



- **Education**

Diploma (Electrical Engineering), B.E. (Electrical Engineering), M.S. in Electrical Engineering, Ph.D.(Pursuing)

- **Experience**

- Teaching : 16 Years
- Industry : 3 Years
- Research : 11 Years

Area of Interest

Micro and Nano Bio-medical devices, Nano-technology in various Bio-medical applications, Power Plant Engineering, PLC – SCADA & Automation.

- **Conferences**

- Re-Thinking Science Learning and Teaching - Workshop held on October 24, 2009, Maui, Hawaii, USA
- Workshop on Professional Development Program held in 2010
- Attended more than 5 leadership talk series organized by MHRD in May 2020.
- Participated in IIC Online Sessions conducted by Institution's Innovation Council (IIC) of MHRD's Innovation Cell, New Delhi to promote Innovation, IPR, Entrepreneurship, and Start-ups among HEIs from 28th April to 22nd May 2020
- International Conference on CyberTech and Smart Systems (ICCSS 2024)
- International Conference on CyberTech and Smart Systems (ICCSS 2025)

• **Projects/Achievements**

- “Smart cell culture platform” Provisional U.S. Patent Application filed 07/09/2010 (Serial No. 61/363,076)
- Completed 9 online certified quiz competitions organized by various colleges/Universities.
- Completed 9 Short Term courses related to Electrical and Electronics Engineering under TATA Steel Learning Centre during April – May 2020.
- Completed 2 online workshops under ALTAIR software for design of electrical machines. Technological Innovations in ICT for Agriculture and Rural Development (TIAR), 2016 IEEE.
- National Power Electronics Conference, NPEC 2017.
- Attended more than 5 leadership talk series organized by MHRD in May 2020.
- Participated in IIC Online Sessions conducted by Institution's Innovation Council (IIC) of MHRD's Innovation Cell, New Delhi to promote Innovation, IPR, Entrepreneurship, and Start-ups among HEIs from 28th April to 22nd May 2020
- Qualified for AICTE RPS grant of Rs. 25 Lakh

• **Publications**

Publications	International Journal (s):	61	National Journals (s) :	0
	International Conference (s):	3	National Conference (s):	0
	Book Chapter (s)	4		

- “An Optically Controlled 3D Cell Culturing System,” Advances in Optoelectronics, Volume 2011 (2011)
- “Dynamic Study of Grid Connected Hybrid Wind PV System in ETAP” 2017 IJSRSET | Volume 3 | Issue 3 | Print ISSN: 2395-1990 | Online ISSN : 2394-4099
- “Automatic Power Factor Correction Using Microcontroller”, IRJET, Volume: 04 Issue: 06 | June -2017
- “Review on Grid-Connected Hybrid DFIG Based Wind and PV”, 2017 IJSRCSEIT | Volume 2 | Issue 1 | ISSN : 2456-3307
- Automatic Car Washing using PLC, MICROCONTROLLER ,Vol 6, Issue 2016
- Basic Structure Of PLC, International Journal Of Engineering And Techniques, Volume 4 Issue 3, May – June 2018
- Communication With Energy Meter And Field Devices Using Plc, International Journal For Research In Applied Science & Engineering Technology (Ijraset)
- Single Stage Controlling Of BLDC Motor Drive By Using Proportional Resonant Controller, International Journal Of Applied Engineering Research

