# FACULTY PROFILE


Name of the Staff : **K.KARTHIK KUMAR**

Official Address with E-mail Id : Assistant Professor,
EEE Department,
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## 1. PERSONAL DETAILS

Age as on 13.07.2024 : 28 years 7 months 21 days
Date of Birth : 22/11/1995
Sex & Marital Status : Male & Unmarried
Citizenship : Indian
Qualification : M.E.,
Date of joining : 10/06/2019
Present status : Assistant Professor

## 2. QUALIFICATION

| Degree | Programme and Specialization | Class | Month &Year of Passing | Institute/University |
|---|---|---|---|---|
| PhD | Power Electronics and Drives | - | Pursuing | Anna University, Chennai |
| M.E | Power Electronics and Drives | I Class with distinction (Rank Holder) **(95.2%)** | April 2019 | Mepco Schlenk Engineering College, Sivakasi./ Anna University |
| B.E | EEE | I Class **(81.9%)** | April 2017 | Mepco Schlenk Engineering College, Sivakasi./ Anna University |

## 3. TEACHING EXPERIENCE

| Designation | Institution/ Organization | Period | Nature of Duties |
|---|---|---|---|
| Assistant Professor | National Engineering College, Kovilpatti. | 10-06-2019 to present | Teaching and Research |
| Teaching Experience as of 13.07.2024 | | | 5 Years 1 Months |

## 4. ACADEMIC ACTIVITIES:

### 4.1 Courses taught:

| Course Title | U.G. or P.G. |
|---|---|
| • Basic Electrical & Electronics Engineering (15 Regulation)<br>• Basic Electrical & Electronics Engineering (19 Regulation)<br>• Digital signal processing & its applications (15 Regulation)<br>• Electrical circuit analysis (19 regulation)<br>• Energy Auditing and Management (15 Regulation)<br>• Project management and finance (15 Regulation)<br>• Electric Vehicle Machines and Drives (19 regulation)<br>• Power Quality (15 Regulation)<br>• Battery Mangement Systems and Modeling<br>• Autonomos Intelligent Vehicle<br>• Basic Electrical & Electronics Engineering (23 Regulation)<br>• Fundamendals of Electrical & Electronics Engineering (23 Regulation) | U.G |

### 4.2 Workshops/Seminars/FDPs/Webinar Attended:

| S.No | Date | Title | Venue |
|---|---|---|---|
| 1 | 1st-3rd March 2018 | Three day workshop on **"Industrial Automation using PLC,HMI& Drives"** | Mepco Schlenk Engineering College, Sivakasi |
| 2 | 16th-17th April 2018 | Two days National Workshop on **"Modeling and Closed Loop Control of Permanent Magnet Machines Using MATLAB"** | Mepco Schlenk Engineering College, Sivakasi |
| 3 | 19th-21st April 2018 | Three days' workshop on **"Role of Virtual Instrumentation in Power Quality Issues using LabVIEW"** | Mepco Schlenk Engineering College, Sivakasi |
| 4 | 13th-15th June 2018 | Three days workshop on **"Power Converters and its Applications"** | Kamaraj College of Engineering and Technology |
| 5 | 7th-8th January 2019 | Two days National Workshop on **"Productive Tools for Writing Journals and Articles"** | AAA College of Engineering and Technology |
| 6 | 1st-2nd March 2019 | Two days Technical Seminar on **"IoT in 5G Wireless Communication"** | Mepco Schlenk Engineering College, Sivakasi |
| 7 | 5th – 9th June, 2020 | FDP on **"Emerging Research Area in Engineering"** | SRM Institute of Science and Technology |

