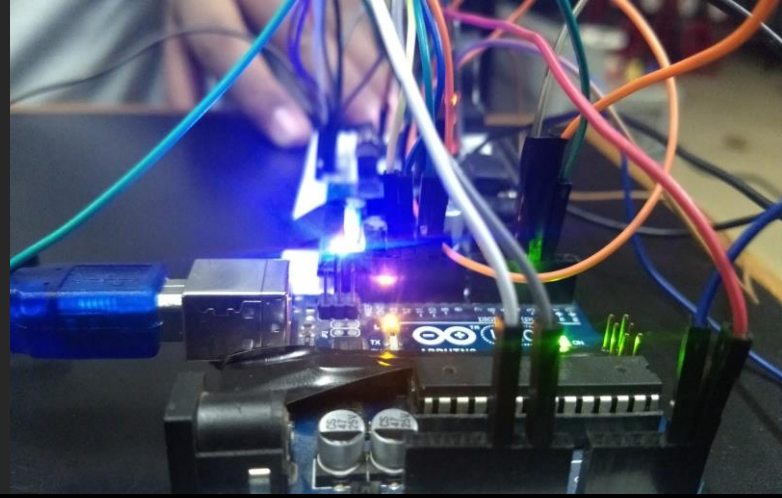


The

Circuit



12th EDITION

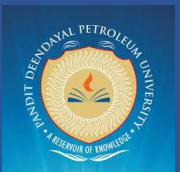
BALIA



Electrical Engineering ● Newsletter

Sep'18 – Feb'19

NAAC
accreditation
with "A" Grade
& CGPA of 3.39
out of 4.00





From the Director
School of Technology
Prof. T. P. Singh

Cheerful greetings to all our alumni and friends from the electrical engineering department at Pandit Deendayal Petroleum University (PDPU) Gandhinagar - our wonderland of technology development and engineering education. I am pleased to bring you the FIRST edition of the departmental newsletter, **The Circuit**, describing many of the departmental activities and accomplishments since September 2018 till today.

It has been very interesting semester at PDPU, as we have been engaged in searches of new faculty members in line with the students achieving higher numbers in gaining industrial placements and opting for higher studies. Meanwhile, the Electrical department continues to do what we do best: carrying out exciting research and preparing the next generation of electrical engineers to enter the workforce. Since its inception, the department has strived hard to comply with the University's vision of imparting world-class education in the field of Energy Engineering and Management. I extend my warm wishes to the department and welcome you to **The Circuit**.



From the Head
Electrical Engineering
Dr. J. G. Jamnani

It gives me immense pleasure and joy to introduce you to our first edition: **The Circuit**, the departmental newsletter. The contents of the letter have been bifurcated into three major sections: (1) *Faculty News*: faculty visits to other organizations, invited talks, lectures delivered, scientific breakthroughs in terms of publications have been highlighted; (2) *Student Spotlight*: as the name suggests, brings forth all the achievements and accomplishments of the students, prizes won, participatory events, projects under execution, etc.; and (3) *Future Events*. The Department of Electrical Engineering (EED) was established in 2010 since the inception of School of Technology, PDPU. EED offers B. Tech., M. Tech. with specialization in power systems and Ph.D. programs. The department has state-of-art laboratories with modern equipment and software package so that the students have better opportunity to learn practical aspects of engineering problems.

If you see anything in **The Circuit** that strikes a chord, please feel free to call or drop me a line at <JG.Jamnani@sot.pdpu.ac.in>.

PDPU’s VISION:

To be an internationally renowned & respected institution imparting excellent education & training based upon the foundation of futuristic research & innovations.

PDPU’S MISSION:

1. Undertake unique obligation for education in energy engineering and management with special responsibilities in domain specific aspects of energy & infrastructure.
2. Seek to nurture students of extraordinary motivation and ability and prepare them for lifelong learning and leadership in an increasingly knowledge driven world.
3. Envisage to establish institutes of excellence in education, competitive edge in research and real time relevance with futuristic thrusts in offering of programmes and undertaking of activities and projects.

