



Dr. S. NARASIMHA

B.Tech, M.Tech, Ph.D

Professor & H.O.D

Electrical & Electronics Engineering.
TKRCET.

Areas of Interest:

His areas of interest include *Power Electronic Applications to Power Systems, AI Techniques, Nonlinear Systems, Co-generation systems and smart grid.*

- Educational & Professional

- Academic Qualifications

- Ph.D in Electrical and Electronics Engineering , JNTU; Hyderabad(2016)
- M.Tech in Power Electronics & Industrial Drives (PE&ID), JNTUHCEH; Hyderabad with Ist class with Distinction (2009).
- B.Tech in Electrical and Electronics Engineering , JNTUH (2003).

Professional Experience

- Teaching Experience (16years)

- Presently Working as a Professor & H.O.D in the Department of E.E.E, TKR College of Engineering & Technology, Hyderabad, from January-2017 to till the date.

• Publications

International Journals

- 1) S. Narasimha, M. Sushama “Control Method for Improving the Voltage Utilization Factor of Multilevel Inverters Considering Co-Generation System Voltage Fluctuation” Published in Volume-3 Issue-6, August 2014 International Journal of Engineering and Advanced Technology, Pg No: 64-67, ISSN: 2249 – 8958.
- 2) S. Narasimha, M. Sushama “Digital Control of A Multi Level Inverter To Improve Gain And Control Performance” Published in Vol. 2, Issue 8, August 2014 International Journal of Innovative Research In Electrical, Electronics, Instrumentation And Control Engineering, Pg No: 1798-1804, ISSN (Print) 2321 – 5526.
- 3) S. Narasimha, M. Sushama “Analysis and Implementation of Buck Boost Voltage Source Inverters Using Hybrid Electric Vehicles” Published in

Volume 4 Issue 1, January 2015, International Journal of Science and Research, Pg No:877-883, ISSN (Online): 2319-7064.

- 4) S. Narasimha, M.Sushama “Digital Control of Multi Level cascade Inverter with Variable DC Voltage Sources” published in Vol. 7 No.1 January 2015, International Journal of Engineering Science and Technology,pg No:32-45, ISSN : 0975-5462.
- 5) S. Narasimha, M.Sushama “A novel Control Method for Improvement of Voltage Utilization Factor in Three-Phase Multilevel Inverter considering the Input Voltage Fluctuation” published in Volume15 Issue3Version 1.0 Year2015, Global Journal Of Researches In Engineering (F), ISSN (print) :0975-5861.
- 6) S. Narasimha, M.Sushama “Adaptive Control Method for Output Voltage of a Three-Phase Multilevel Inverter Considering for Fluctuation in DC Voltage” published in Volume6, Issue4, April 2015, International Journal of Scientific & Engineering Research, pg No: 90-97 (ISSN 2229-5518).
- 7) S.Narasimha, M.Sushama “Analysis Of Superposition Ratio Control Method For the Improvement of Voltage Utilization Factor in Three Phase Multilevel Inverter” published in Volume10, No.14, August 2015, ARPN Journal of Engineering and Applied Sciences ISSN: 1819-6608.Pg:5838-5844
- 8) S.Narasimha, M.Sushama “The Output Voltage Stabilization Of A 3- Phase Multilevel Inverter Considering DC Voltage Fluctuations Using ANFIS” Published in Volume 7, No.2, July-December15, International Journal of Electrical and Electronics Engineers, ISSN:2321-2055, Pg:123-131.
- 9) S. Narasimha, Dr.M.Sushama & J.Lingappa “*Output Voltage Control of a 3-Phase Multilevel Inverter Considering Input Voltage Fluctuations using PI-Technique*” Published in International Journal for Research in Applied Science and Engineering Technology, Volume 4, Issue X, October 2016, ISSN:2321-9653. Pg: 317-322.
- 10) S.Narasimha, Seetha.A “A Grid Tied SPV System with Adaptive DC Link Voltage for CPI Voltage Variations using Fuzzy Logic Control” Published in International Journal of research in computer and communication technology, Volume 5, Issue 12, December 2016, ISSN:2320-5156. Pg: 653-661.
- 11) S.Narasimha, B.Balakrishna “Design of a Novel High Gain Isolated Converter for PV Grid-Connected System” Published in International Journal of scientific Engineering and Technology, Volume 6, Issue 01, January 2017, ISSN 2319-8885, Pg: 88-94.
- 12) Dr. S. Narasimha, M.Savithri, Dr.M.Sushama “**Design Analysis of New High Step-up DC-DC Converter Suitable for Photovoltaic Application**” London Journal of Engineering Research, Volume 17 , Issue 1 ,Compilation 1.0, year 2017, pp.31-42.

