# **PROFILE**



Dr. Y. Ravindranath Tagore

**Associate Professor** 

Electrical & Electronics Engineering Department

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# **Educational Qualifications:**

Degree/Course	Board/University	Year of Passing	CGPA/ % MARKS
Ph.D.	JNTU-Hyderbad	2018	-
M.Tech. (Power Elecronics & Power systems)	IIT Madras	2004	8 /10
B.E. (EEE)	GITAM Andhra University (AU)	2001	75
Diploma (EEE)	SMVM Polytechnic, Tanuku (SBTET, A.P)	1997	88
S.S.C.	KVR ZPPHS, Thullur, (Board of Secondary Education, A.P)	1994	87

**Date of Birth: 24-07-79** 

**Date of Joining: 30-05-19** 

**Achievements:** 

GATE – All India 18<sup>th</sup> rank in 2001 ECET-State 99<sup>th</sup> rank <sup>in</sup> 1997 CEEP- State 134<sup>th</sup> rank in 1994

Selected for IES 2005

Selected for National Merit scholarship (NMS) in SSC

Selected for Telugu Vignana Parithoshakam

**Teaching Experience:** 17.5 Years

### **Experience Details:**

Associate professor	RVR & JC College of Engineering	May 2019 to till date
Associate professor	Vignans Lars Institute of Technology and Science (VLITS), Vadlamudi	Sep. 2015 to May 2019
Associate professor & HOD EEE	Vignans Nirulla Institute of Technology and Science (VNITS), Pedapalakaluru	Nov. 2013 to Sep. 2015
Associate professor	Vignan's Engineering College (VEC), Vadlamudi (From 2009 onwards Vignan's Deemed to be University)	June 2006 to Nov. 2013
Assistant Engineer (AE)	AP GENCO	Mid of Jan. 2006 to May 2006
Assistant professor	VNR Vignana Jyothi Institute of Engineering and Technology (VJIET), Hyderabad	July 2005 to Jan. 2006
Lecturer	Velagapudi Ramakrishna Siddhartha Engineering College (VRSEC), Vijayawada	July 2004 to May 2005

**Research Interests**: Power Electronics & Drives, FACTS Controllers, Renewable energy sources

#### **Projects Guided:**

- B.Tech Projects 16 nos
- M.Tech Projects 8 nos

# **Guest Lectures Given:**

• Delivered expert Lecture on "Career and academic guidance" in the Department of Electrical and Electronics Engineering, Sasi Institute of Technology and Engineering on 16<sup>th</sup> April 2015.

# As a reviewer for international journals:

- ➤ International Journal of Power Electronics (IJPELEC)
- ➤ International Journal of Circuit Theory and Applications (IJCTA)
- ➤ International Journal of Energy Research (IJER)
- ➤ Journal of Engineering Science and Technology Review (**JESTR**)

Details of Publications: (21 SCOPUS & 6 SCI E PAPERS)

#### **International Journals:**

Yadlapalli, R.T., Kotapati, A., B. Srinivasa rao: Fuzzy logic control based high step up converter for electric vehicle applications, *Int. J. Innovative Computing and Applications*.

(In press & SCOPUS)

2 Yadlapalli, R.T., Kotapati, A: Analysis and design of dc-dc converter for electric vehicle applications, *Suranaree Journal of Science and Technology*.

# (In press & SCOPUS/ESCI)

3 Yadlapalli, R.T., Rajani, K., Kotapati, A: Dynamic Analysis of Solar Powered Two-Stage DC-DC Converter with MPPT and Voltage Regulation, *International Journal of Dynamics and Control*.

(In press & SCOPUS)

4 Ravindranath Tagore Yadlapalli, RamaKoteswara Rao Alla, Rajani Kandipati, Anuradha Kotapati, Super capacitors for energy storage: Progress, applications and challenges, *Journal of Energy Storage*, Volume 49, 2022, 104194.

### (SCIE IMPACT FACTOR: 6.583/SCOPUS)

5 Ravindranath Tagore Yadlapalli, Anuradha Kotapati, Rajani Kandipati, Chandra Sekhar Koritala, A review on energy efficient technologies for electric vehicle applications, *Journal of Energy Storage*, Volume 50, 2022, 104212.

#### (SCIE IMPACT FACTOR: 6.583/SCOPUS)

6 Attuluri Rakada Vijay Babu, D K Dheer, Y R Tagore, Sathish Kumar T M, Sadulla Shaik, Gorantla Srinivasa Rao: A review on the progress of intermetallic solid-state hydrogen storage material for fuel cell vehicles, *Eur. Chem. Bull.* 2022, 11(1), 17-29.

