



## Dr. N. Srilatha

Associate Professor, Dept. of EE, UCE, OU

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### Education

- **Ph. D.** in Osmania University **2021**  
*Doctor of philosophy (Ph.D.) in Electrical Engineering from Osmania University with the thesis titled "Congestion Management in Power System Using Artificial Intelligence"*
- **Post-Graduation** in Osmania University **2006**  
*Master of Engineering Degree (M.E.) in Power Systems from University College of Engineering, Osmania University with thesis titled "Load Compensation Using Static Var Compensator"*
- **Under graduation** in Kakatiya University **2003**  
*Bachelor of Technology degree (B.Tech.) in Electrical and Electronics Engineering from Kakatiya Institute of Engineering and Technology, Kakatiya University, Warangal.*
- **Board of Intermediate Education** **1999**  
*Intermediate under Board of Intermediate Education from S.V.S Junior College, Hanamkonda, Warangal.*
- **Board of Secondary Education** **1997**  
*SSC, Board of Secondary Education from Oasis Public School, Warangal.*

### Work Experience

- **Associate Professor** in the Department of Electrical Engg., **UCE(A), OU** with a **Grade pay of Rs.9000/-** from 19.09.2020 till date.
- **Assistant Professor** in the Department of Electrical Engg., **UCE(A), OU** with a **Grade pay of Rs.8000/-** during 19.09.2017 to 19.09.2020.
- **Assistant Professor** in the Department of Electrical Engg., **UCE(A), OU** with a **Grade pay of Rs.7000/-** during 19.09.2012 to 19.09.2017.

- **Assistant Professor** in the Department of Electrical Engg., **UCE(A), OU** with a **Grade pay of Rs.6000/-** during 25.06.2007 to 19.09.2012.
- **Assistant Professor** in the Department of Electrical Engg., **TKRCET, Hyderabad** with a **Consolidated pay of Rs.12000/-** during 25.06.2006 to 24.06.2007.

### Areas of Research Interests

- Power System Operation, Control and Optimization
- Power System Security
- Power Electronic Applications to Power Systems
- Artificial Intelligence applications for Congestion management

### Subjects Taught

#### Under Graduate subjects

- Power System Operation and Control
- Microprocessors and Microcontrollers
- Electrical Circuits
- Power Systems
- Switchgear and Protection
- Programming for Problem Solving

#### Post Graduate subjects

- Smart Grid Technologies
- Advanced Computer Methods in Power Systems
- Power System Stability
- Real-Time Applications to Power Systems
- High Voltage DC Transmission
- Advanced Power Systems Protection

### Awards / Honours

- Received **Prathibha Puraskar** for Excellence in performance in the combined Andhra Pradesh state during Board of Intermediate Exams in the year 1999, from the then Chief Minister, **Hon. Sri. N. Chandra Babu Naidu**.
- Received **Merit Scholarship** awarded for **Top 10 students** for excellent performance in SSC Exams in District level, in Warangal District, in the year 1997.

### Institutional Administrative Experience

- PG Coordinator for M.E./M.Tech., (AICTE Scholarship), UCE(A), OU w.e.f 13.12.2021

- **Session Chair** of 2<sup>nd</sup> International Conference on Emerging Trends in Engineering (ICETE), University College of Engineering, Osmania University, Hyderabad, during 28th - 30th April, 2023.
- Department Convener of M.E. / M.Tech. (PTPG) admissions for the academic year 2021-22
- **BoS (A) Coordinator** of the Department from April, 2020 to January, 2022.
- Examinations In charge in the department from March, 2021 till date.
- **In-charge** for preparation of Handbook, Annual Report, Half Yearly Report, IQAC Report, NIRF data in the department since 2010 till date.
- **Department Coordinator** for **3-week Induction Program** for BE-I Semester students, University College of Engineering, Osmania University during July 2019.
- **Departmental TEQIP-II In-charge** during 2013-2016.
- Coordinated the one-day field study program “33/11 KV substation at IICT, Tarnaka, Hyderabad” to BE III/IV, 2nd semester students on 6<sup>th</sup> Jan 2015.
- **NBA Coordinator**, ME Power Systems, Department of Electrical Engineering, University College of Engineering, Osmania University in 2013.
- **Time Table In charge** for BE/ME, Department of Electrical Engineering, University College of Engineering, Osmania University from 2009-2010.
- **Reviewer** for 2<sup>nd</sup> International Conference on Emerging Trends in Engineering, Osmania University, Hyderabad, 28<sup>th</sup> – 30<sup>th</sup> April, 2023.
- **Session Chair** of 2<sup>nd</sup> International Conference on Emerging Trends in Engineering, Osmania University, Hyderabad, 28<sup>th</sup> – 30<sup>th</sup> April, 2023.
- **Co-Chaired the session** of “Soft Computing and Applications in Electrical Engineering” in International Conference on Innovative Technologies in Engineering, Hyderabad, 11th - 13th April, 2018.
- **Reviewer** for International Conference on Innovative Technologies in Engineering, Hyderabad, 11<sup>th</sup> - 13<sup>th</sup> April, 2018.
- **Reviewer** for International Conference on Emerging Trends in Engineering, Osmania University, Hyderabad, 22<sup>nd</sup> – 23<sup>rd</sup> March, 2019.
- **In charge of Registrations and Proceedings Committee**, National Power Systems Conference during 15<sup>th</sup> – 17<sup>th</sup> December, 2010.

