

Dr. K. Swarnasri  
Professor  
Department of Electrical & Electronics Engineering  
R.V.R. & J.C. College of Engineering  
Guntur - 522 019  
Andhra Pradesh



**Phone Number:** 9491073317 (Ext: 406) (Office) 9848030499(Mobile)

**E-mail:** [swarnasrik@gmail.com](mailto:swarnasrik@gmail.com), [swarnasrik@rvrjc.ac.in](mailto:swarnasrik@rvrjc.ac.in)

**Educational Qualifications:**

Ph.D. in the faculty of Electrical & Electronics Engineering from JNTU Hyderabad in 2015  
“Estimation of Energy Consumption in Agriculture sector and Reducing the impact of free power on Andhra Pradesh state Electricity utility companies”

M.Tech., in Power systems from Regional Engineering College, Warangal in the year 2001

B.Tech in Electrical & Electronics Engineering from RVR&JC College of Engineering, Guntur in the year 1999

**Teaching Experience:** 19 Years

**Research Interests:** Electrical power systems, Power electronics, Power quality, Distribution systems, smart grids, Energy Audit, Renewable Energy, AI techniques etc..

**Grants Received :**

Received and amount of Rs. 3,18,000/- from AICTE, New Delhi for organizing one week STTP on “Energy Management of Smart Grids and Microgrids with IOT” in April 2019.

**Research Work:**

**PhDs Guided:**

S.No.	Name of the Research Scholar	Title of the Research Work	Month & Year of Award	Registered University
1.	Ponnam Venkata K Babu	Optimum Location & Sizing of Renewable resources in Electrical Distribution Systems by Using Metaheuristic Techniques.	September 2020	Acharya Nagarjuna University, Guntur

**Number of scholars working for Ph.D. :** 7 [ 2- International Scholars]

**Research Papers Published:**

**Journals:**

1. K. Swarnasri, S.V.L Narashimham, R,Srinivasa Rao, "Capacitor Placement in Distribution Network with Fuzzy and PSO for loss minimization" in ANU Journal of Engineering& Technology, Vol.1, No:2, December 2009, PP.39-47. ISSN 0976-3414