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|---|---|---|---|
| 8 | 27th – 31st July, 2020 | FDP on **"Research Perspectives of Artificial Intelligence in Electrical Engineering"** | SRI Ramakrishna Institute of Technology |
| 9 | 24th – 28th Aug, 2020 | FDP on **"Practical challenges in the design and development of EVs"** | NIT, Calicut |
| 10 | Jul-Oct 2021 | FDP on **"Electric Vehicles and Renewable Energy"** | NPTEL, IIT Madras |
| 11 | 1st -3rd June 2021 | FDP on **"Impact of Controllers in Power Electronics Converter for Electric Vehicles"** | Dr.N.G.P.Institute of Technology, Coimbatore |
| 12 | 16th June 2021 | Webinar on **"IEEE Xplore"** | EBSCO |
| 13 | 19th -23rd July 2021 | FDP on **"Recent Advances in E-Mobility and Charging"** | NIT, Trichy |
| 14 | 23rd to 25th Sep 2021 | FDP on **"Capacity Building of Students On Environmental Health"** | Ayya Nadar Janaki Ammal College |
| 15 | 23rd 30th Dec 2021 | FDP on **"Grid connected Electric Vehicle charging station with renewable energy power"** | AVC College of Engineering |
| 16 | 23rd -28th Aug 2021 | FDP on **"Digital Teaching Methods in Higher Education"** | Hidusthan College of Arts and Science |
| 17 | 18th -22nd Oct 2021 | Workshop on **"Smart Grid Empowering Smart Cities"** | NIT, Calicut |
| 18 | 18th Jan 2022 | Webinar on **"IEEE Xplore"** | EBSCO |
| 19 | 15th -21st SEP 2022 | FDP on **"Next Generation Application in Electrical and Electronics Engineering"** | NIT, Patna |
| 20 | 26th 29th SEP 2022 | FDP on **"Renewable Energy Systems Laboratory"** | SSN college of Engineering, Chennai |
| 21 | 17th – 21stOCT 2022 | FDP on **"Design and Development of Electric Vehicles: Research Challenges and Opportunities"** | Govt. College of Technology, Coimbatore. |
| 22 | Jul-Aug 2023 | FDP on **"Design Thinking - A Primer"** | IIT madras |
| 23 | 28/08/2023 to 01/09/2023 | FDP on **"Smart Grid and Integration of Distributed Generation"** | NITTTR, Chandigarh |

### 4.3 Industrial Training/ Industry Know How Programme attended:

| S.No | Title | Period | Venue |
|---|---|---|---|
| 1 | Industrial Training service on **"State flow for logic driven system modelling, Modelling physical systems with simscape, Customized course (BMS)"** | 4th – 7th Jan, 2021 | Mathworks |
| 2 | Industrial Training on **"Master class on EV design using MATLAB"** | 23rd Aug. to 21st Sep 2021 | Pantech e learning Pvt |
| 3 | Industry Know How – **"Green Solar Technology"** | 21st – 23rd Mar, 2022 | Green Solar Tech, Madurai |
| 4 | Industry Know How – **"Vike Bike India Pvt Ltd"** | 13th -17th Jan, 2023 | Vike Bike India Pvt Ltd, Theni |
| 5 | Industry Know How –**"Indus Electronics India Pvt Ltd"** | 5th – 09thMar 2024 | Indus Electronics India Pvt Ltd, Coimbatore |

### 4.4 Short term Courses

| Sl. No | Couse title | Certified by | Duration |
|---|---|---|---|
| 1 | MEPEXPO'16 | ***Mepexpo'16 by Mepco Schlenk Engineering College*** | 19-08-2016 to 20-08-2016 |
| 2 | Business English Certificate - Vantage | ***University Of Cambridge, UK*** | 03 to 18-02-2016 and 26-04-2016 |
| 3 | GETS-level 5 | ***Global English Testing Service*** | 02 to 03.03.2018 and 21.03.2018 |

### 4.5 Online Certification Completed:

| S. No | Certification | Period | Organizers | Remarks |
|---|---|---|---|---|
| 1. | NPTEL - Online Certification on ***"Technical English for Engineers"*** | Sep-Nov 2018 (8 Week) | Indian Institute of Technology (IIT), Madras | Successfully completed |
| 2. | NPTEL - Online Certification on ***"Body Language: Key to Professional Success"*** | July-September 2019 (4 Week) | Indian Institute of Technology Roorkee | Successfully completed with Elite |
| 3. | Coursera - ***"Introduction to Power Electronics"*** | July – Aug 2019 (5 Weeks) | University of Colorado | Successfully completed with 90% Grade |
| 4. | Open Learn - ***"Biofuels"*** | July-September 2019 (4 Weeks) | The Open University | Successfully completed |
| 5. | Udemy - ***"8051 Microcontroller"*** | August - September 2019 (2 Hours) | Udemy | Successfully completed |

