

## **FACULTY PROFILE**

1. Name of the faculty : **Dr.P.KARPAGAVALLI**
2. Designation & Department : Professor(CAS)/ Electrical and Electronics Engg.
3. College with address : Government college of Engineering, Dharmapur-636704
4. Gender : Female
5. Age : 50 years
6. Date of Joining : 09-08-2001



### **7. Educational Qualifications:**

Name of the Degree	Specialization/ Branch	Year of Passing	Name of the College	Name of the University	Class obtained
B.E	Electrical & Electronics Engg.	1994	Annamalai University, Chidambaram	Annamalai university	First class
M.E	Power Electronics & drives	2006	Govt. College of Engineering, Salem-11	Anna university Chennai	First class
Ph.D	Power Electronics & Drives	2015	Govt. College of Engineering Salem-11	Anna University Chennai	-

### **8. Previous Experience as on June 2023:**

Name of the College / Industrial	Designation	Date of Joining	Date of Relieving	Experience		
				Years	Months	Days
Govt.college of Engineering, Dharmapuri-636704	Associate Professor	26.04.2023	--			
Govt. College of Engineering, Salem-636011	Assistant Professor	09.08.2001	25.04.2023	21	9	0
<b>Total Experience</b>				21	09	0

**9. Title of the thesis :** Power Quality Based Performance Analysis Of AC-DC Converters And Modeling Of Single Phase DC Drive Based On Four Quadrant Operation With PID Control

### **10 . LIST OF PUBLICATIONS**

International Journal.

- **Karpagavalli, P** & Ebenezer Jeyakumar, A 2013, 'Simulation analysis on proportional integral and derivative control of closed loop DC motor drive with bipolar voltage switching', American Journal of Applied Sciences, ISSN: 1546-9239, doi:10.3844/ajassp.2013.714.723, PP. 714-723.
- **Karpagavalli, P** & Ebenezer Jeyakumar, A 2014, 'PID controller based four quadrant operation of DC motor with unipolar voltage switching', Journal of Theoretical and Applied Information Technology, ISSN:1992-8645, vol. 66, no.2, pp.416-422.

- **Karpagavalli, P** & Ebenezer Jeyakumar, A 2014, 'Power factor improvement in single phase DC motor drive using Double sided PWM switching, Journal of Theoretical and Applied Information Technology, ISSN:1992-8645 , vol. 69, no.2, pp.232-239.
  
- Umar Farook, K & **Karpagavalli . P** , 2014“ Single Stage Single Switch Ac-Dc Step Down Converter Without Transformer ” International Journal of Power Control and Computation(IJPCSC), ISSN: 0976-268X, Vol 6. No.2 – Jan-March 2014 Pp.76-81.
  
- Parameswari,E & **Karpagavalli ,P** 2015“Efficiency Improvement InZVS DC-DC Converter Using Snubber”Australian Journal of Basic and Applied Sciences, ISSN:1991-8178 9(21), Pages: 149-159.
  
- Ambiga,P & **Karpagavalli ,P** 2015“Non-Isolated Interleaved DC-DC Converter With High Step–Down Conversion Ratio”Australian Journal of Basic and Applied Sciences, ISSN:1991-8178 9(21), Pages: 141-148.
  
- **Dr. Karpagavalli P, Sathiya M** “ Bridgeless Sepic Converter Based Computer Power Supply Using Coupled Inductor” Journal of Advances in chemistry, Vol.2, No. 21. Pages 1523-1534, ISSN 2321-807X.
  
- P.Vinu Chakaravarthi & Dr.P.Karpagavalli, 2016 “ Speed control of PMSM Motor using fuzzy and PID controller” Singaporean Journal of Scientific Research .Vol: 8,No.2,PP 121-128
  
- **Dr.Karpagavalli ,P** ,”Semi Bridgeless Phase Shifted JBoost Converter Fed Four Quadrant DC Drive with Power Factor Correction.” Asian Journal of Research in social Science and Humanities Vol. 7, No. 1, January 2017, pp. 454-464
- Niveta K, **Dr.Karpagavalli P**, “Power factor correction of two phase bridgeless boost converter fed BLDC motor” International Journal of Pure and Applied Mathematics, Vol. 119, No.4, 2014, PP : 625-630. ISSN No. 1314-3395.
- R.Mahadevan ,**Dr.P.Karpagavalli P**, “A simplified seven level inverter” International Journal of Applied Theoretical Science and Technology, Vol. 08, Issue. 02, pp. 2431-2440, January 2019, ISSN: 2454-8065.
  
- M.Gajalakshmi,**Dr. P Karpagavalli** “Design and Analysis of a SEPIC Integrated Boost (SIB) Converter using Coupled Inductor”. International Research Journal of Engineering and Technology (IRJET) Vol. 07, Issue. 03, pp. 862-869, March 2020 ISSN: 2395-0056.
  
