

**To learn, grow and make my mark as a part of decision-making body in a value driven organization****ACADEMIC**

- **Ph.D.** completed in Electrical Engineering from Sangam University, Bhilwara in February 2023.
- **M.Tech.** in Power system from Rajasthan Technical University, Kota – 66.86%- May 2013.
- **B.E.** in Electrical Engineering from University of Rajasthan, Jaipur – 68.49% - August 2008.
- **HSC.** in Science Math from RBSE, Ajmer – 59.23% June 2004.
- **SSC.** from RBSE, Ajmer – 60.17% - June 2002.

**EXPERIENCE**

- Teaching experience of 3 year 9 month in "ITM", Bhilwara from 02<sup>th</sup> Aug 2008 to 15 April 2012.
- Teaching Experience as an Assistant professor in "Chartered Institute of Technology", Abu road from 16/04/12 to 07/08/2012.
- Teaching Experience of 2 year 6 month as a Assistant professor in "Techno India NJR Institute of technology", Udaipur from 8/08/12 to 31/1/2015.
- Teaching Experience as a Assistant professor in "Sangam University", Bhilwara from 02/02/15 to till date.

**IT SKILLS**

- Office Tools : MS OS-win-11/win-10/win-7/XP/Vista/2000/98, MS Office, Internet.
- Software Skills : **MATLAB, P-Spice, PLC-SCADA**, PSCAD, Arduino, Circuit maker, AutoCAD, Power World Simulator.

**EXTRA CARRICULAR ACTIVITIES**

- **Gate-2013 score card with 95.63 percentile.**
- Designed two B.Tech. Projects on "**Load Monitoring**" and "**Load Flow Analysis**".
- Make a M.Tech. Project on "**Evaluating the Feasibility of Artificial Intelligence Technique in Improving Automatic Generation Control**".
- PH.D. thesis completed on "**Smart Monitoring and Implementation of Control Unit for Photovoltaic System**".
- Give a B.Tech. Presentation on seminar topic "**Transient Stability Including Series Shunt Compensators & FACTS**".
- Give a M.Tech. Presentation on seminar topic "**Effect of direct current in power transformer**".
- Completed a 30 days Practical Training at "GRID SUB STATION HEERAPURA, JAIPUR" in 2006.
- Completed a 45 days Practical Training at "SANGAM SPINEERS PVT. LMT. BHILWARA" in 2007.
- Two-time **Winner in College Chess Competition 2006 & 2007.**
- Took part in state level inter college chess tournament organized by Rajasthan university in 2006.
- First prize in Akhil Bhartiya Gandhi general knowledge exam held by Swadhiya munch mandasaur(M.P.).
- Managed, coordinated and participated various events at school and college level.
- Visit to College students in many companies like **Secure meter, 400KV & 220KV GSS, Transformer manufacturing company, Thermal power plant, Panel designing company, spinning mill** etc.
- Coordinator of "**M.Tech Course**" from 2018 in Sangam University, Bhilwara.
- Coordinator and faculty of "**PLC-SCADA-1.5 month certificate course**" from 2016 to till date.
- Got **Best Faculty Award** in the department at university level in 2019.
- **Head of electrical engineering department** at Sangam University from july, 2021.
- Many events organized and Examination & TPO team member in college/university as a faculty.
- A **NPTEL online Certification** course on "**ADVANCED LINEAR CONTINUOUS CONTROL SYSTEM: APPLICATIONS WITH MATLAB PROGRAMMING AND SIMULINK**", by IIT Roorkee from 27 august to 24 October 2018.

