

Kings College of Engineering

Department of Electrical and Electronics Engineering

Name: Mr. J. AROKIA RAJ	
Designation :	Assistant Professor
Qualification :	B.Tech., M.E.,(PhD)
Area of Specialization :	Power Electronics Smart Grid Renewable Energy Sources Energy Management System Special Electrical Machines
Experience :	Teaching :15 Yrs
	Industry:-NIL
No. of workshop/Conferences/ FDP attended :	45
Publication :	Journal National: - NIL International:02
	Conference National: 06 International: 07
Membership :	Indian Society for Technical Education (ISTE LM46639)

1. Research Publication

1. **J.Arokia Raj**, S.Ezhil Arasan “Microcontroller Electronic Ballast – Metal Halide Lamp”, CoFRACCCE-08, National Conference at Kings College of Engineering, Sl. No. 61, (2008).
2. **J.Arokia Raj** “DC/DC Converter for Double-Input PWM Using High / Low Voltage Sources”, NACOFEE-09, National Conference at Kings College of Engineering, Pg. no. 198, (2009).
3. **J.Arokia Raj**, T.Senthil Kumar “Design and Implementation of Series Compensation Based High Efficiency Buck-Boost DC/DC Converter”, National Conference on Power Quality and Power Conversion System(PQPCS’10), at Anand Institute of Higher Technology, Chennai, (2010).
4. **J.Arokia Raj** “Grid Interconnection of Renewable Energy Sources at the Distribution Level with Power Quality Improvement Features”, National Conference at Kings College of Engineering, (2012).
5. R.Sundaramoorthi, S.R.Karthikeyan, **J.Arokia Raj** “An Integration of Buck and Boost Converter through Tapped Inductor for Wide Input Wide Output”, International Conference on Computation of Power, Energy, Information and Communication (ICCPEIC-2012), ISBN 978-1-4675-2243-4, ©2012.
6. R.Sundaramoorthi, S.R.Karthikeyan, **J.Arokia Raj** “Analysis of Power Factor Correction through Wide Input Wide Output DC-DC Converter with Tapped Inductor”, CiiT International Journal of Programmable Device Circuits and Systems, Vol 4, No 8, June 2012. 0974-973X/ICCPEIC-27/08/\$20/\$100©2012.
7. A. Albert Martin Ruban, G. Mathew Rajasekaran, N. Rajeswari, **J. Arokia Raj** “Implementation of Energy Management System using Fuzzy Control to the Hybrid Power Generation System for DC Microgrid Applications” International Journal of Electrical Engineering, Volume 8, Number 4, pp. 341-354, ISSN 0974- 2158. (2015) (**ANNA UNIVERSITY ANNEXURE -2**).
8. Dr.S.Durairaj, **J.Arokia Raj**, C.Balaji “VVVF Techniques for Efficiency Optimization in Induction Motor” in the International Conference on Alternate Energy Technologies held at Government College of Technology, Coimbatore on 25th& 26th November, 2015.
9. R.Arunmozhi, **J.Arokia Raj** “Series Compensation Technique Based Energy Management at Micro-Grid” EE33, Page 46, Proceeding of ICETETS-2016, at Kings College of Engg.
10. J.Arokia Raj “Aviation Accident Safety System Using Artificial Intelligence” in the National Conference on Flourishing Areas of Electrical and Electronics Engineering, organized by the Department of EEE, Kings college of Engineering on 15th March, 2019.
11. J.Arokia Raj “A Twenty one Level with Reduced Number of Switches Using PV Renewable Energy Sources” in the National Conference on Flourishing Areas of Electrical and Electronics Engineering, organized by the Department of EEE, Kings college of Engineering on 15th March, 2019.
12. J.Arokia Raj “Implementation of GSM Based Control and Monitoring of Substation” in the International Conference on Intellectual Research in Science, Engineering and Management –ICIRSEM 2020 held on 09th March 2020, at St. Joseph’s College of Engineering and Technology.
13. J.Arokia Raj “Wireless Charging for Electric Vehicles” in the 2nd International Conference on Intellectual Research in Science, Engineering and Management –ICIRSEM 2022 held on 28th May 2022, at St. Joseph’s College of Engineering and Technology.
14. J.Arokia Raj “Smart energy metering and power theft control using Arduino & GSM Technology” in the International Conference on Computing, Communication and Control (IC4), organized by Kings College of Engineering on 26.04.2023.