SoT’s VISION:

To be an internationally renowned and recognized institute imparting technical education, research & training for societal impact and sustainable development.

SoT’s MISSION:

1. Undertake unique obligation for education in energy and engineering with special responsibilities in domain specific aspects of energy & infrastructure.
2. Seek to nurture students of extraordinary motivation and ability and prepare them for lifelong learning and leadership in an increasingly knowledge driven world.
3. Envisage to establish departments for excellent education, cutting edge research and training by offering programmes, to address futuristic needs.

DEPARTMENT’S VISION:

To be recognized globally for excellence in education, research and training in the field of Electrical Engineering by preparing graduates for tomorrow creating high societal impact.

DEPARTMENT’S MISSION:

1. To offer good quality under-graduate, post-graduate and doctoral programmes for preparing globally competitive graduates in electrical engineering.
2. To provide state-of-the-art resources that contribute to achieve excellence in teaching learning, research and skill development activities.
3. To impart knowledge driven, technologically delivered and research augmented excellent education.
4. To motivate the students for life-long learning and to inculcate leadership qualities in an increasingly knowledge driven world.

Mission Element	Mission Element
M1	Globally Competitive (Energy and Engineering)
M2	Skill Development
M3	Excellent Education
M4	Life-Long Learning
M5	Leadership

PROGRAM EDUCATIONAL OBJECTIVES (PEOs):

1. To prepare highly competent graduates with strong foundation in engineering and technology for successful career in industries, academics and research organizations.
2. To prepare the graduates with ability to identify, analyze, design and solve complex electrical engineering problems, based on application of basic sciences, mathematics and fundamentals of electrical engineering.
3. To prepare fundamentally strong graduates having broad knowledge in electrical engineering that can become innovators or entrepreneur to solve industrial and societal challenges.
4. To prepare graduates with holistic education approach that they should contribute ethically in multicultural and multidisciplinary groups to develop sustainable solutions for global, environmental and social issues.

PROGRAM OUTCOMES (PO):

Engineering Graduates will be able to:

1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

11. **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES (PSOS)

PSO1: To identify, formulate, design and investigate various problems related to electrical circuits, power electronics, electrical machines and power systems by applying fundamental knowledge of engineering and science

PSO2: To demonstrate proficiency in usage of modern hardware & software tools to model, design, simulate and analyze electrical systems for solving real world multi-disciplinary problems

PSO3: To contribute in development of smart systems, modern grid and clean energy system for societal and environmental benefits.

Faculty News

Workshops/Short term Courses Conducted

Dr. Anil Markana organized a two-day workshop on *Raspberry PI – Image Processing* which was conducted by **Mr. Kaustubh Sadekar**, Alumni, PDPU and was participated by 43 students in Nov'18. The workshop was organized under IEEE-PDPU Student Chapter.



Dr. Anil Markana organized a two-day workshop on *Internet of Things (IoT)* which was conducted by **Electronics Hobby Centre, Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT)**, Gandhinagar and was participated by 43 students in Nov'18. The workshop was organized under IEEE-PDPU Student Chapter.



Faculty News

Invited Talks / Guest Lectures from Industry Personnel

Dr. Anil Markana organized a two-hour expert talk on *Recent Advances in Factory Automation* which was delivered by **Mr. Rameshchandra Bhorania**, Sr. Manager – FA Training, Mitsubishi Electric India Private Limited, Pune for Semester V students during their Instrumentation and Control course.



Dr. J. G. Jamnani organized an expert talk on *Design of Power and Distribution Transformers* which was delivered by **Mr. Dhruvesh M. Mehta**, Assistant Manager, Technology Transformers & Rectifiers (India) Ltd., Ahmedabad for Semester VII students.

Dr. Siddharth Joshi organized an expert talk on *Sky Surya Shakti Kishan Yojna – Net Metering* which was delivered by **Mr Rajesh Joshi**, Owner and founder, JJPV Solar Ltd. Rajkot for Semester-I M.Tech students.



