, Moorthi, S. and Selvan, M.P.	FPGA Based Microstepping Scheme for a Stepper Motor in Solar-Tracking Applications	International Conference on Renewable Energy Utilizations (ICREU-2012)	245-251	Coimbatore	2012
Vinothkumar, K. and Selvan, M.P.	Analysis of Power Conversion Losses in Dynamic Slip Control Topologies of Grid Connected Small Wind Generators	International Conference on Renewable Energy Utilizations (ICREU-2012)	245-251	Coimbatore	2012
Venkatraman, K., Selvan, M.P. and Moorthi, S.	Performance Analysis of Series Active Filter under Non Sinusoidal Supply and Non Linear Loading	IEEE International Conference on Power and Energy Systems (ICPS - 2011)	1-6	IIT Madras	2011
Venkatraman, K., Selvan, M.P. and Moorthi, S.	Performance of Series Active Filter in Low Voltage Distribution System with Non Linear Loads	IEEE International Conference INDICON-2011	1-6	Hyderabad	2011
Srinath, S. Chandan Kumar and Selvan, M.P.	Dynamic Voltage Compensator: Transformation less Control Perspective	IEEE International Conference on Innovative Smart Grid Technologies-India (ISGT 2011-India)	1-6	Kollam	2011
Srinath, S. and Selvan, M.P.	Investigation on Rating of Shunt APF in Unified Power Quality Conditioner	IET International Conference on Sustainable Energy and Intelligent System (SEISCON 2011)	7-11	Chennai	2011
Sreejith, S., Sishaj P. Simon and Selvan, M.P.	Investigations on Power Flow Solutions using Interline Power Flow Controller (IPFC)	IET International Conference on Sustainable Energy and Intelligent System (SEISCON 2011)	63-68	Chennai	2011

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Vinoth Kumar, K. and Selvan, M.P.	Enhanced Fault Ride-Through (FRT) Scheme & Coordinated Reactive Power Control for DFIG	IEEE International Conference on Sustainable Energy Technologies (ICSET 2010)	1-6	Kandy	2010
Srinath, S. and Selvan, M.P.	Indigenous Control of Augmented DC Voltage in D-Statcom	IEEE Symposium on Industrial Electronics and Applications (ISIEA 2010)	253-257	Penang	2010
Vinoth Kumar, K., Selvan, M.P. and Srinath, S.	Impact of DG Model and Load Model on Placement of Multiple DGs in Distribution System	International Conference on Industrial and Information Systems (ICIIS 2010)	159-164	NIT Karnataka	2010
Srinath, S., Selvan, M.P. and Vinoth Kumar, K.	Comparative Evaluation of Performance of Different Control Strategies on UPQC Connected Distribution System	International Conference on Industrial and Information Systems (ICIIS 2010)	165-170	NIT Karnataka	2010
Sreejith, S., Sishaj P. Simon and Selvan, M.P.	Power Flow Analysis Incorporating Firing Angle Model Based TCSC	International Conference on Industrial and Information Systems (ICIIS 2010)	188-193	NIT Karnataka	2010
Sudha, C. and Selvan, M.P.	Feature Extraction Techniques for Power Quality Disturbance Detection and Classification	International Conference on Power Systems (ICPS 2009)	1-6	IIT Kharagpur	2009
Vinoth Kumar, K. and Selvan, M.P.	Dynamic Slip Control Topologies and Novel Control Strategy for Grid Connected Opti-Slip Induction Generator	IEEE Region Ten International Conference (TENCON 2009)	1-6	Singapore	2009
Vinoth Kumar, K., Nageswar Rao, A. and Selvan, M.P.	Mitigation of Output Power Fluctuations in Wind Farms with Opti-Slip Induction Generator	IEEE PES/IAS International Conference on Sustainable and Alternative Energy (SAE 2009)	1-6	Valencia	2009
Vinoth Kumar, K. and Selvan, M.P.	Planning and Operation of Distributed Generations in Distribution Systems for Improved Voltage Profile	IEEE PES Power Systems Conference and Exposition (PSCE 2009)	1-7	Washington	2009
Selvan, M.P. and Swarup, K. S.	Unbalanced Distribution System Short Circuit Analysis – An Object-Oriented Approach	IEEE Region Ten International Conference (TENCON 2008)	1-6	Hyderabad	2008
Vinoth Kumar, K. and Selvan, M.P.	A Simplified Approach for Load Flow Analysis of Radial Distribution Network with Embedded Generation	IEEE Region Ten International Conference (TENCON 2008)	1-6	Hyderabad	2008
Kotte Venkateswarlu and Selvan, M.P.	Comparative Study on DStatcom Inverter Topologies for Source	International Conference on Power System	783-790	Vizag	2008

