

# National Institute of Technology, Tiruchirappalli:

## Performa for CV of Faculty/ Staff Members

### Curriculum Vitae



Brief Profile: 1-2 paragraphs (not exceeding 500 words)

Selvan M P completed B.E.(Electrical and Electronics Engineering) from Manonmaniam Sundaranar University, Tirunelveli in 1999, M.E.(Power Systems) from National Institute of Technology, Tiruchirappalli in 2000 and Ph.D. (Computer Applications in Power Systems) from IIT Madras in 2006. He has sixteen years of teaching and research experience in the field of power systems. He is currently an Assistant Professor in Electrical and Electronics Engineering department of NIT Tiruchirappalli and associated with the Hybrid Electrical Systems Laboratory. He has published more than ninety technical research papers in various national, international conferences and journals. His areas of interest include distribution system analysis, distributed generators, microgrid, smart-grid, demand side management, custom power devices and power quality.

1.	Name	Dr. M. P. Selvan
2.	Designation:	Assistant Professor
3.	Office Address:	# EE 210, Department of EEE National Institute of Technology Tiruchirappalli
4.	Telephone (Direct) (Optional): Telephone : Extn (Optional): Mobile (Optional):	+ 91-431-250 3262
5.	Email (Primary): selvanmp@nitt.edu	Email (Secondary) : selvanmp@gmail.com
6.	Field(s) of Specialization:	Power Systems

#### 7. Employment Profile

Job Title	Employer	From	To
<b>Research Assistant</b>	REC Tiruchirappalli	February 2001	May 2001
Research Associate	REC Tiruchirappalli	June 2001	December 2001
Half Time Teaching/ Research Assistant	IIT Madras	January 2002	March 2006
Assistant Professor	NIT Tiruchirappalli	April 2006	Till Date

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

Examination	Board / University	Year	Division/ Grade	Subjects
Ph.D.	IIT Madras	2006		Computer Applications to Power Systems
M.E.	REC Tiruchirappalli	2000	First with Distinction	Power Systems
B.E.	Manonmaniam Sundaranar University Tiruch3	1999	First with Distinction	Electrical and Electronics Engineering
HSC	Tamil Nadu State Board	1995	First with Distinction	Mathematics, Biology, Physics & Chemistry
SSLC	Tamil Nadu State Board	1993	First with Distinction	Mathematics, Science

### 9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	To
Faculty in-charge	Department of Computer Lab	April 2006	Till date
Hostel Warden	Zircon C Hostel/ NITT	November 2011	November 2015
Member	Estate Committee	2008	2012

### 10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To
Doctoral Committee Member	Various Universities		
Member, Board of Studies	Government College of Technology, Kariakudi		

### 11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
	NIL	

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12. Fellowships

Year of Award	Name of the Fellowship	Awarding Organization	From (Month/Year)	To (Month/Year)
2016	Visvesvaraya Young Faculty Research Fellowship	Department of Electronics and Information Technology (DeitY), Govt. of India	May 2016	April 2018

13. Details of Academic Work

(i) Curriculum Development

Involved in the Development of curriculum of B.Tech. (EEE) & M.Tech. (Power Systems), M.Tech. (Construction Technology & Management)

(ii) Courses taught at Postgraduate and Undergraduate levels

Undergraduate Level

Computer Methods in Power System Analysis  
 Basics of Electrical and Electronics Engineering  
 Basics of Programming  
 Transmission and Distribution of Electrical Energy  
 Power Systems Analysis  
 Power System Economics and Control Techniques  
 Electromagnetic Fields

Postgraduate Level

Power System Dynamics  
 Electrical Distribution Systems  
 Power Systems Stability  
 Renewable Power Generation Sources  
 High Voltage DC Transmission  
 Smart Grid Technologies

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(iii) Projects guided at Postgraduate level

Study of certain custom power devices for power quality improvement

Load flow analysis of distribution system incorporating wind energy conversion system as a dispersed generation.

Study of unified series-shunt compensator for power quality improvement

A comparative study of Forward-backward sweep power flow methods for radial distribution system

Wavelet base detection and AI based classification of power quality disturbances

Comparative Study on DSTATCOM Inverter Topologies for Source Current Balancing Analysis and Simulation of Shunt Active Power Filter

Wavelet base detection and AI based classification of power quality disturbances

Study on D-Statcom current control techniques for source current balancing and harmonics reduction.

Performance comparison of SAPF and HAPF.

Simulation and Experimental Investigation on Interaction of OPTi-Slip Generator with Grid

Study on Doubly Fed Induction Generator Systems

A Wavelet Transform Analysis for Fault Location

Simulation and Experimental Investigation on Interaction of OPTi-Slip Generator with Grid

Investigations on Transient Stability of a Power System including Wind Generators

Classification and Location of Power System Faults using Wavelet Transform and Interpolation

Performance Analysis of Dynamic Voltage Restorer and Series Active Filter

Performance Analysis of Shunt Active Filter

Radial Distribution System Load Flow using Interval Arithmetic Method

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Hardware Implementation of Single Phase Dynamic Voltage Restorer using LF2407

Hardware Implementation of Single Phase Shunt Active Filter using DSP LF2407

Distribution System Voltage Stability Analysis and its Enhancement using Distributed Generator

Small Signal Stability Analysis of Doubly Fed Induction Generator

Simulation and Hardware Implementation of Three Phase Shunt Active Filter

Simulation and Hardware Implementation of Three Phase Dynamic Voltage Restorer

Siting of FACTS Devices using Sensitivity Analysis

Study on Full Scale Power Converter Based Wind Energy Conversion System

Maximum Penetration Ranking Based DG Integration in Radial Distribution System

Hybrid State Estimation

Power Quality Improvement using Series Active Filter

Experimental Investigation on Unified Power Quality Conditioner for Harmonic Mitigation

An Investigation into the Control Approaches of DSTATCOM for Reactive Power Compensation in Three-Phase Four Wire System

State Estimation of Observable and Unobservable Power Systems

Optimal Sizing and Analysis of WTGS based DG in Distribution Networks Considering Wind Speed Variation

Study on Performance of Custom Power Devices in SCIG based Wind-farms during Normal and Abnormal Grid Conditions

Dynamic Analysis of Microgrid

Load Scheduling for Efficient Energy Management in Buildings with Renewable Power Generations

Energy Management in Smart Buildings Through Demand Response

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Voltage Stability Analysis of Power System with Renewable Power Integration  
Investigations on New Topologies for Multilevel Inverters

Decentralized Control of Interconnected Multi Area Power System

Parallel Operation of Permanent Magnet Synchronous Generator Based  
Windmills

Control of Modular Multilevel Inverter Based on Chopper-Cells by Phase  
Shifted Carrier Based PWM.

