

1. Name and full correspondence address: Dr. M.Padma Lalitha
Professor & HOD
Electrical & Electronics Engineering Department
AITS, Rajampet
PIN– 516 126
Andhra Pradesh, India
2. Email(s) and contact number(s) padmalalitha.mareddy@gmail.com,
09848998643
3. Institution Annamacharya Institute of Technology & Sciences, Rajampet
4. Date of Birth 04/07/1972
5. Gender (M/F/T) F
6. Category Gen/SC/ST/OBC Gen
7. Whether differently abled (Yes/No) No
8. Academic Qualification (Undergraduate Onwards)

| | Degree | Year | Subject | University/Institution | % of marks |
|----|--------|------|---|--|------------|
| 1. | Ph.D | 2011 | Soft Computing Techniques for optimal DG Placement in RDS | Sri Venkateswara University College of Engineering, Tirupati | ---- |
| 2. | M.Tech | 2002 | Power System Operation & Control | Sri Venkateswara University College of Engineering, Tirupati | 86.2 |
| 3. | B.Tech | 1994 | Electrical & Electronics Engineering | JNTU College of Engineering, Anathapur | 72.3 |

9. Ph.D thesis title, Guide's Name, Institute/Organization/University, Year of Award.

Ph. D thesis title :Soft Computing Techniques for optimal DG Placement in RDS

Guide's Name : Dr. V.C.Veera Reddy

University : Sri Venkateswara University, Tirupati

Year of Award : 2011

10. Work experience (in chronological order).

| S.No. | Positions held | Name of the Institute | From | To |
|-------|------------------------------|--|-------------|--------------|
| 1 | Assistant Professor | Annamacharya Institute of Technology & Sciences, Rajampet | 22/10/1999 | 31/3/2005 |
| 2 | Associate Professor | | 01/04/ 2005 | 31/11/2005 |
| 3 | Associate Professor & HOD | | 01/12/ 2005 | 12/042011 |
| 4 | Professor & HOD | | 13/04/2011 | To Till Date |

11. Professional Recognition/ Award/ Prize/ Certificate, Fellowship received by the applicant.

| S.No | Name of Award | Awarding Agency | Year |
|------|--|-----------------|------|
| 1. | Best Teacher in Electrical Engineering | ISTE AP | 2018 |
| 2. | IEEE – Senior Member | IEEE | 2018 |
| 3. | IE- Fellow | IEI | 2017 |

12. Publications (List of papers published in SCI Journals, in year wise descending order).

| S.No | Author(s) | Title | Name of Journal | Volume | Page | Year |
|------|---|---|---|----------|--|------|
| 1 | Padma Lalitha Mareddy, Sivarami Reddy Narapureddy, Venkata Ramamurthy Dwivedula, Prahlada Rao Karanam | Optimum scheduling of machines, automated guided vehicles and tools without tool delay in a multi-machine flexible manufacturing system using symbiotic organisms search algorithm | Concurrency and Computation | Preprint | DOI:10.1002/cpe.6950 | 2022 |
| 2 | Mareddy Padma Lalitha, Ali Shaik, M., Visali, N | Enhancement of Voltage Profile in the Distribution system by Reconfiguring with DG placement using Equilibrium Optimizer: Enhancement of voltage profile in the distribution system | Alexandria Engineering Journal | 61(5), | pp. 4081-4093 | 2022 |
| 3 | Lalitha, M.P, Reddy, N.S., Ramamurthy, D.V., Rao, K.P. | Minimizing the total completion time on a multi-machine FMS using flower pollination algorithm | Soft Computing | 26(3), | pp. 1437-1458 | 2022 |
| 4 | M. Padma Lalitha, sivarami reddy N, S.P.Pandey, G.S.Venkatesh | Simultaneous scheduling of machines and tools in a multi machine FMS with alternative routing using symbiotic organisms search algorithm | Journal of Engineering Research | online | DOI: https://doi.org/10.36909/jer.10653 | 2021 |
| 5 | Padma Lalitha, M., Sivarami Reddy, N., Ramamurthy, D.V | Simultaneous Scheduling of Machines and Tools in a Multi-Machine FMS with Alternate Machines Using Crow Search Algorithm | Journal of Advanced Manufacturing Systems | | | |
| 6 | Mareddy Padma Lalitha, Ali Shaik, M., Visali, N | Performance analysis of hybrid techniques for evaluation of power transmission cost and loss allocation based on transmission reliability margin | International Transactions on Electrical Energy Systems | 31(11) | | 2021 |

