

BIO-DATA

1. **Name** **Dr. R. Linga Swamy**
2. **Designation** Assistant Professor
3. **Department** Electrical Engineering
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7. Research Areas of Interest

Multilevel Inverters, PWM Techniques for Inverters, Space vector PWM, Speed control of Induction Motor Drives, Simulation and Modeling.

8. Educational Qualifications

Course	University	Institute	Year of passing	Specialization
Ph.D	Osmania university Hyderabad	University College of Engineering, OU, Hyderabad	2022	Electrical Engineering
M.Tech	NIT Warangal	National institute of technology, Warangal	2004	Power Electronics & Drives
B.Tech	JNTU, Hyderabad	GRIET, Hyderabad	2002	Electrical & Electronics Engineering

9. Work Experience

Organization	Designation	Period of employment	
		From	To
University College of Engineering, Osmania University	Assistant professor	08/06/2007	Till date
Sreenidhi Institute of Science and Technology, Gatkesar	Assistant professor	19/12/2005	07/06/2007
Vaagdevi College of Engineering., Warangal	Assistant professor	03/07/2004	08/12/2005

10. Subjects Taught:

Under Graduate courses	
<i>Electrical Circuits I</i>	<i>Electrical Circuits II</i>
<i>Power Electronics</i>	<i>Electrical Drives & Static control</i>
<i>Electrical Machines I</i>	<i>Electrical Machines II</i>
<i>Linear Control Systems</i>	<i>Digital Signal Processing Applications</i>
<i>Object Oriented Programming with C++</i>	<i>Electrical Technology</i>
Post Graduate courses	
<i>Static control of DC Drives</i>	<i>Static control of AC Drives</i>
<i>Power semiconductor Devices and circuits</i>	<i>Power Electronics circuits I</i>
<i>Machine Modeling and Analysis</i>	<i>Control of Electric Drives</i>
<i>Static control of Electric Drives</i>	<i>Digital Signal Processing</i>
<i>Modern Control theory</i>	

11. List of Events Coordinated:

- Coordinated a One week workshop on "**Applications of Digital control in Power Electronic Converters**" during **19th – 24th August 2024**, organized by Department of Electrical Engineering, University College of Engineering, Osmania University, Hyderabad, Telangana
- Coordinated a National level event "**SAE Student convention Tier 2**" on **27th January, 2024** organized by SAE India Hyderabad division in association with University college of Engineering, Osmania University, Hyderabad
- Coordinated a 2-day workshop on "**MATLAB**" as a part of platinum jubilee celebrations of the department during **23rd to 24th February 2024** at Department of Electrical Engineering, University college of Engineering, Osmania University

4. Coordinated the **Industrial Visit to Bharath Heavy Electricals Limited (BHEL)**, Ramachandrapuram, Hyderabad for the students of BE (EEE) V Semester on **21st September, 2023**
5. Coordinated the **Industrial Visit to SLDC, Hyderabad** for the students of BE (EEE) VII Semester on **18th October, 2023**
6. Coordinated the **Industrial Visit to ECIL, Hyderabad** for the students of BE (EEE) VII Semester on **12th October, 2023**