Prototype Development of Energy Management in Smart Building Through  
Demand Response

Adaptive PI Control of STATCOM for Voltage Regulation

Design of FPGA based Monitoring System for Microgrid

Cost Effective Design of Power Distribution Systems and Protection Schemes  
in EPC Projects

(iv)\Other contribution(s)

Video Lectures for Power System Operation Control, High Voltage DC  
Transmission

### 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 & Technology, Govt. of India	2009	2012	Completed
Development of Micro-Grid Controller Integrated with Multiple Types of Renewable Sources and Loads	PGCIL	2013	2014	Completed
A Novel Hybrid	National Institute	2013	2017	Ongoing

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Energy System for Supplying Isolated Loads with FPGA Based Energy Management Scheme	of Wind Energy Technology			
Development of Intelligent Residential Load Management System for Smart Grid Environment	Department of Electronics and Information Technology, Govt. of India	2016	2018	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	2012
S. Srinath	Investigations on Performance of Unified Power Quality Conditioner with Combined Mode Control	Supervisor	2013
B. Dastagiri Reddy	Investigations on Certain Multistring Inverter Topologies for Single-phase Micro-grid Applications	Supervisor	2016
S. Sreejith	Scheduling of Thermal Generating Units Incorporating FACTS Devices using Bee Colony Intelligent System	Co-Supervisor	2014

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

### **Role : Participant**

1. **Power System Data Repository and Load Research** organized by CPRI, Bangalore during 20<sup>th</sup> – 21<sup>st</sup> November 2003.
2. **Artificial Intelligence Techniques in Power Systems (AIPS 2003)** organized by Electrical Engineering Department, IIT Madras and Tennessee Tech University, USA during 2<sup>nd</sup> – 6<sup>th</sup> December 2003.
3. **National Workshop on Technology Enhanced Learning for Enriching Engineering Education** organized by Indian Institute of Information Technology and Management-Kerala during 5<sup>th</sup> – 6<sup>th</sup> January 2007.
4. **Modeling and Analysis of Electrical Machines** organized by Electrical and Electronics Engineering Department, College of Engineering, Anna University Chennai during 09<sup>th</sup> -11<sup>th</sup> August 2007.
5. **Wind Power Integration** organized by Electrical and Electronics Engineering Department, NIT Tiruchirappalli during 20<sup>th</sup> – 27<sup>th</sup> August 2007. (**TEQIP**)
6. **Recent Trends in Wind Power Generation and FACTS** organized by Electrical and Electronics Engineering Department, NIT Tiruchirappalli during 28<sup>th</sup> – 29<sup>th</sup> August 2007. (**TEQIP**)
7. **Electronic Circuit Design Techniques** organized by Electrical and Electronics Engineering Department, NIT Tiruchirappalli during 28<sup>th</sup> -29<sup>th</sup> September 2007. (**TEQIP**)
8. **All India Workshop on Recent Trends in Energy Management** organized by The Institute of Engineers (India), Tiruchirappalli Local Centre during 12<sup>th</sup> -13<sup>th</sup> October 2007.



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9. **Electrical Machines and Power Electronics in Renewable Energy Systems** organized by Electrical and Electronics Engineering Department, NIT Tiruchirappalli during 28<sup>th</sup> January 2008 – 1<sup>st</sup> February 2008. (**AICTE - QIP**)
  
10. **Multivariable Control Systems** organized by Chemical Engineering Department, NIT Tiruchirappalli on 29<sup>th</sup> February, 2008. (**TEQIP**)
  
11. **Power Electronics and Renewable Energy Electric Conversion Systems** organized by Electrical and Electronics Engineering Department, NIT Tiruchirappalli during 16<sup>th</sup> June – 28<sup>th</sup> June 2008. (**MHRD – AICTE- Summer School**)
  
12. **Wavelet Transforms for Data Analysis-Theory and Applications** organized by Chemical Engineering Department, IIT Madras during 7<sup>th</sup> July – 12<sup>th</sup> July 2008. (**AICTE-QIP**)
  
13. **Instructional Design and Delivery Systems** organized by National Institute of Technical Teachers Training & Research, Chennai during 21<sup>st</sup> August – 27<sup>th</sup> August 2008.
  
14. **National Workshop on Power Electronics NWPE 2008** organized by Electrical and Electronics Engineering Department, NIT Tiruchirappalli during 12<sup>th</sup> November – 14<sup>th</sup> November 2008. (**NaMPET**)
  
15. **Computer Networking-Hardware & Software** conducted by M/s. SANAT Technologies, Chennai at NIT Tiruchirappalli on 19<sup>th</sup> February 2009.
  
16. **Practical Aspects of Computer Networking** conducted by M/s. Extreme Networks, Chennai at NIT Tiruchirappalli during 12<sup>th</sup> & 13<sup>th</sup> March 2009.
  