| | | | | | | |
|----|---|---|--|---------|---------------|------|
| 7 | Lalitha, M.P., Srinivasan, S., Tiwari, R., Krishnamoorthy, M., Raj, K.K. | Neural network based MPPT control with reconfigured quadratic boost converter for fuel cell application | International Journal of Hydrogen Energy | 46(9), | pp. 6709-6719 | 2021 |
| 8 | Padma Lalitha, M., Reddy, N.S., Ramamurthy, D.V., Prahlada Rao, K. | Integrated simultaneous scheduling of machines, automated guided vehicles and tools in multi machine flexible manufacturing system using symbiotic organisms search algorithm | Journal of Industrial and Production Engineering | | | 2021 |
| 9 | Padma Lalitha, M., Hema Kesavulu, O., Sekhar Dash, S., Chellammal, N. | A novel control approach for damping of resonance in a grid interfaced inverter system-fuzzy control approach | International Journal of Ambient Energy | 42(14), | pp. 1607-1614 | 2021 |
| 10 | Lalitha, M.P., Reddy, N.S., Ramamurthy, D.V., Rao, K.P. | Practical simultaneous scheduling of machines, AGVs, tool transporter and tools in a multi machine FMS using symbiotic organisms search algorithm | International Journal of Computer Integrated Manufacturing | 34(2), | pp. 153-174 | 2021 |
| 11 | Lalitha, M.P., Reddy, N.S., Ramamurthy, D.V., Rao, K.P. | Integrated scheduling of machines, AGVs and tools in multi-machine FMS using crow search algorithm | International Journal of Computer Integrated Manufacturing | 32(11), | pp. 1117-1133 | 2019 |

13. Detail of patents.

| S. No | Patent Title | Name of Applicant(s) | Patent No. | Award Date | Agency/ Country | Status |
|-------|---|--|----------------|------------|-----------------|---------------------|
| 1 | Driver performance scoring smart system and safety-warning with Accident proneness filtering using Machine Learning | Dr. Mareddy Padma Lalitha, Dr.Nallaperumal Chellammal, Dr.N. Sivarami Reddy, Dr.Oruganti Hemakesavulu, Dr. Kanasottu Anil Naik, Dr. Girish Kumar Sharma, Dr. Subramanian Saravanan, Mr. Kannadasan Balakrishnan, Dr. Prabhat Kumar Srivastava, Mr.Pankaj Negi, Dr Barinderjit Singh, Dr. Pratap Patil | 202022100928.7 | | Germany | Filed on 18/02/2022 |
| 2 | Over voltage and under voltage protection notification using ML and IoT based system | Ayes Chinmay Dr. M Pala Prasad Reddy Prof.(Dr.) B.K. Sarkar Mr. Pawan Kumar Singh Dr. M. Padma Lalitha Dr. U. Ramesh Babu | 202231004894 | | India | Published (50/2021) |
| | | | | | | |

| | | | | | | |
|---|--|--|--------------|--|-------|---------------------|
| 3 | Internet of Things based automatic railway gate controller | Dr. M. Padma Lalitha Akanksha Vyas Dr. U. Ramesh Babu Mr. Rushikesh Shantaram Bhalerao Prof. Nalin B. Dev Choudhury Dr. Mukesh Tiwari Rushali R. Thakkar | 202141052141 | | India | Published (50/2021) |
| 4 | System and a method for an intelligent/ automatic tuning of power converter of electric vehicle for charging the battery thereof | Dr.K.Vaisakh Dr. M. Padma Lalitha Dr.P.Balachennaiah Dr. K. Amaresh S. Muqthiar Ali Dr.S.Jeyasudha | 202041055437 | | India | Published (52/2020) |
| 5 | EVM- control: electric vehicle controlling system using BEAGLE BONE BLACK REV C (4G) | Dr. M. Padma Lalitha Sivakumar N S Dr. B. Venkatesh Dr. Velmurugan P Prof. Santosh Gopal Nagpure Dr. L . Priya Dr. Usha Batra | 201941040658 | | India | Published (42/2019) |