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|---|---|---|---|---|
| 6. | Udemy - ***"Basic of Electric Circuits"*** | Sep 2019 (4 Hours) | Udemy | Successfully completed |
| 7. | Udemy - ***"Engineering simulation with SimScale: Drone Aerodynamics"*** | Oct 2019 (4 Hours) | Udemy | Successfully completed |
| 8. | Udemy ***"Introduction to FPGA's and prototyping with the Elbert"*** | Oct 2019 (5 Hours) | Udemy | Successfully completed |
| 9. | Udemy - ***"Start Kali Linux, Ethical Hacking and Penetration Testing"*** | Nov 2019 (4 Hours) | Udemy | Successfully completed |
| 10. | Udemy - ***"Build your own Super Computer with Raspberry Pis"*** | Dec 2019 (3 Hours) | Udemy | Successfully completed |
| 11. | Mathworks - ***"MATLAB Onramp"*** | Jan 2020 (5 Hours) | Math Works | Successfully completed with 100% Grade |
| 12. | Mathworks - ***"Machine Learning Onramp"*** | Jan 2020 (8 Hours) | Math Works | Successfully completed with 100% Grade |
| 13. | Coursera - ***"Introduction to Programming with MATLAB"*** | Feb 2020 (6 Week) | Vanderbilt University | Successfully completed with 100% Grade |
| 14. | Udemy - ***"LEGO mind storms EV3 Robotics"*** | April 2020 | Udemy | Successfully completed |
| 15. | Coursera - ***"Electric Power system"*** | April – May 2020 | The state university of New York | Successfully completed with 95% Grade |
| 16. | Coursera - ***"Introduction to Solar cells"*** | April – May 2020 | Technical University of Denmark | Successfully completed with 98% Grade |
| 17. | Coursera - ***"Introduction to battery management systems"*** | April – May 2020 | University of Colorado | Successfully completed with 91.9% Grade |
| 18. | Coursera - ***"Motors and its control circuits"*** | Sep-Oct 2020 | University of Colorado | Successfully completed with 90% Grade |
| 19. | NPTEL – ***"Fundamentals of electrical engineering"*** | Sep-Dec 2020 | IIT, Kharagpur | Elite |
| 20. | Mathworks ***"Control Design Onramp with Simulink"*** | Oct-2021 | Mathworks | Successfully completed |
| 21. | Mathworks **"Signal Processing Onramp"** | Oct-2021 | Mathworks | Successfully completed |
| 22. | Coursera ***"Electric Vehicles and Mobility"*** | Jan-2022 | Paris Tech | Successfully completed with 98% Grade |
| 23. | NPTEL-**"Electric Vehicle and Renewable energy"** | Jul-Oct 2021 | IIT Madras | Successfully completed |
| 24. | Coursera **"Introduction to Self-Driving Cars"** | May-2023 | University of Toronto | Successfully completed with 98.9% Grade |
| 25. | NPTEL-**"Recent Advances in Transmission Insulators"** | Jan-Feb 2023 | IIT Madras | Successfully completed |
| 26. | NPTEL- **"Smart Grid: Basics to Advanced Technologies"** | Jul-Oct 2023 | IIT Roorkee | 60% |
| 27. | NPTEL- **"Design Thinking - A Primer"** | Jul-Aug 2023 | IIT Madras | 69% |