17. **Power Electronic Simulation-SEQUEL** organized by Electrical and Electronics Engineering Department, NIT Tiruchirappalli on 4<sup>th</sup> May 2009. (**NaMPET**)

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18. **Engineering Practices on Fuzzy Logic, Neural Networks and Hybrid Intelligent Systems** organized by the Department of Mathematics and Electrical & Electronics Engineering, NIT Tiruchirappalli during 15<sup>th</sup> June – 27<sup>th</sup> June 2009. **(MHRD-AICTE)**
19. **Smart Grid Engineering** organized by the Department of Electrical Engineering, NIT Calicut during 22<sup>nd</sup> May – 4<sup>th</sup> June 2011. **(MHRD-AICTE)**
20. **Solar Photovoltaics : Fundamentals, Technologies and Applications** organized by IIT Bombay during 12<sup>th</sup> December – 22<sup>nd</sup> December, 2011. **(ISTE Workshop)**
21. **TEQIP Industrial Workshop on Understanding IGBT: from Device to Inverter**, organized by EEE department of NIT Tiruchirappalli on 08<sup>th</sup> April 2014. **(TEQIP II Industrial Workshop)**
22. **TEQIP Industrial Workshop on Power System Modeling and Simulation with PSCAD**, organized by EEE department of NIT Tiruchirappalli during 12<sup>th</sup> – 13<sup>th</sup> May 2014. **(TEQIP II Industrial Workshop)**
23. **TEQIP-II Workshop on Low Power Controller using MSP 430 Microcontrollers** organized by EEE department of NIT Tiruchirappalli during 20<sup>th</sup> – 21<sup>th</sup> June 2014. **(TEQIP II Workshop)**
24. **Short Term Course on Real Time Controller Design Using TI C2000 Microcontroller** organized by EEE department of NIT Tiruchirappalli during 26<sup>th</sup> – 28<sup>th</sup> September 2014.
25. **Short Term Course on Role of Power Electronics in Power Engineering** organized by EEE department of NIT Tiruchirappalli during 04<sup>th</sup> – 05<sup>th</sup> March 2016. **(TEQIP II Workshop)**
26. **Workshop on Embedded System Design using FPGA Board** organized by EEE department of NIT Tiruchirappalli during 23<sup>rd</sup> – 24<sup>th</sup> April 2016. **(TEQIP II Industrial Workshop)**

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

**1. Workshop on Electrical Science and Electronics for Physics Teachers of Higher Secondary Schools.**

Under TEQIP (Services to Community and Economy)

Duration: 28<sup>th</sup> and 29<sup>th</sup> October 2006

Co-ordinated with Dr. N.Kumaresan at EEE Department, NIT Trichy.

**2. Workshop on C++ Programming for PG students**

Under TEQIP (Tribal Development)

Duration: 30<sup>th</sup> November 2006 and 1<sup>st</sup> December 2006

Co-ordinated with Ms. S.Sudha at EEE Department, NIT Trichy.

**3. Workshop on Computer Fundamentals**

Under TEQIP (Tribal Development)

Duration: 24<sup>th</sup> and 25<sup>th</sup> March 2007

Co-ordinated with Mr. G. Saravana Ilango at EEE Department, NIT Trichy.

**4. Short Term course on Electrical Machines and Power Electronics in Renewable Energy Systems**

Under AICTE-QIP

Duration: 28<sup>th</sup> January 2008 and 1<sup>st</sup> February 2008

Co-ordinated with Dr. N. Kumaresan at EEE Department, NIT Trichy.

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**5. National Workshop on Power Electronics - NWPE 2008**

Served in the Organizing Committee

Under NaMPET.

Duration : 12<sup>th</sup> November 2008 to 14<sup>th</sup> November 2008

**6. Workshop on Power System Protection – Level 1 Course**

For the Engineers of Power Grid Corporation of India Limited

Duration : 16<sup>th</sup> – 17<sup>th</sup> March 2009

**7. Short Term Course on Power System Stability Issues with Distributed Generators**

Self finance Category

Duration : 29<sup>th</sup> – 30<sup>th</sup> June 2012

**8. TEQIP-II Industrial Workshop on Understanding IGBT: from Device to Inverter**

Under TEQIP II (Industrial Workshop)

Duration : 08<sup>th</sup> April 2014

Co-ordinated with Dr. S. Moorthi and Ms. M. Venkatakirthiga

**9. TEQIP-II Industrial Workshop on Power System Modeling and Simulation with PSCAD**

Under TEQIP II (Industrial Workshop)

Duration : 12<sup>th</sup> – 13<sup>th</sup> May 2014

Co-ordinated with Dr. S. Moorthi and Ms. M. Venkatakirthiga

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**10. TEQIP-II Workshop on Low Power Controller using MSP 430 Microcontrollers**

Under TEQIP II (Workshop)

Duration : 20<sup>th</sup> – 21<sup>th</sup> June 2014

Co-ordinated with Dr. P. Raja and Dr. S. Moorthi

**11. Short Term Course on Real Time Controller Design Using TI C2000 Microcontroller**

Self finance Category

Duration : 26<sup>th</sup> – 28<sup>th</sup> September 2014

Co-ordinated with Dr. S. Moorthi and Ms. S. Mageswari

**12. TEQIP-II Short Term Course on Role of Power Electronics in Power Engineering**

Under TEQIP II (Workshop)

Duration : 04<sup>th</sup> – 05<sup>th</sup> March 2016

Co-ordinated with Dr. S. Moorthi

**13. TEQIP-II Industrial Workshop on Embedded System Design using FPGA Board**

Under TEQIP II (Industrial Workshop)

Duration : 23<sup>rd</sup> – 24<sup>th</sup> April 2016

Co-ordinated with Dr. S. Moorthi and Ms. M. Venkatakirthiga

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### 18. Invited Talks delivered

#### 1. DC and AC Drives

- Workshop on Power Electronics for Polytechnic Teachers under TEQIP (Service to Community and Economy) during 24<sup>th</sup> -25<sup>th</sup> June 2006, EEE Dept., NIT Trichy

#### 2. Introduction to Object-Orientation and C++ Programming

- Workshop on C++ Programming for PG Students under TEQIP (Tribal Development) during 30th November 2006 and 1st December 2006, EEE Dept. NIT Trichy.

#### 3. Application of Simulation Software in Power Systems Engineering

- Workshop on Recent Trends in Modeling and Simulation in Power Systems and Power Electronics for Engineering college teachers under TEQIP (Networking) during 30th and 31<sup>st</sup> March 2007, EEE Dept. NIT Trichy.

#### 4. Object-Oriented Programming in Engineering Applications

- A lecture program in association with Computer Society of India Tiruchirappalli Chapter on 19<sup>th</sup> October 2007, Institution of Engineers (India), Tirucirappalli local center.

#### 5. Power Quality Issues in Distributed Generations

- Workshop on Distributed Generations for Engineering college teachers under TEQIP (Service to Community and Economy) during 14<sup>th</sup> and 15<sup>th</sup> December 2007, EEE Dept. NIT Trichy.