2. K. Swarnasri, S.V.L Narashimham, "Distributed Generation for minimization of Power losses in Distribution Systems" in ANU Journal of Engineering& Technology, Vol.1, No:2, December 2009, PP.65-75. ISSN 0976-3414
3. K. Swarnasri, Dr. S.V.L Narashimham "Realistic Estimate of Agricultural power in Andhra Pradesh (INDIA) – A Case study" ARPJ Journal of applied sciences, Vol.6 No.8 August 2011, pp 31-36 ISSN 1819-6608.
4. K. Swarnasri, Dr. S.V.L Narashimham "Realistic Estimate of Agricultural power in Andhra Pradesh (INDIA) – A Case study" ARPJ Journal of applied sciences, Vol.6 No.8 August 2011, pp 31-36 ISSN 1819-6608.
5. K. Swarnasri, Dr SVL Narasimham, Prof. A. SrinivasaRao "Distributed generation for power loss minimization in Agricultural feeder – Indian context" Indian Streams Research Journal (ISRJ), April 2012., ISSN:2230-7850.
6. K. Swarnasri, Dr. S.V.L Narashimham "Requirement based Evaluation of Energy Consumption in Agricultural sector – A Case Study " *Global Journal of Science Frontier Research*, Volume 13, Issue 5, May 2013, pp. 1-6. ISSN :2249-4626
7. K. Swarnasri, P. Anusha, "A Novel approach to compensate voltage sag in three phase lines", International Journal of Electrical and Electronics Engineering Research (IJEER) Vol. 4, Issue 2, Apr 2014, 229-238, ISSN: 2278-943X
8. G. Lalitha, K. Swarnasri, P. Upendra, D. Teja, R. Shanmukha Rao, "Energy Balance Study Of Solar Home Lighting System", International Journal of Industrial Electronics and Electrical Engineering, ISSN: 2347-6982 Volume-2, Issue-7, July-2014, pp. 6-12.
9. N. Suneel Kumar, Dr. K. Swarnasri, "Investigation Of UPQC Performance Using PI and ANN Controller ", JIAATS-JEEE , Vol. 16 | April 2015, ISSN-4265-0578, Article No. 2.
10. Mr. Thoguru Srikar, Dr. K. Swarnasri "Hybrid Intelligence Controller With Power Quality Features For Grid Interconnection Of Renewable Energy Sources", International Journal of Emerging Trends in Electrical and Electronics (IJETEE – ISSN: 2320-9569) Vol. 11, Issue. 4, August-2015, pp 54-59.
11. K. Swarnasri et.al. "Distributed Solar generation applied to Agriculture sector in Andhra Pradesh – A case study", Advanced Research in Electrical and Electronics Engineering Vol 2, issue 14, October-December, 2015, pp 59-62.
12. N. Anjani Pavani; K. Swarnasri, Optimal Placement of Distributed Generation in Distribution Networks, HCTL Open International Journal of Technology Innovations and Research (IJTIR), Volume 24, Issue 2, April 2017, pp. 8-21, e-ISSN: 2321-1814.
13. Gopi Latha Venna and Dr.K.Swarnasri, "Analysis of Harmonic Mitigation in Distribution Network using Internal Model Controllers and Synchronous Reference Frames", International Journal for Modern Trends in Science and Technology, Vol. 04, Issue 02, February 2018, pp.-17-24.
14. B. Divya Lakshmi and Dr.K.Swarnasri, "Dynamic Voltage Regulator/Restorer (DVR) With Ultra Capacitor For Power Quality Improvement", Journal of Advanced Research in Dynamical and Control Systems, Vol 9, issue 16, pages 74-85.
15. Patan Sharuk Khan and K. Swarnasri, "Closed Loop Speed Control of Cascaded Multi Cell Trans Z-Source Inverter Fed Induction Motor Drive", IJAREEIE, Vol.7, Issue 5, May 2018, pp-2398-2407.
16. Ponnamm Venkata K Babu, K.Swarnasri, P.Vijetha. 'A three phase unbalanced power flow method for secondary distribution system', Advances in modelling and Analysis B , Vol.61, No.3,pp.139-144,Sep 2018.

17. Ponnamm Venkata K Babu, Dr. K. Swarnasri, "Novel Technique for Optimal Placement and Sizing of DG in 3-Phase Unbalanced Radial Secondary Distribution System", International Journal of Innovative Technology and Exploring Engineering, Vol. 09, Issue 4, February, 2020.
18. Ponnamm Venkata K. Babu, Dr. K. Swarnasri, "Multi-Objective Optimal Allocation of Electric Vehicle Charging Stations in Radial Distribution System Using Teaching Learning Based Optimization", International Journal of Renewable Energy Research, Vol. 10, No 1, March, 2020.
19. Ponnamm Venkata K. Babu, Dr. K. Swarnasri, "Multi-Objective Optimal Allocation of Electric Vehicle Charging Stations and Distributed Generators in Radial Distribution Systems using Metaheuristic Optimization Algorithms", Engineering, Technology & Applied Science Research, Vol. 10, No 3, June, 2020.
20. M.Chiranjivi, Dr. K. Swarna Sri, "A Review On D Statcom, Dvr (Dynamic Voltage Restorer) And Upqc For Compensating Power Quality Issues", International Journal of Grid and Distributed Computing Vol. 13, No. 1, (2020), pp. 1168 – 1175.
21. Venkata K Babu Ponnamm and K. Swarnasri, "Optimal integration of different types of DGs in radial distribution system by using Harris hawk optimization algorithm", Taylor & Fransis Cogent Engineering, Vol. 07, No. 1, 2020.