### 4.5 Short term Courses / Seminars / Conference/ Workshops Organized:

| S. No | Course Title | Period | venue | Participants |
|---|---|---|---|---|
| 1. | ***MATLAB Onramp*** | 1 Day December 2019 | National Engineering College, Kovilpatti. | 20 |
| 2. | ***MATLAB PROGRAMMING CONTEST – PART I*** | 13.10.2020 (Tuesday) | National Engineering College, Kovilpatti. | 49 |
| 3. | ***MATLAB simulink Demo*** | 24.10.2020 | National Engineering College, Kovilpatti. | 42 |
| 4. | ***MATLAB Cody contest 2020*** | Sep-Dec 2020 | National Engineering College, Kovilpatti. | 150 Registered, and received medals |
| 5. | ***Careers at MATLAB – part I*** | 2 Hours, 06.11.2020 | National Engineering College, Kovilpatti. | 20 |
| 6. | ***MATLAB simulink Onramp*** | 1 day Jan 2021 | National Engineering College, Kovilpatti. | 65 |
| 7. | Value-added course on ***"BASICS OF MATLAB & ITS APPLICATIONS"*** | ODD semester 2021-22 | National Engineering College, Kovilpatti. | 65 |
| 8. | Value-added course on ***"BASICS OF MATLAB & ITS APPLICATIONS"*** | ODD semester 2022-23 | National Engineering College, Kovilpatti. | 50 |
| 9. | Value-added course on ***"BASICS OF MATLAB & ITS APPLICATIONS"*** | ODD semester 2023-24 | National Engineering College, Kovilpatti. | 30 |

## 5. RESEARCH PAPER PUBLICATIONS

### 5.1 International Conference Publication

| Sl. No | Date | Paper title | Conference | Publication |
|---|---|---|---|---|
| 1 | 23rd March 2019 | "Efficiency Enhancement of Isolated Quasi Y-Source DC/DC Boost Converter for EV Battery Charging Application" | 2019 IEEE International Conference on Innovations in Communication, Computing and Instrumentation (ICCI 2019) | IEEE Digital Explorer Library |
| 2 | 4th -5th May 2018 | "Design and Simulation of DC-DC Interleaved ZETA Converter for Renewable Applications" | International Conference on Recent Advancements in Electrical, Electronics and Control Engineering (IConRAEeCE'18) - 4th & 5th May, 2018 Department of EEE, Mepco Schlenk Engineering College (Autonomous), Sivakasi. | IConRAEeCE'18 |
| 3 | 31st Mar – 1st April 2021 | Performance analysis of PI Controller based modern boosting topology for EV battery charging applications | International E- Conference on Recent advances in computation, communication, Internet of Things and Artificial Intelligence | Conference Proceedings |
| 4 | 31st Mar – 1st April 2021 | Vehicle Theft Detection using GSM and GPS | International E- Conference on Recent advances in computation, communication, Internet of Things and Artificial Intelligence | Conference Proceedings |
| 5 | 31st Mar – 1st April 2021 | Smart Garbage Systems | International E- Conference on Recent advances in computation, communication, Internet of Things and Artificial | Conference Proceedings |