## Research Publications

### International Journals

1. N. Srilatha, G.V. Naga Lakshmi, N. Jaya Lakshmi, **Efficient Plug-In Electric Vehicles Charging Scheduling to Increase Parking Lot Utilization,** Journal of Electrical Systems, ISSN: 1112-5209, Vol. 20, Issue. 10s, September 2024. (SCOPUS indexed)

2. N. Srilatha, "**On-Line Dynamic Security Assessment of Power Systems Utilizing Case-Based Reasoning Approach**," Journal of Electrical Systems, ISSN: 1112-5209, Vol. 20, Issue. 10s, pp 1060-1067, August, 2024. (SCOPUS indexed)  
(URL: <https://journal.esrgroups.org/jes/article/view/5204>)
3. G. V. Naga Lakshmi, N. Srilatha, "**Optimal Capacity and Placement of Distributed Generation using Sequential Quadratic Programming**," International Journal of Intelligent Systems and Applications in Engineering, ISSN: 2147-6799, Vol.12, Issue.22s, pp 1241-1246, July, 2024, (SCOPUS indexed)  
(URL: <https://ijisae.org/index.php/IJISAE/article/view/6587>)
4. N Srilatha, G V Naga Lakshmi, "**Security Improvement Using FACTS Device Placement based on Modal Analysis**," International Journal on Recent and Innovation Trends in Computing and Communication, ISSN: 2321-8169, Volume. 11, Issue. 11, December 2023. (SCOPUS indexed)  
(URL: <https://ijritcc.org/index.php/ijritcc/article/view/10901>)
5. N Srilatha, "**Efficient Energy Utilization in Plug-in Hybrid Electric Vehicles using Fuzzy Logic Controllers**," International Journal of Membrane Science and Technology, ISSN: 2410-1869, Vol. 10, No. 2, pp 4405-4414, September, 2023. (SCOPUS indexed)  
(URL: <https://cosmoscholars.com/phms/index.php/ijmst/article/view/3756>)
6. N. Srilatha, "**Switched Capacitor Multilevel Inverter for Transformerless Grid-Connection Applications**", International Journal of Innovative Research and Analytical Reviews, EISSN: 2348-1269, PISSN: 2349-5138, Vol. 10, Issue. 2, April 2023 (UGC approved) (Impact factor: 7.17)  
(URL: [http://www.ijrar.org/viewfull.php?&p\\_id=IJRAR23B4671](http://www.ijrar.org/viewfull.php?&p_id=IJRAR23B4671))
7. N. Srilatha, V. Jayamadhuri, "**Grid Connected Dual VSI Modules with Renewable Sources for Power Quality Improvement using Optimal Power Sharing**", International Journal of Innovative Research in Technology, ISSN: 2349-6002, Vol. 9, Issue. 10, March 2023 (UGC approved)  
(URL: [https://ijirt.org/master/publishedpaper/IJIRT158953\\_PAPER.pdf](https://ijirt.org/master/publishedpaper/IJIRT158953_PAPER.pdf))
8. N. Srilatha, J. Sandeep, "**Surveillance of Captive Generation Units unified with Solar Power Plants**", Journal of Emerging Technologies and Innovative Research, ISSN: 2349-5162, Vol. 9, Issue. 9, September 2022 (UGC approved)  
(URL: <https://www.jetir.org/papers/JETIR2209583.pdf>)