- S Nishanth ,**Dr. P Karpagavalli**, “ Design and Analysis of Hybrid Converter for High Voltage Medical Applications” ,International Journal for Modern Trends in Science and Technology Vol. 06, Issue. 03, pp. 24-28 ,March 2020 ,ISSN:2455-3778.
  
- C.Sivraj, **Dr.P.Karpagavalli**, “Design and Analysis of Non-Isolated DC-DC Boost Converter International Research Journal of Engineering and Technology (IRJET)”, Vol. 07, Issue. 12, pp. 290-295, Dec 2020, ISSN: 2395-0072.
  
- Pavithra.M , **Dr.P.Karpagavalli** , “Design and Development of Single Switch High Step-Up Modify SEPIC DC-DC Converter” International Journal for Modern Trends in Science and Technology, 7(04): 22-27, 2021, ISSN: 2455-3778.
  
- Kokilnila,P, **Dr.P.Karpagavalli**, “**Design and Implementation of Buck Boost<sup>2</sup> Converter with Closed Loop Control System**” International Journal for Modern Trends in Science and Technology, 7(01): 520-523, 2021 ,ISSN: 2455-3778.
  
- Pavithra V & **Karpagavalli P** “**A FLC based interleaved dc-dc boost converter with voltage multiplier**” International Research Journal of Modernization in Engineering Technology and Science, Volume:03/Issue:12/December-2021 , e-ISSN: 2582-5208.

- G.Sivraj & P.Karpagavalli, “ Noval double switch voltage –lift cuk converter” Journal power Electronics ,<https://doi.org.10.1007/s43236-022-00509-8>(Annexure I and Annexure II)
- K. Dharani Sree & P. Karpagavalli “Modified Satin Bowerbird for Distributed Generation in Remotely Controlled Voltage Bus” Intelligent Automation & Soft Computing, DOI: 10.32604/iasc.2023.025303( Annexure I.and Annexure II).

#### 10.National conference

- Performance of Single phase DC Drive controlled by PWM full bridge DC-DC converter in the National conference on modern trends in Electrical and Electronics System organized by the Electrical and Electronics Engineering Department at GCE-salem-11 on 22<sup>nd</sup> & 23<sup>rd</sup> , March, 2006
- Implementation of Proportional Integral and Derivative Controller for Brushless DC Motor in the National conference on “Advancements in Power Electronics and Industrial Drives” organized by the Electrical and Electronics Engineering Department at GCE-salem-11 on 7<sup>th</sup> March,2013
- PID Controller for Direct Current Motor in the National conference on “Advancements in Power Electronics and Industrial Drives” organized by the Electrical and Electronics Engineering Department GCE-salem-11 on 7<sup>th</sup> March, 2013
- .Speed control of PMSM motor using fuzzy and PID controller in the National conference on “Advancements in Power Electronics and Industrial Drives(NCAPED&ID’16) at Government college of Engineering ,organized by the Electrical and Electronics Engineering

#### 11.Short term program Attended

SL NO	Programme details	DATE	AICTE/TEQIP	NO. OF DAYS
1	Role of solid state controller and Embedded systems in power system. Kumaraguru college of technology, Coimbatore.	07-11-2004 to 20-11-2004	AICTE	14
2	Soft computing techniques for engineering applications. Alagappa chettiar college of engineering and technology. Karaikudi.	17-07-2006 To 29-07-2006	AICTE	13
3	Virtual instrumentation based on Lab VIEW. Govt, college of engineering, Salem-11.	20-11-2006 To 21-11-2006	TEQIP	02
4	Communication and pedagogical skills for effective teaching , Govt. college of engineering, Salem-11	12- 12-2006	TEQIP	01
5	Intensive training on advanced laboratory equipments. Govt. college of engineering, Salem-11	08-01-2007 To 12-01-2007	TEQIP	05
6	An overview of effective teaching. Govt, College of engineering, Salem-11.	13-02-2007 To 14-02-2007	TEQIP	02
7	Campus wide networking. Govt. college of engineering, Salem-11	23-06-2007	TEQIP	01
8	Intensive training on programmable logic controller (PLC). Govt. college of	22-09-2008 To	TEQIP	02