Ms. Vima Mali organized an expert talk on *Liberalization, Globalization and Privatization* which was delivered by **Dr. Chandan Chatterjee**, Former Director, Center for Entrepreneurship Development (Govt. of Gujarat) & General Manager (Technical) Industrial Extension Bureau-INDEXTb (Govt. of Gujarat) for Semester-VII B.Tech students

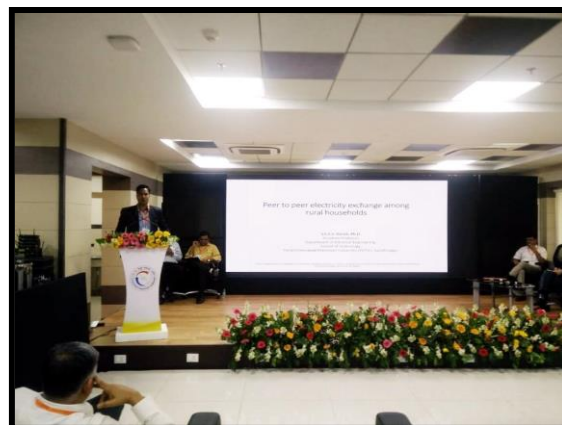
Faculty News

Invited Talks / Guest Lectures Delivered



Dr. Siddharth Joshi delivering an expert talk on *PSIM software* and conducted hands-on-training at Atmiya University Rajkot (Sep'18).

Dr. V. S. K. V. Harish delivered a talk on “*Peer to peer electricity exchange within a solar based DC micro grid for rural electrification*” at Uttar Pradesh Electricity Regulatory Commission (UPERC) organized Conference on **Creation of Eco System using Block Chain Technology for Renewable Energy Distributed Energy Generation & Supply** in Lucknow on 10th Oct'18.



Dr. V. S. K. V. Harish with Sh. Sethuraman Ganesan, Sr. Manager, ABB (India) Ltd. and others at CBIP, GETCO, CIGRE-India and ABB organized National Conference on Renewable Energy integration in Vadodara (Dec' 18). Dr. Harish was invited to speak on *Energy trading and exchange within microgrids*.

Dr. J.G. Jamnani delivered Expert lecture delivered for the M.Tech. and B.Tech. Students on “*Maintaining and Improving Voltage Profile in Power System*” at Institute of Technology, Nirma University on 9th October, 2018.

Faculty News

Invited Talks / Guest Lectures Delivered

Dr. Anil Markana delivered expert talk on “*Lexicographic Multi-objective optimization and its application in process control*” during **ISTE-GTU sponsored one week STTP on Multi-objective optimization: Theory and Applications**, organized by Vishwakarma Government Engineering College, Chandkheda, Ahmadabad on 12th Feb. 2019.



Dr. V. S. K. V. Harish with Sh. R.P. Singh, Chairman (IAS), Sh. Sanjay Kumar Singh, Secretary of UPERC and Ms. Tanya Batra, Grant Thornton after delivering his talk on *Vehicle-to-Grid Management* (Feb'19) at Lucknow.

