# **FACULTY PROFILE**

Name of the Staff	: Mr. K. KUMAR
Official Address with E-mail Id	: Assistant Professor,
	EEE Department,
	National Engineering College
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. Personal Details	
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#### 1.

Age	: 31
Date of Birth	: 01/05/1992
Sex & Marital Status	: Male / Married
Citizenship	: Indian
Qualification	: M.E

Degree	Programme and Specialization	Class /CGPA	Month &Year of Passing	Institute/University
PhD	High Voltage Engineering		Pursuing	Anna University
M.E	HVE	I Class / 8.72	May 2015	National Engineering College, Kovilpatti.
B.E	EEE	I Class / 7.95	April 2013	Park College of Engineering and Technology, Coimbatore.

Date of joining Present status **Professional Experience**  : 15/05/2015

: Assistant Professor

: Nil

# 2. Academic Achievements

### 2.1 Short term Courses / Seminars / Conference/ Workshops Attended:

S. No	Title	Period	Venue
1	NPTEL-AICTE Faculty Development	Jul-Oct	NPTEL (Online)-IIT
1	Programme on "Power System Analysis"	2022	Kharagpur
2	AICTE Training And Learning (ATAL) Academy Online Elementary FDP on, "State of the art applications and research areas in high voltage engineering (RAHVE- 2021)"	05.07.2021 To 09.07.2021	National Institute of Technology, Calicut
3	Recent Advances in Condition Monitoring of Power Equipment (Virtual FDP)	25.01.2021 to 30.01.2021	National Institute of Technology, Calicut
4	Circuit Design using AutoCAD Electrical	20.07.2020 to 24.07.2020	ICT Academy

	AICTE-MARGDARSHAN Sponsored	18.11.2019	National Institute of
5	Faculty Development Programme on "Advanced Tools and Techniques for	to	Technology,
	"Advanced Tools and Techniques for Research on Engineering Problems"	23.11.2019	Thiruchirapalli.
	MHRD TEQIP-III Sponsored Faculty	09.07.2018	National Institute of
6	Development Programme on "Advanced	to	Technology, Calicut
6	Condition Monitoring Methods for Power	14.07.2018	
	Equipment"		
	Two Weeks AICTE sponsored faculty	06.11.2017	National Engineering
7	development Programme on "Recent trends	to	College, Kovilpatti
7	and Applications of High Voltage	19.11.2017	
	Engineering"		
	Two days training programme on Protection	24.10.2017	National Engineering
8	Relay	to	College, Kovilpatti
0		25.10.2017	
	Three days Quality improvement	27.05.2017	National Engineering
0	Programme on "Technology Enabled	to	College, Kovilpatti
9	Teaching Learning Process" conducted by	29.05.2017	
	NITTTR, Chennai.		
	One-week training Programme on	22.05.2017	National Engineering
10	"Instructional design and delivery systems"	to	College, Kovilpatti
		27.05.2017	
	Five days QIP-AICTE sponsored short term	19.12.2016	Indian Institute of
	course on "Recent Advances in UHV	to	Science (IISc),
11	transmission and distribution"	23.12.2016	Bangalore
	Two Days National Workshop on "Image	16.09.2016	KPR Institute of
10	Processing using MATLAB"	to	Engineering and
12		17.09.2016	Technology,
			Coimbatore
	IEEE CIS Sponsored Three days workshop	05.08.2015	National Engineering
13	on "Implementation of Soft Computing	to	College, Kovilpatti
	Techniques" ISCT'15	08.08.2015	
	One Day Pre-Conference Workshop	04.13.2015	SVS College of
1 /	Entitled "Programming, Simulation and		Engineering,
14	Optimization Using		Coimbatore.
	MATLAB/SIMULINK"		
	MNRE sponsored two day National Level	09.01.2015	National Engineering
15	Technical Seminar on "Adaptive Control of	to	College, Kovilpatti.
15	Integrating Renewable Energy Sources with	10.01.2015	
	Smart Grid Using Scada"		
	Two days National workshop on "Nano	25.02.2014	K.S.Rangasamy college
16	Materials Synthesis and Characterization"	to	of Technology,
		26.02.2014	Tiruchengode.
	One day workshop on "VLSI design using	07.01.2012	SNS College of
17	PSPICE"		Technology,
			Coimbatore.

# 2.2 Expert Lecture Delivered:

Sl.No	Title	Date	Venue	Participants
1	"Prediction of Pollution Severity in High Voltage Insulator using soft computing techniques"- A Two Day online workshop on "Condition	12.03.2022	Dept of EEE, National Engg. College, Kovilpatti	70