12. List of Research Publications:

Number of Conferences: 06

Number of Journals: 14

Total publications: 20

List of Journals published

1. **R.Linga Swamy**, “Novel switching sequence to reduce CMV without increase in current THD for three-level inverter”, International Journal of Power Electronics (IJPELEC), Inderscience publishers, Vol. 19, No. 2, pp. 132-152, February 2024, DOI: 10.1504/IJPELEC.2024.136559, ISSN: 1756-6398 (**Scopus Indexed Journal**)
2. Eniganti Sreeshobha, **Reddymalla Linga Swamy**, “Evaluation of insulated gate bipolar transistor valve converter based unified power flow controller reliability and efficiency”, International Journal of Power Electronics and Drive Systems (IJPEDS), Volume 13, Issue 4, pp2348-2356, December 2022, with DOI: 10.11591/ijpeds.v13.i4, ISSN: 2088-8694 (**Scopus Indexed Journal**)
3. **R.Linga Swamy**, R.Somanatham, “Reduction of Common mode voltage for cascaded three-level inverter”, **i-manager’s Journal on Electrical Engineering**, Vol. 15, issue 4, April - June 2022.
4. **R.Linga Swamy**, “Analysis of Selective Harmonic Elimination for Three-phase Voltage/Current Source Inverter” **i-manager’s journal of Electrical Engineering**, Volume No. 11, Issue No. 10, ISSN: 0973-8835, April - June 2021
5. **R.Linga Swamy**, E.Sreeshobha, M. Rathan pradeep, “Power Optimization of grid connected DFIG wind energy system”, **International Journal of Engineering Research and Applications (IJERA)**, Volume No. 14, Issue No. 4, ISSN: 2248-9622, October 2021
6. **R.Linga Swamy**, P.Lokender Reddy, M. Sai Kiran, “Simplified SVPWM for Three-Level Inverter Extending Operation into Over Modulation Region”, **International Journal of Engineering Research and Applications (IJERA)**, Volume No. 11, Issue No. 12, ISSN: 2248-9622, December 2021
7. **R.Linga Swamy**, A. Jyothsna, “Performance Evaluation of FLC Based Three-Phase PWM AC Chopper Drive Using HBCC Technique”, **International Journal of All Research Education and Scientific Methods (IJARESM)**, Volume No. 9, Issue No. 10, ISSN: 2455-6211, October

2021

8. E.Sreeshobha, **R.Linga Swamy**, “Relative Analysis of Single-Stage and Two-Stage Energy Storage System Interconnected Solar Power System Performance”, **International Journal of Scientific Development and Research (IJS DR)**, Volume No. 6, Issue No. 9, ISSN: 2455-2631, September 2021
9. E.Sreeshobha, **R.Linga Swamy**, D.Sreeja “Analysis of Solar Energy Storage System Operating Modes with Bidirectional Buck-Boost DC-DC Converter”, *Journal of Emerging Technologies and Innovative Research (JETIR)*, Volume No. 8, Issue No. 9, ISSN: 2349-5162, September 2021.
10. P.Lokender Reddy , **R.Linga Swamy**, “*Multi Level Inverter THD minimization by Improved Particle Swarm Optimization*”, **International Journal of Engineering Research and Applications (IJERA)**, Volume No. 11, Issue No. 10, ISSN: 2248-9622, October 2021
11. **R.Linga Swamy**, R.Somanatham, P.V.N. Prasad, G.Srinivas “ Simulation of Space Vector PWM for 3-Level Inverter fed Induction motor in Overmodulation Region”, *International Journal of Recent trends in Engineering and Technology*, Volume 11, June 2014.
12. K.shashikanth, T.Vaishnavi, **R.Linga Swamy**, “Seven level diode clamped Inverter fed Asynchronous Machine”, *International Journal of Computer Information Systems (IJCIS)*, Vol. 3, No. 3, ,Page No. 83-88, ISSN: 2229-5208, September 2011.
13. K.shashikanth, T.Vaishnavi, **R.Linga Swamy**, “Diode clamped Multilevel Inverter – Eleven level”, *International Journal of Computer Information Systems (IJCIS)*, Vol. 3, No. 3,Page No. 101-105, ISSN: 2229-5208, September 2011.
14. V. Srinath, P.Srinivas, **R.Linga Swamy**, “Speed control of space vector modulated Inverter driven Induction motor with Active filter” *I manager’s journal of Electrical Engineering*, Vol. 1, No. 1, July-september 2007

List of Conferences

1. **R.Linga Swamy**, R.Somanatham “Analysis of CMV Reduction methods for Three-Level NPC Inverter fed Induction motor”, *International Conference on Emerging Trends in Engineering (ICETE 2109)*, University college of Engineering, Osmania University, Hyderabad, 22-23 March 2019.