(SCOPUS)

Y. RavindranathTagore, A. R.Vijay Babu, Y. Srinivasarao, P. Manoj Kumar, K. Anuradha: Experimental Validation of Fuel Cell Powered Energy Efficient Gallium Nitride Multilevel Inverter for Industrial Applications, *Journal of New Materials for Electrochemical Systems*. Vol. 24, No. 3, 2021, pp. 159-165.

(SCIE)

8 Yadlapalli, R.T., Kotapati, A, Rajani. K: Advancements in power conditioning units for electric vehicle applications: a review. *International Journal of Electric and Hybrid Vehicles*. Vol. 13, No. 1, 2021, pp. 81-115.

(SCOPUS/ESCI)

9 Y. Ravindranath Tagore. Modeling and Control of Hybrid Power Sourced High Gain DC-DC Converter. *Journal of Engineering Science and Technology Review*. Vol. 14, No. 1, 2021, pp. 119 - 127.

(SCOPUS)

10 Yadlapalli RT, Kotapati A, Kandipati R, Balusu SR, Koritala CS. Advancements in energy efficient GaN power devices and power modules for electric vehicle applications: a review. *International Journal of Energy Research.* 2021;45:12638-12664.

#### (SCIE IMPACT FACTOR: 5.164/SCOPUS/WBS)

11 Yadlapalli, R.T., Kotapati, A.: Analysis, design and implementation of a fixed frequency PWM-based sliding-mode controller for quadratic buck converter. *Int. J. Power Electronics*, Vol. 13, No. 1, 2021, pp. 66-82.

(SCOPUS)

12 Yadlapalli, R.T., Kotapati, A. (2020). Modeling and control of laptop computer voltage regulator module with multiple power sources. *Journal Européen des Systèmes Automatisés*, Vol. 53, No. 3, pp. 421-427. https://doi.org/10.18280/jesa.530313.

(SCOPUS)

13 Yadlapalli RT, Narasipuram RP, Kotapati A. An overview of energy efficient solid state LED driver topologies. *Int J Energy Research*. Vol. 44, No. 2, 2020, pp. 612-630.

## (SCIE IMPACT FACTOR: 3.741/SCOPUS/WBS)

14 Yadlapalli, R.T., Kotapati, A.: Modeling, Design and Implementation of Quadratic Buck Converter for low power applications. *Int. J. Power Electronics*, Vol. 11, No. 3, 2020, pp. 322-338.

(SCOPUS)

15 Yadlapalli, R.T., Kotapati, A.: Implementation of fuzzy logic controller-based quadratic buck converter for LED lamp driver applications, *Int. J. Innovative Computing and Applications*, Vol. 11, Nos. 2/3, 2020, pp. 159-166.

(SCOPUS)

16 Yadlapalli, R.T., Kotapati, A, Rajani. K: Performance Analysis of Quadratic Buck Converter for Electric Vehicle Battery Charging Applications. *International Journal of Electric and Hybrid Vehicles*. Vol. 11, No. 4, 2019, pp. 346-357.

#### (SCOPUS/ESCI)

17 Yadlapalli, R.T., Narasipuram, R.P. and Dodda, A. 'Development of Fuzzy Logic Controller for Improved Interline Unified Power Quality Conditioner', *Int. J. Innovative Computing and Applications*, Vol. 10, No. 2, 2019, pp. 86–99.

(SCOPUS)

18 Y. Ravindranath Tagore., K. Anuradha., Atluri R Vijay Babu., P. Manoj kumar: Modelling, Simulation and Control of Fuel cell Powered Laptop Computer Voltage Regulator Module. *International Journal of Hydrogen Energy*, vol. 44, no. 21, 23 April 2019, pp. 11012-11019.

## (SCI E, IMPACT FACTOR: 4.939)

19 Narasipuram.R.P. Yadlapalli.R.T. 'Performance analysis and design optimisation of 3-Ø Packed U Cell inverter for industrial drive applications', *Int. J. Mathematical Modelling and Numerical Optimisation*, Vol. 9, No.3. 2019, pp. 309-337.

(SCOPUS)

20 Narasipuram, R.P. S. Chaitanya, Yadlapalli, R.T. 'Efficiency analysis of maximum point tracking techniques for photovoltaic systems under variable conditions', *Int. Innovative Computing and Applications*, Vol. 9, No. 4, 2018, pp. 230–240.