	Monitoring and Diagnosis Techniques for High Voltage Power Apparatus using Soft Computing Approaches".			
2	"Basic Fundamentals and Need for Protection in Power System"- A Two Day online workshop on "Smart Protection and control using Numerical Relay"	16.04.2021	Dept of EEE, National Engg. College, Kovilpatti	64
3	"Prediction of Pollution Severity in High Voltage Insulator using Machine Learning Techniques"- A Two Day online workshop on "Application of Artificial Intelligence Techniques in High Voltage Engineering".	05.02.2021	Dept of EEE, National Engg. College, Kovilpatti	70
4	<i>"High Voltage Testing Techniques"-</i> NEC TECHFEST'2020, ALTANZIA	20.02.2020	Dept of EEE, National Engg. College, Kovilpatti	20
5	"Flashover characteristics on High Voltage Insulator"- NEC- ALTANZIA 2K19	20.02.2019	Dept of EEE, National Engg. College, Kovilpatti	30
6	"High Voltage Testing Techniques", ALTANZIA 2K18	13.03.2018	Dept of EEE, National Engg. College, Kovilpatti	82
7	<i>"Outdoor Insulators for High</i> <i>Voltage Application"-</i> RTAHVE'17 AICTE Sponsored Two Week Faculty Development Programme on "Recent Trends and Applications of High Voltage Engineering"	08.11.2017	Dept of EEE, National Engg. College, Kovilpatti	35

### **2.3 Online Certification Completed:**

S. No	Certification	Period	Organizers	Remarks
1.	COURSERA –Advanced Study of Protection Schemes and Switchgear	April 2023 (4 weeks) L&T EduTech		95%
2.	NPTEL Online Certification on, "Power System Protection and Switch Gear"	July-Sep (2021)	Tuly-Sep (2021) Indian Institute of Technology (IIT), Roorkee.	
3.	COURSERA- Safety in the Utility Industry	October 2021 (4 Weeks) University at Buffalo		98.75%
4.	UDEMY- Fundamental of Electrical Power System Protection	May 2021		
5.	NPTEL Online Certification on "Advances in UHV Transmission and Distribution"	Sep-Nov 2020 (8 Weeks)	- Science (IINC)	
6.	COURSERA- Introduction to Solar Cells	June 2020 (5 Weeks)	University of Denmark (DTU)	94.5%

7.	MATLAB Online Certification on "MATLAB Fundamentals"	May 2020	Mathworks Training Services	
8.	UDEMY- Power Management in India & Basic Concepts of Solar Photovoltaic Module	April 2020		
9.	MATLAB Online Certification on "Machine Learning Onramp"	April 2020 Mathworks Training Services		
10.	COURSERA- Electric Power Systems	March 2020 (4 Weeks)	University at Buffalo The State University of New York	
11.	MATLAB Online Certification on "MATLAB Onramp"	December 2019	Mathworks Training Services	
12.	COURSERA-Programming for Everybody (Getting Started with Python)	December 2019(4 Weeks)	University of Michigan 98%	
13.	NPTEL Online Certification on "Recent Advances in Transmission Insulators"	August – September 2018 (4 Weeks)	Indian Institute of Science (IISC), Elite Bangalore	
14.	NPTEL Online Certification on "Power System Engineering"	January-April 2018 (12 Weeks)	Indian Institute of Technology (IIT), Elite Kharagpur	
15.	NPTEL Online Certification on "Electrical Machines-I"	July-October 2017 (12 weeks)	ber Indian Institute of Technology (IIT), Scored	
16.	NPTEL Online Certification on "Introduction to Research"	January- February 2016 (10 Hours)	Indian Institute of Technology (IIT), Madras	Elite

# 2.4 Industrial Training Attended:

S. No	Training Details	Period	Company Details
1	Faculty Industrial Training on power system and insulation coordination study	20 <sup>th</sup> -24 <sup>th</sup> Feb 2023	4A Design & Engineering Pvt.Ltd, Chennai
2	Faculty Industrial Training on Transformer Manufacturing and Testing	28 <sup>th</sup> Feb – 4 <sup>th</sup> Mar 2022	Padmavahini Transformers private Limited, Coimbatore.
3	Faculty Industrial Training on Transformer Manufacturing and Testing	19 <sup>th</sup> - 23 <sup>rd</sup> November 2018	Shree Abirami Enggineering works, Chennai.
4	Faculty Industrial Training on High Voltage Testing Techniques	5 <sup>th</sup> – 9 <sup>th</sup> June 2017	Global Power Research Institute, NABL Certfitied Lab, Cuddalore.

Γ	5	Industrial Training Programme on	05.12.2017	Mahindra Research Valley, Chennai.
		"Design and Validation of		
		Automobile Parts".		

### 3. Research Achievements

### 3.1 International Journal Publication

S.No	Title of the Paper	Name of the Journal	Vol. No. & Page No.	Month & Year
1.	Automatic Fish Feeder System	International Journal of Innovative Technology and Exploring Engineering (IJITEE)	Volume-9 Issue-5, Page No. 70-72.	March 2020
2.	Investigation of Flashover Performance on 22kV Bushing with Non-Uniform Pollution	International Journal of Applied Engineering Research (IJAER) – Annexure -II	ISSN 0973- 4562 Vol. 10 No.20	March 2015