9. N. Srilatha, "**Optimal Placement of Micro-PMUs in Reconfigurable Smart Distribution System**", *International Journal of Creative Research Thoughts*, ISSN: 2320-2882, Vol. 10, Issue. 3, March 2022 (UGC approved)  
(URL: <https://www.ijcrt.org/papers/IJCRT2203660.pdf>)
10. N. Srilatha, G. Yesuratnam, "**Chaotic Darwinian Particle Swarm Optimization for Real-Time Hierarchical Congestion Management of Power System Integrated with Renewable Energy Sources**," *International Journal of Electrical Power and Energy Systems*, Elsevier, Online ISSN: 1879-3517, Vol. 128, June 2021. (SCI Journal)  
(URL:<https://www.sciencedirect.com/science/article/abs/pii/S0142061520341776>)
11. N. Srilatha, G. Yesuratnam, "**Congestion Management in Deregulated Environment Aided by Demand Side Response**," *International Journal of Advanced Science and Technology*, ISSN:2005-4238, E-ISSN:2207-6360, Vol. 29, No. 8, pp. 1351-1362, June, 2020. (SCOPUS indexed)  
(URL: <http://sersc.org/journals/index.php/IJAST/article/view/20260>)
12. N. Srilatha, G. Yesuratnam, "**Optimal Location of multi-type FACTS for Power System Security Enhancement**," *International Journal of Engineering and Advanced Technology*, Volume-9, Issue-2, December, 2019, ISSN:2249-8958 (SCOPUS indexed)  
(URL: <https://www.ijeat.org/download/volume-9-issue-2/>)
13. N. Srilatha, G. Yesuratnam, "**Congestion Management Considering Economic and Efficient Generation Rescheduling**," *International Journal of Recent Trends in Engineering*, Volume-8, Issue-154, June 2019. ISSN: 2277-3878 (SCOPUS indexed)  
(URL: <https://www.ijrte.org/download/volume-8-issue-1s4/>)
14. E. Vidya Sagar, N. Srilatha, "**Optimal Location and Rating of Capacitor Banks on radial Distribution Feeder**", *International Journal of Engineering Research and Industrial Applications*, Vol. 4, No. 4, 2009.

### International Conferences

1. N. Srilatha, J. Sandeep, "**Monitoring and Control of Captive Generation Units in Presence of Grid Integrated Solar Power Plants**", 2nd International Conference on Smart Grid Energy Systems and Control, NIT Kurukshetra, 7th – 9th April, 2023.
2. N. Srilatha, "**Distributed Generation Placement Using Voltage Stability Index and Optimal Sizing Using Adaptive Particle Swarm Optimization**", 2<sup>nd</sup> International Conference on Innovative Research in Engineering and Technology, Vietnam (virtual conference), 15<sup>th</sup> – 16<sup>th</sup> July, 2022

3. N. Srilatha and G. Yesuratnam, "**Locational Marginal Price Based Optimal Location of UPFC for Power System Security Improvement**," *International Conference on Innovative Technologies in Engineering*, Hyderabad, 11<sup>th</sup> - 13<sup>th</sup> April, 2018.
4. N. Srilatha and G. Yesuratnam, "**Security Assessment and Enhancement Using RBFNN with Feature Selection**," *North American Power Symposium*, Washington, September, 2014.
5. Srilatha N, Yesuratnam G and Shiva Deepthi M, "**RBF Neural Network Approach for Security Assessment and Enhancement**," *IEEE Transmission & Distribution Conference & Exposition*, Chicago, April 2014.
6. Yesuratnam, N. Srilatha and P. L. Reddy, "**Congestion Management Technique Using Fuzzy Logic Based on Security and Economy Criteria**," *11<sup>th</sup> WSEAS international conference on Artificial Intelligence*, Cambridge University, UK, 2012.
7. Yesuratnam and N. Srilatha, "**An Expert System Approach of Congestion Management for Security and Economy Oriented Power System Operation**," *9<sup>th</sup> IEEE International Power and Energy Conference IPEC*, Singapore, 2010.

### **Book Chapters**

1. N. Srilatha, B. P. Rathod and G. Yesuratnam, "**Machine Learning Based Prediction Model for Monitoring Power System Security**," *Advances in Decision Sciences, Image Processing, Security and Computer Vision*, Springer, pp. 443-450, 2019. Electronic ISSN 2662-3455 Print ISSN 2662-3447.

