P E S College of Engineering, Mandya

(An Autonomous Institution, affiliated to VTU, Belagavi)

Faculty Profile

General

Name	Dr. MAHESH KUMAR K M	
Department & Affiliated Institution	Department of Electrical & Electronics Engineering P.E.S College of Engineering, Mandya–571 401	
Present Serving as	Associate Professor & Head Dept. of E&E Engineering P.E.S College of Engineering Deputy Dean (Research) P.E.S College of Engineering Mandya -571 401	
Research Area	High Voltage Insulation Engineering	
Contact Number	+91 9036803007	
Email ID	maheshkm@pesce.ac.in / maheshkm01@gmail.com	

AcademicProfile

EducationalQualifications

Degree	College	University	Yearof Passing	Class
Ph. D.	P.E.T Research Foundation, Mandya	UoM, Mysore	2022	Awarded
M. Tech.	BMSCE, Bangalore	VTU, Belagavi	2009	First Class
B.E.	PESCE, Mandya	VTU, Belagavi	2007	First Class

Professional Experience

Organization & Department	Designation	Period
PESCE, Mandya	Associate Professor & Head	01-04-2023 to till date
PESCE, Mandya	Associate Professor	20-10-2022 to till date
PESCE, Mandya	Assistant Professor	05-07-2010 to 19-10-2022

Academics	Description of Academic records
Teaching Records (Details of courses taught)	Basic Electrical Engineering, Analog Electronics Circuits, Electrical Machines, Embedded Systems, Programmable Logic Circuits & SCADA , High Voltage Engineering, Data Structures using C, Data Communication and Networking

Research Publications in Refereed Journals and Conferences

Publications in	Numbers
Journals	*07*
Conferences	*02*
Patents	*03 (Indian Patent) +01 Design Patent (Applied)*
Book Publication	*01 (Co-Author)*

Other Important Responsibilities held in the College

2. AICTE Activity Point Coordinators

Membership of Professional Societies

1. Member of Indian Society of Technical Education (ISTE)

2. Member of Institute of Engineers (IEI)

3. Member of Institute of Smart Structures and Systems (ISSS)

List of FDP Attended in last three years (2020-2023)

Sl. NO	Name of the course	Date	Duration	Place	Sponsored agency
1.	Synthesis, Characterization and Application of advanced materials	27/01/2020 to 31/01/2020	1 week	PESCE, Mandya	TEQIP-3
2.	Power Train and Electromagnetic Transients	18/01/2020 to 19/01/2020	2-Days	New Horizon College of Engineering, Bangalore	NHCE, Bangalore
3.	Latex & Xfig	15/06/2020 to 19/06/2020	1 week	online mode Calcutta Institute of Technology, West Bengal	IIT Bombay spoken tutorial
4.	Power Electronic Applications to Renewable energy systems and Energy storage systems	06/07/2020 To 10/07/2020	1 week	NIE, Mysore online mode	TEQIP-3
5.	Electric Power Grid Modernisation: Trends, Challenges and Opportunities	20/07/2020 to 24/07/2020	1 week	NIE, Mysore online mode	TEQIP-3
6.	Contemporary Scenario in Power Systems	25/07/2020 to 30/07/2020	1 week	ATME College of Engineering, Mysuru	ATME College
7.	Research: New Avenues for Budding Researchers	01/08/2020 to 02/08/2020	2-Days	UVCE, Bangalore	UVCE
8.	Renewable energy and smart grid: Challenges and scope	24/08/2020 to 28/08/2020	1 week	PESCE, Mandya	TEQIP-3
9.	Control Systems & Sensors Technology	5/10/2020 to 9/10/2020	1 week	UVCE, Bangalore online mode	AICTE Training And Learning (ATAL) Academy
10.	Smart City: Recent Developments in Smart City (SMART-2020)	23/11/2020 to 28/11/2020	1 week	Sri Siddhartha Institute of Technology, Tumakuru	AICTE
11.	Essential Skills and Technologies for Quality Research	30/03/2021 to 03/04/2021	1 week	Online mode PESCE, Mandya	TEQIP-3
12.	Electrical Paradigm Shift to Cyber Physical Systems and Contemporary Research in Electrical and Electronics Engineering	03.05.2021 to 15.05.2021	2 week	Online mode Saranathan College of Engineering, Tiruchirapalli, Tamil Nadu	AICTE
13.	Developing Effective Research Skills	09/08/2021 to 13/08/2021	1 week	Online mode PESCE, Mandya	AICTE Training And Learning (ATAL) Academy
14.	Industrial Automation using PLC Programming	07/02/2022 to 11/02/2022	1 week	MSME Technology Centre, Ludhiana (Central Tool Room, Ludhiana)	AICTE Training And Learning (ATAL) Academy
15.	Recent Advancements in Sustainable Development through Renewable Energy Systems	07.03.2022 to 16.03.2022	2 week	Online mode Govt. Engineering College Bikaner	TEQIP-3
16.	Advanced Computational Methods in the Energy & Power Sector	*21.03.2022 to 25.03.2022*	1 week	Online mode Govt. Engineering College Bikaner	TEQIP-3
17.	Trends and challenges in the development of Electrical vehicles and Hybrid electrical vehicles (series2)	*14th - 18th, November 2022*	1- Week	Lendi Institute of Engineering and Technology, INDIA	Lendi Institute
18.	Recent Trends in Power Electronics and Power Systems	*March 20-25, 2023*	1- Week	NIE, Mysore	NIE, Mysore