### **Conferences:**

1. K. Swarnasri, "A Novel Single phase to Three Phase Converter" in Proceedings of National Conference on Recent Trends in Electrical Engineering-2007.
2. K. Swarnasri, P. AnjaleeKumari, G. SambasivaRao "Power converter for PV and wind connected utility systems", in Proceedings of All India seminar on power systems control operation & maintenance (PSCOM) 2010, 4th to 5th December 2010
3. K. Swarnasri, Dr SVL Narasimham "Solar power in Indian rural distribution systems" in Proceedings of All India seminar on power systems control operation & maintenance (PSCOM) 2010, 4<sup>th</sup> to 5<sup>th</sup> December 2010.
4. K. Swarnasri, N. Ramanarayana "Performance indices for islanding of power systems to avoid blackouts" 2<sup>nd</sup> National conference NCIES-2011 on 31<sup>st</sup> March 2011 at Maha Engineering college, Salem, Tamil Nadu.
5. K. Swarnasri, Dr SVL Narasimham, Prof. A. SrinivasaRao "Distributed generation for power loss minimization in Agricultural feeder – Indian context" – National conference MEPED'13 at Jeppiaar College of Engineering, Chennai on 12<sup>th</sup> April 2013.
6. K. Swarnasri, Dr SVL Narasimham, "Proposals for grid integrated Solar energy systems in Distribution network", UGC Sponsored National conference on Solar power harvesting and storage at RVR&JC College of Engineering, Guntur in June 2013.
7. K. Swarnasri, P. Anusha, "Voltage Sag Compensation Of Point Of Common Coupling (PCC) Using Fault Current Limiter In Three Phase Lines", International Conference on Electrical Electronics and Computer Science-EECS-9<sup>th</sup> Feb 2014, -ISBN-978-93-81693-54-2 pp. 106-111.
8. G. Lalitha, K. Swarnasri, "Energy Balance Study of Solar Home Lighting System", International Conference on Electrical, Electronics, Computer Science and Mechanical Engineering, Bangalore, April 2014, ISBN : 978-93-84209-10-0, pp. 59-65.

9. N. Suneel Kumar, K. Swarnasri "Performance of UPQC using ANN and PI controllers ", National conference on smart grids for smart cities SGSC-2014, 7<sup>th</sup> – 8<sup>th</sup> November 2014, Andhra University, Visakhapatnam.
10. T. Srikar and Dr.K. Swarnasri, "Hybrid Intelligence controller for Grid interconnection of RES" at Sri Venkateswara college of Engineering, Bengaluru in National Conference on Recent Developments in Power Engineering NCRDPE-15 on 5<sup>th</sup> August 2015.
11. K. Swarnasri, M. Divya, S. Sreenivasa Rao, " A Novel method for load management in distribution network", at International conference on Research Advances in Electrical, Electronics & Communication in St. Ann's college of Engineering & Technology, Chirala on 19<sup>th</sup> March 2016.
12. Gopi Latha Venna and Dr.K.Swarnasri, "Analysis of Harmonic Mitigation in Distribution Network using Internal Model Controllers and Synchronous Reference Frames", International conference on recent advances in Electrical and Electronics Engineering (ICEEE17) at Chalapati Institute of Engineering and Technology, Guntur during 17<sup>th</sup> to 18<sup>th</sup> July 2017.
13. Dr.K. Swarna Sri, TR Chandni "Operation And Control Of a DC Grid-Based Wind Power Generation System In a Microgrid Environment" IEEE International Conference on Recent Advances in Engineering and Technology at Sri Krishna College of Engineering and Technology, Coimbatore, India, December 28-29, 2017.
14. P.V.Kishore Babu, Dr. K. Swarnasri "Adaptive PSO Technique for Optimal Placement and Sizing of DG in 3-Phase Unbalanced Radial Secondary Distribution System", ICISGT – 2019, IEEE International Conference on Intelligent Systems and Green Technology. 29-30 JUNE 2019.
15. Padala Navya Meghana, K. Swarnasri, P.V.Kishore Babu "SMART CUSTOMER DEMAND FORECAST WITH SUBSTANTIAL ENERGY DEMAND VARIABILITY" International Conference on Science Engineering and Technology (ICSET-2K19). It is going to be held on 26<sup>th</sup> - 27<sup>th</sup> July 2019 at Mummdivaram, Andhra Pradesh.
16. Ponnamm Venkata K Babu, Dr. K. Swarnasri presented a paper title "Novel Technique for Optimal Placement and Sizing of DG in 3-Phase Unbalanced Radial Secondary Distribution System" in International Conference on Smart Energy Systems and Electric Vehicles (ICSESEV-2020) held during 8<sup>th</sup> – 10<sup>th</sup> Jan-2020.