Published a chapter titled “Analysis of CMV Reduction methods for Three-Level NPC Inverter fed Induction motor”, in eBook titled “Advances in Decision Sciences, Image Processing, Security and Computer Vision”, Volume 2, part of the Book series titled “Learning and Analytics in Intelligent Systems”, Volume 4, Springer publications, Print

ISBN 978-3-030-24317-3 , Online ISBN 978-3-030-24318-0, DOI: https://doi.org/10.1007/978-3-030-24318-0_45, Page No. 373–382, year 2020.

2. **R.Linga Swamy**, R.Somanatham “ Reduction of common mode voltage for SVPWM Three-Level Inverter using Novel switching sequences”, IEEE *International Conference on Electrical, Electronics and Optimization Techniques(ICEEOT-2016)*, Chennai, Tamilnadu, 3rd to 5th March 2016.
3. N.Susheela, M.V.Ramana Rao, **R.Linga Swamy**, E.Vidya Sagar, “ Simulation of a Novel Single-Phase Three-leg AC/AC converter fed Universal Motor”, *5th National conference on power electronics and drives(PEDC'11)*, Karaikudi, Tamilnadu, 9th march 2011.
4. T.Praveenkumar, **R.Linga Swamy**, E.Mahesh, “Simulation of Multilevel Three-Phase Inverter fed Induction Motor using Fast Space-Vector Modulation Algorithm” *International conference on Electrical Power and Energy systems (ICEPES-2010)*, 26th – 28th August 2010, NIT Bhopal, M.P., India.
5. V. Krishna Murthy, M.V. Ramana Rao, **R.Linga Swamy**, “Harmonic reduction in single switch three phase boost rectifier fed DC motor with harmonic injected PWM” *National Conference on Design, Operation & Control of distribution systems*, 3rd - 4th July 2009, SNIST, Hyderabad, India.
6. **R.Linga Swamy**, P.Satish Kumar, “Speed control of space vector modulated Inverter driven Induction motor” *International Multiconference of Engineers and Computer scientists*, Hongkong, 19th -21st March, 2008

12. Details of Chapters published in ebook published in Journals

1. Published a chapter titled “Analysis of CMV Reduction methods for Three-Level NPC Inverter fed Induction motor”, in eBook titled “Advances in Decision Sciences, Image Processing, Security and Computer Vision”, Volume 2, part of the Book series titled “Learning and Analytics in Intelligent Systems”, Volume 4, Springer publications, Print ISBN 978-3-030-24317-3 , Online ISBN 978-3-030-24318-0, DOI: https://doi.org/10.1007/978-3-030-24318-0_45 Page No. 373–382, year 2020.

13. Guest Lectures Delivered

Number of Guest Lectures delivered: 13

1. Two session Guest Lecture given on the topic “Implementation of PWM for 2 level and 3 level Inverters using DSP” in the one week international workshop on "**Applications of Digital control in Power Electronic Converters**" during 19th – 24th August 2024, organized by Department of Electrical Engineering, University College of Engineering, Osmania University, Hyderabad, Telangana
2. Guest Lecture given on the topic “Fundamentals Simulink in Electrical Engineering” in

Induction program for BE I semester Students titled ”**An Introduction to software tools used in Engineering Education, Research and Industry**” at University college of Engineering, Osmania University, Hyderabad, on 8th December 2020.