#### 6. Distributed Generations

- AICTE-QIP sponsored short term course on Electrical Machines and Power Electronics in Renewable Energy Systems during 28<sup>th</sup> January 2008 and 1<sup>st</sup> February 2008, EEE Dept. NIT Trichy.

#### 7. Object-Orientation and C++

- An invited lecture at J.J. Collage of Engineering, Tiruchirappalli on 15<sup>th</sup> March 2008 for first year M.C.A. students.

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### 8. Power Quality

- An invited lecture at Jayamatha Engineering College, Aralvoimozhi on 12<sup>th</sup> April 2008 in the AICTE sponsored workshop on Power Quality in Wind Mills.

### 9. DStatcom Current Control Techniques for source current balancing and harmonics Reduction

- MHRD-AICTE sponsored summer school on Power Electronics and Renewable Energy Electric Conversion Systems during 16<sup>th</sup> June 2008 and 28<sup>th</sup> June 2008, EEE Dept. NIT Trichy.

### 10. Distributed Generations

- An invited lecture at Saranathan College of Engineering and Technology, Tiruchirappalli 9<sup>th</sup> September 2008 in the inauguration of Electrical Engineering Association.

### 11. Rotor Speed Stability of Wind Driven Induction Generator

- AICTE-QIP sponsored short term course on Renewable Energy Electric Conversion Systems during 14<sup>th</sup> and 18<sup>th</sup> December 2009, EEE Dept. NIT Trichy.

### 12. MATLAB Application Tool

- An invited lecture at Velammal College of Engineering & Technology, Madurai on 27<sup>th</sup> February 2010 in the National Level Workshop on Application Tools for Engineering Sciences.

### 13. Power Quality Analysis

- An invited lecture at K.L.N. College of Engineering, Madurai on 13<sup>th</sup> March 2010 in the workshop on Recent Trends in Power Quality and Measuring Techniques.

### 14. Distributed Generations

- An invited lecture at Trichy Engineering College, Tiruchirappalli on 30<sup>th</sup> July 2010 in the inauguration of Electrical & Electronics Engineering Association.

### 15. Distributed Generations

- An invited lecture at CMS College of Engineering, Namakkal on 5<sup>th</sup> March 2011 in the one day seminar on Recent Research Issues in Electrical Engineering.

### 16. Smart Grid

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- An invited lecture at Roever College of Engineering and Technology, Perambalur on 11<sup>th</sup> March 2011 in the inauguration of Electronics and Communication Engineering Association.
17. Research Issues in Distributed Generation
- An invited lecture at KLN College of Engineering, Madurai on 10<sup>th</sup> May 2011 in the workshop on Research Issues in Power System Engineering.
18. Distributed Generation Planning
- An invited lecture at NIT Calicut, on 27<sup>th</sup> May 2011 in the MHRD-AICTE sponsored faculty development programme on Smart Grid Engineering during 22<sup>nd</sup> May – 4<sup>th</sup> June 2011.
19. Soft Computing in Distributed Generation Planning
- An invited lecture at Muthayammal Engineering College, Rasipuram, on 13<sup>th</sup> June 2011 in the AICTE sponsored staff development programme on Soft Computing Techniques in Advanced Special Electrical Drives during 13<sup>th</sup> June – 25<sup>th</sup> June 2011.
20. Mitigation of Output Power Fluctuations in Grid Connected WRIG based small WTGS
- An invited lecture at Lakireddy Bali reddy college of Engineering, Vijayawada, AP, on 22<sup>nd</sup> June 2011 in the AICTE sponsored staff development programme on Advances in Power Electronics for Renewable Energy Systems during 20<sup>th</sup> June – 25<sup>th</sup> June 2011.
21. Rotor Speed Stability of Grid Connected Wind Driven Induction Generator
- An invited lecture at Lakireddy Balireddy college of Engineering, Vijayawada, AP, on 22<sup>nd</sup> June 2011 in the AICTE sponsored staff development programme on Advances in Power Electronics for Renewable Energy Systems during 20<sup>th</sup> June – 25<sup>th</sup> June 2011.
22. Smart Grid
- An invited lecture at M. Kumarasamy College of Engineering and Technology, Karur on 13<sup>th</sup> July 2011 in the inauguration of Electrical and Electronics Engineering Association.
23. Protective Relay Co-ordination



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- An invited lecture at Selvam College of Technology, Namakkal on 19<sup>th</sup> August 2011 in the two day national level workshop on Recent Trends in Power Quality and Power System Maintenance during 19<sup>th</sup> August – 20<sup>th</sup> August 2011.
24. Distributed Generation Planning for Smart Grid
- An invited lecture at Coimbatore Institute of Technology, Coimbatore on 26<sup>th</sup> August 2011 in the one day pre conference tutorial on Smart Grid Systems as a part of the International Conference on Renewable Energy Utilization (ICREU-2012).
25. Smart Grid
- An invited lecture at SCAD College of Engineering and Technology, Tirunelveli on 04<sup>th</sup> October 2011 in the fourth National Level Technical Symposium EMIT 11-12.
26. Distributed Generation Planning for Smart Grid
- An invited lecture at Kalasalingam University, Krishnancoil 14<sup>th</sup> October 2011 as a part of the activities of EEE association.
27. Wind Energy Conversion Systems
- An invited lecture at Coimbatore Institute of Technology, Coimbatore on 26<sup>th</sup> January 2012 as a part of workshop conducted by EEE association.
28. Rotor Speed Stability
- Key note speech at Saranathan College of Engineering, Tiruchirappalli on 17<sup>th</sup> March 2012 in National Conference on "Advanced Strategies in Power Engineering ASPE 2012"
29. Power Electronic Applications in Wind Turbine Generator Systems
- An invited lecture at Arunachala College of Engineering for Women, Nagercoil on 10<sup>th</sup> May 2012 in the AICTE sponsored staff development programme on Trends in Power Electronics and Industrial Drives during 7<sup>th</sup> May – 20<sup>th</sup> May 2012.
30. Recent Trends in Transmission-FACTS, HVDC and EHVAC
- An invited lecture at Kamaraj College of Engineering & Technology, Virudunagar on 17<sup>th</sup> May 2012 in the Anna University Chennai sponsored faculty development programme on Transmission & Distribution during 17<sup>th</sup> May – 24<sup>th</sup> May 2012.
31. Soft Computing Applications to FACTS

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- An invited lecture at Government College of Technology, Coimbatore on 18<sup>th</sup> May 2012 in the AICTE sponsored staff development programme on Soft Computing Techniques in Electrical Systems & Control during 9<sup>th</sup> May – 22<sup>nd</sup> May 2012.