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	Current Balancing	Analysis, Control and Optimization (PSACO 2008)			
Sudha, C. and Selvan, M.P.	Wavelet Based Detection and ANN Based Classification of Power Quality Disturbances	International Conference on Power System Analysis, Control and Optimization (PSACO 2008)	426-430	Vizag	2008
Sumathi, N, Selvan, M.P. and Kumaresan, N.	A Hybrid Genetic Algorithm Based Power System Stabilizer	International Conference on Intelligent and Advanced Systems (ICIAS 2007)	1-6	Kaula Lampur	2007
Anuradha, J and Selvan, M.P.	A Comparative Study of Forward-Backward Sweep Power Flow Methods for Radial Distribution System	International Conference on Modelling and Simulation (CITICOMS 2007)	1-7	Coimbatore	2007
Selvan, M.P. and Swarup, K.S.	Distribution System Load-Flow using Object-Oriented Methodology	IEEE International Conference on Power System Technology (POWERCON 2004)	1168-1173	Singapore	2004
Selvan, M.P. and Swarup, K.S.	Object-Oriented Software Modelling of Unbalanced Distribution System	International Conference on Power Systems (ICPS 2004)	227-230	Kathmandu	2004
Selvan, M.P. and Swarup, K.S.	Large Scale Power System Computations with Object-Oriented Design	IEEE PES General Meeting	330-335	Colorado	2004
Athulya, M. S., Arjun Visakh and Selvan, M.P.	Electrical Vehicle Recharge Scheduling in a Shopping Mall Charging Station	National Power Systems Conference (NPSC 2020)	-	IIT Gandhinagar	2020
Hanumanthan Rao, B., Chandan Kumar, B., Manjunatha Sharma, K. and Selvan, M.P.	Design and Development of an Emulator for Distribution Automation Using DCS	National Power Systems Conference (NPSC 2018)	-	NIT Tiruchirappalli	2018
Navya Krishnan K, Hanumanthan Rao, B., Arun, S.L. and Selvan, M.P.	Interactive Demand Response in a Locality of Smart Power System	National Power Systems Conference (NPSC 2018)		NIT Tiruchirappalli	2018
Arun, S.L. and Selvan, M.P.	Prosumer based Demand Response for Profitable Power Exchange between End-user and Utility	National Power Systems Conference (NPSC 2018)		NIT Tiruchirappalli	2018
Nindra Sekhar, Lakshmana Rao, P., Kumaresan, N. and Selvan, M.P.	Experimental Investigation on Operation of Stand-alone Wind-driven DFIG-Solar PV System	National Conference on Hybrid AC/DC Power Systems for effective utilization of Renewable Energy (IEI-NCEE 2017)	-	NIT Tiruchirappalli	2017