## RESEARCH PAPER

- A paper presented on "**Improved Stability Analysis of an Indirect Vector Controlled 3-Ph. Induction Motor by Fuzzy Logic Based Controller**" in national conference "REEES-2010" on 10<sup>th</sup> -11<sup>th</sup> September 2010.
- A paper presented on "**A fuzzy logic based SSSC controller for performance improvement**" in national conference "ETREEE-2012" at ITM, Bhilwara on 25<sup>th</sup> -26<sup>th</sup> February 2011.
- A paper submitted in national seminar on "**Power Generation from Renewable Energy Sources**" at CTAE, Udaipur on 2<sup>nd</sup> -3<sup>rd</sup> February 2012.
- A paper presented on "**Feasibility of Fuzzy Logic Technique in Improving Automatic Generation Control of an Interconnected Hydro-thermal Power System**" in national conference "ERECON-2013" at TINJRIT, Udaipur on 23<sup>rd</sup> -24<sup>th</sup> February 2013.
- A paper presented on "**Wireless Power Theft Monitoring System**" in national conference "**Emerging trend for sustainable development in engineering and technology**", at SS college of engineering, udaipur on 30-31 January, 2014.
- A paper presented on "**Case Study: Nanotechnology Application in the New Energy Generation Mechanism**" in national conference "Emerging trend for sustainable development in engineering and technology", at SS college of engineering, Udaipur on 30-31 January, 2014.
- A Paper Published on "**Evaluation of artificial intelligence technique in improving automatic generation control**", at international journal of advance engineering and research development (**IJAERD**) on Aug-2017.
- A paper presented on "**Bladeless windmill**" in national conference "Design aspect, operation and control of smart grids", at SKIT, jaipur on 27-28 October, 2017. 28 October, 2017.
- A paper presented on "**Bladeless wind power generation: an independent source for rural electrification**" in international conference "Coping Change: Through Innovation and Value Creation for Society" at Sangam university, Bhilwara on 21-22 December, 2017.
- A paper presented on "**Case Study of solar and wind hybrid energy system for economic power generation**" in national conference "Recent innovation and trends in engineering and technology", at Sangam University, Bhilwara from 24-25 December, 2018.
- A Paper published on "**Wind Power Generation System for Rural Places**", in "International Journal of Research and Analytical Reviews (**IJRAR**)" on FEB-2019.
- A Paper presented on "**Systematic Investigation of Photovoltaic System for Suitable Energy Generation**", in International Conference On "Engineering Optimization and Data Science" at SKIT, Jaipur on 11-12 October, 2019.
- A Paper published on "**Analysis and Assessment of MPPT for Solar PV System: A Review**", in "Journal of Xidian University" in vol-14, issue -06, 2020.
- A Paper presented on "**Control Strategies for Maximum Power Point Tracking Techniques for Solar PV System**" in "International Conference of Analytical and Interdisciplinary Research" at Sangam University, bhilwara on 5-6 February, 2021.
- A Paper presented on "**Utilization of energy generation by solar photovoltaic when grid is at off condition**" in "International Conference on Intelligent Robotics, Mechatronics and Automation Systems" at Vellore Institute of Technology, Chennai on 26-27 March, 2021.
- A Paper published on, "**Utilization of Solar Photovoltaic Energy Generation When Grid is at Shut down Condition**", UGC Care Group-I Journal on Anvesak Vol. 52, No. 09 (I),ISSN: 0378-4568, July-Dec, 2022.
- A Paper presented on "**Efficiency energy generation of Microgrid from solar power plant**" in "International Conference of Analytical and Interdisciplinary Research(ICAIR-2022)" at Sangam University, bhilwara on 6-8 October, 2022.
- A Paper presented on, "**Utilization of Solar Photovoltaic Energy Generation When Grid is at Shut down Condition**", in "International Conference of Analytical and Interdisciplinary Research(ICAIR-2022)" at Sangam University, bhilwara on 6-8 October, 2022.
- A Paper published on, "**Optimization of operation, maintenance and performance issue in PV array by smart monitoring for green energy**", Advanced Engineering Science, Vol. 54, Issue No. 02, and ISSN: 2096-3246, Nov, 2022.

