Name: Dr. V Madhusudhan

Designation: professor Department: EEE Mail I'd: <u>vellala.madhusudhan60@gmail.com</u>



Experience (in years): Teaching: 32 Research: 16y Others(if any, specify): Nil

1. Educational / Technical qualifications:

S.No	Level (UG / PG / Ph.D)	Year of passing	Specialization
1	Ph.D	2007	Power system reliability
2	M.Tech	1984	Electrical power systems
			engineering
3	B.Tech	1982	Electrical and electronics
			engineering

2. Teaching and Learning:

2.1. Teaching Interests: power systems and electrical machines

- 2.2. Novel Teaching & Learning Techniques adopted: ppt, bbt
- 2.3. Involvement in curriculum updating / Design: member of board of studies for autonomous engineering colleges in Telangana and Andhra Pradesh states

3. Co-curricular and Extra-Curricular Activities

- 3.1. Interests and Hobbies: more interaction with students and motivating them for learning advances in the area of electrical engineering
- 3.2. CCA/ECA Organized: various activities like blood donation camps, technical and cultural fests conducted
- 3.3. CCA/ECA participated: presented papers in national and international seminars and conferences.
- 3.4. Counseling and Mentoring Activity: counselled students during every semester of the circular and given valuable suggestions for both UG and PG students
- 3.5. Committees involved in:

Department level: acted as member for various committees like project review and ethics,

departmental student association committee etc.

Institute Level: member of college academic committee, anti-ragging committee, grievance and redressal committee etc.

4. Conference / Workshop / Seminar / Guest Lectures:

4.1. Conducted:

1. A National-level Students Conference ELIVISION2K4 conducted on 08-01-2004 at KSRMCE, Kadapa.

2. National level student symposium TECH FEST 2K9 conducted on 16-02-2009 at KORMCE, Kadapa.

3. National level student symposium TEXPLOSION 2K12 conducted on 28-29th Jan-2012 at MRIT, Secunderabad.

4. National level students Technical Paper Presentation TECHQUEST 2K12 conducted on 12-13th Oct2012 at MRIT, Secunderabad

4.2. Attended:

1. Attended winter school on "RELIABILITY ENGINEERING AND APPLICATIONS TO POWER SYSTEMS", from 11-12-2000 to 23-12-2000 at JNTUCE, Anantapur.

2. National Work Shop "DART-2005" at JNTUCE, Anantapur from 28th – Oct to 30th Oct-2005.

3. Workshop on "High voltage testing software perceptive" at Institute of Aeronautical Engineering, Hyderabad on 30-12-2010.

4. Workshop on "Power Electronics Applications to Power Quality" at Mallareddy Engineering College, Hyderabad during 12-13 Feb-2011.

5. "Composite Power System Reliability Analysis Using System State Duration Sampling Approach" B.V.Prasanth, V.Madhusudhan, V.Sankar, K.J.Pillai, at National Institute of Occeanography,Goa,India,2-4 November 2006, pp38, 30th National System Conference (NSC2006).

6. "Composite Power System Reliability Analysis Using State Transition Sampling Approach" B.V.Prasanth, V.Madhusudhan, V.Sankar, K.J.Pillai, at Indian Institute of Technology ,Bombay, Mumbai ,India, 16-17 December 2005, pp8, 29th National System Conference (NSC-2005) on System Engineering Approach to Sustained Growth.

7."Reliability Analysis of Inter Connected Power Systems Using State Space Decomposition" V.Madhusudhan, V.Sankar, K.J.Pillai, at Gayatri Vidya Parishad College of Engineering, Visakhapatnam, India. 27-29 December 2003, pp114-117, National Seminar on Emerging Trends in Power System Operation and Control.

8. "Reliability Evaluation of Generating Systems" V.Madhusudhan, V.Sankar, K.J.Pillai, at PSG College of Technology, Coimbatore, India, 13-15 December 2001, pp470-474, 25th National System Conference (NSC-2001) on System Engineering Approach.

9. "Personal Computers for Real Time Control of Power System Distribution Networks" K.Ramesh Reddy, V.Madhusudhan, KSN Reddy, at Institution of Engineers Local Center, Kadapa, Andhra Pradesh, India, on 15th March,2000,pp34, All India Seminar on Information Technology.