### 32. Distributed Generation Planning for Smart Grid

- An invited lecture at Anna University of Technology Madurai, on 28<sup>th</sup> July 2012 in the CSIR sponsored two day workshop on "Smart Grids" during 27<sup>th</sup> – 28<sup>th</sup> July 2012.

### 33. Distributed Generation

- An invited lecture at National Institute of Technology Tiruchirappalli, on 03<sup>rd</sup> August 2012 in the Self Financed two day short term course on Power System Protection Issues with Distributed Generators during 03<sup>rd</sup> – 04<sup>th</sup> August 2012.

### 34. Power Electronic Applications in Wind Turbine Generator Systems

- An invited lecture at A.C. College of Engineering and Technology, Karaikudi on 10<sup>th</sup> November 2012 in the TEQIP sponsored faculty development programme on Power Electronic Controllers for Renewable Energy Resources during 5<sup>th</sup> November – 10<sup>th</sup> November 2012.

### 35. Rotor Speed Stability of Wind-driven Grid Connected Induction Generator

- An invited lecture at EEE Department, NIT Tiruchirappalli on 05<sup>th</sup> January 2013 in the short term training program on Wind Energy Electric Conversion Systems (WEECS) during 4<sup>th</sup> January – 5<sup>th</sup> January 2013.

### 36. Power Quality Approach in Smart Grid

- An invited lecture at Sona College of Technology, Salem on 16<sup>th</sup> February 2013 in the CSIR sponsored National Workshop on Smart Grid Technology for Sustainable Energy Systems during 15<sup>th</sup> February – 16<sup>th</sup> February 2013.

### 37. FACTS

- An invited lecture at Cauvery College of Engineering and Technology, Tiruchirappalli on 27<sup>th</sup> February 2013.

### 38. Smart Grid

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- Key Note address at Danalakshmi Srinivasan Engineering College, Perambalur on 2<sup>nd</sup> March 2013 in the National Level Conference on Emerging Investigations in Electrical Engineering 2013.
39. Object-Oriented Methodology
- An invited lecture at BSNL Tiruchirappalli Office on 3<sup>rd</sup> March 2013.
40. Overview of Various Renewable Energy Systems
- An invited lecture at VIT University, Chennai Campus on 9<sup>th</sup> March 2013 in the CSIR sponsored National Workshop on Renewable Energy Micro-grids on 9<sup>th</sup> March 2013.
41. Integration of Wind Energy in Smart Grid
- An invited lecture at SRM University, Chennai on 3<sup>rd</sup> April 2013 in the ISTE-SRM Short Term Training Programming on Computational Intelligence in Smart Electric Power Grid during 1<sup>st</sup> – 6<sup>th</sup> April 2013.
42. Distributed Generation Planning
- An invited lecture at VIT University, Chennai Campus on 19<sup>th</sup> April 2013 in the CSIR Sponsored One day Seminar on Energy management in Micro-grid.
43. Principles of Voltage Stability Analysis
- An invited lecture at Gnanamani College of Technology, Namakkal on 08<sup>th</sup> May 2013 in the AICTE Sponsored Faculty Development Programme on "Latest Techniques in Voltage Stability and Control" during 06<sup>th</sup> – 18<sup>th</sup> May 2013.
44. Optimization Applications to Grid Connected DGs
- An invited lecture at Government College of Engineering, Tirunelveli on 11<sup>th</sup> May 2013 in the AICTE Sponsored Faculty Development Programme on "Optimization, Intelligent and Control for Grid Connected Renewable Distributed Generation" during 06<sup>th</sup> – 19<sup>th</sup> May 2013.
45. Research Issues and Successful Publication of Papers
- An invited lecture at K.L.N. College of Engineering, Madurai on 17<sup>th</sup> May 2013 in the One day Seminar on "Research Issues in Science and Technology & Successful Publications of Papers in Referred Journals" organized by Research and Development unit of K.L.N. College of Engineering.
46. Rotor Speed Stability and Fault Ride Through Capability of DFIG
- An invited lecture at Government College of Technology, Coimbatore on 23<sup>rd</sup> May 2013 in the AICTE sponsored faculty development programme on

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Avenues for Advanced Research in Modern Power Electronics and Hybrid Energy Systems during 15<sup>th</sup> – 28<sup>th</sup> May 2013.

### 47. Operation and Control of UPQC for mitigation of PQ Problems

- An invited lecture at Pondicherry Engineering College, Pondicherry on 29<sup>th</sup> May 2013 in the AICTE sponsored faculty development programme on Analysis,, Operation and Control of Restructured Power Systems during 27<sup>th</sup> May – 07<sup>th</sup> June 2013.

### 48. Computer Control of Power Systems

- An invited lecture at Paavai College of Engineering, Namakkal on 9<sup>th</sup> June 2013 in the Anna University, Chennai sponsored faculty development training programme on Power System Operation and Control during 06<sup>th</sup> – 12<sup>th</sup> June 2013.

### 49. Soft Computing Applications in Distributed Generator Planning

- An invited lecture at Anna University Chennai, Tiruchirappalli Regional Office-BIT Campus on 21<sup>st</sup> August 2013 in the TEQIP II sponsored faculty development programme on Soft Computing Applications in Electrical Engineering during 19<sup>th</sup> – 25<sup>th</sup> August 2013.

### 50. Overview of State Estimation and Voltage Stability

- An invited lecture at Sethu Institute of Technology Madurai on 07<sup>th</sup> September 2013 in the faculty development programme on Applications of Wide Area Measurements in Power Systems during 6<sup>th</sup> – 7<sup>th</sup> September 2013.