- 13) S. Narasimha, D.Spandana “ **A Closed Loop Hybrid Phase Shift Controlled Dual Active Bridge Converter with Dynamic Input Voltage Change**” International Journal of Electrical Electronics & Computer Science Engineering, Volume 4, Issue 5, 2017),E-ISSN : 2348-2273, P-ISSN : 2454-1222,pp23-26.
- 14) S. Narasimha, A.Madhusudan & J.Lingappa “**Implementation and Analysis of Cascaded H Bridge Multilevel Inverter Using Space Vector PWM**” International Journal of Advance Research in Science and Engineering, Volume 6, Issue 11, 2017, ISSN : 2319-8354, pp1232-1243.
- 15) S. Narasimha, “**Design and Development Of Paddy Cutter Using Solar Energy**” *i-manager's Journal on Electrical Engineering (JEE)*, Volume 11, Issue 3, 2018, ISSN Print: 0973-8835 ,pp 9-16.
- 16) Dr.s. Narasimha, Dr.S. Surrender reddy “**Design and implementation of smart uninterruptable power supply using battery storage and photovoltaic arrays**” International Journal of Engineering & Technology, Volume 7, Issue 3, June 2018. ISSN 2227-524X. pp 960-965.
- 17) Narasimha, S., and Laxman, P. “**Pattern and Implementation of 800VA Uninterrupted Power Supply**”. *i-manager's Journal on Power Systems Engineering*, vol.no.6 Issue no.1,pp: 14-25. 2018.
- 18) Dr.s. Narasimha, Dr.S. Surrender reddy “ **Dynamic and hybrid phase shift controller for dual active bridge converter**” International Journal of Engineering & Technology, Volume 7, Issue 4, Feb. 2019. ISSN 2227-524X. pp:4795-4800.
- 19) Narasimha, S., and Rani, B. J.. “**Design and Development of Smart Power Module for Reliable Power Supply with Power Quality Feature**”. *i-manager's Journal on Power Systems Engineering*, Volume 6, Issue 2, pp:29-38. 2019.
- 20) Narasimha, S., and Mansoor shareef MD “**Power Quality Improvement Using D-STATCOM**” The International journal of analytical and experimental modal analysis, Volume XI, Issue VIII, August/2019, ISSN NO: 0886-9367,pp: 374-377.

International Conference

- 21) S.NARASIMHA, Dr.M.SUSHAMA “Analysis of Flying Capacitor Multilevel Inverter Based Shunt Active Power Filter to Voltage Deregulation of Non Linear Loads” presented at International conference on Advances in Electrical, Electronics, Mechanical And Computer Science” ICAEEMCS-2013 held at Hyderabad (INDIA), on 21st April, 2013.
- 22) S.NARASIMHA, Dr.M.SUSHAMA “Direct Torque Controlled Permanent Magnet Synchronous Drive using Multilevel inverter Analysis” presented at 2nd International conference on Recent Advances in Design, Development and Operation of Micro Air Vehicles (ICRAMAV-2013) held during 21-23 November, 2013 at JNTUH.
- 23) S.NARASIMHA, Dr.M.SUSHAMA “The Output Voltage Quality Of Three Phase

Multilevel Inverters Considering Co generation Systems” presented at International conference on Science, Technology and Management, ICSTM-2015, YMCA, New Delhi (India), 1 Feb 2015.

