Name: SATEESH KUMAR ADEPU



### Qualification

Degree	University
PhD (Power Quality)	Jodhpur National University, India
M.Tech (Power Electronics)	Vaagdevi College of Engineering, JNTUH, Warangal, Telangana state, India
B.Tech (EEE)	Vaagdevi College of Engineering, JNTUH, Warangal, Telangana state, India

### **Experience** :

• Working as an Assistant Professor, Dept. of Electrical & Electronics Engineering, Vaagdevi College of Engineering, Since Oct- 2010 to till date.

### Area of Interest:

Power systems (Distribution systems studies), power quality improvement.

#### Subjects Taught:

• Electrical circuits, Power systems – I, Power Systems – II, Computer Methods in Power Systems (CMPS), Switch Gear Protection (SGP), and Basic Electrical & Electronic Engineering (BEEE).

#### **Research Publications**:

- 1. AdepuSateesh Kumar, K.Prakash, Y.Hareesh Kumar "Improved dual SOGI control for 3-phase UPQC under distributed grid and load conditions" with an ISBN Number: 978-1-5090-1134-6/17/\$31.00 ©2017 IEEE TENCON.
- Y.Hareesh Kumar, AdepuSateesh Kumar, K.Prakash "an SO-SOGI based control for a 3- phase DVR under distorted grid conditions including DC offset" with an ISBN Number: 978-1-5090-1134-6/17/\$31.00 ©2017 IEEE TENCON.
- **3.** AdepuSateesh Kumar, K.Prakash, Y.Hareesh Kumar "Performance analysis of cascaded multilevel inverter based DSTATCOM"PP No: 5525-5531, IJAET 2017 International Journal of Applied Engineering Research.
- **4.** V.Tejaswini, K.Swetha. A Sateesh Kumar "Fuzzy Based power control of inter lined HVDC network" IEEE ©2017.
- 5. AdepuSateesh Kumar, K.Prakash, "Analysis of Split Capacitor Based DSTATCOM with

LCL Filter Using Instantaneous Symmetrical Components Theory" With an ISBN Number: 978-1-4673-9745-2,PP No: 103-108, ©2016 IEEE explore (Ref. no. -37745)2<sup>nd</sup> IEEE International Conference (AEEICB-2016)

- **6.** AdepuSateesh Kumar, K.Prakash, "Fuzzy based power conditioner to mitigate negative sequence currents and reactive power compensation of distributed network", 3rd IET International conference on electrical, electronics, engineering trends, communication, optimization and sciences, PP No: 773-785, © 2016 IET.
- AdepuSateesh Kumar, K.Prakash, Dr.Swati Sharma, "Performance Analysis of Hybrid DSTATCOM with Different Control Strategies used in Distribution Networks" International conference on advanced material technologies-2106, PP No:128-147, vol:4, 27<sup>th</sup>&28 December, © 2016 ELSEVIER Materials today.
- 8. AdepuSateesh Kumar, K.Prakash, Dr.Swati Sharma, "A Five-Level Cascaded DSTATCOM for Single-Phase Distribution System", PP No: 01-06, National Conference on Challenges and Issues in Operation of Competitive Electricity Markets (CIOCEM-2016) Central Power Research Institute (CPRI), Bangalore © 2016.
- **9.** AdepuSateesh Kumar, K.Prakash, Dr.Swati Sharma, "Harmonic Mitigation & Neutral Line Currents Reduction of Distribution Systems Using Adaptive Neuro-Fuzzy Inference System based D-STATCOM". International Journal of Power Electronics and Drive Systems (IJPEDS, ISSN: 2088-8694).
- 10. AdepuSateesh Kumar, K.Prakash, Dr.Swati Sharma, "Multilevel converter based DSTATCOM for –ve sequence component of current reduction and harmonic mitigation" Indian Journal of Science & Technology, ISSN Print: 0974-6846, ISSN Online: 0974-5645.
- 11. Published the paper titled "Power Quality Improvement in Micro Grid Distribution System Using APF with PI Controller" in the 5<sup>th</sup> International Conference on Recent Innovations in Science, Engineering And Management (ICRISEM-2016).
- Published the paper titled "DVR Implementation in A 13 Bus Balanced Industrial System to Control Symmetrical & Unsymmetrical Faults" in the 2<sup>nd</sup> International Conference on Innovations in Electrical & Electronics Engineering (ICIEEE-2015). With an ISBN Number: 978-93-85100-39-0.