### 51. Operation and Control of UPQC for mitigation of PQ problems

- An invited lecture at VIT University, Chennai Campus on 05<sup>th</sup> October 2013 in the CSIR Sponsored One day Seminar on Power Quality.

### 52. Operation and Control of UPQC

- An invited lecture at Periyar Maniammai University, Vallam on 12<sup>th</sup> October 2013 in the One day National Level Seminar on Recent Trends in Power Quality Management.

### 52. Short Circuit Analysis in Power System

- An invited guest lecture at M. Kumaraswamy College of Engineering, Karur on 19<sup>th</sup> October 2013 for the students of M.E. (Power Systems) Programme.

### 54. Funding Proposals for Research and Development

- An invited lecture at K.L.N. College of Engineering, Madurai on 26<sup>th</sup> October 2013 in the ISTE Sponsored One day Seminar on "Funding Proposals for

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Research and Development” organized by Research and Development unit of K.L.N. College of Engineering.

### 55. Operation and Control of UPQC for mitigating power quality problems

- An invited lecture at Thiagarajar College of Engineering, Madurai on 27<sup>th</sup> November 2013 in the One week TEQIP Sponsored Faculty Development Programme on “Power Quality Issues in Contemporary and Future Power Networks” organized during 27<sup>th</sup> November 2013 to 3<sup>rd</sup> December 2013.

### 56. Application of Power Electronics in SCIG based Windfarms

- An invited lecture at Anna University Chennai, Tiruchirappalli Regional Office-BIT Campus on 12<sup>th</sup> December 2013 in the TEQIP II sponsored faculty development programme on Research Avenues in Power Electronics organized during 9<sup>th</sup> – 15<sup>th</sup>, December 2013.

### 57. Rotor Speed Stability of Induction Generator based Wind Farms

- Keynote address at Cape Institute of Technology, Levengipuram, Tirunelveli District on 27<sup>th</sup> March 2014 in the International Conference on Advancements in Electrical, Electronics and Computing Technologies (ICAEECT 2014) organized during 27<sup>th</sup> – 28<sup>th</sup>, March 2014.

### 58. Distributed Generation & Its Topologies

- An invited lecture at Kamaraj College of Engineering and Technology, Virudhunagar on 03<sup>rd</sup> May 2014 in the two day national seminar on “Distributed Generation and Microgrid” organised during 02<sup>nd</sup> – 03<sup>rd</sup>, May 2014.

### 59. Different Topologies of Wind and Solar Based Distributed Generation

- An invited lecture at Government College of Engineering, Bargur on 21<sup>st</sup> May 2014 in the one week Faculty Development of Programme on “Green Energy for Sustainable Development and Environment” organised during 19<sup>th</sup> – 25<sup>th</sup>, May 2014.

### 60. Soft Computing Applications to Grid Connected DGs

- An invited lecture at National Institute of Engineering, Mysore on 12<sup>th</sup> June 2014 in the TEQIP II sponsored one week National Workshop on Distributed Generation and Power Quality during 9<sup>th</sup> – 13<sup>th</sup> June 2014.

### 61. Power Flow Analysis in Power System

- An invited guest lecture at M. Kumaraswamy College of Engineering, Karur on 23<sup>rd</sup> August 2014 for the students of B.E. (EEE) Programme.

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### 62. Power System Stability

- An invited guest lecture at M. Kumaraswamy College of Engineering, Karur on 20<sup>th</sup> September 2014 for the students of B.E. (EEE) Programme.

### 63. Fundamental of Rotor Angle Stability

- An invited guest lecture at Sree Vidyanikethan Engineering College, Tirupathi on 25<sup>th</sup> October 2014 for the students of B.Tech. (EEE) Programme.

### 64. Smart Grid

- An invited guest lecture at Anna University, Tirunelveli Regional Office on 19 March 2015 in the Pre-Conference Tutorial in National Conference of Embedded Systems.

### 65. Embedded Control of Microgrid with Solar Hybrid System

- An invited guest lecture at PSG College of Technology, Coimbatore on 27<sup>th</sup> March 2015 in the National Level Workshop Series in Research Perspectives on Solar PV systems.

### 66. Microgrid – Benefits and Challenges

- An invited guest lecture at MEPCO SCHLENK Engineering College, Viruthunagar on 19<sup>th</sup> May 2015 in the AICTE - FDP on Topics of Research in Electrical Engineering (TREE'15).

### 67. Embedded Control of Microgrid

- An invited guest lecture at MEPCO SCHLENK Engineering College, Viruthunagar on 19<sup>th</sup> May 2015 in the AICTE - FDP on Topics of Research in Electrical Engineering (TREE'15).

### 68. Optimisation Applications to Grid Connected DGs

- An invited guest lecture at MEPCO SCHLENK Engineering College, Viruthunagar on 25<sup>th</sup> June 2015 in the Two day seminar on Challenges in Grid Connected Renewable Energy Systems

### 69. Microgrid Benefits & Challenges and Associated Control

- An invited lecture at Anna University Chennai, Tiruchirappalli Regional Office-BIT Campus on 21<sup>st</sup> September 2015 in the TEQIP II sponsored faculty development programme on Role of Renewable Energy in an Indian Power Sector" (RREIPS'15) during 21<sup>st</sup> – 27<sup>th</sup> September 2015.

### 70. Power System Stability

- An invited lecture at TKM College of Engineering Kollam on 24<sup>th</sup> November 2015 in the TEQIP II sponsored faculty development programme on Power System Operations during 23<sup>rd</sup> – 28<sup>th</sup> November 2015.

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### 71. Advanced Metering Infrastructure & Netmetering

- An invited lecture at Central Power Research Institute Bangalore on 26<sup>th</sup> November 2015 in a Two day workshop on Smart Grid and Renewable Energy (SGRE) during 26<sup>th</sup> – 27<sup>th</sup> November 2015.

### 72. Role of Embedded Systems in Smart Grid

- An invited lecture at Coimbatore Institute of Technology, Coimbatore on 27<sup>th</sup> November 2015 in the TEQIP II sponsored faculty development programme on Embedded Systems during 21<sup>st</sup> – 27<sup>th</sup> November 2015.