LIST OF PUBLICATIONS

1. Mahesh Kumar K M, "Experimental investigation of partial discharge patterns of Mineral oil and synthetic ester oil", Advanced Engineering Science, Volume 54, Issue 02, December, 2022, ISSN: 2096-3246
2. Mahesh Kumar K M, "Modeling and simulation of partial discharge and calibration Circuit for void in solid insulation", Journal of Data Acquisition and Processing Vol. 38 (1) 2023.https://sjcjycl.cn/ DOI: 10.5281/zenodo.7735496, ISSN: 1004-9037
3. Mahesh Kumar K M, Dr. B. Ramachandra, "Design of Matching Impedance and Amplifier Circuit for Partial Discharge Measurement" International Journal of Advanced Science and Technology, vol. 29, no. 7s, (2020), pp. 2020-2026; http://sersc.org/journals/index.php/IJAST/article/view/12581
4. Mahesh Kumar K M, Dr. B. Ramachandra, L. Sanjeev Kumar, "Analysis of Partial Discharge Patterns of Natural Ester Oil and Mineral Oil Used in Power Transformer", Materials Today Proceedings an Elsevier Journal ISSN: 2214 53, 2001, https://doi.org/10.1016/j.matpr.2020.12.868
5. Mahesh Kumar K M, Dr. B Ramachandra, Dr. L Sanjeev Kumar "A Comparative Study of Partial Discharge Pulse Time Characteristics of paper Insulation Impregnated with Mineral Oil, Natural Ester and Synthetic Ester Oil", Turkish Online Journal of Qualitative Inquiry (TOJQI) Volume 12 No. 6, July 2021: 5626- 5636, https://www.tojqi.net/index.php/journal/article/view/2380
6. Mahesh Kumar K M, Dr. B. Ramachandra, Dr. L. Sanjeev Kumar "Analysis of Phase Resolved Partial Discharge Patterns of Kraft Paper Insulation Impregnated in Transformer Mineral oil" IEEE 2020 International Conference on Smart Electronics and Communication (ICOSEC), Trichy, India, 2020, pp. 1157-1161, doi: 10.1109/ICOSEC49089.2020.9215344
7. Mahesh Kumar K M, Dr. B. Ramachandra "Calibration of Partial Discharge Measuring System by a Reference Square Wave", Test Engineering & Management, January-February 2020 ISSN: 0193-4120 Page No. 16276 – 1628 https://www.testmagzine.biz/index.php/testmagzine/article/view/3393
8. Mahesh Kumar K M, Dr. B Ramachandra "Breakdown Voltage and Partial Discharge Inception and Extinction Voltage Variations in Mineral, Natural and Synthetic Ester Oils", Turkish Online Journal of Qualitative Inquiry (TOJQI) volume 12, Issue 7, July 2021: 6715-6722, https://www.tojqi.net/index.php/journal/article/view/4907
9. Mahesh Kumar K M, Dr. P S Puttaswamy, "Design and Implementation of An Efficient Soft Switching Inverter Fed AC Drive", International Research Journal of Engineering and Technology (IRJET), Volume: 04 Issue: 01 | Jan -2017, e-ISSN: 2395 -0056 Page No. 1164-1168.
10. Mahesh Kumar K M, "PLC Based Closed Loop Speed Control Of DC Shunt Motor", International Journal of Advanced Engineering Research and Applications, Volume 2, Issue 9 Pages 575-582.
11. Mahesh Kumar K M, Dr. B Ramachandra "Speed Control of Three Phase Induction Motor Using PLC under Open and Closed Loop Condition" Int. Journal of Engineering Research and Application, ISSN: 2248-9622, Vol. 7, Issue 1, (Part -4) January 2017, pp.34-39

PATENTS:

1. IOT Based Smart Wearable Suit For Self Health Assessment In Post Covid Era India Patent, Application No.202141030202 A, Publication Date: 16/07/2021
2. A novel inverter topology for solar photovoltaic converter, INDIA Patent, Application No. 202141035939 A, Publication Date: 13/08/2021
3. Title of the invention : Power Supply Systems For Lower Voltage Auxiliary Systems On An Electric Vehicle That Use Power Drawn From A High Voltage Bus, Application, No.202241075091
4. Design patent: High Voltage Partial Discharge Pulse Capturing Impedance and Amplifier Device, Ref. No. 382291-001, C.B.R No. 203794

Book Publication:

1. Co-Author for Book Titled: "OPERATING ELECTRIC VEHICLE", Publisher: AGPH Books, ISBN-978-93-95936-14-9

Others:

- As a resource person delivered Technical talk on "PLC & SCADA" to Students and faculties of SJB Polytechnic, Bellur cross, Nagamangala Taluk, Mandya

- As a resource person delivered complete Course on "PSPICE SIMULATION SOFTWARE" from from 2nd July to 6th July 2019 for students of Electrical Engineering, Electronics & communication Engineering, Instrumentation & Electronics Technology Engineering branches of Uma Nath Singh Institute of Engineering and Technology, Jaunpur, Uttar Pradesh

- As a resource person delivered technical talk on Embedded System on 2 day "Build your Project" workshop of AI & ML Dept., City Engineering College, Bangalore on 31st July 2023