- Load Flow & Short Circuit Analysis Of 132/33/11kv Substation Using Etap, International Journal Of Advance Engineering And Research Development, ISSN 2348-4470, 01-12
- Harmonic analysis and suppression in hybrid wind & PV solar system, International Conference on Electrical, Electronics, Materials and Applied Science AIP Conf. Proc. 1952
- PLC Programming for Various Application Under Lab Development, International Journal of Research in Engineering, Science and Management, ISSN 2581-5792, 329-333.
- Geothermal Power Plant Design Using PLC & SCADA, INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH IN TECHNOLOGY, ISSN 2349-6002, 176-179.
- Water Heating Process using PLC, INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH IN TECHNOLOGY, ISSN 2349-6002, 275-280
- Integration of SCADA System with Existing PLC Setup to Control Induction Motor and Stepper Motor, International Journal of Research in Engineering, Science and Management, ISSN 2581-5792, 407-410.
- Industrial Automation using Modern Controls, Monitoring, Data Logging and Development of Training Facility in College, International Journal of Engineering Research & Technology, ISSN 2278-0181, 563-568.
- INDUSTRIAL AUTOMATION USING PLC, HMI AND ITS PROTOCOLS BASED ON REAL TIME DATA FOR ANALYSIS, International Journal of Advanced Research in Engineering and Technology, ISSN 0976-6480, 0976-6499, 1353-1363.
- SMART GRID USING RENEWABLE ENERGY, IoT AND HPES SYSTEMS, International Journal of Engineering Applied Sciences and Technology, ISSN 2455-2143, 205-210.
- Electricity Generation Using Solar Power, INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH IN TECHNOLOGY, ISSN 2349-6002, 267-272.
- Water Level Controller, INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH IN TECHNOLOGY, ISSN 2349-6002, 262-266.
- Increasing the thermal Efficiency of Steam Power Plant with the Help of Solar Energy, INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH IN TECHNOLOGY, ISSN 2349-6002, 340-342.
- Smart Distribution Systems, INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH IN TECHNOLOGY, ISSN 2349-6002, 443-449.
- Review Paper Solar Energy Generatio Recent Trends, INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH IN TECHNOLOGY, ISSN 2349-6002, 740-744.
- Sodium-ion Energy Storage Batteries, INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH IN TECHNOLOGY, ISSN 2349-6002, 354-356.
- Radioactive waste management analysis, INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH IN TECHNOLOGY, ISSN 2349-6002, 351-353.
- Fuel Cell and Hydrogen Vehicles, INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH IN TECHNOLOGY, ISSN 2349-6002, 381-384.
- High Speed Electrical Transmission, INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH IN TECHNOLOGY, ISSN 2349-6002, 390-392

- Recent Developments in Electric Vehicles, INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH IN TECHNOLOGY, ISSN 2349-6002, 347-350
- Electric vehicles: Network Modelling and Future Research Needs, INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH IN TECHNOLOGY, ISSN 2349-6002, 419-422.
- Hybrid Vehicle, INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH IN TECHNOLOGY, ISSN 2349-6002, 381-384
- Programmable Logic Controller (PLC) and its Applications, INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH IN TECHNOLOGY, ISSN 2349-6002, 372-376.
- BASIC STRUCTURE OF PLC, International Journal of Engineering and Techniques, ISSN 2395-1303, 169-173
- Communication with Energy Meter and Field Devices using PLC, International Journal for Research in Applied Science & Engineering Technology, ISSN 2321-9653, 738-740.
- Control of Induction Motor Using PLC and VFD, International Research Journal of Engineering and Technology, ISSN 2395-0056, 2395-0072, 995-997.
- Role of Bisection Method, International Journal for Research in Applied Science & Engineering Technology, ISSN 2321-9653, 426-428
- Review on Concepts of Nuclear Power Plant, International Journal of Innovative Research In Technology, ISSN 2349-6002, 377-380
- Development of Photo Voltaic - Electric Bicycle Powered by Solar, International Journal for Research in Applied Science & Engineering Technology, ISSN 2321-9653, 533-536
- Wireless Power Transmission for Wireless Charging, International Journal of Innovative Research in Technology, ISSN 2349-6002, 357-359
- Polymeric Composite Insulator 11-33KV, International Journal of Innovative Research in Technology, ISSN 2349-6002, 385-386
- Hydrogen Fuel Cell Vehicles, International Journal of Innovative Research In Technology, ISSN 2349-6002, 413-418
- A Review Paper on Home Automation, International Journal of Innovative Research In Technology, ISSN 2349-6002, 387-389.
- High Speed Electrical Transmission, International Journal of Innovative Research In Technology, ISSN 2349-6002, 390-392
- A Review Paper on Nuclear's Power Plants Safety, International Journal of Innovative Research In Technology, ISSN 2349-6002, 409-412
- The Electric Vehicle, International Journal of Innovative Research In Technology, ISSN 2349-6002, 273-277
- Solar Power Technology for Electricity Generation, International Journal of Innovative Research in Technology, ISSN 2349-6002, 360-362
- A Review on Automation Of Industries, International Journal of Engineering Applied Sciences and Technology, ISSN 2455-2143, 298-300
- Reasons for Failure of Transmission Lines and their Prevention Strategies, International Journal for Research in Applied Science & Engineering Technology, ISSN 2321-9653, 780-783