### 73. Introduction to GIS and its Applications to Power Sector

- An invited lecture at National Power Training Institute, Neyveli on 25<sup>th</sup> January 2016.

### 74. Introduction to GPS and its Applications to Power Sector

- An invited lecture at National Power Training Institute, Neyveli on 25<sup>th</sup> January 2016.

### 75. Power System Analysis-Bus admittance and impedance matrix formulation

- An invited lecture at Dhirajlal Gandhi College of Technology, Salem on 23<sup>rd</sup> May 2016 in the Anna University approved faculty development training programme on Power System Analysis during 23<sup>rd</sup> – 29<sup>th</sup> May 2016.

### 76. Power Electronic Converters for Micro Grid

- An invited lecture at VIT University, Chennai Campus on 15<sup>th</sup> November 2016 in the DST-NIMAT sponsored Faculty Development Programme on “Recent Trends in Advanced Control of Power Electronics and Power Systems” during 14<sup>th</sup> - 25<sup>th</sup> November 2016.

### 19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member )	Organization	Membership No. with date
Member	IEEE	92598409

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20. Academic Foreign Visits

Country	Duration of Visit	Programme
Singapore	One Month, December 2008	TEQIP Abroad Visit

21. Publications

**JOURNAL PUBLICATIONS**

**INTERNATIONAL**

1. 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, Springer***, 2016 In Press, **SCImago Indexed ISSN: 2195-3899**
2. 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***, 2016, In Press, **SCI Indexed ISSN: 1751-8687**
3. 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***, Vol.10, No. 10, October 2016, pp. 2410-2423, **SCI Indexed ISSN: 1751-8687**
4. 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***, Vol. 41, No. 9, September 2016, pp.3355-3367, **SCI Indexed ISSN: 2191-4281**
5. 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***, Vol. 62, No. 9, September 2015, pp.5569-5577, **SCI Indexed ISSN: 0278-0046**



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6. 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*, Vol.30, No. 7, July 2015, pp. 3703-3711, **SCI Indexed ISSN: 0885-8993**
7. 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*, Vol. 269, May 2015, pp. 286-294, **SCI Indexed ISSN: 0257-8972**
8. 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*, Vol. 66, January 2015, pp. 280-293, **SCI Indexed ISSN: 0142-0615**
9. Dastagiri Reddy, B. **Selvan, M.P.** and Moorthi, S., “Simplified Embedded Control Scheme for Two-Stage Multistring Off-Grid Inverter”, *IET Power Electronics*, Vol.7, No. 12, December 2014, pp. 2954-2963, **SCI Indexed ISSN: 1755-4535**
10. Vinothkumar, K. and **Selvan, M.P.**, “Hierarchical Agglomerative Clustering Algorithm Method for Distributed Generation Planning”, *International Journal of Electrical Power and Energy Systems*, Vol. 56, March 2014, pp. 259-269, **SCI Indexed ISSN: 0142-0615**
11. 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* Online Issue December, 2013, DOI 10.1007/s11708-013-0288-0, **ISSN: 2095-1698**
12. 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 proceedings – Generation, Transmission and Distribution*, Vol. 7, No. 8, August 2013, pp. 898 – 906, **SCI Indexed ISSN: 1751-8687**
13. Srinath, S. and **Selvan, M.P.**, “Performance Analysis of UPQC with Heterogeneous Control during Load Power Factor Variation”, *European Transactions on Electrical Power*, Vol. 22, October 2012, pp. 937-960. **ISSN: 1546-3109**
14. Srinath, S. and **Selvan, M.P.**, “UPS Mode Operation of UPQC with Mixed Mode Control”, *International Review of Automatic Control*, Vol. 5, No. 3, May 2012, pp. 342-348. **ISSN: 1974-6067**
15. 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*, Vol. 5, No. 2, April 2012, pp. 576-588, **ISSN: 1974-983X**

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16. 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***, Vol. 5, No. 2, April 2012, pp.690-701, **ISSN: 1974-983X**
17. Vinoth Kumar, K. and **Selvan, M.P.**, “Distributed Generation Planning- A New Approach based on Goal Programming”, ***Electric Power Components and Systems***, Vol. 40, No. 5, March 2012, pp. 497-512. **SCI Indexed ISSN: 1532-5008**
18. 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***, Vol. 8, No. 3, 2011, **ISSN 1448-837X**
19. 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***, Springer Lecture Notes in Electrical Engineering Vol. 134, 2011, pp.253-259, **ISBN: 978-3-642-25904-3**
20. 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***, Vol. 39, No. 14, October 2011, pp. 1493-1506, **SCI Indexed ISSN: 1532-5008**
21. 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***, Vol. 8, No. 2, 2011, pp. 137-153, **ISSN: 1448-837X**
22. Vinoth Kumar, K. and **Selvan, M.P.**, “Fuzzy Embedded Genetic Algorithm Method for Distributed Generation Planning”, ***Electric Power Components and Systems***, Vol. 39, No. 4, February 2011, pp. 346-366, **SCI Indexed ISSN: 1532-5008**
23. 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***, Vol. 52, No.1, January 2011, pp. 2651-2658, **SCI Indexed ISSN: 0196-8904**
24. Vinoth Kumar, K. and **Selvan, M.P.**, “Grid Integration of Distributed Generation- Consequences on Node Voltage under Grid Perturbations” ***Wind Engineering***, Vol. 34, No. 6, December 2010, pp. 629-650, **ISSN: 0309-524X**
25. Vinoth Kumar, K. and **Selvan, M.P.**, “Control Scheme for Mitigation of Output Power Fluctuations in Grid Connected Wound Rotor Induction Generator”, ***Wind Engineering***, Vol. 34, No. 5, October 2010, pp. 579-594, **ISSN: 0309-524X**