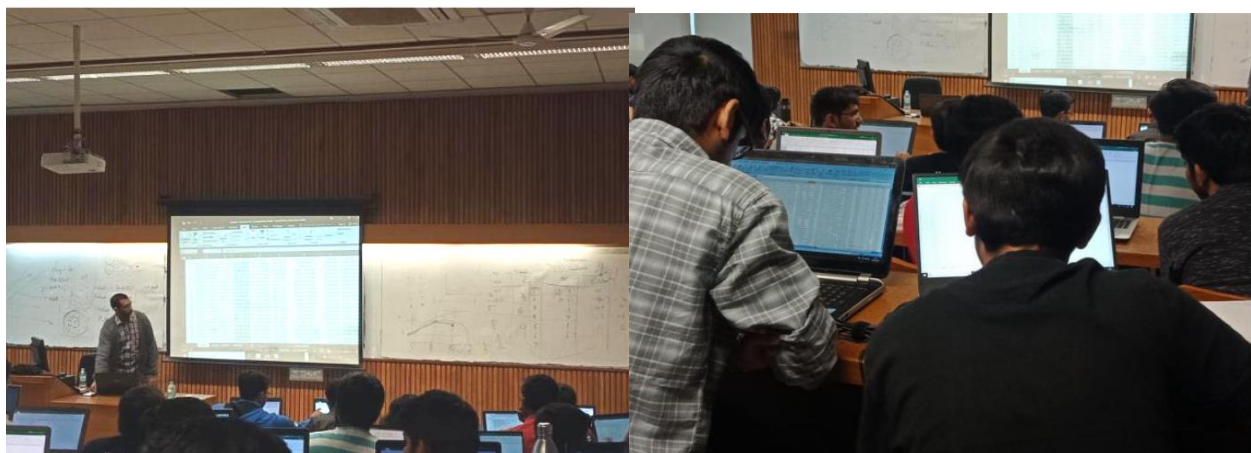
Extension Activities

Dr. Anil Markana was invited as a Panel member of Research Proposal Presentation Evaluation Committee for PhD admission (2018-19) at Gujarat Technological University, Chandkheda, Ahmedabad in Dec. 2018 and in Feb 2019.

Dr. Anil Markana was invited as an expert during open house project fair at SSIP (Students Start Ups and Innovation Policy) at Government Engineering College, Gandhinagar in Feb. 2019.

Workshops/Short term Courses Conducted

Dr. Anil Markana organized a two-day IEEE-PDPU Student Chapter workshop on *Data Analytics* which was conducted by **Mr. Abhishek Patria**, Executive - Development Strategy, ONGC and participated by 35 students in Feb'19.



Faculty News

Workshops/Short term Courses Attended

Dr. V. S. K. V. Harish, Mr. Nirav Karelia and Mr. Vipin Shukla attended the *PDPU-Roadmapping workshop on Industry Institution Collaboration* which was conducted by **University of Cambridge, UK** with support from **BP Exploration (Alpha) Ltd.** held at PDPU, Feb' 19.



Ms. Vaidehi Deshpande attended the **DST-UKIERI workshop** on *Design, Optimization and Data-driven Applications of Smart Energy System* which was held at the **Indian Institute of Technology Gandhinagar**, Feb' 19.

Mr. T V Pavan Kumar attended the **TEQIP-III STTP** on *Futuristic Technology for Power System* at **ABB, Vadodra**, jointly Organized by BVM Engineering College, ABB India Ltd., and GEC, Banswara under the Twinning Program, Dec' 18.



Mr. Vipin Shukla attended the **TEQIP III Short Term Course** on "*Recent Advances in Applied Optimization*" which was held at the **Indian Institute of Technology Guwahati**, Dec' 18.

Faculty News

Workshops/Short term Courses Attended

Dr. Anil Markana and **Ms. Meera Karamta** attended the TENCON Secretariat – 2018 conference of IEEE Seoul Section organized by the IEEE Region 10 held at the **Jeju Island, South Korea, Oct., 2018**.



Meet our new faculty members



Ms. Vaidehi Purushottam Deshpande (b. 1991)

Ms. Deshpande joined the Electrical Engineering department as a **Lecturer** on **8th Oct'18**. She has 2.5 years of total teaching experience. She is a Master in Engineering with Power Electronics & Drives as specialization from University of Pune in 2016 with a B.E. in Electrical Engineering from University of Pune in 2010. She is currently teaching Analog & Digital Electronics (Theory and Lab) for B.Tech-IV, Power System Design & Practice for B.Tech-VI. Her areas of interest lie in Power quality, active power filters, renewable energy generation, drives and power electronics.



Dr. V. S. K. V. Harish (b. 1988)

Mr. Harish joined the department as an **Assistant Professor** on **4th Sep'18**. Prior to this, he was a Post-Doctoral Research Fellow at TERI School of Advanced Studies, New Delhi (2016-18), He received his Ph.D. (IIT-Roorkee) in 2017, M.E. (Power) with Gold Medal (Jadavpur University, Kolkata) in 2012 and B.E. (EEE) in 2009 from MDU Rohtak. He is currently teaching *Advances in Power Systems* for B.Tech-VI, *Digital Signal Processing Lab* for B.Tech-VIII and *Advanced Power Electronics* for M.Tech-II. His research interests lie in building energy systems, micro-grids and rural electrification.

