

Dr. N. Srilatha

Associate Professor, Dept. of EE, UCE, OU

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Education

• **Ph. D.** in Osmania University

August, 2021

Submitted Doctor of philosophy (Ph.D.) Thesis 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
- 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

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 year1999, from the then Chief Minister, **Hon. 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

• Department Convener of M.E. / M.Tech. (PTPG) admissions for the academic year 2021-22

- **BoS (A) Coordinator** of the Department from April, 2020 till date.
- 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 6th 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.
- 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, 11th 13th April, 2018.
- **Reviewer** for International Conference on Emerging Trends in Engineering, Osmania University, Hyderabad, 22nd 23nd March, 2019.
- In charge of Registrations and Proceedings Committee, National Power Systems Conference during 15th 17th December, 2010.

Research Publications

Journals

- 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, Vol. 128, January 2021
- 2. N. Srilatha, G. Yesuratnam, "Congestion Management in Deregulated Environment Aided by Demand Side Response," *International Journal of Advanced Science and Technology*, Vol. 29, No. 8, pp. 1351-1362, 2020. ISSN:2005-4238, E-ISSN:2207-6360 (SCOPUS indexed).

- 3. N. Srilatha, G. Yesuratnam, "Optimal Location of multi-type FACTS for Power System Security Enhancement," *International Journal of Engineering and Advanced Technology*, Volme-9, Issue-2, December, 2019, ISSN:2249-8958 (SCOPUS indexed).
- 4. N. Srilatha, G. Yesuratnam, "Congestion Management Considering Economic and Efficient Generation Rescheduling," *International Journal of Recent Trends in Engineering*, Volume-8, Issue-1S4, June 2019. ISSN: 2277-3878 (SCOPUS indexed).
- 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.
- 6. 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.

Conferences

- 7. 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, 11th 13th April, 2018.
- 8. N. Srilatha and G. Yesuratnam, "Security Assessment and Enhancement Using RBFNN with Feature Selection," *North American Power Symposium*, Washington, 2014.
- 9. Srilatha N, Yesuratnam G and Shiva Deepthi M, "RBF Neural Network Approach for Security Assessment and Enhancement," *IEEE Transmission & Distribution Conference & Exposition*, Chicago, 2014.
- 10. Yesuratnam, N. Srilatha and P. L. Reddy, "Congestion Management Technique Using Fuzzy Logic Based on Security and Economy Criteria," *11th WSEAS international conference on Artificial Intelligence*, Cambridge University, UK, 2012.
- 11. Yesuratnam and N. Srilatha, "An Expert System Approach of Congestion Management for Security and Economy Oriented Power System Operation," *9th IEEE International Power and Energy Conference IPEC*, Singapore, 2010.

Workshops / Training Programs Organized

- Organized Two Day Online Workshop on "Reliability and its Applications to Power Systems and Drives" 26th 27th June, 2020, UCE (A), OU.
- Organized Three Day workshop on "Application of Simulation tools to Modern Power Systems" during 7th 9th 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 14th - 15th 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 7th - 9th 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 30th June-5th July, 2014, in the Department of Electrical Engineering, UCE(A), OU

Workshops / Training Programs Attended

- Five-day online Faculty Development Program on Recent Advances and Application of IOT in Renewable Energy Technologies during 23rd 27th 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 27th 31th 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 12th July 16th 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 21st 25th 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 13th 24th July, 2020.
- AICTE sponsored online FDP on AI Techniques to Electrical Engineering, UGC-Human Resource Development Centre, JNTUH Kukatpally, Hyderabad, during 6th 10th 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 15th 19th June, 2020.

- Online STTP on MATLAB based teaching-learning in Mathematics, Science and Engineering, Ramrao Adik Institute of Technology, Nerul, Navi Mumbai, during 18th -22nd May, 2020.
- One Week Refresher Course on Application of AI Techniques in Electrical Engineering, Department of Electrical Engineering, UCE, OU, during 18th - 23rd November, 2019.
- One Day **Induction Program**, University College of Engineering, Osmania University, on 20th 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 18th 23th December, 2017.
- Two Day workshop on Leadership & Research Challenges for Professional Women, Department of Electrical Engineering, UCE, OU, during 4th 5th 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, 26th 30th December, 2017.
- One day work shop on **How to Write Research Proposal** on 18th 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 26th to 30th July, 2013.
- Distinguished lecture program on **Power System Reliability Concepts & Techniques** organized by IEEE Hyderabad section on 29th 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** 27th to 29th November, 2008, organized by NIT, Warangal.
- Two-day workshop on **EDSA** software Applications to Power Systems 5th & 6th December, 2008, organized by EED, UCE, OU.
- **UGC** sponsored **Orientation Program** at Academic Staff College, Osmania University, during 30th July, 2012 to 30th August, 2012.
- Two-day workshop on **Power Quality** 28th & 29th September 2007, organized by EED, UCE, OU.
- Ten-day **Orientation Program** at Osmania University Centre for International Programs (OUCIP) during 2nd to 12th July, 2007.

Project Guidance

Number of M.E. projects guided : 13
Number of B.E. projects guided : 10

Personal Details

Father's Name : N. Thirumala Chary
Mother's Name : N. Vakula Sridevi
Date of Birth : 20th January, 1982

Nationality : Indian

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Languages Known : Telugu, English and Hindi

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