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26. 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*, Vol. 34, No. 4, August 2010, pp. 445-460, **ISSN: 0309-524X**
27. **Selvan, M.P.**, "Object Oriented Optimal Power Flow-A New Approach Based on Design Patterns", *Electric Power Components and Systems*, Vol. 38, No. 2, January 2010, pp. 197-211, **SCI Indexed ISSN: 1532-5008**
28. Vinoth Kumar, K. and **Selvan, M.P.**, "A simplified approach for load flow analysis of radial distribution network", *International Journal of Computer, Information, and Systems Science and Engineering*, Vol. 2, No. 4, Fall 2008, pp. 271-282.
29. **Selvan, M.P.** and **Swarup, K.S.**, "Modelling and analysis of unbalanced distribution system using object-oriented methodology", *Electric Power Systems Research*, Vol. 76, No. 11, July 2006, pp. 968-979, **SCI Indexed ISSN: 0378-7796**
30. **Selvan M.P.** and Swarup, K.S., "Development of power flow software using design patterns", *IEEE Transactions on Power Systems*, Vol. 21, No. 2, May 2006, pp. 611-618, **SCI Indexed ISSN: 0885-8950**
31. **Selvan M.P.** and Swarup, K.S., "Dynamic topology processing in a radial distribution system", *IEE Proceedings Part C, Generation, Transmission and Distribution*, Vol. 153, No. 2, March 2006, pp. 155-163, **SCI Indexed ISSN: 1751-8687**
32. **Selvan, M.P.** and Swarup, K.S., "Object modelling of balanced and unbalanced distribution systems for power flow analysis", *Electric Power Components and Systems*, Vol. 34, No. 2, February 2006, pp. 191-215, **SCI Indexed ISSN: 1532-5008**
33. Selvan, M.P. and Swarup, K.S. "Object Methodology–Method and Design for Topological Processing" *IEEE Power & Energy Magazine*, Vol. 3, No. 1, January-February 2005, pp. 18-29. **SCI Indexed ISSN: 1540-7977**
34. 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*, Vol. 32, No. 2, February 2004, pp. 215-228, **SCI Indexed ISSN: 1532-5008**

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**NATIONAL**

1. Venkata Hareesh, S., Raja, P. and **Selvan, M.P.**, “Need and Challenges of Smarter Power Systems”, **Electrical India**, Vol. 56, No. 1, January 2016, pp. 82-84.
2. Asha Radhakrishnan and **Selvan, M.P.**, “ A Load Scheduling for Smart Energy Management in Buildings with Renewable Power Generations”, **Electrical India**, Vol. 55, No. 5, May 2015, pp. 76 – 90.
3. Vinoth Kumar, K. and **Selvan, M.P.** “Effect of Distributed Generator Model on Placement of Multiple DGs in Radial Distribution System”, **Electrical India**, Vol. 50, No. 8, August 2010, pp. 130 – 136.
4. **Selvan, M.P.** and Swarup, K.S. “Object-Oriented Power System Analysis”, **Journal of Indian Institute of Science**, Vol. 84, No.5, September – October 2004, pp. 141-154.

**CONFERENCE PUBLICATIONS**

**INTERNATIONAL**

1. 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)**, 4-6 July 2016, Delhi Technological University, Delhi INDIA, pp.3257-3261.
2. 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)**, 4-6 July 2016, Delhi Technological University, Delhi INDIA, pp.914-919
3. 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)**, 10-12 December 2015, CPRI Bangalore, INDIA, pp.195-199
4. Soumya, N. K. and **Selvan, M.P.**, “State Estimation of Observable and Unobservable Power Systems”, **IEEE International Conference on Energy,**

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- Power and Environment (ICEPE-2015)**, 12-13 June, 2015, NIT Megalaya, Shillong, INDIA.
5. 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)**, 12-13 June, 2015, NIT Megalaya, Shillong, INDIA.
  6. 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**, 11-13 December, 2014, Pune, INDIA.
  7. 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)**, 20-23 May, 2014, Kuala Lumpur, MALAYSIA, pp. 79-83.
  8. 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**, 13-15 December, 2013, IIT Bombay, Mumbai, INDIA.
  9. 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 September, 2013, Mauritius, AFRICA.
  10. 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)**, 16-19 December, 2012, CPRI Bangalore, INDIA, pp. 1-6.
  11. 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**, 7-9 December, 2012, Cochin, INDIA, pp. 676-681.
  12. 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**, 7-9 December, 2012, Cochin, INDIA, pp. 167-170.
  13. **Selvan, M.P.** and Chiranjeevi, V, "A Method for Siting of STATCOM and SSSC for Power Transfer Capacity Enhancement" **IEEE International Conference INDICON-2012**, 7-9 December, 2012, Cochin, INDIA, pp. 367-372.

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14. 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)*, 5-7 December, 2012, Hyderabad, INDIA, pp. 197-200.
15. 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)*, 6-9 August, 2012, IIT Madras, INDIA, pp. 1-6.
16. 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)*, 6-9 August, 2012, IIT Madras, INDIA, pp. 1-6.
17. Venkatraman, K., **Selvan, M.P.** and Moorthi, S., "Investigation on Series Active Filter with Small Energy Source for DC Voltage Control", *Springer International Conference on Control, Communication and Power Engineering (CCPE-2012)*, 27-28 April, 2012, Bangalore, INDIA, pp. 454-459.
18. 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)*, 21-22 March, 2012, Kumaracoil, INDIA, pp. 174 - 179.
19. 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)*, 3-6 January, 2012, Thrissur, INDIA, pp. 1-6.
20. 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)*, 04-06 January, 2012, CIT Coimbatore, INDIA, pp. 245-251.
21. 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)*, 04-06 January, 2012, CIT Coimbatore, INDIA, pp. 109-115.
22. 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)*, 22-24 December, 2011, IIT Madras Chennai, INDIA, pp. 1-6.

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23. 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**, 16-18 December, 2011, Hyderabad, INDIA, pp. 1-6.
24. 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)**, 01-03 December, 2011, Kollam, INDIA, pp. 1-6.
25. 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)**, 20-22 July, 2011, Chennai, INDIA, pp. 7-11.
26. 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)**, 20-22 July, 2011, Chennai, INDIA, pp. 63-68.
27. 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)**, 6-9 December, 2010, Kandy, SRILANKA, pp.1-6.
28. Srinath, S. and **Selvan, M.P.**, "Indigenous Control of Augmented DC Voltage in D-Statcom", **IEEE Symposium on Industrial Electronics and Applications (ISIEA 2010)**, 3-5 October, 2010, Penang, MALAYSIA, pp. 253-257.
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