### **Workshops / Training Programs Organized**

- **Organized Two-week Induction Programme** for B.E. first semester students during 21<sup>st</sup> - 31<sup>st</sup> August, 2024, in UCE, OU.
- **Organized One-week workshop** on "Smart Hybrid Energy Systems – Challenges and Solutions" as part of Platinum Jubilee Celebrations of the Department of Electrical Engineering, University College of Engineering, Osmania University, during 18<sup>th</sup> - 23<sup>rd</sup> December, 2023.
- **Organized Two-week Induction Programme** for B.E. first semester students during 30<sup>th</sup> August to 8<sup>th</sup> September, 2023, in UCE, OU.
- **Organized One Day Workshop** on "Women Conclave - A Meetup of Women Professionals - Embrace Equity" on Friday, 17<sup>th</sup> March 2023, in the Department of Electrical Engineering, UCE(A), OU.

- **Organized Two Day Online Workshop** on “Reliability and its Applications to Power Systems and Drives” 26<sup>th</sup> - 27<sup>th</sup> June, 2020, UCE (A), OU.
- **Organized Three Day workshop** on “Application of Simulation tools to Modern Power Systems” during 7<sup>th</sup> – 9<sup>th</sup> May, 2015, in the Department of Electrical Engineering, UCE(A), OU. **Developed lecture notes** for software like PSSE and Power World Simulator for the workshop.
- **Organized Two Day Workshop** on ‘Power System Security’ during 14<sup>th</sup> – 15<sup>th</sup> September, 2009, in the Department of Electrical Engineering, UCE(A), OU

### Expert Lectures Delivered

- Invited Lecture at Malla Reddy Engineering College on **Power System Security** on 20.12.2016
- Expert Lecture at Three Day Workshop on “**Application of Simulation tools to Modern Power Systems**” during 7<sup>th</sup> – 9<sup>th</sup> May, 2015, in the Department of Electrical Engineering, UCE(A), OU
- Expert Lecture at One Week faculty Development Program on “**Distributed Generation and Power Quality Issues**” during 30<sup>th</sup> June-5<sup>th</sup> July, 2014, in the Department of Electrical Engineering, UCE(A), OU
- Expert Lecture at Two day National level Technical Symposium Techsonance-2022 on “**Machine Learning Applications in Electrical Engineering**” on 27<sup>th</sup> April, 2022, in the Department of Electrical Engineering, UCE(A), OU

### Workshops / Training Programs Attended

- 40-hour faculty development programme on “**Learning Paradigms on Machine Learning and Deep Learning with Python**” during 20<sup>th</sup> - 30<sup>th</sup> June, 2024, Organized by E&ICT academy NIT Warangal and MVSR Engineering college
- Five-day Hybrid Mode Short Term Course and Faculty Development Programme on “**Sustainable Technologies & Energy Management of Hybrid Microgrid (STEMM-2023)**” organized by Department of Electrical Engineering from 12-July-2023 to 16-July-2023.
- Five-day online Faculty Development Program on **Power Electronics Converters’ Applications in Microgrid and Vehicular Technology** during 20<sup>th</sup> - 24<sup>th</sup> July, 2022 organized by National Institute of Technology Rourkela, Odisha, India
- AICTE Training And Learning (ATAL) Academy Online Elementary FDP on **Data-Driven Strategies in Smart Power System and Control** during 22<sup>nd</sup> to 26<sup>th</sup> November, 2021 organized by National Institute of Technology Andhra Pradesh

