

National Institute of Technology, Tiruchirappalli: Performa for CV of Faculty/ Staff Members

Curriculum Vitae



Brief Profile: 1-2 paragraphs (not exceeding 500 words)

1. Name Pinkymol K.P
2. Designation: Assistant Professor
3. Office Address: EEE Annex Room A2-S2-10
4. Telephone (Direct) (Optional):
Telephone : Extn (Optional):
Mobile (Optional):
5. Email (Primary): pinkymol@nitt.edu Email (Secondary)
:pinky1766@gmail.com
6. Field(s) of Specialization: Power Electronics
7. Employment Profile

Job Title	Employer	From	To
Assistant Professor	NIT Trichy	21-5-2020	
Associate Professor	Saintgits College of Engineering, Kerala	July 2017	May 2020
Assistant Professor	Saintgits College of Engineering, Kerala	August 2016	June 2017
Assistant Professor	Saintgits College of Engineering, Kerala	July 2010	December 2010
Lecturer	Saintgits College of Engineering, Kerala	December 2009	June 2010
Lecturer	Saintgits College of Engineering,	August 2006	February 2008

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	Kerala		
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8. Academic Qualifications (From Highest Degree to High School):

Examination	Board / University	Year	Division/ Grade	Subjects
Doctor of Philosophy	Nanyang Technological University, Singapore	2016		Multilevel Diode Clamped Converter with Space Vector Modulation and dc-link Capacitor Balancing
Master of Technology	Rajiv Gandhi Institute of Technology, Mahatma Gandhi University	2010		Industrial Drives and Control
Bachelor of Technology	Saintgits College of Engineering, Mahatma Gandhi University	2006		Electrical and Electronics Engineering

9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	To
NBA Committee	Department of EEE	July 2022	June 2023
Coordinator for workload of faculty , research scholar , HTRA and department time table	Department of EEE	July 2022	June 2023
NBA Committee	Department of EEE	July 2021	June 2021
Class committee Chair person for 1 st Year M. Tech Power Electronics & Power System – January session	Department of EEE	January 2021	June 2021
Report Preparation & any other	Department of EEE	July 2020	December 2020

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department works			
B.Tech & M.Tech Program coordinator and BoS in-charge	Department of EEE	July 2020	June 2021

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To
Executive committee member	IEEE IA/IE/PELS society Jt. Chapter Kerala	2018	Till date
DAB Memembr	EEE /Saintgits college of Engineering	2017	Till date

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization

12. Fellowships

Year of Award	Name of the Fellowship	Awarding Organization	From (Month/Year)	To (Month/Year)

13. Details of Academic Work

(i) Curriculum Development

(ii) Courses taught at Postgraduate and Undergraduate levels

- EEPE33 Solid State Drives (UG)
- EEPC23 Measurements and Instrumentation (UG)
- EEPC12 DC Machines and Transformers (UG)
- EELR11 DC Machines and Transformers Laboratory (UG)
- EE693 PWM Converters and Application (PG)
- EE658 Power Converters and Drives Lab (PG)

(iii) Projects guided at Postgraduate level

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SI No	Title	Student Name & year	College
1	Onboard Charger for Electric Vehicle with Active Power Decoupling Capability	B. Partha Sashank, 2022	NIT Trichy
2	Bridge-less Ćuk Converter based EV Charger for 2/3-wheeler	S Anupam Sandeep, 2022	NIT Trichy
3	Analysis and Modelling of a Multidevice Interleaved DC/DC Converter for Fuel Cell Hybrid Electric Vehicles (MDIBC)	Meghanath Bathini, 2022	NIT Trichy
4	Grid Connected PV System using Two stage SST with SiC Devices	Badaganti Sai Prasad Reddy, 2021	NIT Trichy
5	Design and Optimization Of High Frequency Transformer for Solid State Transformer Applications	Ajay Koshy Abraham, 2020	Saintgits College of Engineering, Kerala
6	Design & Development of PV & Wind Hybrid System with Controller for Supplying AC & DC Loads	Koshy M Kuriakose, 2019	Saintgits College of Engineering, Kerala
7	Battery Powered 4-Phase SRM Drive for Advanced Electric Vehicles	Abel George, 2017	Saintgits College of Engineering, Kerala
8	Unified Power Quality conditioner in a Distribution System	Anju Mathew , 2011	Saintgits College of Engineering, Kerala

(iv) Other contribution(s)

- Research Scholar Mr. Som Ankar Jairaj received PRMF in 2021 for the project Title “ Dimensioning and optimization of the hybrid energy storage system and development of control strategy based on drive cycle for Electric Passenger Car “

14. Details of Major R&D Projects as Co-PI

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed
<i>Development of Bi-directional</i>	ISRO	2022	2024	Ongoing

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<i>Battery Charger-Discharge Regulator (BCDR)'' Funding Agencies</i>				
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15. Number of PhDs guided: Nil