3. Guest Lecture given on the topic “Fundamentals of MATLAB/Simulink in Electrical Engineering”, in National Level Technical symposium “**Techsonance-2019**”, organized by Electrical Engineering Department, University college of Engineering, Osmania University, Hyderabad, on 23rd Feb. 2019.
4. Guest Lecture given on the topic “Fundamentals of MATLAB/Simulink in Electrical Engineering”, in **2 day workshop on MATLAB** on 28th July 2018 organized by Sridevi womens Engineering College, Gandipet, RR District
5. Guest Lecture given on the topic “Fundamentals of MATLAB/Simulink in Electrical Engineering”, in National Level Technical symposium “**Techsonance-2018**”, organized by Electrical Engineering Department, University college of Engineering, Osmania University, Hyderabad, on 9-10, March 2018
6. Guest Lecture given on the topic “Fundamentals of MATLAB/Simulink in Electrical Engineering” in Workshop on “**Recent Trends and Practical Applications of Power Electronics and Power systems**” from 28-31 Jan 2014, , organized by ESCI, Hyderabad.
7. Guest Lecture given on the topic “Fundamentals of MATLAB/Simulink in Electrical Engineering”, in National Level Technical symposium “**Techsonance-2017**”, organized by Electrical Engineering Department, University college of Engineering, Osmania University, Hyderabad, on 10-11, March 2017
8. Guest Lecture given on the topic “Fundamentals of MATLAB/Simulink in Electrical Engineering”, in National Level Technical symposium “**Techsonance-2015**”, organized by Electrical Engineering Department, University college of Engineering, Osmania University, Hyderabad, on 06-07, March 2015
9. Guest Lecture given on the topic “ Fault Analysis using PSCAD” in Three day Workshop on “**Applications of Simulation tools to Modern Power systems**”, from 7th to 9th May 2015, organized by UCE, OU.
10. Guest Lecture given on the topic “Fundamentals of MATLAB/Simulink in Electrical Engineering”, in National Level Technical symposium “**Techsonance-2014**”, organized by Electrical Engineering Department, University college of Engineering, Osmania University, Hyderabad, on 14-15, March 2011.
11. Guest Lecture given on the topic “MATLAB and Simulation Programming” during the Continuing Professional Development Programme on “**Recent Trends and Practical Applications of Power Electronics and Power Systems (with MATLAB software exposure)**” from 28 – 29 Jan 2014, a National Level programme, held at Engineering Staff College of India, Hyderabad
12. Guest Lecture given on the topic “Fundamentals of MATLAB/Simulink in Electrical Engineering”, in National Level Technical symposium “**Techsonance-2013**”, organized by Electrical Engineering Department, University college of Engineering, Osmania University, Hyderabad, on 14-15, March 2013
13. Guest Lecture given on the topic “Fundamentals of MATLAB/Simulink in Electrical Engineering” in Two day workshop on “**MATLAB & Simulation Applications in**

Power systems & Power Electronics”, 2nd & 3rd March 2012, organized by Malla Reddy engineering college for women, Hyderabad.

13. Administrative Experience in Universities/Colleges

- **Additional chief superintendent (Exams)** , UCE(A), OU (from 12/02/2024 to present)
- **Faculty Advisor for “SAE Collegiate Club OU”,** UCE,OU (from 01/12/2022 to present)
- **Incharge for B.E. & M.E. Time Tables** , EED, UCE, OU (from 17/04/2023 to present)
- **PG NBA Coordinator** for ME (Industrial drives and control) for the year 2024
- **Faculty Advisor** for the ME (Industrial drives and control) (from 02/02/2024 to present)
- **Member of the Board of studies in the Department** of Electrical Engineering, UCE, OU (from 08/07/2022 to present)
- **Incharge, Drives Lab,** Department of Electrical Engineering, University College of Engineering, Osmania University (2015 to present)
- **Incharge for Industry institute interaction activities** EED, UCE, OU (03/05/2023 to 2024)
- **Faculty Advisor** for the ME (Industrial drives and control) (17/06/2013 to 05/04/2015)
- **Incharge, Internal Exams,** Department of Electrical Engineering, University College of Engineering, Osmania University (2012- 2016)
- **Incharge, Attendance and Feedback,** Department of Electrical Engineering, University College of Engineering, Osmania University (2016- 2020)

12. Chairing Technical Sessions

1. Session Co-Chair at International Conference on Emerging Trends in Engineering (ICETE) at University College of Engineering, Osmania University, Hyderabad during 22nd to 23rd March, 2019.
2. Chaired technical sessions at Students National level Technical symposium ‘Techsonance’ held at Department of Electrical Engineering, University College of Engineering, Osmania University, Hyderabad, during the years 2009 to 2019.

