



## **Dr. S. Jagadish Kumar**

B.E(OU), M.Tech(JNTUH), Ph.D (JNTUH)

**Assistant Professor(SGS)**

**MISTE, MSSI**

Electrical & Electronics Engineering

### **Areas of Interest:**

Power Quality, Electrical Machines ,Power System protection, Energy Audit.

**Dr. S. JAGADISH KUMAR** is currently working as Assistant Professor in EEE Department at JNTUH College of Engineering, Nachupally, Jagtial District, Telangana, India. He also rendered his services as Head of the Department, Electrical Maintenance Officer, Officer-Incharge Examinations, Furniture Maintenance Officer, PG Co-ordinator, Hostel manager and Hostel warden at this institute. He has a meritorious academic record and having more than 21 years of experience in Teaching. He has obtained his B.E in EEE from the University College of Engineering, Osmania University, M.Tech from JNTUH University and Ph.D from JNTUH, Hyderabad, Telangana, India. He has published more than 26 research papers in various National, International Journals and conferences. He has organized and participated in various Workshops/Seminars/FDPS and training programs. His area of interest include Power Quality, Electrical Machines, Power System protection, Energy Audit.

**Countries Visited:** Singapore, Malaysia

**Awards:** 1) APJ Abdul Kalam Lifetime Achievement National Award-2021 by National Institute for Socio Economic Development, Bengaluru.

2) Most Innovative Faculty of the year Award-2024 by Global Eminence Awards -2024.

### **- ▶ Educational & Professional**

#### **- ▶ Academic Qualifications**

- ▶ M.Tech in Electrical Power Systems, JNTUH CEH, JNTUH with First Class With Distinction (2005-2008)

- ▶

B.E in Electrical & Electronics Engineering, OUCE, Osmania University with First Class With Distinction (1999-2003)

#### **▶ Professional Experience**

#### **- ▶ Teaching Experience**

- ▶ Academic Consultant, OUCE, Osmania University (2003-11-22 - 2004-09-20)

- ▶ Academic Consultant, OUCE, Osmania University (2004-09-20 - 2007-06-30)

- ▶ Assistant Professor, Institute of Aeronautical Engineering, Dundigal, Hyderabad. JNTUH (2007-07-09 - 2008-06-30)

- ▶ Assistant Professor, Vasavi College of Engineering, Hyderabad. OU. (2008-07-07 - 2011-01-10)

#### **- ▶ At JNTUH**

- ▶ Assistant Professor (Sr.Scale), JNTUH CEJ, JNTUH (2013 - Till Date)

- ▶ Assistant Professor, JNTUH CEJ, JNTUH (2011 - 2013)

### **- ▶ Publications**

#### - International Journals

- ▶ S JAGADISH KUMAR, *POWER QUALITY ANALYSIS OF VARIOUS LED LAMPS AND SIMULATION USING SERIES ACTIVE FILTER*, The International Journal of Analytical and Experimental Modal Analysis, ISBN No.0886-9367, Vol No.13, Issue No.4, pp.37-42, IJAEME JOURNAL, April, 2021
- ▶ S.Jagadish Kumar, *A Review on P-Q Control Theory for A Single Phase Grid Connected Converter For Distribution System With Distributed Generation*, Journal of Engineering Sciences, ISBN No.0377-9254, Vol No.11, Issue No.4, pp.1085-1089, April, 2020
- ▶ S.Jagadish Kumar, *Harmonic Reduction Using Shunt Active Filter*, Journal of Engineering Sciences, ISBN No.0377-9254, Vol No.11, Issue No.5, pp.149-152, May, 2020
- ▶ S.Jagadish Kumar, *Design and Installation of Hand-Made Generator in JNTUHCEJ Campus*, Journal of Engineering Sciences, ISBN No.0377-9254, Vol No.11, Issue No.5, pp.381-385, May, 2020
- ▶ S.Jagadish Kumar, *Theoretical Modelling Of DSTATCOM For Minimizing Harmonic Distortion*, INTERNATIONAL JOURNAL OF SCIENTIFIC & TECHNOLOGY RESEARCH , ISBN No.2277-8616, Vol No. 8, Issue No. 12, pp.1520-1524, DECEMBER, 2019
- ▶ S.Jagadish Kumar, *Performance Analysis of A Shunt Active Filter By Instantaneous Reactive Power Compensation*, Journal of Engineering Sciences, ISBN No.0377-9254, Vol No.10, Issue No.11, pp.296-300, November, 2019
- ▶ S.Jagadish Kumar, *Hysteresis Band Current Controller Based Shunt Active Power Filter for Harmonic Compensation.*, International Journal of Emerging Technology and Advanced Engineering, ISBN No.ISSN 2250-2459, Vol No.2250-2459, International Journal of Emerging Technology and Advanced Engineering