Faculty News

Publications - Journals

- ❖ **Karamta, M. and Jamnani, J.G.** “*Estimating the dynamic states of mulit-machine power system using extended and unscented Kalman filter*”, **ACTA Press - International Journal of Power and Energy systems**, (Accepted).
- ❖ Patel, U., Chothani, N., and **Bhatt, P.** “*Emulation of Auto-Reclosing Scheme for Transmission Line with Adaptive Dead Time Control*”, **Taylor & Francis - Electric Power Components and Systems** (Accepted).
- ❖ Astik, M., **Bhatt, P.** and Bhalja, B. “*Bi-directional Position and Speed Estimation Algorithm for Sensorless Control of BLDC Motor*”, **Electrical, Control and Communication Engineering – Scientific Journal**, Riga Technical University (Accepted).
- ❖ Patel, N. and **Bhatt, P.** “*Mitigation of Sub-synchronous Resonance with Static Var Compensator*”, **Taylor’s University - Journal of Engineering, Science and Technology** (Accepted).
- ❖ **Jamnani, J. G.** and Pandya, M. “*Coordination of SVC and TCSC for Management of Power Flow by Particle Swarm Optimization*”, **Elsevier - Energy Procedia**, Vol. 156, pp. 321-326, Jan 2019.
- ❖ **Harish, VSKV**, Anwer, N. and Kumar, A., “*Optimal Energy Sharing Within a Solar-Based DC Microgrid*,” **Springer - Advances in Intelligent Systems and Computing**, vol. 817, pp. 635-644, Jan 2019.
- ❖ Malhotra, Y. and **Harish, VSKV.** “*Solar Based Integrated Energy Systems for Green Building Applications*,” **UGC - Journal of Energy Environment and Carbon Credits**, vol. 8, no. 3, pp. 22-26, Jan 2019.
- ❖ Patel, U., Chothani, N., **Bhatt, P.** and Tailor, D. “*Auto-Reclosing Scheme with Adaptive Dead Time Control for Extra-High-Voltage Transmission Line*” **IET Science, Measurement & Technology**, vol. 12, no. 8, pp. 1001-1008, Nov 2018.
- ❖ Patel, U., Chothani, N., **Bhatt, P.** “*Sequence-space-aided SVM classifier for disturbance detection in series compensated transmission line*”, **IET Science, Measurement & Technology**, vol. 12, no. 8, pp. 983-993, Nov 2018.
- ❖ **Harish, VSKV**, Anwer, N. and Kumar, A. “*Modelling of Peer to Peer Sharing of Power within Solar Based DC Microgrids*,” **UGC-Trends in Mechanical Engineering & Technology**, Vol. 8, no. 3, pp. 44-48, Nov 2018.

Faculty News

Publications – Journals

- ❖ **Markana A.**, Padhiyar N., and Moudgalya K., “*Multi-criterion control of a bioprocess in fed-batch reactor using EKF based economic model predictive control,*” **Elsevier-Chemical Engineering Research and Design**, vol. 136, pp. 282-294, Oct. 2018.
- ❖ **Joshi, S., Pandya, V. and Sant, A.** “*Gain Scheduling Algorithm based Control of Renewable Energy Systems for Hybrid Standalone DC Grid*”, **Springer-Iranian Journal of Science and Technology**, vol. 42, no. 3, pp. 327 – 342, Sept, 2018