- Five-day **online Faculty Development Program on Recent Advances and Application of IOT in Renewable Energy Technologies** during 23<sup>rd</sup> – 27<sup>th</sup> August 2021 organized by School of Engineering and Technology, IGNOU, New Delhi
- Five-day **online Faculty Development Program on Smart Grid Markets - Key Trends, Challenges and Opportunities** during 27<sup>th</sup> – 31<sup>st</sup> July 2021 organized by Department of Electrical Engineering in association with Center for Continuing Education, NIT Warangal.
- One-week **online FDP** entitled **Electrical Distribution System Analysis with Renewable Energy Sources** during 12<sup>th</sup> July – 16<sup>th</sup> July 2021, organized by Department of Electrical Engineering, National Institute of Technology, Kurukshetra
- One-week **Online ATAL FDP on Distributed Energy Systems Modelling and Control**, organized by Govt. Engg. College, Bharuch, Gujarat, during 21<sup>st</sup> - 25<sup>th</sup> June, 2021
- Received **NPTEL Online Certification** for the subject **Introduction to Smart Grid during January, 2021**, after completing an **8 weeks course in SWAYAM**.
- Two-week online FDP on **Advanced Optimization Techniques and Hands-on with MATLAB/SCILAB**, Summer Joint Faculty Development Programmes 2020, EICT Academies at IIT Guwahati, IIT Roorkee, IIITDM Jabalpur, MNIT Jaipur, NIT Patna and NIT Warangal, during 13<sup>th</sup> - 24<sup>th</sup> July, 2020.
- **AICTE sponsored** online FDP on **AI Techniques to Electrical Engineering**, UGC-Human Resource Development Centre, JNTUH Kukatpally, Hyderabad, during 6<sup>th</sup> - 10<sup>th</sup> July, 2020.
- Online FDP on **Recent Strategies on Micro and Smart Grid Technology**, GMR Institute of Technology, Rajam, Srikakulam, Andhra Pradesh, under JNTU Kakinada, during 15<sup>th</sup> - 19<sup>th</sup> June, 2020.
- Online STTP on **MATLAB based teaching-learning in Mathematics, Science and Engineering**, Ramrao Adik Institute of Technology, Nerul, Navi Mumbai, during 18<sup>th</sup> - 22<sup>nd</sup> May, 2020.
- **One Week Refresher Course on Application of AI Techniques in Electrical Engineering**, Department of Electrical Engineering, UCE, OU, during 18<sup>th</sup> – 23<sup>rd</sup> November, 2019.
- One Day **Induction Program**, University College of Engineering, Osmania University, on 20<sup>th</sup> January, 2018.
- **MHRD** sponsored one-week short term course on **High Voltage gain Soft-Switching Advanced Current Fed Technologies for Microgrid and Electric Transportation**, Department of Electrical Engineering, UCE, OU, during 18<sup>th</sup> – 23<sup>rd</sup> December, 2017.
- Two Day workshop on **Leadership & Research Challenges for Professional Women**, Department of Electrical Engineering, UCE, OU, during 4<sup>th</sup> – 5<sup>th</sup> January, 2019.
- **MHRD** sponsored one-week short term course on **Wide Area Monitoring and Control of Cyber Power System**, Department of Electrical Engineering, National Institute of Technology, Warangal, 26<sup>th</sup> – 30<sup>th</sup> December, 2017.



- One day work shop on **How to Write Research Proposal** on 18<sup>th</sup> September, 2015, organized by University College of Engineering, OU, Hyderabad.
- 2 weeks **Faculty Development Programme in Entrepreneurship** during 30-12-2013 to 10-01-2014 at EDC, OU Building No. 21, Adjacent to Mechanical Engineering Department, UCE, OU.
- **AICTE-QIP Sponsored** short term course on **Power System Economics** at IIT Kanpur from 26<sup>th</sup> to 30<sup>th</sup> July, 2013.
- Distinguished lecture program on **Power System Reliability – Concepts & Techniques** organized by IEEE Hyderabad section on 29<sup>th</sup> November, 2011 at PGCIL.
- **UGC** sponsored **Refresher Course** on **Recent Trends in Deregulation of Power Systems** in June, 2011.
- Three-day workshop on **Power Quality Issues- Analysis and Mitigation Techniques** 27<sup>th</sup> to 29<sup>th</sup> November, 2008, organized by NIT, Warangal.
- Two-day workshop on **EDSA software Applications to Power Systems** 5<sup>th</sup> & 6<sup>th</sup> December, 2008, organized by EED, UCE, OU.
- **UGC** sponsored **Orientation Program** at Academic Staff College, Osmania University, during 30<sup>th</sup> July, 2012 to 30<sup>th</sup> August, 2012.
- Two-day workshop on **Power Quality** 28<sup>th</sup> & 29<sup>th</sup> September 2007, organized by EED, UCE, OU.
- Ten-day **Orientation Program** at Osmania University Centre for International Programs (OUCIP) during 2<sup>nd</sup> to 12<sup>th</sup> July, 2007.

### Project Guidance

- Number of M.E. projects guided : **24**
- Number of B.E. projects guided : **14**

(Namilakonda Srilatha)  
11.11.2024