"An Overview of Supervisory Control And Data Acquisition-SCADA" K.Ramesh Reddy,
V.Madhusudhan, KSN Reddy, at Institution of Engineers Local Center, Kadapa, Andhra
Pradesh, India, on 15th March, 2000, pp33, All India Seminar on Information Technology.

11. "Reliability Evaluation Six phase Systems" V.Madhusudhan, K.RameshReddy, K.J.Pillai, V.Sankar, at Regional Engineering College, Warangal, Andhra Pradesh, India, on 14-15 February,1998,pp1.32-1.39, National Conference on Trends and Challenges in Large Interconnected Power Systems, TRIPS'98.

12."Micro Computer Based Monitoring of small Hydro Power Plants" Dr.K.SoundarRajan, V.Madhusudhan, K.Ramesh Reddy, at Coimbatore Institute of Technology, Coimbatore, India, on 3-4 December,1993,pp86-98, National Seminar on Small Hydro Power projects, CIVSEM'93

5. Academic Contribution and Research & Consultancy:

5.1. Invited Lectures:

Sl.	Title of Lecture /	Title of Conference /	Organized by
No	Academic Session	Seminar etc.	
1	Given Invited Talk at JNTU CEP during on Composite power systems reliability evaluation	TEQIP workshop 26-27 July 2013 under TEQIP-II	JNTUCEP
2	chairperson in National level Technical symposium "BHASWARA-2012"	National level Technical symposium "BHASWARA- 2012	And Technology, Keesara, RR District. 14 th -15 th March 2012
3	Acted as Member, Advisory Committee	International Journal on Computing, Communications & Systems (IJCCS)	Malla Reddy College of Engineering and Technology, Secunderabad
5	Acted as judge for poster presentations on Robotics	Robotics in "MEDHA 2012"	Malla Reddy Engineering College for Women, Hyderabad
6	Session chair on smart Energy 21-22 nd September 2013	IEEETheInternationalConferenceonAdvancedComputingTechnologiesICACT-2013	Annamacharya Institute of Technology and Sciences Rajampet
7	Guest Lecture	Reliability Applications of Engineering Systems	Institution of Engineers (India), Kadapa Local Centre
8	Guest Lecture	Embedded Systems	Malla Reddy College of Engineering and Technology, Secunderabad
9	Guest Lecture	Reliability applications for Enhanced power quality	Mallareddy Engineering college, Secunderabad
10	Guest Lecture	Emerging Trends in Electrical Engineering	Sri Sai Institute of Technology and Sciences, Rayachoty, Kadapa DT.
11	Guest Lecture	Composite Power System Reliability	Sri Sai Institute of Technology and Sciences, Rayachoty, Kadapa DT.
12	Guest Lecture	Reliability of Distributed Systems	Sri Sai Institute of Technology and Sciences, Rayachoty, Kadapa DT.

13	Guest Lecture	Introductory Concepts of Power Quality for Enhanced System Reliability'	
14	Invited Lecture	Recent Trends in Electrical Engineering" during 6-8 Sept- 2012	Malla Reddy Engineering College for Woman
15	Guest Lecture	Reliability in Power Engineering	Geethanjali College of Engineering And Technology, Keesara, RR District.
16	Guest Lecture	Monte Carlo Simulation Methods for Reliability Applications to Power Systems Engineering	JNTU College of Engineering, Pulivendula

5.2. Articles/Chapters published in Books: Nil

5.3. Books published as single author or as editor: Nil

- 5.4. Projects Guided:
 - a) UG: 40
 - b) PG:20
- 5.5. Research Interests: power systems engineering
- 5.6. Ph.D students :
 - a) Enrolled: 8
 - b) Submitted: Nil
 - c) Awarded: Nil
- 5.7. Papers published in reviewed journals:

S.No	Title of the Paper	Journal Name Vol.No. PP	ISBN/IS SN No.	Impact Factor/ Citation Index	National/ International
1	MI Control of MLI STATCOM for Sag and well Enhancement in Power Distribution SystemPp2279-2285	International Electrical Engineering Journal (IEEJ)	ISSN: 2078- 2365	-	International
2	FRC Based IPC Stratagem for MLI- DSTATCOM compensating unbalances in Power Distribution Network Hydrothermal System Using Artificial Bee Colony Algorithm"	International Journal of Advance Research in Science and Engineering (IJARSE)	ISSN- 2319- 8354	-	International
3	Pretend Design of a 9-	International Journal of Engineering	ISSN : 2277-	4.116	International

	Level & 27-Level MLI- DSTATCOM for Reactive Power Compensation in PS pp-128-140	Sciences and Research Technology (IJESRT)	9655		
4	SRM Speed control with various Converter Topologies pp-4939-4951	International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, (IJAREEIE)	ISSN: 2320 – 3765	-	International
5	A Variable Speed PFC Converter for Brushless SRM Drive	, International Journal of Cybernetics & Informatics	ISSN: 2320 – 8430	-	International
6	Fortification of Voltage Recompense by Scheming of CMHBI – DSTATCOM pp- 90-93	International Journal of Recent Advances in Engineering & Technology (IJRAET)	ISSN (Online): 2347 – 2812	-	International
7	Reduction in Commutation Torque Ripple in Sensor less BLDC Motor Fed by Pvcells using Fuzzy Logic Controller pp-605-611	International Journal of Research (IJR),	e-ISSN : 2348 - 6848,	-	International
8	A New Power Factor Correction Method using an Inverter Fed Interior Permanent Magnet (IPM) Motor pp-468-473	International Journal & Magazine of Engineering, Technology, Management and Research (IJMETMR),	ISSN : 2348 – 4845	2.625	International
9	A New Control Scheme for PWM of 4-Leg Voltage Source Inverter Fed Unsymmetrical Two Phase Induction otorpp-10291-10299	International Journal of Scientific Engineering and Technology Research (IJSETR)	ISSN 2319 - 8885	-	International
10	Modified DTC Scheme using Fuzzy Logic Control for a FSTPI Fed Induction Motor Drive pp-6536-6542	International Journal of Scientific Engineering and Technology Research (IJSETR)	ISSN : 2319 – 8885	-	International
11	Modeling of 5-Level	International Journal	ISSN :	-	International

	CHB as DSTATCOM for compensation of Power Quality Issues	of Electrical and Electronics Engineers (IJEEE),	2321- 2055		
	pp-70-79				
12	Implementation of Multilevel VSC Topologies for DSTATCOM pp-8714-8723	International Journal of current Research	ISSN: 0975- 833X	3.845	International
13	Design of Voltage Controlled DSTATCOM for Power Quality Improvement and Energy Conservation	International Journal of Advanced Engineering Science and Technological Research (IJAESTR)	ISSN:2 321- 1202	-	International
14	Power Quality Improvement By Using Flexible-DSTATCOM by Mitigating the Effects of Faults pp40-46	World Journal of Engineering Science	ISSN:2 320- 7213	-	International
15	Performance Studies of Three–Phase Cascaded H-Bridge and Diode- Clamped Multilevel inverters pp-5418-5423	International Journal of Engineering and Computer Science	ISSN:2 319- 7242	-	International
16	Performance Analysis of 12&24 Pulse AC- DC Converter fed vector controlled Induction motor Drives (VCIMD) PP-368-374	International Journal of Emerging Technologies and Applications in Engineering, Technology and Sciences, IJ-ETA	ISSN 0974- 3588	-	International
17	Power flow studies and Power Oscillation damping in a large Power System Using FACTS Devices pp-179-182	International Journal of Computer Applications In Engineering, Techno logy and Sciences, IJ-CA-ETS	ISSN: 0974- 3596	-	International
18	Design aspects and analysis for higher order harmonic mitigation of converter feeding a Vector controlled switched reluctance motor drives pp-411-415	International Journal of Emerging Technologies and Applications in Engineering, Technology and Sciences,IJ-ETA- ETS	ISSN 0974- 3588	-	International
19	Implementation of performance analysis of	International Journal on Intelligent		-	International