- 24) S.NARASIMHA, Dr.M.SUSHAMA “A New Control Method for Output Voltage Control of A Three Phase Multilevel Inverter Using Adaptive Neuro Fuzzy Inference System” International Conference on Emerging Trends in Electrical Systems & Engineering (ICETESE-2015), 3rd & 4th July in Hyderabad.
- 25) S.NARASIMHA, Dr.M.SUSHAMA and J.Lingappa “Cascaded H-bridge Multilevel D-STATCOM for the Mitigation of Harmonics & Distortions in a Distributed Generation Systems” 2nd International Conference on Emerging Trends in Electrical Systems & Engineering (ICETESE-2016), August 19th & 20th, 2016 in Hyderabad. India.
- 26) Dr.S.NARASIMHA, Dr.M.SUSHAMA “A New Control Method for Output Voltage Control of A Three Phase Multilevel Inverter Using ANN-Technique” Conference on ICRTEST-16 25th-27th October-2016 in St.Peter’s engineering college, Hyderabad.
- 27) Dr.S.Narasimha, Lingappa.J “ Adaptive DC link voltage for CPI voltage variations using adaptive methods” International Conference on System, Science, Control, Communication Engineering & Technology (ICSSCET-17) 16-17 February 2017 in TKR Engineering college.
- 28) S.Narasimha and M.murali krishna “High step up DC-DC Converter for PV grid connected applications” International Conference on Electrical and Electronics Engineering (ICEEE) held at Chennai, on 26th march 2017.
- 29) S.NARASIMHA has participated in “**38th National System Conference (NSC-2014)**” Conducted by JNTUH college of Engineering Hyderabad, during 5-7 November, 2014.
- 30) Dr.S.Narasimha, Ala.Madhusudhan, & J.Lingappa “Implementation & analysis of cascade H bridge multilevel inverter using space vector PWM” 12th International Conference on recent trends in engineering science & management, held at O.U campus, HYD, on 19th Nov-2017.

BOOKS PUBLICATION:

BOOK TITLE : “**Electrical and Electronics Measurements and Instrumentation**”

Publishers: BS Publications.

ISBN: 978-93-5230-192-8.

Authors: **Dr. S. Narasimha**, professor, TKRCET & Dr.G.N.Srinivas, professor, JNTUHCEH

- Events Participated/Organized

Participated

Refresher Courses Attended

1. Attended a *20 day's* Refresher Course on “**ADVANTAGES IN POWER ELECTRONICS AND THEIR APPLICATIONS TO DRIVES AND POWER SYSTEMS**” from 10-11-2008 to 29-11-2008 at UGC Academic Staff College, JNTU Hyderabad.
2. Attended a *21 day's* Refresher Course on “**REAL TIME OPERATION AND CONTROL OF POWER SYSTEMS**” from 16-02-2009 to 07-03-2009 at UGC Academic Staff College, JNTU Hyderabad.

IIT-Workshop

3. Participated in a *Two-Week* ISTE STTP on “**Electric Power System**” Conducted by Indian Institute of Technology Kharagpur From 12th june to 15th jully, 2017.
4. Attended a *Two weeks* – AICTE approved faculty Development Program(FDP101X) on “**Foundation Program in ICT for Education**” Organized by IIT Bombay, from August3, 2017 to September7,2017.
5. Attended a *Two weeks* – AICTE approved faculty Development Program(FDP201x) on “**Pedagogy for Online and Blended Teaching-Learning Process**” Conducted by IIT Bombay, from September 14, 2017 to October 12,2017.