- Study of Electric Vehicles, International Journal of Innovative Research In Technology, ISSN 2349-6002, 278-284
- Experimental Study on Power Saver Establishment for Commercial Purpose, International Journal of Scientific Research and Engineering Development, ISSN 2581-7175, 732-734
- Use of Cloud Computing in Grid Control, International Journal of Innovative Research In Technology, ISSN 2349-6002, 363-364
- Efficiency of Solar Panel, International Journal of Innovative Research In Technology, ISSN 2349-6002, 369-371
- Efficiency of Solar Panel, International Journal of Innovative Research In Technology, ISSN 2349-6002, 285-287
- Increasing Efficiency of Thermal Power Plant with the Help of Solar Energy, International Journal for Research in Applied Science & Engineering Technology, ISSN 2321-9653, 723-724
- Efficiency of Solar Panel, International Journal of Innovative Research In Technology, ISSN 2349-6002, 288-290
- Review on Concepts of Nuclear Power Plant, International Journal of Innovative Research In Technology, ISSN 2349-6002, 336-339
- Review Paper on Application of Nanotechnology in Science and Technology, International Journal for Research in Applied Science & Engineering Technology, ISSN 2321-9653, 648-650.
- Study of Electrical Vehicles And Its Applications, International Journal of Innovative Research in Technology, ISSN 2349-6002, 393-401
- Review Paper on Solar Energy, International Journal of Innovative Research in Technology, ISSN 2349-6002, 402-408
- Analysis of Solar Based Thermal Power Plant, International Journal of Innovative Research In Technology, ISSN 2349-6002, 273-274
- ADMS: The Substratum of Modern Age Power Distribution, International Journal of Innovative Research In Technology, ISSN 2349-6002, 381-384
- Single Stage Controlling Of BLDC Motor Drive By Using Proportional Resonant Controller, International Journal Of Applied Engineering Research, ISSN 0973-4562, 8778-8782
- Speed Control Of Induction Motor Using Plc Through VFD, International Journal of Scientific Development and Research, ISSN 2455-2631, 381-386
- Interfacing Of Stepper Motor With Programable Logic Controller Using Human Machinery Interface, Journal of Emerging Technologies and Innovative Research, ISSN 2349-5162, 528-530
- Contingency Analysis for a Solar Energy Generation System Using Real-Time Data Analysis, Lecture Notes in Electrical Engineering, Springer Nature, Conference Paper, 2024

Books Published

- Electrical Materials and Wiring Practice, ISBN 978-93-89233-34-6, Tech Knowledge Publications
- Control Systems and PLC, ISBN 978-93-89251-43-2, Tech Neo Publications

Book Chapters

- Integrating Nanoscience in the Realm of Renewable Energy, Nanotechnology in the Life Sciences, Publisher:Springer Nature, ISSN:2523-8027E-ISSN:2523-8035, 2025
- Graphene: A Promising Material for Flexible Electronic Devices, Advanced Structured Materials Book Chapter 2023, DOI: 10.1007/978-3-031-28942-2_5

Extra Activities

- Participated in ELI activities at University of Hawaii at Manoa, USA,
- In-plant training coordinator at department level
- IIC department coordinator
- BoS member of Department of Electrical Engineering
- Organizing committee member of Nanocon018 Conference.
- Worked as a Graduate research assistant at University of Hawaii at Manoa, USA
- Participated in Dale Carnegie's workshop on High Impact Teaching Skills