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|---|---|---|---|---|
| | | | Intelligence | |
| 6 | 8th July 2021 | Design and Development of Closed Loop PI Controlled solar integrated modified A source dc to dc Boosting Topology for standalone battery charging system | 2021 6th International Conference on Communication and Electronics Systems (ICCES) (10.1109/ICCES51350.2021.9488941) | IEEE Explore |
| 7 | 23 September 2021 | Steady state and Dynamic performance investigation of Solar interlinking BLDC motor for electric vehicle application | 2021 Second International Conference on Electronics and Sustainable Communication Systems (ICESC) 10.1109/ICESC51422.2021.9532830 | IEEE Explore |
| 8 | 20 January 2022 | 13-level Inverter Configuration with a Reduced Auxiliary Circuit for Renewable Energy Applications | 2021 5th International Conference on Electronics, Communication and Aerospace Technology (ICECA) 10.1109/ICECA52323.2021.9675929 | IEEE Explore |
| 9 | 30 March 2022 | A Survey on various Electric Vehicle batteries – Battery power management and performance monitoring system | 2022 Second International Conference on Artificial Intelligence and Smart Energy (ICAIS) 10.1109/ICAIS53314.2022.9743050 | IEEE Explore |
| 10 | 29 July 2022 | Design and Implementation of a Solar Energy-Supported Standalone Electric Vehicle Charging Point/Panel using MVO Optimization | 2022 7th International Conference on Communication and Electronics Systems (ICCES) 10.1109/ICCES54183.2022.9835900 | IEEE Explore |
| 11 | 20/10/2022 | An improved Dual Active Bridge Power Converter for EV batteries | 2022 3rd International Conference on Smart Electronics and Communication (ICOSEC) 10.1109/ICOSEC54921.2022.9951950 | IEEE Explore |
| 12 | 23-25 January 2023 | An Automatic Solar Panel Performance Monitoring System and Load Control using IoT Technique | 2023 5th International Conference on Smart Systems and Inventive Technology (ICSSIT) 10.1109/ICSSIT55814.2023.10060886 | IEEE Explore |
| 13 | 23-25 January 2023 | A Novel Converter Design for Energy Management in Electrical Vehicles | 2023 5th International Conference on Smart Systems and Inventive Technology (ICSSIT) 10.1109/ICSSIT55814.2023.10061018 | IEEE Explore |
| 14 | 02-04 February 2023 | Exploiting Reliable Power from Independent PV-Battery Systems by Combining Improved INC with Power Management Circuitry | 2023 Third International Conference on Artificial Intelligence and Smart Energy (ICAIS) 10.1109/ICAIS56108.2023.10073825 | IEEE Explore |
| 15 | 23-25 February 2023 | Smart Grid Peer-to-Peer Exchanging Energy System using Block Chain | 2023 7th International Conference on Computing Methodologies and Communication (ICCMC) 10.1109/ICCMC56507.2023.10084032 | IEEE Explore |
| 16 | 23-25 February 2023 | Exploring Innovative IoT Solutions for Automated Battery Condition Detection in Electric Vehicles | 2023 7th International Conference on Computing Methodologies and Communication (ICCMC) 10.1109/ICCMC56507.2023.10083663 | IEEE Explore |
| 17 | 02-04 March 2023 | Smart Attendance System using RFID and Raspberry Pi | 2023 Second International Conference on Electronics and Renewable Systems (ICEARS) 10.1109/ICEARS56392.2023.10085186 | IEEE Explore |
| 18 | 24 May 2023 | Independent PV-Battery Systems by Combining Autonomous Incremental Conductance Particle Swarm Technique with a Power Management Circuitry | 2023 7th International Conference on Trends in Electronics and Informatics (ICOEI) (10.1109/ICOEI56765.2023.10125591) | IEEE Explore |
| 19 | 2024/4/9 | Enabling Sustainable Urban Energy: Innovating an IoT-Integrated Hysteresis-Controlled Photovoltaic Panel Controller for | 2024 5th International Conference on Recent Trends in Computer Science and Technology (ICRTCST) (10.1109/ICRTCST61793.2024.10578396) | IEEE Explore |

| | | | | |
|---|---|---|---|---|
| | | Maximizing Solar Electric Harvesting | | |
| 20 | | Solar Brilliance: Revolutionizing Electric Mobility with the Quasi-Quadratic Converter for Optimal Charging Efficiency | 2024 Third International Conference on Distributed Computing and Electrical Circuits and Electronics (ICDCECE) (10.1109/ICDCECE60827.2024.10548150) | IEEE Explore |