#### **Membership of Professional Bodies:**

- Member IEEE - Power Engineering Society; (International)
- Associate Member Institute of Engineers (India)
- Member, Solar Energy Society of India (SESI)
- Reviewer for few International Journals

#### **Guest Lectures Delivered:**

- "Design of Transformers" at R.V.R & J.C College of Engineering during the Seminar on Developments and Maintenance of Transformers,13-14<sup>th</sup>, September, 2002.

- "Analysis of Electrical & Electronics circuits using PSPICE" at R.V.R & J.C College of Engineering during AICTE-ISTE short-term training programme 15-29<sup>th</sup>, March 2004.
- "Recent Advances in Electrical Engineering" at Sri Mittapalli college of Engineering, Guntur on 19-03-2016.
- "Entrepreneurship Challenges and Sustainable Opportunities in Indian Perspective" – at RVR&JC College of Engineering in Entrepreneurship awareness program, sponsored by The National Science & Technology Entrepreneurship development board and Department of Science & Technology, GOI organized by Department of Mechanical Engineering on 14<sup>th</sup> September 2019.
- "Electric – Vehicles" – at AICTE Sponsored TWO weeks FDP on "Emerging Technologies and Challenges in Mechanical Engineering (ETCME) on 24<sup>th</sup> October 2019.
- "Entrepreneurship Challenges and Opportunities for sustainable future in Indian Perspective" – at RVR&JC College of Engineering in Entrepreneurship awareness program, sponsored by The National Science & Technology Entrepreneurship development board and Department of Science & Technology, GOI organized by Department of Mechanical Engineering on 11<sup>th</sup> December 2019.
- "Webinar on Electric Vehicles and their impact on Electrical Distribution Network", organized by EEE Department, Miracle Educational Society group of Institutions , Vijayanagaram(Dt), A.P. on 3<sup>rd</sup> June 2020.

#### **Workshops / Seminars / Courses Participated:**

- "H.V. Testing Techniques" 08-11-2002 at Siddhartha Engineering College at Vijayawada.
- "Modelling of Power system components" 25-29, Nov 2002 at SNIST, Hyderabad.
- Two day workshop on "Mipower applications to power systems" 28-29, NOV 2003 by PRDC, Banglore at RVRJC CE.
- One day workshop on "AI Techniques to power systems" 21-01-2006 at KLCE Vaddeswaram, Vijayawada.
- Three day workshop on "AI&MH Techniques applications to power systems" 31-07-2008 to 02-08-2008 NIT,warangal.
- QIP programme on "Analysis of Modern power systems" 16<sup>th</sup>-20<sup>th</sup>,March 2009 IISC,Bangalore.
- One day workshop on "Challenges in Indian power sector" on 6<sup>th</sup> December 2010 at NIT Warangal.
- FDP Programme on "Advances in Control and operation of Distribution systems" at VR Siddhartha Engineering college, Vijayawada during 29<sup>th</sup> – 30<sup>th</sup> March 2013.
- UGC Sponsored National conference on "Solar power harvesting and storage" at RVR&JC College of Engineering, Guntur in June 2013.