14. Orientation/Refresher Attended:

Number of Orientation/Refresher Attended: 03

Name of the Course	Academic Staff College / University	Duration	Sponsoring Agency
Orientation course in “Communicative English”	Academic Staff College, Osmania University, HYD	26/11/2012 to 24/12/2012	UGC
Orientation program	Osmania University, Hyderabad	02/07/2007 to 12/07/2007	OUCIP
Refresher course on “Advanced control systems”	Vasavi college of Engineering, Hyderabad	21/07/2006 to 01/08/2006	IEEE Computer society chapter

15. Workshops / Training Programmes Attended:

Number of Workshops / Training Programmes Attended: 36

S.No.	Name of the Course	Academic Staff College / University	Duration	Sponsoring Agency
1	Five day Workshop on “Python Orientation”	Osmania TBI, OU & Aisdore Technologies	11 th - 14 th September 2023	Osmania TBI, OU
2	2 nd International Conference on Emerging Trends in Engineering (IECTE)	Alumni Association, University College of Engineering(A), Osmania University	28 – 30 April, 2023	Alumni Association, University College of Engineering(A), Osmania University
3	Accompanied the students of BE (EEE) V Semester for Industrial Visit to Bharath Heavy Electricals Limited, Ramachandrapuram, Hyderabad	EED, UCE,OU	21 st September, 2023	EED, UCE,OU
4	Five day FDP Program on “Solar PV Partial Shading Mitigation Techniques and Its Applications”	National Institute of Technology, Goa	04 th – 08 th July 2022	DST SERB

5	Accompanied the students of BE (EEE) VII Semester for Industrial Visit to SLDC, Hyderabad	EED, UCE,OU	18 th October, 2023	EED, UCE,OU
6	Three day (online) workshop on “Outcome Based Education (OBE) and NBA Accreditation (SAR Preparation and Assessment)” 12-14, August 2020	University College of Engineering(A), Osmania University	12/08/2020 to 14/08/2020	TEQIP
7	Two Day online workshop on “Reliability and its applications to Power systems and drives”	Department of Electrical Engineering, University College of Engineering(A), Osmania University	26/06/2020 to 27/06/2020	UCE,OU
8	One week Refresher course on “Applications of AI Techniques in Electrical Engineering”	Department of Electrical Engineering, University College of Engineering(A), Osmania University	18/11/2019 to 23//11/2019	TEQIP
9	International conference on Emerging trends in Engineering(ICETE)	University College of Engineering(A), Osmania University	22/03/2019 to 23/03/2019	UCE,OU & Springer
10	International Conference on Innovative Technologies in Engineering (ICITE)	University College of Engineering(A), Osmania University	11/04/2018 to 13/04/2018	UCE,OU
11	One day Induction program	University College of Engineering(A), Osmania University	20/01/2018	TEQIP
12	One week short term course on “High Voltage Gain Soft Switching Advanced Current-fed Technologies for Microgrid and Electric Transportation”	Department of Electrical Engineering, University College of Engineering(A), Osmania University	18/12/2017 to 23/12/2017	MHRD (GIAN)
13	One week MHRD GIAN course on “Advanced Adjustable speed AC Motor Drive systems: Applications, problems & solutions”	National Institute of Technology, Goa	15/05/2017 to 20/05/2017	GIAN,MHRD
14	Two day workshop on “Teaching, Learning and	University College of Engineering(A),	13/12/2016 to	TEQIP