14. Books/Reports/Chapters/General articles etc.

| S.No | Title | Author's Name | Publisher | Year of Publication |
|----------------------|---|--|---|---------------------|
| Books | | | | |
| 1 | DG Placement using GA and PSO ISBN- 978-3-659-15970-1. | Dr. M. Padma Lalitha | LAMBERT Academic Publishing, Germany | 2012 |
| 2 | Hybrid Approach for DG Placement- for loss reduction and improvement of reliability ISBN- 978-3-659-34204-2. | Dr. M. Padma Lalitha | LAMBERT Academic Publishing, Germany | 2013 |
| Edited Books | | | | |
| 3 | Proceedings of NCES-21 – ISBN- 978-93-81583-72-2. | Dr. M. Padma Lalitha, Dr.O.Hemakeasavulu Dr. P.Gopi | Excellect Publishors, New Delhi | 2021 |
| 4 | Proceedings of NCRAIPES-16 ISBN- 978-93-84935-88-7. | Dr. M. Padma Lalitha, Dr.O.Hemakeasavulu Mr S.Muquthiar Ali | Excellect Publishors, New Delhi | 2016 |
| 5 | Proceedings of NCES-14 | Dr. M. Padma Lalitha, Dr.O.Hemakeasavulu R.Madan Mohan | Excellect Publishors, New Delhi | 2014 |
| 6 | Proceedings of NCES-12 | Dr. M. Padma Lalitha, Dr.O.Hemakeasavulu | Excellect Publishors, New Delhi | 2012 |
| Book Chapters | | | | |
| 7 | Novel ANN Based MPPT Control Strategy for Hybrid PV/Wind and Diesel Generator System | Jarugumalli Ramya Grahitha, M. Padma Lalitha & Suresh Srinivasan | Springer, Singapore <u>Lecture Notes in Electrical Engineering</u> book series <u>On Intelligent Technologies and Robotics</u> Online ISBN 978-981-16-3690-5 Print ISBN 978-981-16-3689-9 | 2021 |
| 8 | Modeling and Simulation of Automatic Centralized Micro Grid Controller | M. Padma Lalitha, J. Jayakrishna & P. Suresh Babu | Springer, Singapore Part of the <u>Studies in Computational Intelligence</u> book series on <u>Intelligent Technologies and Robotics</u> 978-3-030-68291-0 | 2021 |

| | | | | |
|----|---|--|--|------|
| 9 | Effect of Load Model and Load Level on DG Placement by Crow Search Algorithm | Mareddy Padma Lalitha & Oruganti Hemakesavulu | Springer, Singapore Lecture Notes in Electrical Engineering, vol 569. Online ISBN978-981-13-8942-9 | 2019 |
| 10 | Two Loop PI Controlled Cascaded Re-Boost Seven Level Inverter Fed Induction Motor System with Superior Dynamic Response | P. Bhaskara Prasad M. Padma Lalitha B. Sarvesh | Springer, Singapore Lecture Notes in Electrical Engineering, vol 569. Online ISBN978-981-13-8942-9 | 2019 |

15. Any other Information (maximum 500 words)

Consultancy works undertaken:

| S.No | Title | Agency | Year | Period | Grant/Amount Mobilized (Rs) | Status |
|------|---|------------------------------|------|----------|-----------------------------|-----------|
| 1 | Academic Resource Planning App | Eddirs Innovative solutions | 2019 | 1 year | Rs 2, 50,000 | Completed |
| 2 | Rectification of capacitor bank tripping with power quality enhancement | M/S Jai Bajrang Pump Company | 2020 | 6 months | Rs 3, 42,000 | Completed |
| 3 | Power Optimization in Wireless network | VI Solutions, Bangalore | 2021 | 6 months | Rs 2, 83,000 | Completed |

Administrative Experience & Curriculum Development:

- Heading the Department of EEE, AITS from Dec, 2005.
- Member of Governing Body of the institute
- Member of Academic Council of the institute.
- Member of Finance Committee of the Institute.
- Chairman, Board of Studies for EEE Department of AITS, Rajampet.
- Member, Board of Studies, Department of EEE for JNTUA, Ananthapuramu.
- Handled Smart grid Technologies subject for research scholars of JNTUA, Ananthapuramu
- Developed Handouts & active learning teaching plans for the Control Systems, Smart grid Technologies, Electrical Circuits, Design of Solar PV plant for your own home, Matlab Programming- An introduction and Matlab & Simulink- An introduction.