(SCOPUS)

21 Ravindranath Tagore YADLAPALLI Anuradha KOTAPATI, "Switching Frequency Effects and Efficiency Analysis of Quadratic Buck Converter for Low Output Voltage and High Current Applications," *Journal of electrical engineering*, vol. 16, no. 3, 2016, pp. 262-271.

(SCOPUS)

22 Ravindranath Tagore YADLAPALLI Anuradha KOTAPATI, "Comparative study of switched-mode power supplies for low voltage and high current applications," *Journal of electrical engineering*, vol. 16, no. 1, 2016, pp. 316-329.

(SCOPUS)

23 Ravindranath Tagore YADLAPALLI and Anuradha KOTAPATI, "Simulation of hybrid power sources for industrial LED lighting systems," *Journal of electrical engineering*, vol. 15, no. 4, 2015, pp. 156-167.

(SCOPUS)

G Ganesh, G Vijay Kumar, AR Vijay Babu, G. Srinivasa Rao Y. R. Tagore: Performance analysis and MPPT control of a standalone hybrid power generation system. *Journal of electrical engineering*, vol. 15, no. 1, 2015, pp. 334-343.

(SCOPUS)

25 Yadlapalli, R.T., Kotapati, A.: An efficient sliding-mode current controller with reduced flickering for quadratic buck converter used as LED lamp driver. In: *Int. J. of Power Electronics*, Vol. 6, No. 4, 2014, pp.345-375.

(SCOPUS)

Yadlapalli, R.T., Kotapati, A.: A fast-response sliding-mode controller for quadratic buck converter. In: *Int. J. of Power Electronics*, Vol. 6, No. 2, 2014, pp.103-130.

(SCOPUS)

27 Srinivasa Rao Gorantla, G. Kesava Rao, S. Siva Naga Raju, Y. R. Tagore: Design & implementation of Automated Regenerative Braking system for Electric /Hybrid Electric Vehicle. In: *International Journal of Electric and Hybrid Vehicles*, Vol.4, No. 3, June 2012. pp 1-11.

(SCOPUS)

# **International Conferences:**

- M. Narendra Kumar and Y. Ravindranath Tagore, "Comparison of carrier based PWM technique for active neutral point clamping multilevel inverter," **IEEE** International Conference on Intelligent computing and control systems, Madurai, May 2020, pp. 1888-1892.
- R. T. Yadlapalli and A. Kotapati, "Dynamic Performance Enhancement of Full Bridge Converter as CPU VR," 2018 Fourth **IEEE** International Conference on Advances in Electrical, Electronics, Information, Communication and Bio-Informatics (AEEICB), Chennai, Feb. 2018, pp. 156-160.
- 3 R. T. Yadlapalli and A. Kotapati, "Efficieny Analysis of Quadratic Buck Converter for LED Lamp Driver Applications," In proc. **IEEE** International Conference on Trends in Electronics and Informatics (ICEI'17), Tirunelveli, May 2017, pp. 210-214.
- 4 R. T. Yadlapalli and A. Kotapati, "Dynamic performance comparison of Quadratic buck converter with analog and Digital average current-mode controllers," 2017 Third **IEEE** International Conference on Advances in Electrical, Electronics, Information, Communication and Bio-Informatics (AEEICB), Chennai, Feb. 2017, pp. 173-177
- N. Rajanand Patnaik, Y. Ravindranath Tagore and S. Chaitanya, "Advanced Seven Level Transformer-Less Multilevel Inverter Topology for PV Application," 2017 Third **IEEE** International Conference on Advances in Electrical, Electronics, Information, Communication and Bio-Informatics (AEEICB), Chennai, Feb. 2017, pp. 111-116.
- 6 Y. S. Kishore Babu, Y. Ravindranath Tagore, Tripura Pidikiti: *Sliding Mode Control of ZVS Buck Converter*. **IEEE** conference on Machine Intelligence and Research Advancement (ICMIRA), 2013, pp 95-99.
- 7 T. Rajesh, Y. S. Kishore Babu, Y. R. Tagore: *Performance Evaluation of Indirect Vector Controlled Induction Motor Sensor less Drive.* **IEEE** computational intelligence and communication networks (CICN), 2012, pp. 656-60.

#### Patent published:

1. Dr.Korrapati Radha Rani, Dr.Nimmagadda Chaitanya, Dr.Yadlapalli Ravindranath Tagore, Dr.Nelluri China Kotaiah, Dr.Rama Koteswara Rao Alla, Mr.Yaramasu Suri Babu, Mr.Chegudi Ranga Rao, Mr.Dharani Kumar Narne, Mr.Gopu Veeranjaneyulu, Mr.Puvvadi Venkata Mahesh. "*Bidirectional DC-DC Power Converter Circuit to Reduce Current Ripples*." Application No.202041052197 A, Date of filing of Application :01/12/2020, Publication Date: 11/12/2020.