# **3.2 International Conference Publication**

S. No	Title of the Paper	Name of the Conference	Organizer	Month & Year	Publication
1	Automatic Billing Trolley for an enhanced supermarket using RFID	7th International Conference on Computing Methodologies and Communication (ICCMC)	Surya Engineering College, Erode.	04 April 2023	IEEE Xplore Digital Library. DOI: <u>10.1109/ICC</u> <u>MC56507.202</u> <u>3.10083555</u>
2	Investigation of Electric field distribution on a 33kV polymeric insulator under polluted conditions using Finite Element Method	4th International Conference on Circuits, Control, Communication and Computing (I4C)	Ramaiah Institute of Technology, Bangalore	21-23 December 2022	<b>IEEE</b> Xplore Digital Library. <b>DOI:</b> <u>10.1109/I4C5</u> <u>7141.2022.10</u> <u>057935</u>
3	Investigation of High Voltage dielectric barrier and their effect on breakdown voltage using Numerical method	4th International Conference on Circuits, Control, Communication and Computing (I4C)	Ramaiah Institute of Technology, Bangalore	21-23 December 2022	IEEE Xplore Digital Library. DOI: <u>10.1109/I4C5</u> <u>7141.2022.10</u> <u>057682</u>

4	Automatic Indoor Hydroponic Plant Grow Pot using Arduino	IEEE- International Conference on Artificial Intelligence and Smart Systems (ICAIS 2021)	JCT College of Engineering and Technology, Coimbatore	23-25, February 2022	IEEE Xplore Digital Library. DOI: <u>10.1109/ICAI</u> <u>\$53314.2022.</u> <u>9742782</u>
5	Car Parking Allocation System using Arduino	IEEE- International Conference on Artificial Intelligence and Smart Systems (ICAIS 2021)	JCT College of Engineering and Technology, Coimbatore	25-27, March 2021	<b>IEEE</b> Xplore Digital Library. <b>DOI:</b> <u>10.1109/ICAI</u> <u>\$50930.2021.</u> <u>9395865</u>
6	Dimensionality Reduction and Feature Extraction using Image processing techniques for classification of Single Partial Discharge Patterns	RTU TEQIP-III Sponsored, 3 <sup>rd</sup> International Conference on Communication and Computational Technologies (ICCCT 2021)	Rajasthan Institute of Engineering and Technology, Jaipur & Rajasthan Technical University Kota	27 <sup>th</sup> & 28 <sup>th</sup> February 2021	Springer Book Series, <b>'Algorithms</b> <b>for</b> <b>Intelligent</b> <b>Systems'</b> <u>DOI:</u> <u>10.1007/978-</u> <u>981-16-3246-</u> <u>4_33</u>
7	Investigation of Pollution severity and dry and characteristics on 11KV composite Insulator	2020 IEEE International Conference on Advances and Developments in Electrical and Electronics engineering (ICADEE 2020)	Karpagam College of Engineering, Coimbatore	10 <sup>th</sup> & 11 <sup>th</sup> December 2020	<b>IEEE</b> Xplore Digital Library. <b>DOI:</b> <u>10.1109/ICA</u> <u>DEE51157.20</u> <u>20.9368945</u>
8	Prediction of flashover voltage on 11kV Composite Insulator using Kernel Support Vector Machine	International Conference on Soft Computing for Problem Solving – (Springer)	VIT Vellore	17th – 19th December 2018	Springer Book series- Advances in Intelligent Systems and Computing, Vol. 1057 DOI:10.1007/ 978-981-15- 0184-5_5
9	Investigation of Flashover Performance on 22kV RTV Coated Bushing Under Non-Uniform Coastal Pollution	IEEE International Conference on Electrical Energy Systems, ICEES 2018	SSN College of Engineering, Chennai	7 <sup>th</sup> – 9 <sup>th</sup> February 2018.	IEEE Xplore Digital Library. <b>DOI:</b> <u>10.1109/ICEE</u> <u>S.2018.84432</u> <u>39</u>

10	Investigation of Non-Uniform Pollution on RTV Coated Bushing.	IEEE International Conference on Electrical, Computer and Communication Technologies, ICECCT 2015	SVS College of Engineering Coimbatore	05 <sup>th</sup> - 07 <sup>th</sup> March 2015	IEEE Xplore Digital Library. <b>DOI:</b> <u>10.1109/ICEC</u> <u>CT.2015.7226</u> <u>002</u>
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### 4. Courses taught:

Course Title		
Basic Electrical and Electronics Engineering, AC Rotating Machines, Digital	U.G	
Logic Circuits, Electrical Power Systems, High Voltage Engineering, CAD	(Theory)	
of Electrical Apparatus.		
Basic Electrical Engineering laboratory, Electrical Machines Laboratory,	U.G (Lab)	
Integrated Circuits Laboratory, Engineering Practices Laboratory, Power		
system simulation and High Voltage Laboratory.		
Electro Magnetic Interference and Electro Magnetic Compatibility, High	P.G	
Voltage Labaratory		

### 5. Additional Responsibilities held

- Junior Jaycee- Coordinator
- International Studies (Member)
- Board of Studies (Asst)
- Industry Institution Interaction (Asst)
- Social Awareness Cell (Asst)
- Department Placement (Asst)
- Department Minutes of Meeting (Asst)