## PATENT

- A certified patent design and registered to "**INDUCTIVE ANGLE ENCODER**" of Num. 336979-001 at patent office, Kolkata on 30/12/2020.

## WORKSHOP, SEMINAR, CONFERENCE & INTERNSHIP ATTENDED

- A national workshop on "**Fundamental of PSCAD and General Application**", organized by Nayak power system at TINJRIT, Udaipur from 12-14 April 2013.
- Two week ISTE STTP workshop on "**Analog Electronics**", conducted by IIT Kharagpur from 4-14 June 2013.
- A National workshop attends on "**Distribution Generation and Restructuring of Power Systems**", organized by CTAE, Udaipur on 30-31 August, 2013.
- Two week ISTE STTP workshop on "**Signal and Systems**", conducted by IIT Kharagpur from 2-12 January 2014.

- A short term training program on "**Emerging Trends in Industrial Automation and Control**", conducted by EED, MNIT, Jaipur on 1-4 April, 2016.
- A FDP on "**Teaching skills and research methodology**" in Sangam university from 5-7 January 2017.
- A workshop on "**Remote sensing and GIS applications in carbon forestry**", conducted by ISRO from 16 Feb 2017 to 10 March 2017.
- Two week ISTE STTP workshop on "**Electrical power system**", conducted by IIT Kharagpur from 10-15 June 2017.
- One month FDP on "**Foundation program in ICT for Education**", conducted by IIT Bombay from 03 August to 07 September 2017.
- One month FDP on "**Pedagogy for Online and Blended Teaching Learning Process**", conducted by IIT Bombay from 14 September 2017 to 12 October 2017.
- Two days workshop session on "**Internet of Things**", conducted by SkillIT India on behalf of SkillThon'18 in an association with e-Cell **IIT Guwahati** from 06-07 September, 2017.
- A two days International seminar on "**Multidisciplinary challenges and opportunities in smart nano-grids and V2G**", organized by GITS, Udaipur on 21-22 April 2018.
- Two days Hands-on training session on "**MATLAB**", organized by Sofcon India Pvt. Ltd. from 14-15 September, 2018.
- Two week short term training program through ICT Mode on "**PROBLEM BASED LEARNING**", conducted by NITTTR, Kolkata from 20-31 May, 2019.
- One day workshop session on "**NPTEL AWARENESS WORKSHOP**", organized by IIT, Kanpur. on 17 October, 2019.
- A Six days training program on "**POWER SYSTEM OPTIMIZATION USING GAMS**", organized by RIT, Rajaramnagar in association with IEEE Bombay section, from 11th to 16th May, 2020.
- One Day hands on training on "**DEEP LEARNING WITH MATLAB**", conducted by CIT-TLC in association with Math works, on 26 May, 2020.
- A Five days training program on "**ELECTRIC VEHICLE**", organized by RIT, Rajaramnagar in association with IEEE Bombay section, from 27th to 31st May, 2020.
- 3 days online workshop on "**Education 4.0-Season II**" organized by IQAC, Atharva College of Engineering held on 28th - 30th May 2020.
- One month online internship in "**SOLAR PHOTO VOLTAIC (PV) INSTALLATION & MAINTENANCE**" from 01.07.2020 to 30.07.2020 by **MSME-TECHNOLOGY DEVELOPMENT CENTRE (PPDC)**.
- A Five Days Online Faculty Development Program on "**RESEARCH IN ENGINEERING - A WAY FORWARD**" conducted on 6 to 10 July, 2020 at A. P. Shah Institute of Technology, Thane.
- One Week Short Term Training Programme on "**IMAGE PROCESSING AND DATA SCIENCE WITH MATLAB (IP&DSWM 2020)**", organized by Government College of Engineering, Aurangabad, under Technical Education Quality Improvement Programme (TEQIP- III), during 07th July to 11th July 2020.
- Attended 6<sup>th</sup> students' conference on "**Engineering and Systems**" organized by MANIT, Allahabad Prayagraj during 10-12 July, 2020.
- A Course Completion Certificate of "**MATLAB Onramp**" has successfully completed 100% of the self-paced training course on 11/07/2020.
- A Course Completion Certificate of "**Machine Learning Onramp**" as successfully completed 100% of the self-paced training course on 13/07/2020.
- A Course Completion Certificate of "**Deep Learning Onramp**" as successfully completed 100% of the self-paced training course on 13/07/2020.
- A AICTE sponsored one week Short Term Training Program on "**POWER ELECTRONICS BASED DRIVES AND CONTROL**" held during 03/08/2020 to 08/08/2020 organized by Prof. Ram Meghe College of Engineering and Management, Badnera-Amravati, Maharashtra.
- A Faculty Development Program on "**RECENT TRENDS IN ELECTRICAL ENGINEERING & SOFT COMPUTING APPLICATIONS IN POWER SYSTEMS**" held from 25/08/2020 to 29/08/2020 at "Shrinathji Institute of Technology & Engineering, Nathdwara".
- A short course on "**Learn to Design your own Solar Home System**" by Energy Swaraj Foundation in association with SVPM'S College of Engineering, Malegaon(Bk), Baramati in August 2020.
- One week Faculty Development Program on "**Renewable Integration, Challenges & Opportunities**" held from 01/09/2020 to 05/09/2020 at Vedant College of Engineering and Technology, bundi.
- One week faculty Development Program on "**Emerging trends in power electronics and power system**" held from 07/09/2020 to 11/09/2020 at OP Jindal university, Raigarh.