#### Workshops / Seminars / Courses Participated:

- An AICTE Training And Learning (ATAL) Academy Online FDP on "Control Techniques in Electric Vehicles and Battery Management" Organised by *VNR Vignana Jyothi Institute of Engineering and Technology*, Hyderabad from 04/10/2021 to 08/10/2021.
- A One week National level Intercollegiate Online FDP on "Outcome Based Education & Bloom's Taxonomy" organised by the Internal Quality Assurance Cell of Ramakrishna Mission Vivekananda Centenary College, Kolkata in association with IPSR solutions limited from 08 November 2021 to 15 November 2021.
- An Online FDP on "Systems Engineering" Organised by APSSDC in association with Dassault systems, Government of Andhra Pradesh from 17-05-2021 to 22-05-2021.
- 4 A One Week AICTE Training And Learning (ATAL) Academy Online FDP on "Energy Storage" Organised by *Jawaharlal Nehru National (JNN) College of Engineering*, Shivamogga, Karnataka from 2020-10-5 to 2020-10-9.
- A One Week AICTE Training And Learning (ATAL) Academy Online FDP on "Electric Vehicles" Organised by *J.N.N CE*, Shivamogga, Karnataka from 2020-11-2 to 2020-11-6.
- A one week online FDP on "**Recent Trends and Emerging Technologies in Distributed generation Systems**" conducted by Dept. of EEE, *J.N.N CE*, Shivamogga, Karnataka in association with The Institution of Electronics and Telecommunication Engineers (IETE) held from August 24<sup>th</sup> to 28<sup>th</sup> 2020.
- A one week online FDP on "Recent Trends and Emerging Technologies in Solar and Wind Energy Conversion Systems" conducted by Dept. of EEE, *J.N.N CE*, *Shivamogga*, Karnataka in association with IETE held from August 10<sup>th</sup> to 14<sup>th</sup> 2020.
- A Five Day online FDP on "**Emerging Trends in Electrical Engineering-A Research Perspective**" organized by EEE Department, *LBS College of Engineering*, Kasaragod, Kerala from 27/07/2020 to 31/07/2020.
- 9 A Five Day online Short Term Course on "**Power Electronics Application in smart Grid and Electric Vehicle**" organized by Department of EEE, *Sri Ramakrishna Engineering College* (SREC), Coimbatore, Tamil Nadu from 03/08/2020 to 07/08/2020.

- A One Week online National Level Workshop on "**Research Challenges and Application of Computational Tools in Electrical Engineering**" conducted by Department of EEE, Vignan's Nirula Institute of Technology and Science (VNITS), Guntur, A.P from 10<sup>th</sup>-15<sup>th</sup> August 2020.
- A One Week online National Level FDP on "Current Research Trends in Power Systems and Power Electronics" conducted by Department of EEE, VNITS, Guntur, A.P from 20<sup>th</sup> 25<sup>th</sup> July 2020.
- A One Week online Workshop on "Introduction to PLECS Tool for Power Electronics Applications" Organised by Department of EEE, *VRSEC*, Vijayawada, A.P, India in association with PLEXIM Switcherland and Sponsored by AICTE-Margadarshan Scheme held during 2<sup>th</sup> 6<sup>th</sup>, July 2020.
- A One Week AICTE Sponsored STTP-III on "Integration, Storage and Control in Hybrid Energy Storage Systems (HES)" conducted by Department of EEE, *Geetanjali College of Engineering and Technology (GCET)*, Hyderabad, T.S from August 31<sup>th</sup> 5<sup>th</sup> Sep. 2020.
- A One Week AICTE Sponsored STTP-II on "Integration, Storage and Control in Hybrid Energy Storage Systems (HES)" conducted by Department of EEE, *GCET*, Hyderabad, T.S from August 17<sup>th</sup> 22<sup>th</sup> August 2020.
- A One Week National Institute of Technical Teachers' Training and Research (NITTTR), Bhopal Certified Faculty Development Programme (FDP) on "Learner Centric Methods & Outcome Based Learning" Organised by VFSTR Deemed to be University, Vadlamudi, Guntur from 28<sup>th</sup> May 2<sup>nd</sup> June, 2018.

Dr. Y. Ravindranath Tagore