#### International Conference

- ▶ S.Jagadish Kumar, *Analysis Of Spilt Capacitor Three-Phase Four-Wire Shunt Active Filter In Distribution System*, International Conference On Signal Processing, Communication, Power And Embedded System (SCOPE)-2016 , Centurion University Of Technology And Management Paralakhemundi, Odisha, India, October , 2016
- ▶ S.Jagadish Kumar, *Current Harmonics Compensation By Using Active Power Filter In Distribution System*, 7th International Conference On Research In Science And Technology (ICRST) , Nanyang Technological University, Nanyang Executive Centre, Singapore, NOVEMBER, 2016
- ▶ S.Jagadish Kumar, *"Performance Evaluation of split Capacitor, Four-leg and Three H-Bridge based Three-Phase Four-Wire Shunt Active Filters."*, High Voltage Engineering and Technology ICHVET 2015, ICHVET 2015 , January, 2015
- ▶ S.Jagadish Kumar, *Performance Comparison of Passive and Active Power Filters For a Non-Linear Load*, AAPPS-13, Department of Electrical Engineering JNTUHCEJ, karimnagar, October, 2013
- ▶ S.Jagadish Kumar, *"Reduction of Current Harmonics using Active Power Filter in Distribution system"*, Power System Analysis, Control & Optimization (PSACO-2008) , Department of Electrical Engineering, AU College of Engineering, Andhra University, March, 2008
- ▶ S.Jagadish Kumar, *"DSTATCOM in Distribution Network for Power Factor Control"*, AMSE (International Association for Modelling and Simulation Technique in Enterprise, France) , Department of Applied Physics, University of Calcutta, December , 2007

#### National Conference

- ▶ S.Jagadish Kumar, *Analysis Of Three H-Bridge Based Three-Phase Four Wire Shunt Active Filter With P-Q Theory*, The National Conference On Recent Trends In Science And Technology , JNTUH CEJ Nachupally, Karimnagar, February, 2015
- ▶ S.Jagadish Kumar, *Harmonic Compensation In Distribution System Using Four Pole Based Three Phase Four Wire Shunt Active Filter*, The National Conference On Recent Trends In Science And Technology , JNTUH CEJ Nachupally, Karimnagar, February, 2015
- ▶ S.Jagadish Kumar, *Design and performance of Active power filters to reduce current distortions in Distribution Systems*, AAPPS-13, Department of Electrical Engineering JNTUHCEJ, karimnagar,, October, 2013
- ▶ S.Jagadish Kumar, *Performance Comparison of Passive and Active Power Filters For a Non-Linear Load*, AAPPS-13, Department of Electrical Engineering JNTUHCEJ, karimnagar,, October , 2013
- ▶ S.Jagadish Kumar, *Micro and Nano Scale Electric Machines & Applications of Power Electronics*, National Level Conference on Nanotechnology, Department of Electrical Engineering ,KITS college, karimnagar, March, 2011

**-> Events Participated/Organized**

**- Organized**

- > Organized a Symposium on CONVENOR- EGNIS 2019, DEPARTMENT OF EEE, JNTUHCEJ, 27-02-2019 to 28-02-2019
- > Organized a Symposium on CONVENOR- EGNIS 2018, DEPARTMENT OF EEE, JNTUHCEJ, 21-03-2018 to 22-03-2018
- > Organized a Symposium on CONVENOR- EGNIS 2017, DEPARTMENT OF EEE, JNTUHCEJ, 25-02-2017 to 26-02-2017
- > Organized a Refresher Course on Emerging Trends in Renewable Energy Sources & Energy Management, Academic Staff College-JNTUH Kukatpally, Hyderabad., 09-06-2014 to 24-06-2014

**- Co-ordinated**

- > Coordinated for a Workshop on *POWER SYSTEMS*, JNTUHCEJ, 02-11-2016 to 04-11-2016