- One week Faculty Development Program on "**Green Energy: The Energy of Future (GEEF-2020)**" held from 07/09/2020 to 11/09/2020 at "Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur".
- A AICTE Sponsored One Week Online Short Term Training Program (STTP), Slot-2, on "**Recent Advances in Micro Electro Mechanical Systems (MEMS), Mechatronics and Their Applications for Future Challenges**" from 21-09-2020 to 26-09-2020, organized by Mahatma Gandhi Institute of Technology, Hyderabad.
- A three days FDP on "**Advance Microgrids, Smart Renewable & Distributed Energy System**", held from 24/09/2020 to 26/09/2020 at "Shrinathji Institute of Technology & Engineering, Nathdwara".
- Attended 2nd International Conference on "**Artificial Intelligence and Speech Technology (AIST-2020)**" organized by Indira Gandhi Delhi Technical University for Women (IGDTUW), Delhi held on 19th -20th November, 2020.
- A workshop on "**Basics of AC-DC Converters: Rectifiers**", organized by Skill Lync on 23 November 2020.
- A short term training program on "**Solar PV and Storage Systems**" conducted by department of electrical and electronics engineering, JSSATE, Noida from 7<sup>th</sup> to 12<sup>th</sup> December, 2020.
- A faculty development program on "**Recent Innovations & Technologies in Electrical Engineering**" held at "Engineering College, Jhalawar" from 04/01/2021 to 08/01/2021.
- A faculty development program on "**Arduino and PLC Based Automation in thermal, Production and Automobile Field**" held at "Shrinathji Institute of Technology & Engineering, Nathdwara" from 19/01/2021 to 23/01/2021.
- A faculty development program on "**Writing and Publishing Research Papers**" organized by "GHS-IMR and Sangam university" from 28/06/2021 to 04/07/2021.
- A faculty development program on "**ICT Tools for Effective Teaching Learning**", organized by Internal Quality Assurance Cell [IQAC], Sangam University, Bhilwara from 26th July to 2nd August 2021.
- A faculty development program on "**Power System Design Simulation and Analysis using DIgSILENT PowerFactory Software**", organized by DIgSILENT GmbH, Germany in association with M/s DELLSOFT Technologies Pvt. Ltd. New Delhi from July 27 to 28, 2021.
- A faculty development program on "**IoT with Smart City**", organized by AICTE Training And Learning (ATAL) Academy, Government Polytechnic Daman from 13th to 17th September 2021.
- A Faculty Development Programme on "**Techno-Economic Assessment of Flexibility Competency in Deregulated Power System (TEAFCDPS-2021)**" held on September 20 - 24 , 2021 at "Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur".
- A Refresher Program on "**Recent Trends in Robotics and Automation**" organized by Department of Electronics and Communication Engineering and SKIT-ISTE student chapter, Swami Keshvanand Institute of Technology, Management & Gramothan (SKIT, M & G), Jaipur from January 5 to 11, 2022.
- A 30 Days master class on "**EV Design**" at Pentech e Learning PVT LTD. From 2-2-2022 to 3-3-2022.
- An one week Short Term Training Program on "**Writing and Publishing of Quality Research Articles and Ethics of Research**" held from 21/02/2022 to 25/02/2022 at "Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur".
- A Workshop on "**Solar PV Systems**" organized by JK Lakshmi Pat University Jaipur in collaboration with WAAREE Energies Ltd. on March 15, 2022.
- AICTE sponsored one week Faculty Development Program (FDP) on "**Management of Intellectual Property Uncertainty in Designing and Manufacturing for Electric Vehicle Systems**" organized by Electrical Engineering Department, National Institute of Technology Manipur, held during 21st-25th Feb. 2022.
- A Faculty Development Programme on "**Outcome based Education & its Implementation**" organized by IQAC at Sangam University, Bhilwara on 12 & 13 April, 2022.
- A national-level workshop on the topic "**Challenges before HEI in remote areas for achieving Quality Improvement through Assessment & Accreditation process**" in Sangam University on November 24-25, 2022.
- One week national high-end workshop on "**Advance Research Tools Application in Renewable Energy**", organized by **MANIT, Bhopal** from 5<sup>th</sup> to 11<sup>th</sup> December 2022.
- One Week Virtual Faculty Development program on "**Operation and Control of Modern Power System**" Under RIT-IEEE Student Branch & RIT-CTL, Organized by Department of Electrical Engineering, RIT during 5<sup>th</sup> to 10<sup>th</sup>, February, 2024.
- One Week online Short Term Training Program (STTP) on "**Emerging Trends on Control and Automation at Present Scenario**" organized by Department of Electrical Engineering, Dream Institute of Technology, Kolkata from 09.05.2024 to 15.05.2024.