	Assessment Methodologies”	Osmania University	14/12/2016	
15	Two day workshop on “Power Quality – Harmonic Analysis for power systems”	Department of Electrical Engineering, University College of Engineering(A), Osmania University	19/09/2016 to 20/09/2016	TEQIP
16	Short Term Course on “Applications of Power Electronics to Renewable Energy”	National Institute of Technology, Goa	12/05/2016 to 14/05/2016	NaMPET, DEIT
17	IEEE International Conference on Electrical, Electronics and Optimization Techniques(ICEEOT- 2016)	DMI College, Chennai	03/03/2016 to 05/03/2016	IEEE and DMI College
18	One Week training programme on “ Power Electronics and Drives for Vehicular Systems – Technology Status & Future Trends	Department of Electrical Engineering, University College of Engineering(A), Osmania University	23/11/2015 To 28/11/2015	TEQIP
19	Three day work shop on “ Application of Simulation Tools to Modern Power Systems”	Department of Electrical Engineering, University College of Engineering(A), Osmania University	07/05/2015 To 09/05/2015	TEQIP
20	Three day work shop on “Solar photo voltaic Training Program”	Department of Electrical Engineering, University College of Engineering(A), Osmania University	02/03/2015 To 04/03/2015	OU
21	One Week FDP on “Distributed generation and Power Quality issues”	Department of Electrical Engineering, University College of Engineering(A), Osmania University	30/06/2014 To 05/07/2014	TEQIP
22	One Week FDP on “Advances in Power Electronics and Drives”	Department of Electrical Engineering, University College of Engineering(A), Osmania University.	12/05/2014 To 17/05/2014	TEQIP

23	Workshop on “Advancements in Multilevel Inverters for AC Drives”	BVRIT,Narsapur	07/07/2012	IEEE and BVRIT
24	Short Term course on “Engineering Research Methodology”	Department of Mechanical Engineering, University College of Engineering(A), Osmania University	02/02/2012 to 04/02/2012	UCE,OU
25	Seminar on “MATLAB & Simulink for Engineering Education”	Mathworks India	29/06/2011	Mathworks India
26	16 th National Power systems Conference	Department of Electrical Engineering, University College of Engineering(A), Osmania University.	15/12/2010 to 17/12/2010	EED, UCE, OU.
27	Two-day workshop on “Power System security”	Department of Electrical Engineering, University College of Engineering(A), Osmania University.	14/09/2009 to 15/09/2009	EED, UCE, OU.
28	Two-day workshop on “EDSA Software Applications to power systems”	EED, UCE, OU & NEWTECH Solutions, Hyderabad	05/12/2008 To 06/12/2008	TEQIP
29	Workshop on “Modeling, simulation & control of power converters”	NIT warangal	09/06/2008 to 13/06/2008	NIT warangal
30	IAENG International Muticonference of Engineers and computer scientists	IAENG International Association of Engineers, Hong Kong	19/03/2008 to 21/03/2008	IAENG
31	Workshop on “Digital signal	NIT warangal	29/02/2008	TEQIP

	processor applications to Electric drives”		to 02/03/2008	
32	Workshop on “Power Quality”	EED, UCE, OU	28/09/2007 to 29/09/2007	EED, UCE, OU
	Orientation program	Osmania University, Hyderabad	02/07/2007 to 12/07/2007	OUCIP
33	SUN Faculty workshop on “Java Programming Language”	UCE, OU	18/06/2007 to 22/06/2007	NASSCOM & APSCHE
34	Refresher course on “Advanced control systems”	Vasavi college of Engineering, Hyderabad	21/07/2006 to 01/08/2006	IEEE Computer society chapter
35	Seminar on “Adaptive and Intelligent control based power system stabilizers”	JNTU, Hyderabad & SNIST, Hyderabad	24/04/2006 & 25/04/2006	IEEE PES & IAS
36	Workshop on “Training and Learning”	UCE, OU	19/04/2006	TEQIP

Number of ME Projects guided: 29

Number of BE Projects guided: 20

(Dr. R. Linga Swamy)

Updated on 04/11/2024