F.D.P

6. Attended a *Two weeks* faculty Development Program on “**POWER SYSTEM AUTOMATION TROUGH SCADA & GIS**” (sponsored by AICTE, New Delhi) Organized by dept of EEE at AURORA’S Engineering Collage from 04-06-2007 to 16-06-07.

Short Term Course Attended

7. Attended a *Five day's* Short Term course on “**HVDC TRANSMISSION & FACTS**” at CVR College of Engineering from 3rd Dec 2007 to 7th Dec 2007.
8. Attended a *Three day's* Short Term Orientation Program organized by Academic staff collage of JNT University at SCIENT Institute of Technology. On “**EFFECTIVE TEACHING METHODOLOGY**” from 4th Sep to 6th Sep 2008.
9. Attended a *six day's* Short Term course on “**HIGH VOLTAGE TESTING & MEASUREMENT TECHNIQUES**” from 31-10-2011 to 05-11-2011 at UGC Academic Staff College, JNTU Hyderabad.
11. Attended a *Three day's* “**Orientation Course**” held from 12th to 14th September, 2013 under TEQIP-II. In JNTUHCEH.

Work Shops Attended

12. Attended a *Three day's* Work shop on “**SCADA IN MODERN POWER SYSTEM CONTROL**” sponsored by TEQIP from 13th to 15th March 2009, Organized by the Dept of EEE **NIT-WARANGAL**.
13. Attended a *Two days* National Level workshop on “**RESEARCH PERSPECTIVES ON ARTIFICIAL INTELLIGENCE–A NEURAL NETWORK APPROACH**” Conducted on 11th and 12th March 2010, In Vidya Vikas Institute of Technology, Chevella.
14. Attended a *One day* Tutorial on “**VIRTUAL HIGH VOLTAGE LABORATORY**” conducted on 28th August 2010. In JNTUHCEH.
15. Attended a *Two days* workshop on “**APPLICATIONS OF SOFT COMPUTING TECHNIQUES IN ELECTRICAL ENGINEERING**” Conducted on 23rd and 24th March 2010, In Vignana Bharathi Institute of Technology, Ghatkesar, RR Dist. Hyderabad.
16. Participated in *One day* workshop on “**IEEE EXPLORE DIGITAL LIBRARY USER AWARENESS WORKSHOP**” held on August 2nd, 2013 at JNTUH.
17. Attended a *Two days professor summit* on “**Embedded System Design Using Atmel XMEGA XPLD A1 and ARM based SAM 4L**” Organized by Atmel India University program in coordination with University Industry Interaction Cell at JNTUH from 24th Feb 2014 to 25th Feb 2014.
18. Attended *One day awareness workshop* on “**Intellectual Property Rights**” on 26-03-2014 at JNTUH Campus.
19. Participated in *One day* workshop on “**POWER SYSTEM DEREGULATION-RECENT TRENDS**” Organized by EEE-dept, JNTUHCEH, Under TEQIP-II held on 26th July, 2014.
20. Attended a *Three day's* Work shop on “**SCADA IN MODERN POWER SYSTEM CONTROL**” sponsored by TEQIP from 13th to 15th March 2009, Organized by the Dept of EEE **NIT-WARANGAL**.
21. Participated in *One day* workshop on “**NBA Accreditation**” held on 12th December, 2014 conducted by E.E.E.D, JNTUHCEH.
22. Participated in *Three day* workshop on “**High Voltage Engineering**” held on 6th to 8th March 2013, in JNTUHCEH
23. Participated *One day* “**NPTEL AWARENESS WORKSHOP FOR FACULTY**” being conducted by Vardhaman College of Engineering, Hyderabad on July 9, 2016.
24. Attended a *Three day's* National Work shop on “**AICTE Mandate-Examination**”

Reforms-Outcome Based Teaching, Learning&Assessment Strategies” Under TEQIP-III from 25/09/2019 to 27/09/2019, Organized by the JNTUH.