- TATA Capability development certificate on "**Instrument and Control System**", "**Power system earthing**", "**PLCs**" and "**Machine Learning**" in April 2020.
- One webinar on "**NAAC Accreditation Management System**", by INPODS, on 27/05/2020.
- One day live webinar on "**Impact of Covid-19 on Indian culture**" on 6<sup>th</sup> June, 2020.
- The International Webinar Series "ERUDITE TALK Season 2" on "**Power Electronic Technologies for Fuel Cell-Based Hybrid Energy Systems**" organized under **IEEE Robotics and Automation Society** of St.Joseph's College of Engineering on 13/07/2020.
- A webinar on "**Evolution of Modern Power Systems and it's challenges**" by St.Joseph College of Engineering, Chennai and St.Mother Theresa Engineering College, Vagaikulam, Tuticorin on 15/07/2020.
- A Webinar on "**PV Array Fed motor Drive using multilevel inverter**", organized by CIET, Guntur, AP on 27/07/2020.
- The Webinar on "**Future scope and Applications of Artificial Intelligence**", organized by the Department of Electronics and Communication Engineering, Hindusthan Institute of Technology, Coimbatore on 30.07.2020.
- The Training program on "**Job Opportunity and carrier with embedded systems**" by Don bosco institute of technology, Bengaluru, on 4/08/2020
- The Training program on "**Product Based precautions**" by Don bosco institute of technology, Bengaluru, on 4/08/2020.
- The Training program on "**Real time Embedded Systems**" by Don bosco institute of technology, Bengaluru, on 6/08/2020.
- The Training program on "**ML and its application in oil and gas industry**" by Don bosco institute of technology, Bengaluru, on 6/08/2020.
- The Training program on "**Artificial Intelligence and Autonomous Vehicle**" by Don bosco institute of technology, Bengaluru, on 7/08/2020.
- The Training program on "**Tips and Tricks to Learn Java**" by Don bosco institute of technology, Bengaluru, on 7/08/2020.
- A Webinar on "**New World of work**", organized by Elets digital learning magazine and Harappa education on 12/08/2020.
- The Webinar on "**Automation using Programmable Logic Controller**" organized by Hindusthan Institute of Technology, Coimbatore on 18/08/2020.
- An Online webinar on "**Trace Gases in Atmosphere**" organized by school of basic science, Sangam university, Bhilwara on 24/12/2020.
- An Online webinar on "**Multilevel Inverter for PV Application**" organized by department of electrical and electronics engineering, CIET Guntur, A.P. on 02/08/2021.
- A webinar on "**Multidomain Modeling with Simscape using MATLAB**" by Mathwork on 11 october, 2022.
- A webinar on "**Meet the Editor: Publishing Research in Material Science and Engineering**" by Taylor and Francis Group on 23 november 2023.