**- Participated**

- > Participated in a Training on *Electric Vehicle Charging Stations Infrastructures and Technologies(Online)*, The National Small Industries Corporation Ltd. Technical Services Centre , Hyderabad., 10-03-2021 to 24-04-2021
- > Participated in a Training on *Power Quality & Energy Auditing(Online)*, The National Small Industries Corporation Ltd. Technical Services Centre , Hyderabad, 03-08-2020 to 17-08-2020
- > Participated in a FDP on *Smart Grid Technology*, REVA University IEEE PES Student Chapter in association with IEEE PES Bangalore Chapter(Online), 16-07-2020 to 20-07-2020
- > Participated in a Workshop on *Reliability and its Applications to Power Systems and Drives*, Department of Electrical Engineering, University College of Engineering (A), Osmania University, 26-06-2020 to 27-06-2020
- > Participated in a Seminar on *Understanding Power System Simulation Concepts Through Case Studies (webinar series)*, IEEE PES-IAS Chapter Delhi Section and PES India Chapters Council, 22-06-2020 to 26-06-2020
- > Participated in a FDP on *Moodle Learning Management System*, JNTUH College of Engineering Sultanpur (online), 10-06-2020 to 15-06-2020
- > Participated in a FDP on *SCILAB- An open source substitute for MATLAB*, JNTUH College of Engineering Sultanpur (online), 25-05-2020 to 30-05-2020
- > Participated in a Training on *Journal Citation Reports (JCR) Certification Series*, JCR -South Asia Training & Certification Program 2020 (online), 12-05-2020 to 15-05-2020
- > Participated in a Refresher Course on *Energy Conservation and Management - Issues and Methodologies*, UGC-HRDC, JNTUH Kukatpally, Hyderabad, 18-11-2019 to 30-11-2019
- > Participated in a FDP on *Power Quality Analysis and Improvement Techniques*, NIT WARANGAL, 18-06-2018 to 23-06-2018
- > Participated in a FDP on *Power Electronics*, NIT WARANGAL, 11-12-2017 to 20-12-2017
- > Participated in a FDP on *QIP-STC Real Time Simulation for Power Electronics and Power System Applications.*, IISC Bangalore, 10-07-2017 to 14-07-2017
- > Participated in a Workshop on *BIG DATA*, JNTUHCEJ, 13-12-2016 to 27-12-2016
- > Participated in a Workshop on *NBA*, JNTUHCEJ, 04-12-2016
- > Participated in a Workshop on *SOLAR ENERGY APPLICATIONS*, Department of Electrical Engineering, OUCE (A), OU, 02-03-2011 to 06-03-2011
- > Participated in a Workshop on *POWER ELECTRONICS AND DRIVES IN ELECTRIC & HYBRID VEHICLES*, Vasavi College of Engineering, 24-12-2008
- > Participated in a Refresher Course on *Enhancing Professional & Instructional Skills of Young Faculty-08*, Staff Development Programme organized by Department of Electrical & Electronics Engineering, Vasavi College of Engineering, Hyderabad, 04-12-2008 to 12-12-2008
- > Participated in a Refresher Course on *Advances in Power Electronics and Their Applications to Drives and Power Systems*, UGC- Academic Staff College, JNTU, Hyderabad, 11-11-2008 to 29-11-2008
- > Participated in a Refresher Course on *Use of Matlab Tool Boxes For Real Time Applications In Electrical Engineering*, Department of Electrical & Electronics Engineering, Birla Institute of Technology, Mesra , Ranchi, 16-06-2008 to 22-06-2008
- > Participated in a Workshop on *POWER QUALITY*, OUCE (A), OU, 28-09-2007 to 29-09-2007
- > Participated in a Workshop on *SPECIAL ELECTRICAL MACHINES*, OUCE (A), OU & SIS&T, 02-04-2007 to 03-04-2007
- > Participated in a Workshop on *POWER SYSTEM OPERATION & CONTROL*, OUCE (A), OU & SIS&T, 27-11-2006 to 29-11-2006

**-> Administrative Positions Held**

- > Head of the Department, JNTUH CEJ, 28 Dec 2016 - 06 May 2019
- > Deputy Warden (Boys), JNTUH CEJ, 18 Feb 2011 - 12 Jan 2015
- > CRC, Vasavi College of Engineering, Hyderabad., 04 Sep 2008 - 30 Dec 2010
- > Hostel Manager, JNTUH CEJ
- > EMO, JNTUH CEJ