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor/ Co-Supervisor)	Year of Award

16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc. (mentioning the role)

Date (s)	Title of Activity	Level of Event (International/ National/ Local)	Role (Participant/ Speaker/ Chairperson, Paper presenter, Any other)	Event Organized by	Venue
13/05/2022	ICSSR sponsored Seminar on "Awareness Programme on Recent Technological Developments in Eelctric Vehicle and Future Benefits of our Society"	Local	Speaker	A.K.T Memorial College of Engineering and Technology Kallakurichi-606213,Tamilnadu, India	A.K.T Memorial College of Engineering and Technology Kallakurichi-Tamilnadu,India
18/07/2021	Bosch IEEE EV Hackathon	National	Member in Judging Panel	IEEE Kerala Section and IEEE IA/IE/PELS Jt. Chapter Kerala.	Online
10/09/2020 to 14/09/2020	Online training Programme on "E - content Development"	Local	participant	National Institute of Technical Teachers Training and Research	online
27/08/2020 to	Five Day Online FDP on "Real	national	participant	Department of EEE, Adi Shankara	online

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31/08/2020	time Applications of Power Electronics - Research Scope and Challenges"			Institute of Engineering and Technology, Kalady, Kerala.	
2/1/2020 to 4/1/2020	IEEE PESGRE	International conference	IEEE Conference Technical Programme committee	IA/IE/PEL Jt.chapter Kerala	Le Meridian, Kochi

17. Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convenor / Co-Convenor)

Title of Activity	Level of Event (International/ National/ Local)	Date (s)	Role	Venue
STTP on "Software Tools for Power Converter Design"	National	26/04/2021 to 30/04/2021	Coordinator	Online-NIT Trichy
STTP on "Design and Development of Power Converter for Renewable Energy Application"	National	03/12/2018 to 07/12/2018.	Coordinator	Saintgits college, Kerala
IEEE IAS Sponsored "Two day Proficiency Programme on Electric and Hybrid Electric Vehicle Engineering"	National	30/08/2019 to 31/08/2019	Coordinator	Saintgits college, Kerala
National Level Project Exhibition and Competition - SRISHTI'19	National	18/02/2019 to 19/02/2019	Chief-coordinator	Saintgits college, Kerala

18. Invited Talks delivered

Topic	Date	Inviting Organization
Electric Vehicle Architecture and Components	13/05/2022	IEEE Power and Energy Society Student Chapter at Saintgits College of Engineering, Kottayam
Electric Vehicle Architecture and Components	13/05/2022	A.K.T Memorial College of Engineering and Technology
Power Converter Modeling and Control	08/06/2021	Sahrdaya College of Engineering, Kerala.
Basics of Converter	14/05/2021	College of Engineering, Guindy,

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Control		Anna University, Chennai.

19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member)	Organization	Membership No. with date
Life Member	ISTE	LM114267
Senior Member	IEEE	92592426 from 2019

20. Academic Foreign Visits

Country	Duration of Visit	Programme

21. Publications

(A) Refereed Research Journals:

Author(s)	Title of Paper	Journal	Volume (No.)	Page numbers	Year	Impact Factor of the Journal (Optional)
P. H. Raj, A. I. Maswood, G. H. P. Ooi and Z. Lim	Voltage balancing technique in a space vector modulated 5-level multiple-pole multilevel diode clamped inverter	<i>IET Power Electronics</i>	vol. 8, no. 7,	pp. 1263-1272,	2015	
M. M.	Reference	<i>IET Power</i>	vol. 10,	pp. 222-	2017	

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Roomi, A. I. Maswood, H. Dehghani Tafti and P. Harikrishna Raj	Disposition Modulation Method for non- ideal Dual Z- Source Neutral- Point-Clamped Inverter	<i>Electronics</i>	no. 2	231		

(B) Conferences/Workshops/Symposia Proceedings

Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page numbers	Conference Theme	Venue	Year
V. Biyani, J. R, T. E. T. A, S. S. V. S and P. K. P	Vector Control Implementation in PMSM Motor Drive for Electric- Vehicle Application	<i>4th International Conference on Energy, Power and Environment (ICEPE), IEEE</i>	pp. 1-8.	<i>Energy, Power and Environment</i>	online	2022
A. K. Abraham, S. Joseph, K. P. Pinkymol, J. Joseph and K. R. M. Nair	Optimum High Frequency Transformer Design using Iterative Algorithm and Validation of the Design by Finite Element Analysis Method,	<i>2022 IEEE International Conference on Power Electronics, Smart Grid, and Renewable Energy (PESGRE)</i>	pp.1-6	<i>Power Electronics, Smart Grid, and Renewable Energy</i>	online	2022
V. Biyani, J. R, T. E. T. A, S. S. V. S and P. K. P	Comparative Study of Different Control Strategies in Permanent Magnet Synchronous Motor Drives	<i>IEEE 5th International Conference on Condition Assessment Techniques in Electrical Systems (CATCON)</i>	pp. 275- 281.	<i>Condition Assessment Techniques in Electrical Systems</i>	online	2021
A. K. Abraham, S. Sebastian, P. KP, A. Gopi and D. E.	Experimental and Numerical Analysis of the Impact of Placement of	<i>International Conference on Power Electronics and Renewable</i>	pp. 1-7.	<i>Power Electronics and Renewable Energy Applications</i>	online	2020