#### **FDP AND WORKSHOP CONDUCTED**

- Three Days workshop conducted (29-31 January 2015) on "**P-Spice software**", at TINJRIT, Udaipur for students and faculty.
- 2 days workshop conducted on "**PSCAD**" at Sangam University, Bhilwara in April 2017.
- 2 days workshop conducted on "**PLC-SCADA**" (Wonderware and CoDeSys software) at Sangam University, Bhilwara in 2018.
- Many Lectures delivered on "**PLC**" (CoDeSys software) at a cemented pipe company "**A Infrastructure, Bhilwara**" in 2019.
- 2 days webinar organized on "**Power Plant Operations: Electrical and Mechanical Aspects**" on 24-25 may, 2021.
- Arranged a workshop organized by **IIT Bombay on SCILAB** in 2018.
- Two times Coordinate and organized a **project exhibition on "Intelligence System and Computing"** in Electrical, electronics and computer department on April 2018 and 2019.

#### **Research Guidance**

- One M.tech. Dissertation (Mr. Parag joshi) completed under my guidance on "**Impact on voltage stability during power flow maximization**".
- One M.tech. Dissertation (Ms. Srishti Gupta) completed under my guidance on "**Simulation Based Performance Analysis of DSTATCOM for Power System**".

- One M.tech. Dissertation (Mr. Vinay Rohiwal) completed under my guidance on “**Implementation of Efficiency Energy Generation of Microgrid from Solar Power Plant**”.
- One M.tech. Dissertation (Ms. Shweta Joshi) completed under my guidance on “**Modeling and Analysis of Solar Power Generation Forecasting using Machine Learning Technique**”.

#### **HOBBIES**

- Love to help the ones who are in need and treat them like friends.
- Travelling new places, Playing Chess & Reading books.
- Watching movies and listening Music.

#### **Reference**

1. Dr. B.R.Natrajan, Dean in chemical engineering at Banasthali vidyapeth, Rajasthan.
2. Dr. Nitin Gupta as a Associate Professor (EE dept.) at MNIT, Jaipur.

#### **PERSONAL DETAILS**

**Date of Birth** : 22<sup>rd</sup> September 1987

**Father's Name** : Mr. Surendra Kumar Gandhi

**Residential Address:** 26-'Mainak', near nala, Subhash Nagar, Distt. Bhilwara (Raj.)-311001

**Permanent Address:** 26-'Mainak', near nala, Subhash Nagar, Distt. Bhilwara (Raj.)-311001

**Marital status** : Married

**Sex** : Male

**Languages Known** : Hindi and English

Date:

Place: Bhilwara

**ATUL GANDHI**