-> **Project/Research Guidance**

- **Students**

Student Name	Title	Year	Download
1.SIRIPURAM SAIKRISHNA 2.SIGIRI NAVYASRI 3.RAMAGUNDAM 4.NAGARAJU 5.FARHEEN 6. SHANIGARAPU VAMSHI KRISHNA	REDUCTION OF CURRENT HARMONICS USING INSTANTANEOUS REACTIVE POWER THEORY	2019	
1.SUDDALA KAVYA 2. DURUSOJU PRANAYKUMAR 3.MESHINENI DEEPTHI 4. KODURI ANIL KUMAR 5. PUSAPALLI SAI NIKHIL	IMPROVEMENT OF POWER QUALITY BY HARMONIC REDUCTION USING SHUNT ACTIVE POWER FILTER WITH D-Q CONTROL STRATEGIES	2019	
1.CHIMPANNA LAVANYA 2.VATTOLI MANORAMA 3.KOTTE ABHILASH RAO 4.KADARI SANDEEP 5.GATTU SHIVA PRASAD RAO	Energy Auditing Anal Remedial Measures	2018	
1.GUJJULA SHIVANI 2.BODA MOUNIKA 3.PANDILLA SRIKANTH 4.GIRI NANDAN REDDY PUCHAKAYALA5. DUDA RAJESH	Condition Monitoring of Inceipient Faults in Power Transformers	2018	
1.KATLA LAVYA 2.MOTHKURI MAHENDHAR 3.BANOTH SUSHMITHA 4.NAMA FRYJSIF ACRONIYA 5.LYADALLA ABHIJITH	Energy Management & Audit	2018	
1.PAMU SRIKANTH 2.KOTTE SAISREE REDDY 3.MODEM SAI PRASANNA KUMAR 4.GOSIKA SRINIVAS 5.VASAM DEEPAK 6.PAWAR VINAY PRASAD	Energy audit survey in distribution systems and remedial measures	2017	
1.SAMALA MEHER SUSHMA 2.SIRASAWADA RANJITH 3. G VISHWAS MARELLA 4. NAGASIDDHARTHA	A survey on energy auditing at jagtial town-II	2017	
1.VANGARA ACHYUTH 2.THULLURU POOJITHA 3.GADAM PRIYANKA YADAV 4.CHADUDUPU BHARATH 5.KATKOORI VINEETH REDDY	DESIGN AND INSTALLATION OF HAND MADE WIND GENERATOR IN JNTUHCEJ CAMPUS	2017	
1.GADDAM BHARATH KUMAR 2.BATHNI MANISHA 3.KORRA NIKHITHA 4.MOHD NADAR 5.DEETI SREEKANTH	CLEAN AND GREEN ENERGY THOROUGH WIND POWER IN JNTUHCEJ	2016	
1.GORLA MARUTHI 2.A SRIKANTH 3.M RAJITHA 4.VALISHETTY JASWANTH VARMA 5.BUDITHI SASANKA		2016	
Student Name	Title	Year	Download
NEROJI ARUNTEJ	Harmonic distortion control in electric traction systems.	2016	
BANDI MADHURIMA	Harmonic current reduction by using passive and high pass filters in railway systems	2016	
G.SANTOSH	Analysis and harmonics of electric traction system and reduction of total harmonic distortion by using Shunt Active Filter	2016	
K.RANADHEER	Harmonic Mitigation In Electric Railway Traction Using Shunt Active Power Filter	2015	
G.MAHIPAL REDDY	Harmonic reactive power compensation by transformerless single phase active power filter using fuzzy controller.	2015	
U.ANITHA	Selective harmonic elimination PWM for CMV reduction in three level NPC inverter for Induction drives.	2014	
R.BHAGYA REKHA	A novel three phase PFC rectifier using a harmonic current injection method	2014	
MAHATHI SABBANI	Improvement on small signal stability of single machine infinite bus using sssc equipped with hybrid fuzzy logic controller.	2014	
S.ARUN REDDY	Improvement of power quality problems using D-STATCOM and DVR	2013	
M.SUNIL KUMAR	Performance comparision of Passive and Active power filters for a non-linear laod	2013	

Contact :

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Electrical & Electronics Engineering

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