Achievements & Awards :

- Received ISTE AP section “Best Teacher in Electrical Engineering” for the year 2018.
- All India Topper of the NPTEL online Course “Introduction to Smart Grid”.
- All India Topper of the NPTEL online Course “Advanced Linear Continuous Control Systems: Applications with MATLAB Programming and Simulink”.
- Got 4 best paper awards.
- Google Scholar **H-Index-12, I10-Index-14**
- Research Gate Score **9.9 & H-index-7**.
- Publications have about **640 citations**.
- Published 3 patents.
- Consultancy projects -3
- **Review Member** for SCI and reputed International Journals like International Journal of Electric Power Components and Systems (T&F Publication), Journal of Electronics Systems, IET generation, transmission and distribution etc.
- **Editorial board member** for reputed International Journals.
- **Organizing Chair and resource person for AICTE-ISTE sponsored one week online induction/Refresher Program on “Challenges and opportunities in Electrical Vehicle Technology”.**
- **Coordinator and resource person for AICTE sponsored STTP on “Energy Management & control System for smart renewable energy remote power generation” for 4 phases.**
- **Organizing Chair for** 2nd International Conference on Cognitive Informatics & Soft Computing (CISC-2019)-
- **Publication Chair for** 2nd International Conference on Science, Engineering and Mathematics (ICACM-2020)-
- Publication chair and Session Chair for IEEE International Conference ICACT in 2013.
- Session Chair for International Conference ICECE organized by IRAJ on 14th July 2013
- Technical Program Committee member for First International Online Conference on Computing 2011 (IIOCC 2011), September 23-25,2011, organized by Masam Network.
- Chairperson for National Student Seminar EEL-12 & EEL-16 organized by JNTUACEP, Pulivendula.

Professional Body Membership : Senior Member IEEE, Fellow IEI, Member ISTE, Member IAENG

Curriculum Development :

□

CV Links:

Vidwan - <https://vidwan.inflibnet.ac.in/myprofile>

Vidwan-ID : 218218

scopus

<https://www.scopus.com/authid/detail.uri?authorId=57201835524>

Scopus ID - **57201835524**

Publons

<https://publons.com/researcher/1658345/padma-lalitha-mareddy/>

Researcher ID - K-4500-2019

Orcid ID - 0000-0003-0742-2217

Google scholar

<https://scholar.google.co.in/citations?user=hYCfKL0AAAAJ>

Google Scholar Id - hYCfKL0AAAAJ

European Union Expert

<https://ec.europa.eu/research/participants/experts/web/cv>

EU Expert ID - EX2022D546714

Ph.D Scholars Guiding : 03 (2 Submitted)

M.Tech Projects Guided : 21

Events Organized :

I. Technical : 32

II. Non-Technical : 12

Technical Events Organized :

Guest Lectures/ Invited Lectures Delivered :

| Sl. No. | Title of Lecture | Title of Conference/Seminar | Organized by |
|---------|--|---|--|
| 1 | Design & Installation of Solar PV for your home | Guest Lecture | Krishna Engineering College, Ghajiabad |
| 2 | Soft computing Techniques in Smartgrid | FDP on Smartgrid | SRM University, Chennai |
| 3 | Introduction to smartgrid | Guest Lecture | JNTU college of Engineering Ananthapur, Ananthapur |
| 4 | Application of nature inspired algorithms for DG placement | AICTE sponsored STTP on Energy management and control system for smart renewable energy remote power generation | AIMS,Rajampet |
| 5 | Application of Artificial Intelligence to Power Systems | Recent trends in FACTS Controller | AIMS,Rajampet |
| 6 | Soft Computing Techniques for Optimization | Recent Trends in Manufacturing Systems- An AICTE Sponsored One Week national level staff development program | AIMS,Rajampet |
| 7 | DG- A new paradigm of power systems | Technical Lecture | IE, Kadapa Local Center |
| 8 | Application of PSO for Loss reduction in RDS | AIPS- An AICTE Sponsored One Week national level staff development program | AIMS,Rajampet |

| | | | |
|----|--------------------------------------|--|----------------------|
| 9 | Application of Soft-computing to RDS | AIPS- A One day national level staff development program | AITS,Rajampet |
| 10 | Key note address | National level student conference EEL 2k12 | JNTUACEP,Pulivendula |
| 11 | Distributed Generation | Guest Lecture | AITS,Tirupati |
| 12 | Distribution system losses | Guest Lecture | MITS,Udayagiri |

Seminars /Workshops/Conferences Attended:

Workshops : 16

Conferences : 25

In addition during this pandemic period completed 27 courses in coursera.