25. Attended a *One day* National Work shop on “**Impact of Autonomy in Higher Education Institutions**” Under TEQIP-III On 27/07/2019, Organized by the JNTUH

Train The Trainer (TTT) programs

26. Attended a *One week* program on Train The Trainer (TTT) program of NASSCOM-Foundation skills in IT, which is organized under TEQIP-II at JNTUCE Hyderabad. On 20th-26th November 2013.
27. Attended a *3-day* workshop on the “To Train the Trainer (TTT) program, which is organized under TEQIP-III at JNTU Hyderabad. On 17th-19th may 2018.

Research methodology

28. Completed the Course work “One week” on “Research Methodology” conducted by the University from 16.01.2012 to 21.01.2012 at JNTUH Campus.

Organized

29. *Organizing Committee member* for “*International Conference on Recent Trends in Engineering, Science and Technology*” (ICRTEST)-2016, in SPEC.
30. *Organizing Committee member* for “*FINISHING SCHOOL on PLC & EMBEDDED SYSTEMS*” In March 11th to 30th, 2013, JNTUHCEH.

- Project/Research Guidance

- Students

NAME OF THE STUDENT	THESIS TITLE	YEAR
V. NIKHIL KUMAR	SYNCHRONOUS REFERENCE FRAME METHOD FOR MULTIPLE BIDIRECTIONAL CONVERTERS IN A DC/AC MICRO GRID	2019
SD. MUJEEB AHMED	FUZZY LOGIC BASED POWER MANAGEMENT STRATRGIES FOR A SMART MICRO GRID-CONNECTED PV-SCHEDULED MULTIPLE TRANXITIONS	2018
D. SPANDANA	A CLOSED LOOP TRIPLE DECK BUCK BOOST CONVERTER WITH HIGH GAIN SOFT SWITCHING OPERATION	2018
B JANSI RANI	DESIGN AND DEVELOPMENT OF INTELLIGENT POWER MODULE FOR AUTO	2018

	POWER SUPPLY WITH ENHANCED POWER QUALITY	
Seetha.A	A Grid Tied SPV System with Adaptive DC Link Voltage for CPI Voltage Variations using Fuzzy Logic Control	2016
B.Balakrishna	Design of a Novel High Gain Isolated Converter for PV Grid-Connected System	2016

Awards, Honors and Recognitions

- ❑ **Best Teacher Award** for the academic year 2008-09 from Scient Institute of Technology. Ibrahimpatanam, R.R dist, Telangana.
- ❑ **Best paper Award** on “Analysis of Flying Capacitor Multilevel Inverter Based Shunt Active Power Filter to Voltage Deregulation of Non Linear Loads” presented at ICAEEMCS-2013 held at Hyderabad (INDIA), on 21st April, 2013.
- Guest Lecturer in **AP Police Academe**, Training classes (CSI&TSI) for the subject of: **ELECTRONIC MEASUREMENTS & INSTRUMENTATION.**
- Guest Lecturer in **JNTUHCEH**, Dept of E.C.E, for M.Tech subject: “**Sensors and Actuators**”.
- Participated in the “*Sparring*” in “Vth Andhra pradesh & Maharashtra Open KARATE Champion ship Tournaments” **Awarded the BWON BELT.** Organized by Power Sun Budokan Karate Club at Br.Gudihatnoor, Dist. Adilabad on 24th & 25th Feb-2002.
- **Awarded 2nd** place in VEPAN KATA Event in the “Open to All Style Martial Arts Championship-2002” held on 27th October, 2002 at Govt. Junior College of Boys, Adilabad, T.S.

Professional memberships

- ❖ IAENG-Member Number: 191579.

Advisory/Editorial/Reviewer

- ❖ Advisory/Editorial Board for- **International Journal of Engineering and Techniques(IJET)**-ISSN-2395-1303.
- ❖ Editorial Board for-**i-manager's Journal on Electrical Engineering (JEE)**- ISSN Print: 0973-8835.

Contact :

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