## 5.2 International Journal Publication

| S. No | Title of the Paper | Name of the Journal | Volume & Issue | Month &Year of Publication |
|---|---|---|---|---|
| 1 | Power Quality Analysis of Single Phase Full Bridge Rectifier Fed DC Motor Drive | International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering(IJIREEICE) | Vol.6, Issue 11, November 2018 | November 2018 |
| 2 | Performance Analysis of Three-Phase Two Quadrant Controlled Converter for DC Load Applications | International Journal of Scientific Research in Science and Technology (IJSRST) | Volume 6, Issue 2, pp. 679-685, March-April 2019. | April 2019 |
| 3 | Efficiency enhancement of Solar PV Powered Micro-integrated High Frequency Isolated Vehicle Battery Charging Converter | International Journal of Power Electronics and Drive System (IJPEDS) | **Scopus Indexed** ( Vol. 10, No. 2, June 2019, pp. 953~960) | June 2019 |
| 4 | 'Optimization of Various Natural Ester Oils Impregnated Nomex Paper Performance in Power Transformer Applications under Different Ageing Conditions' | International Journal of Recent Technology and Engineering (IJRTE) | **Scopus Indexed** (Volume-8 Issue-3, September 2019. Page No.: 6245-6251) | September 2019 |
| 5 | Stability Analysis Of Solar Assisted dc-dc Y-Source Boosting Topology Using State-Space Model | Sylwan | **Annexure-I** (Volume 163, Issue 12, pp. 550-568) **Impact factor=0.623** | November 2019 |
| 6 | High Efficient Solar Integrated an Isolated Dc-Dc Full-Bridge Converter for Electric Vehicle Battery Charging Application | International Journal of Innovative Technology and Exploring Engineering (IJITEE) | **Scopus Indexed** ( Vol. 9, Issue No. 4, February 2020, pp. 432~437) | February 2020 |
| 7 | A High Efficient Solar Assisted A-Source dc-dc Boost Converter for Electric Vehicle Battery Charging Application | International Journal Of Scientific & Technology Research | **Scopus Indexed** | March 2020 |
| 8 | Single Switch, Boost converter with High Voltage gain for Fuel cell-based products | Solid state technology | **Scopus Indexed** Volume: 64 Issue: 2 Publication Year: 2021 **(Annexure I)** | March 2021 |
| 9 | Efficiency enrichment of a Modern Boosting Topology for solar EV battery charging applications | Journal of Xidian University | VOLUME 15, ISSUE 3, 2021 | March 2021 |

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|---|---|---|---|---|
| 10 | Evolutionary Algorithm Based Z-Source DC-DC Boost Converter for Charging EV Battery | Intelligent Automation And Soft Computing | **Scopus Indexed** Vol.34, No.2, 2022 **Impact Factor= 1.7** https://doi.org/10.32604/iasc.2022.025396 | May 2022 |
| 11 | Optimization and prediction of incremental sheet forming parameters of Titanium grade 5 sheet using a response surface methodology and artificial neural network | Proceedings Of The Institution Of Mechanical Engineers Part C-Journal Of Mechanical Engineering Science | **IF:1.75 https://doi.org/10.1177/09544062221133674** | November 2, 2022 |
| 12 | an improved design and performance enhancement of Y-source DC-DC boost combined phase shifted full bridge converter for electric vehicle battery charging applications | Journal of Electrical Engineering & Technology | **IF: 1.528 https://doi.org/10.1007/s42835-023-01414-1** | 22 February 2023 |
| 13 | Smart Emergency Charging of Electric Vehicle with Solar PV-based Backstepping Model-Free and critic RL Control Structure | Journal Of Control Engineering And Applied Informatics | **IF: 1.29** | 2023/3/28 |
| 14 | Load Voltage Balancing Using Marine Predator Algorithm for Power System Quality Improvement | Journal of Electrical Engineering & Technology | **IF: 1.528 https://doi.org/10.1007/s42835-023-01522-y** | 15 May 2023 |
| 15 | A simple robust mechanism of PV-supported dynamic voltage restorer using interval type-2 fuzzy logic controller | Automatika, Journal for Control, Measurement, Electronics, Computing and Communications | **IF: 1.74 https://doi.org/10.1080/00051144.2022.2140390** | 21 May 2023 |
| 16 | Efficiency and dynamic characteristics of improved dual-stage power converter setup with advanced model predictive controller for electric vehicle battery charging | International Journal of Circuit Theory and Applications Publisher: Wiley | **IF: 2.4 https://doi.org/10.1002/cta.3736** | 2023/7/16 |
| 17 | Investigation of a solar incorporated improved quasi-Y-source DC–DC step-up converter connected with phase-shifted converter in electric vehicle battery charging | Electrical Engineering | **IF:1.6 https://doi.org/10.1007/s00202-023-01909-0** | 04 July 2023 |
| 18 | Analysis on insulating characteristics of natural high oleic ester and mineral oil based blended oil under accelerated thermal aging exposure | Biomass Conversion and Biorefinery | **IF:4.2 https://doi.org/10.1007/s13399-023-04842-1** | 08 September 2023 |
| 19 | Modelling and performance analysis of improved incremental conductance MPPT technique for water pumping system | Measurement: Sensors | **https://doi.org/10.1016/j.measen.2023.100895** | 2023/12/1 |
| 20 | Performance evaluation of improved Y source power factor correction converter with enhanced power quality in EV rapid charger application | Electrical Engineering | **IF: 1.6 https://doi.org/10.1007/s00202-024-02258-2** | 10 February 2024 |
| 21 | Performance evaluation of solar-combined boosting topology for EV battery charger using interval type-2 fuzzy controller | Electrical Engineering | **IF:1.6 https://doi.org/10.1007/s00202-023-02073-1** | 25 October 2023 |