15. J.Arokiaraj "Power Quality Mitigation problems and Alternative Solutions" in the International Conference on Computing, Communication and Control (IC4), organized by Kings College of Engineering on 26.04.2023.
16. J.Arokiaraj "Soft Switching Bidirectional Step – up / Down Partial Power Converter with Reduced Components Stress" in the International Conference on Applications of AI & IoT in Power and Energy Systems (ICAAIIPES), organized by Arasu Engineering College on 24th April 2024.

2. Short Term Courses/FDP/Seminar/Workshop Attended:

S.No	Title of the Programme	Organization	Duration	
			From	To
1.	Recent Trends in High Voltage Engineering & Application of Power Electronics to Power system	SASTRA University	02-06-2008	06-06-2008
2.	A National Level Seminar On VLSI Application In Power Electronics	Kings college of Engg.	23-08-2008	
3.	Impact Of Technical Education On Socio-Economic Growth of the Nation	Vinayaka Mission's KirupanandaVariyarEngg. College.	26-11-2009	27-11-2009
4.	Workshop on advanced control systems design.	Oxford Engineering College.	21-12-2009	
5.	National level FDP on Electrical machines design	Kings college of Engg.	02-04-2011	
6.	Two week ISTE Workshop on Basic Electronicsthrough ICT (MHRD)	Conducted by IIT Bombay – RC at PMUVallam.	28-06-2011	08-07-2011
7.	Two day Faculty Development Program	Knowledge Training and Consulting Chennai at Kings college of Engg.	22-12-2011	23-12-2011
8.	Two week ISTE Workshop on Introduction to Research Methodologies through ICT (MHRD).	Conducted by IIT Bombay – RC at PMUVallam.	25-06-2012	04-07-2012
9.	National level Workshop on Advance Techniques in Electrical Systems	Kings college of Engg.	31-08-2012	
10.	One day national level seminar on A recent trend in power quality management (POM13)	PeriyarManiammai University.	12-10-2013	
11.	One day workshop on Solar Energy and its Applications in Micro-grid	Kings college of Engg.	25-07-2014	

12.	Two days Faculty Development program on ARM processor embedded system	Sudharsan Engineering College. Pudukkottai.	05-06-2015	06-06-2015
13.	Two Days workshop on Application Development with Arduino Controllers	PantechProEdPvt Ltd. Trichy.	01-08-2015	02-08-2015
14.	TEQIP II Short-Term Course on Role of Power Electronics in Power Engineering.	Dept. of EEE., NIT,Trichy.	04-03-2016	05-03-2016
15.	Teachers' Conclave on Pursuing excellence in teaching	SSN College of Engineering	07-01-2017	
16.	One day Faculty Development Programme on Micro Teaching & Class Room Management.	Kings College of Engineering, Punalkulam.	28 th August, 2017	
17.	Three day AICTE sponsored national level seminar on "Challenges and Opportunities of IoT based stand alone and interactive Micro Grid System"	K. S. Rangasamy College of Technology, Tiruchengode.	01-11-2017	03-11-2017
18.	ISTE Staff Chapter Organized Word Cookies at Kings College of Engineering and Won First Position.	Kings College of Engineering	18.07.2019	
19.	Two Day Faculty Development Programme on Research issues and Solutions in Sustainable Energy Conversion and Renewable Energy Sources.	Dept. of EEE, Kings College of Engineering, Punalkulam.	01.11.2019	02.11.2019
20.	Short Term Training Programme Through ICT Mode on "Management Issues of Laboratory and Workshop Class"	NITTTR, Kolkata	04.11.2019	08.11.2019
21.	Short Term Training Programme Through ICT Mode on "Control and Automation"	NITTTR, Kolkata	18.11.2019	22.11.2019
22.	Short Term Training Programme Through ICT Mode on "Indian Electricity Rule and Code of Practices"	NITTTR, Kolkata	16.12.2019	20.12.2019

23.	Faculty Development Programme on “ Control and Stability Aspects in Micro Grid”	IEEE Madras Section	14.12.2020	17.12.2020
24.	Faculty Development Programme on “Artificial Intelligence & Machine Learning in Smart Energy Systems”	Dept. of EEE, Kings College of Engineering, Punalkulam.	03.05.2023	05.05.2023
25.	Seminar on “Advances In Batteries and Charging Infrastructure for EV (ABC-EV)” Samayapuram, Tiruchirappalli, held on 07 th February 2025	The Institution of Engineers (India), Tiruchirappalli Local Centre under the aegis of Electrical Engineering Division Board, Iel in association with Department of EEE, K.Ramakrishnan College of Engineering (Autonomous)	07.02.2025	-