	engineering, Salem-11	23-09-2008		
9	Future electrical energy requirement and energy management . Kalaingar karunanidhi institute of technology. Coimbatore.	31-05-2010 To 13-06-2010	AICTE	14
10	Application of wavelets and sot computing techniques for power quality analysis. Dr. Mahalingam college of engineering and technology.Pollachi.	15-11-2010 To 27-11-2010	AICTE	13
11	Advanced programmable logic controller (PLC) programming and its applications. Govt. college of engineering, Salem-11	08-03-2011 To 09-03-2011	TEQIP	02
12	A paradigm of advanced computer networking and soft computing. Govt. college of engineering, Salem-11	02-05-2011 To 06-05-2011	TEQIP	05
13	Recent trends in power systems. Sona college of technology. Salem - 5.	23-05-2011 To 05-06-2011	AICTE	14
14	VLSI, PLC – application and renewable source of Energy . Govt. college of engineering, Salem-11	13 - 06-2011 To 19-06-2011	TEQIP	07
15	Research issues in power converters and power system. Govt. college of engineering, Salem-11	16 -08-2012 TO 17-08-2012	TEQIP	02
16	Permanent magnet synchronous motor and its applications. Govt. college of engineering, Salem-11	02-02-2013	TEQIP	01
17	Power electronics application to renewable energy generation . Govt, college of engineering, Salem.	29-04-2013 To 12-05-2013	AICTE	14
18	SoC and advanced digital design using VHDL. Govt, college of engineering , Salem.	13-05-2013 To 26-05-2013	AICTE	14
19	Modern simulation techniques for research in engineering and science. Govt. college of engineering, Salem-11	22-07-2013 To 28-07-2013	TEQIP	07
20	Advanced digital controller for modern special machine drives: industrial perspective. Govt. college of engineering, Salem-11	23-10-2013 To 29-10-2013	TEQIP	07
21	Power electronics application to distributed generation. Govt. college of engineering, Salem-11	30-10-2013 To 06-11-2013	TEQIP	07
22	Capacity building. Govt. college of engineering, Salem-11	22-04-2014	TEQIP	01
23	An introduction to out come based Education. Govt. college of engineering, Salem-11	06-05-2015	TEQIP	01
24	Advanced technology in solar PV system – Industrial Perspective. Govt. college of engineering, Salem-11	27-10-2015 To 02-11-2015	TEQIP	07
25	Advanced measuring equipment . Govt. college of engineering, Salem-11	03-11-2015 To 09-11-2015	TEQIP	07
26	Internet of things and its applications. Govt. college of engineering, Salem-11	03-12-2015 To 09-12-2015	TEQIP	07
27	System design using SOC FPGA . Govt.	05-01-2016	TEQIP	

	college of engineering, Salem-11.	To 11.01.2016		07
28	Outcome based Education and Accreditation, Department of mechanical Engineering, Govt. college of engineering, Salem-11	8-02-2016 To 9-02-2016	TEQIP	02
29	89C51 Embedded based System Application - Industrial perspective, Department of Electrical and Electronics Engineering.	26-07-2016 To 1-08-2016	TEQIP	07
30	Outcome based Education Department of Civil Engineering, Govt. college of engineering, Salem-11	14-10-2016 To 15-10-2016	TEQIP	02
31	Integration of Renewable Energy, Energy storage and system operation. Department of Electrical and Electronics Engineering, GCE, Salem-11	14-12-2016 to 20-12-2016	TEQIP	07
32	Industrial Drives Automation and Intelligent control. EEE Dept., Govt. College of Engineering, Salem-11	01-03-2017 to 07-03-2017	TEQIP	07
33	Quality Management in Technical Education” organized by ISTE Bangalore	16-03-2017  To 18- 03-2017	TEQIP	03
34	Training on E-Procurement , Department of Computer science and Engineering, Govt. college of engineering, Salem-11	25-04-2018  & 26-04-2018	TEQIP	02
35	TEQIP III sponsored workshop Women Empowerment , GCE,Salem-11	8-03-2019	TEQIP	01
36	National level faculty development programme on “ Electrical Energy Audit” GCE,Salem-11	24-09 2019 to 25-09-2019	TEQIP	02
37	Two days work shop on “Performance improvement in micro grid with advanced controller design”GCE,Salem-11	6-11-2019 To 7-11-2019	TEQIP	02
38	TEQIP III sponsored Productivity Enhancement Programme (PEP) GCE,Salem-11	18-11-2019 To 23-11-2019	TEQIP	06
39	Advanced RF circuit design and software defined Radio Govt, college of engineering , Salem	12-06-2019 To 25-06-2019	AICTE	14
40	<b>AICTE sponsored</b> Six days on line short term training Programme on Digital Controllers for Power converters Applications organized from Department of EEE , Syed Ammal Engineering College -Ramanathapuram	13-07-2020 to 18-07-2020	AICTE	07

41	AICTE sponsored one week on-line STTP on “Application of soft computing Techniques to Renewable system “(series -1) Government collage of Technology , Coimbatore	6-08-2020 To 12-08-2020	AICTE	07
42	TEQIP III sponsored one week faculty Programme on “ Advanced Electrical drives” organized by Department of Electrical and Electronics Engineering, GCE,Salem-11.	8-03-2021 To 13-03-2021	TEQIP	06

## 12.Membership Professional Bodies

ISTE Life Member

13. Area of Interest : Machines, Circuit theory .DC Drives , AC Drives and Power System.

P.Karpagavalli