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Sampada Sunil Sahare and Selvan, M.P.	Comparison of Different Phase Shift Control Techniques for Isolated Bi-directional DC-DC Converter (IBDC) for Battery Charging Application	National Conference on Hybrid AC/DC Power Systems for effective utilization of Renewable Energy (IEI-NCEE 2017)		NIT Tiruchirappalli	2017
Arun, S.L. and Selvan, M.P.	Very Short Term Prediction of Solar Radiation for Residential Load Scheduling in Smartgrid	National Power Systems Conference (NPSC 2016)	-	IIT Bhubaneswar	2016
Vijaya Priya, R., Kishore Reddy, S., Selvan, M.P. and Raja, P.	Parallel Operation of Permanent Magnet Synchronous Generator Based Windmills Connected to HVDC-VSC Link	National Power Systems Conference (NPSC 2016)		IIT Bhubaneswar	2016
Asha Radhakrishnan and Selvan, M.P.	Load Scheduling for Smart Energy Management in Residential Buildings with Renewable Sources	National Power Systems Conference (NPSC 2014)		IIT Guwahati	2014
Hrishkesan, V.M., Venkatraman, K., Selvan, M.P. and Moorthi, S.	Application of D-STATCOM in SCIG based Wind-farms during Normal and Abnormal Grid Conditions	National Power Systems Conference (NPSC 2014)		IIT Guwahati	2014
Lalit Negi and Selvan, M.P.	Maximum Penetration Ranking based Siting and PSO Assisted Goal Programming based Sizing of DG units in Radial Distribution System	National Power Systems Conference (NPSC 2012)	-	IIT-BHU Varanasi	2012
Srinath, S., Anu G. Kumar and Selvan, M.P. ,	Experimental Verification of Unified Power Quality Conditioner with Transformation Less Combined Mode Control	National Power Systems Conference (NPSC 2012)		IIT-BHU Varanasi	2012
Srinath, S., Anu G. Kumar and Selvan, M.P.	Simulation and Experimental Verification of Transformationless Control of Series Active Filter for Mitigating Load Voltage Harmonics	National Power Systems Conference (NPSC 2012)		IIT-BHU Varanasi	2012
Srinath, S., Mohan, K., Prabakaran, S. and Selvan, M.P.	Implementation of Single Phase Shunt Active Filter for Low Voltage Distribution System	National Power Systems Conference (NPSC 2010)		Hyderabad	2010
Vinoth Kumar, K., Santhosh Kumar, B. and Selvan, M.P.	Voltage Stability Enhancement of Radial Distribution System using Distributed Generators	National Power Systems Conference (NPSC 2010)		Hyderabad	2010
Mohan, K., Prabakaran, S., Srinath, S. and Selvan, M.P.	Effect of Short Circuit Level of Distribution System on the Performance of Series	National Conference on Control of Power Electronic Drives and System (CPEDS		Vizag	2010

National Institute of Technology Tiruchirappalli

	Active Filter	2010)			
Vinoth Kumar, K., Surendar, G. and Selvan, M.P.	Performance Comparison of Shunt Active Filter and Hybrid Active Filter	National Systems Conference (NSC 2008)	71-76	IIT Roorkee	2008
Selvan, M.P. and Sahaya Elsi, S.	Modeling and Simulation of Unified Series Shunt Compensator	National Conference on Electrical and Embedded Systems (NCEEE 2008)	135-139	Chennai	2008
Selvan, M.P. and Swarup, K.S.	Object-Oriented Modelling of Distribution System with Dispersed Generations for Power Flow Analysis	National Power Systems Conference (NPSC 2004)	122-127	IIT Madras	2004
Ravi Badhan, Selvan, M.P. and Swarup, K. S.	Distribution Feeder Reconfiguration Using Object Oriented Programming	IEEE-Annual Convention and Exhibition	430-434	Kolkata	2002
Selvan, M.P. and Swarup, K.S.	Network Topology Processor- An Object-Oriented Approach	IEEE-Annual Convention and Exhibition	435-439	India	2002

(C) Book Chapters

Author(s)	Title of Chapter	Title of Book	Name of Publishers	Year of Publication	ISBN Number
S.L. Arun M.P. Selvan	Demand Response Frameworks for Smart Residential Buildings	Operation of Smart Homes	Springer	2021	978-3-030-64915-9
S.L. Arun M.P. Selvan	Demand Response in Smart Residential Buildings	Intelligent Paradigms for Smart Grid and Renewable Energy Systems	Springer	2021	978-981-15-9968-2
R. Vijaya Priya P. Raja M.P. Selvan	Variable Speed Permanent Magnet Synchronous Generator-Wind Energy Systems	Renewable Energy for Sustainable Growth Assessment	Wiley	2022	978-1-119-78536-1
B. Dastagiri Reddy K. Venkatraman M.P. Selvan S. Moorthi	An FPGA Based Embedded Systems for Online Monitoring and Power Management in a Standalone Micro-Grid	Smart Grids and Microgrids: Technology Evolution	Wiley	2022	978-1-119-76059-7