### 5.3 Funded Project:

| S.No | Name of the faculty | Title of the Project | Funding Agency | Duration (yrs) | Amount in Lakhs | Period | Status |
|---|---|---|---|---|---|---|---|
| 1. | Mr.F.Antony Jeffrey Vaz, Mr.K.Karthik Kumar | Cold Storage Container system using IOT | NewGen IEDC - DST | 1 | 2.5 | 2022-23 | Completed |

### 5.4 Book Published:

| S.No. | Name | Title of the paper | National / International | Year | ISBN/ISSN | publisher | Link |
|---|---|---|---|---|---|---|---|
| 1 | K. Karthik Kumar, AS Kamaraja, OR Saiayyappa | Integration of Renewable Energy Sources Using Matrix Converter | International | 2021-22 | 978-6203854732 | Lambert Academic Publishing | https://www.amazon.co.uk/Integration-Renewable-Energy-Sources-Converter/dp/6203854735 |

### 5.5 Reviewer in Journals:

- Active Reviewerin **"Simulation: Transaction of the society for Modeling and Simulation International"**.
- Active Reviewer in **"Cybernetics and Systems".**

## 6. MEMBERSHIP IN PROFESSIONAL BODIES :

| Name of Society | Grade of Membership |
|---|---|
| • **IRED**<br>Membership Status: (Associate Member UACEE)<br>Membership No: AM101000584654 | Life Member |
| • **IAENG**<br>Membership No: 241980 | Member |

## 7. ADDITIONAL RESPONSIBILITIES HELD

- ***Tutor*** for the batch 2019-23
- ***EEE Dept. Library*** In charge (From June 2019 – Nov 2020)
- ***EEE Dept. Library*** In charge (From Nov 2020 - Till Date)
- ***Department Result Analysis*** – Assist (From June 2019 - Till Date)
- ***GATE Forum – EEE***– Assist (From June 2019 - Till Date)
- ***Power Electronics lab*** – Assist (From June 2019 - Till Date)
- ***NAAC Criteria 3*** (Department level In charge – (2021-2022))
- ***Extension and Outreach Cell*** – Co – Convener (June 2021-Till Date)
- ***Design Thinking – Mentor (2021-2022)***
- ***NBA Criteria 5 – Incharge(From May 2022-Aug 2022)***
- ***Tutor*** for the batch 2020-24
- **2023R Syllabus, Course Plan, Course Design Framings**
- ***Student Affairs and Industrial Relations (July 2024 – till date)***

| Social Media | Followers / Subscribers | Posts / Videos | Views/Likes | Link |
|---|---|---|---|---|
| **Personnel Social Medium** | | | | |
| **Facebook** | 110 | 40 | 100+ | **Facebook Link** |
| **Instagram** | 238 | 40 | 1000+ | **Instagram Link** |
| **LinkedIn** | 59 | 20 | 50+ | **LinkedIn Link** |
| **Twitter** | 15 | 10 | 50+ | **Twitter Link** |
| **YouTube** | 653 | 138 | 115,722 | **YouTube link** |
| **Academic / Research Medium** | | | | |
| **Slide Share** | 2 | 33 | 100+ | **SlideShare Link** |
| **Research Gate** | 99 | 35+ | 4000+ Reads | **Research Gate Link** |
| **WOS Researcher ID:** | | **WOS Link** | | |
| **Scopus ID** | | **Scopus Link** | | |
| **ORCiD** | | **ORCiD Link** | | |
| **G-Scholar_ID** | | **G-Scholar_ID** | | |