### Grants:

## **Projects guided:**

### **UG** projects

e e projects		
Title	Student Name	Year
Modeling and simulation	Ch.Nikhil	2017-2018
of IUPQC controller to	S.Rajesh	
provide additional grid	B.Sharadha	
voltage regulation as a	P.Mukesh	
STATCOM	K.Rajinikanth	
Simulation of slit	B.Rajinikanth	2017-2018
capacitor based D-	P.Rakesh	
STATCOM with LCL	G.Akhil	

filter using instantaneous symmetrical components theory	G.Rohith Baba	
Automatic Locomotive washing plant using PLC STEP7-400	K.Bindu Priyanka K.Alekya M.Anusha P.SaiPallavi	2016-2017
An Improved Hybrid DSTATCOM Topology to compensate Reactive and Non-Linear Loads	B.Suresh G.Ranjith K.Poornima T.Deepak	2016-2017

### PG projects

Title	Student Name	Year
Performance of	M.Shailaja	2017-2018
SATCTOM using impact		
of switching harmonic on		
capacitor cells balancing		
in phase shifted PWM		
based cascaded H-bridge		
Simulation of cascaded	G.Swetha	2017-2018
multilevel STATCOM		
using reactive current		
reference algorithm		
Simulation of	B.Parthika	2016-2017
DSTATCOM using		
kernel incremental		
metalearing control		
algorithm under non		
linear load conditions		
Control of single phase	A.Swetha	2015-2016
cascaded H-Bridge		
multilevel inverter with		
modified MPPT for grid		
connected photovoltaic		
system		

# Workshops/Seminars/FDP's Organized:

S.No	Title	Type of Event	Dates	Organized /
				Participated
1	One day National level workshop on Matlab Basics	National level Work shop	09-10-2017	Organized
2	Tow day national level workshop on LABVIEW POWERED AUTOMATION	National level Work shop	18 <sup>th</sup> -19 <sup>th</sup> Sep 2017	Organized
Nork	shops/Seminars/FDP's At	ttended•		
S.No	Title	Type of Event	Dates	Organized / Participated
1	Renewable Energy Technologies and Distributed Generation- 2017	One Week FDP	22 <sup>nd</sup> -27 <sup>th</sup> Apr 2017.	Participated
2	Recent Trends in Electrical Engineering	One Week FDP	$9^{th} - 15^{th}$ Dec 2016	Participated
3	Distribution generation & renewable integration fore costing tools & EMS towards smart grid/smart city MHRD program,	Two week workshop	23-05-2016 to 03-06-2016	Participated
4	Applications of Simulation Tools to Modern Power Systems	TEQIP phase-II	May-2015	Participated
	Power Control and Energy	TEQIP phase-II	May-2013	Participated

Conferences Attended: (preferably International)

### Two IEEE international conferences attended.

- 1. AdepuSateesh Kumar, K.Prakash, Y.Hareesh Kumar "Improved dual SOGI control for 3-phase UPQC under distributed grid and load conditions" with an ISBN Number: 978-1-5090-1134-6/17/\$31.00 ©2017 IEEE TENCON.
- AdepuSateesh Kumar, K.Prakash, Y.Hareesh Kumar "an SO-SOGI based control for a 3- phase DVR under distorted grid conditions including DC offset" with an ISBN Number: 978-1-5090-1134-6/17/\$31.00 ©2017 IEEE TENCON.

### Achievements:

Awarded PhD degree 2017.

### **Other Academic Activities:**

- Academic coordinator
- Worked as a Project Coordinator for Under Graduation, Vaagdevi College of Engineering.
- Supervised 15 Under Graduate Academic Research Projects.
- Supervised 10 Post Graduate Academic Research Projects.
- Conducting workshop as Coordinator
- Department internal examination in charge.
- Industrial visits in charge.
- Department Coordinator for techno craft 2k15.
- Time table in charge up to last semester (work load, all examination duties, main timetables, revised timetables, etc...).
- Syllabus review member.
- Subject coordinator
- Coordinator for Students Mentoring Committee, Vaagdevi College of Engineering.