- Alumni Relations Conference (ARC) – India at Indian School of Business, Hyderabad on November 1<sup>st</sup> 2014.
- A three day short term course on “Recent Trends and Applications in Smart and Mircro grids” organized by Department of EEE at KL University during 10<sup>th</sup> – 12<sup>th</sup> July 2015.
- Seminar on “Engineering Education & Research” conducted by National Instruments India, Bangalore at Vijayawada on 29<sup>th</sup> December 2015.
- Two day National seminar on March to Make in India through Engineering Advancements at RVR & JC College of Engineering during September 29-30, 2016.
- AICTE recognized Short term course on ANN&FL through ICT during 24<sup>th</sup> to 28<sup>th</sup> April 2017 at RVR& JC College of Engineering through Remote centre conducted by NITTTR-Chandigarh.
- Attended Two Week ISTE STTP on Electric Power System during 10<sup>th</sup> to 15<sup>th</sup> July 2017 organized by IIT Kharagpur, through college remote centre.
- Completed IITB FDP 201X Pedagogy for Online and Blended Teaching-Learning Process 14<sup>th</sup> September to 20<sup>th</sup> November 2017.
- Completed IITB FDP 101x Foundation Program in ICT for Education, 25<sup>th</sup> July to 13<sup>th</sup> September 2017.
- Attended “Bridge 17 The Future Work” - Conducted by ICT Academy at Vijayawada on 26<sup>th</sup> October 2017.
- Completed Prephase – I qualifying phase for Phase-I IIEECP Certification Program , organized by IUCEE, APSSDCL during May 2018.
- Attended Phase – I IIEECP Certification program at VIT-Amaravati: organized by IUCEE, APSSDCL during 12<sup>th</sup> to 14<sup>th</sup> July 2018.
- Completed IITB-FDP 301x “Mentoring educators in Educational Technology” conducted by IITBombay from May 2018 to July 2018.
- Completed the STTP through ICT mode on “Outcome based Education and Accreditation” organized by NITTTR, Kolkata during 24<sup>th</sup> to 28<sup>th</sup> September 2018.
- Attended two day Workshop on “Leadership opportunities for Professional Women” on 27<sup>th</sup> & 28<sup>th</sup> October 2018, organized by IEEE Guntur Subsection in association with WIEAG, Hyderabad section at Efftronics Systems Pvt Ltd, Vijayawada.
- Completed “APSSDC OBE Course 2018” offered by IUCEE during 27<sup>th</sup> September to 15<sup>th</sup> December 2018.
- Completed UDEMY 30.5 hours “Complete Python Developer in 2020: zero to mastery” online course in April 2020.

- Two-Day FDP on “Virtual Teaching” conducted by Teaching Learning Centre (Under PMMMNMTT, Department of Higher Education, MHRD, GoI) Coimbatore Institute of Technology, through online mode during 20th and 21st April 2020.
- Webinar on “The New Face of Higher Education after COVID-19” on May 10, 2020 organized by Acharya Nagarjuna University and APSCHE.
- Online "Faculty Development Program" on Role of IoT, Embedded, Electric Vehicle & Power Electronic Converters for Smart World organized by St.Joseph's College of Engineering, Chennai in association with IEEE Student Chapter for the during 18th May to 22<sup>nd</sup> May 2020.
- Online TEQIP-III sponsored International Workshop on “Electric Power Grid Modernisation: Trends, Challenges and Opportunities” Organized by The National Institute Of Engineering, Mysuru & IEEE PES-Bangalore Chapter held from July 20-24, 2020.

### **Workshops / Conferences Organized:**

- Coordinator - “Electric Tarang – 2010” on 22<sup>nd</sup> January 2010.
- Coordinator - Paper contest on “Energy Conservation” on 17<sup>th</sup> December 2014.
- Coordinator - “Electric Tarang – 2016” on 11<sup>th</sup> February 2016.
- Coordinator - **AICTE sponsored** One week STTP grant on “Energy Management of Smart Grids and Microgrids with IOT” organized during 29th July 2019 to 3rd August 2019.

### **Sponsored Projects:**

(Sponsored by Management, RVR&JC CE)

- Design of VAR compensator for transmission line simulation panel.
- Power quality analysis and enhancement
- A Pilot project on Solar energy based UPS for Web server

### **Other Duties:**

- Convener – Alumni Cell
- Mentor – IEEE Student Branch
- Program Coordinator – for B.Tech course (UG) - EEE Department
- Member – Board of Studies – EEE Department
- Member – Anti Ragging committee, Anti Ragging Squad
- Member – College Academic Council

### **Other Professional Roles:**

Treasurer – IEEE Guntur Subsection