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Koshy	PV Panels on the Performance of a Rooftop Plant	<i>Energy Applications (PEREA)</i>				
M. M. Roomi, P. H. Raj and B. Zhao	Closed Loop Current Control of Dynamic Voltage Restorer for Rectifier Loads	IEEE International Conference on Power Electronics, Smart Grid and Renewable Energy	pp. 1-6	Power Electronics, Smart Grid and Renewable Energy	Le Meridian , Kochi	2020
K. M. Kuriakose, P. K.P, D. E. Koshy and A. Gopi	Design & Development of PV Wind Hybrid Grid Connected System	3rd International conference on Electronics, Communication and Aerospace Technology (ICECA)	pp. 1012-1017.	Electronics, Communication and Aerospace Technology	RVS Technical Campus, Coimbatore	2019
A. George, K. P. Pinkymol and J. Cherian	Battery powered 4-phase 8/6 pole SRM drive for advanced electric vehicle	2017 <i>Innovations in Power and Advanced Computing Technologies (i-PACT)</i> , Vellore, IEEE	pp. 1-5.	<i>Power and Advanced Computing Technologies</i>	VIT Vellore,	2017
A. I. Maswood, L. Benbrahim and P. Harikrishnaraj	An investigation into the efficiency of silicon carbide based power inverters	2016 4th <i>International Conference on the Development in the in Renewable Energy Technology (ICDRET)</i>	pp. 1-6.	<i>Renewable Energy Technology</i>	Dhaka	2016
P. H. Raj, A. I. Maswood, G. H. P. Ooi and H. Dehghani Tafti,	Five-level multiple-pole multilevel diode-clamped inverter scheme for reactive power compensation	2015 <i>IEEE Innovative Smart Grid Technologies - Asia (ISGT ASIA)</i> , Bangkok	pp. 1-5	<i>Smart Grid Technologies</i>	Bangkok	2015

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P. H. Raj , A. I. Maswood, G. H. P. Ooi and H. Deghani Tafti	Multiple-pole multilevel diode clamped inverter for permanent magnet synchronous motor drive	<i>2015 IEEE 11th International Conference on Power Electronics and Drive Systems</i> , Sydney, NSW	pp. 862-866	<i>Power Electronics and Drive Systems</i>	Sydney, NSW	2015
H. R. Pinkymol , A. I. Maswood, O. H. P. Gabriel and L. Ziyou	Analysis of 3-level inverter scheme with DC-link voltage balancing using LS-PWM & SVM techniques	<i>2013 International Conference on Renewable Energy Research and Applications (ICRERA)</i> ,	pp. 1036-1041.	<i>Renewable Energy Research and Applications</i>	Madrid	2013
Harikrishna Raj Pinkymol , A. I. Maswood and A. Venkataraman	Space vector based field oriented control of Permanent Magnet Synchronous Motor with a 3-level inverter scheme	<i>2013 IEEE Transportation Electrification Conference and Expo (ITEC)</i> , Detroit, MI,	pp. 1-6.		Detroit, MI,	2013
A. I. Maswood, P. H. Raj and P. L. A. Vu,	Efficiency of silicon carbide-based power inverters analytical results,"	<i>2nd International Conference on the Developments in Renewable Energy Technology (ICDRET)</i>	pp.1-4.	<i>Renewable Energy Technology</i>	Dhaka	2012

(C) Books & Monographs

Author(s)	Title of Book/Monograph	Name of Publishers	Year of Publication	ISSN/ISBN Number
Ziyou Lim,	<i>Advanced Multilevel</i>	Wiley	2018	ISBN: 978-

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<i>Hossein Deghani Tafti, and Harikrishna R. Pinkymol</i>	<i>Converters and Applications in Grid Integration/ Multilevel Modulation Methods</i>			1-119-47589-7
<i>Gabriel H. P. Ooi, Hossein Deghani Tafti, and Harikrishna R. Pinkymol</i>	<i>Advanced Multilevel Converters and Applications in Grid Integration / Voltage Balancing Methods for Classical Multilevel Converters</i>	<i>Wiley</i>	2018	ISBN: 978-1-119-47589-7
<i>Muhammad M. Roomi and Harikrishna R. Pinkymol</i>	<i>Advanced Multilevel Converters and Applications in Grid Integration/ Multilevel Converter -Based Flexible Alternating Current Transmission System</i>	<i>Wiley</i>	2018	ISBN: 978-1-119-47589-7