		18-Pulse AC-DC converter FED switched reluctance Motor Drives to Robotics pp-1-5	Electronic Systems			
	20	Performance Analysis of 12&18 Pulse AC- DC Converter fed vector controlled Permanent Magnet Synchronous Motor Drives pp-409-413	International Journal of Emerging Technologies and Applications in Engineering, Technology and Sciences, IJ-ETA- ETS	ISSN 0974- 3588	-	International
2	21	Composite Power System Reliability EvaluationUsingMonte carlo Methods- A Comparative Study pp-39-49	I-manager's Journal on Future Engineering and Technology			national

5.8. Papers presented at National / International Journals:

S.No	Title of the Paper	Names of the Conference/ Seminars	National/ International	Period
1	Evaluation and Enhancement of Reliability of Electrical Distribution System in the presence of Dispersed Generation	International conference on Signal Processing, Communication, Power and Embedded System (SCOPES)	International	2016
2	Design Aspects and Analysis for higher order harmonic mitigation of power Converter feeding a vector controlled Induction Motor Drives pp-282-287	IEEE-ICAESM 2012 International conference	International	2012
3	Comparison of Single -Phase Cascaded and Multilevel DC link Inverter with Pulse width Modulation Control Methods pp-229-235	2 nd International conference on Sustainable Energy and Intelligent Systems (SEISCON 2011)	International	2011
4	Design and Implementation of Power Converters for Wind Energy Conversion System	2 nd International conference on Intelligent Information System and Management, IISM-2011	International	2011
5	Implementation of Performance analysis of 18 pulse AC-DC converter fed switched reluctance motor drives to robotics Pp-175-178	International Conference on Emerging trends in robotics and communication technologies, INTERACT-	International	2010

		2010		
6	Wavelet based protection schemes for teed transmission circuits pp-192-197	International Conference on Communication, Computation, Control and Nano Technology.	International	2010
7	Power flow and voltage analysis of power transmission system using static var compensator pp-871-874	International Conference on Communication, Computation, Control and Nano Technology.	International	2010
8	Reliability Analysis of Composite Power Systems Using Poisson's Distribution pp-28	2 nd International Conference on Quality, Reliability and Information Technology, ICQRIT- 2003.	International	2003
9	Composite Power System Reliability Analysis Using System State Duration Sampling Approach	National System Conference (NSC-2006)	national	2006
10	Composite Power System Reliability Analysis Using State Transition Sampling Approach pp-8	29 th National System Conference (NSC-2005) on System Engineering Approach to Sustained Growth	National	2005
11	Reliability Evaluation of Generating Systems pp-470-474	25 th National System Conference (NSC-2001) on System Engineering Approach	national	2001
12	Reliability Evaluation Six phase Systems pp-1.32-1.39	National Conference on Trends and Challenges in Large Interconnected Power Systems, TRIPS'98	National	1998
13	Reliability Analysis of Inter Connected Power Systems Using State Space Decomposition	National Seminar on Emerging Trends in Power System Operation and Control.	National	2002
14	Personal Computers for Real Time Control of Power System Distribution Networks	National Seminar at Institution of Engineers Local Center, Kadapa	National	1998
15	An Overview of Supervisory Control And Data Acquisition- SCADA	National Seminar at Institution of Engineers Local Center, Kadapa	National	1998
16	Micro Computer Based Monitoring of small Hydro Power Plants	National Seminar on Small Hydro Power projects, CIVSEM'93	National	1993

5.9. Sponsored research Projects: Nil

S.No	Title	Agency	Period	Grant amount	Ongoing / Completed

5.10 Consultancy Projects: nil

S.No	Title	Agency	Period	Sanctioned Amount	Ongoing / Completed

6 Awards / Honors received:

- 1. Honorary Secretary on kadapa local center of Institute of Engineering (IE(I)) of India for the session 2016-17 & 2017-18
- 2. Member of Executive committee for the Electrical Division of Institute of Engineering (IE(I)) of India for the session 2014-15 & 2015-16
- 7 Motto: to involve actively research activity, guiding and encouraging students to develop innovative thinking that suits the present day's industry