Publications – Conferences

- **Amit Vilas Sant** and Maharshi H. Gohil, “*ANN Based Fundamental Current Extraction Scheme for Single Phase Shunt Active Filtering,*” Third International Conference on Electrical, Computer and Communication Technologies, ICECCT 2019, held at Coimbatore, India, **February 19-23, 2019.**
- Mihir Bhatt, **Praghmesh Bhatt**, “*Thermal Stress Analysis of Transformer Oil based Nanofluid*”, 12th International Conference on Thermal Engineering: Theory and Applications, Pandit Deendayal Petroleum University, Gandhinagar, India, **February 23-26, 2019.**
- Het Bhalja, **Amit Vilas Sant**, **Anil Markana** and Bhavesh Bhalja, “*Standalone Microgrid with Five Level Diode Clamped Inverter Based Hybrid Generation System,*” in the Proceedings of the Third International Conference on Electrical, Computer and Communication Technologies, ICECCT 2019, held at Coimbatore, India, **February 19-23, 2019.**
- H. S. Bhalja, **A. V. Sant**, **Markana A.** and B. R. Bhalja, “*Standalone microgrid with five-level diode clamped inverter based hybrid generation system*” in proceedings of the 2019 third IEEE international conference on Electrical, Computer and Communication Technologies (IEEE ICECCT 2019), held at SVS college of Engineering, Coimbatore, Tamilnadu, India, **Feb 20-22, 2019**
- Shyam Sakaria, Mark Tailor and **Siddharth Joshi**, “*MODELING & SIMULATION ANALYSIS OF 800kW HAWT*”, in proceedings of the 12th International Conference on Thermal Engineering: Theory and Applications (ICTEA 2019), held at Pandit Deendayal Petroleum University, Gandhinagar, India, **Feb 23-26, 2019.**
- **Siddharth Joshi**, **Vivek Pandya** and **Bhinal Mehta**, “*FRT effect on 800kW Grid Tied Wind Energy Conversion System*”, in proceedings of the 12th International Conference on Thermal Engineering: Theory and Applications (ICTEA 2019), held at Pandit Deendayal Petroleum University, Gandhinagar, India, **Feb 23-26, 2019.**
- Gargi Trivedi and **Markana A.**, “*Sizing and placement of single distribution generator in radial distribution network: An analytical study*”, in proceedings of the 12th International Conference on Thermal Engineering: Theory and Applications (ICTEA 2019), held at Pandit Deendayal Petroleum University, Gandhinagar, India, **Feb 23-26, 2019.**

Faculty News

Publications – Conferences

- Dhaval R. Vyas and **Markana A.**, “*Setpoint tracking control using modified higher order sliding mode control: Application to robotic manipulator*”, 12th International Conference on Thermal Engineering: Theory and Applications (ICTEA 2019), held at Pandit Deendayal Petroleum University, Gandhinagar, India, **Feb 23-26, 2019**.
- Sweta Malik; **V S K V Harish**, “*Integrating demand response and energy efficiency*”, World Sustainable Energy Days 2019: Young Energy Researchers Conference, Wels/Austria, **Feb 27 - Mar 1, 2019**.
- **Vima Mali** and Brijesh Tripathi, “*Optimum working temperature of the supercapacitor in a hybrid energy storage system for electric vehicle application,*” in the Proceedings of the 12th International Conference on Thermal Engineering: Theory and Applications, held at PDPU in collaboration with the Ryerson University Canada, **23-26th Feb 2019**.
- Binit Patel, Kishan S, **Vipin Shukla**, “*Design and Implementation of BLDC Motor Controller for Energy Efficient Fan*” 12th International Conference on Thermal Engineering: Theory and Applications (ICTEA 2019), held at Pandit Deendayal Petroleum University, Gandhinagar, India, **Feb 23-26, 2019**.
- Amitkumar Suthar, Manish Kumar and **Vipin Shukla**, “*Sea Water Desalination Using Waste Heat of Nuclear Power Plant*”, (Elsevier SSRN) International Conference on Sustainable Computing in Science, Technology and Management, SUSCOM-2019, **February 26 - 28, 2019**.
- **Praghesh Bhatt**, Chao Long, **Bhinal Mehta**, Nilay Patel, “*Optimal Utilization of Reactive Power Capability of Renewable Energy Based Distributed Generation for Improved Performance of Distribution Network*”, International Conference on Renewable Energy and Climate Change (REC2019), IITRAM, Ahmeabad, **1-2 February, 2019**.
- Pankita Mehta, **Praghesh Bhatt**, **Vivek Pandya**, “*Voltage Control of Wind and Diesel Based Distributed Generating System Using PSO and CSA*”, International Conference on Renewable Energy and Climate Change (REC2019), IITRAM, Ahmedabad, **1-2 February, 2019**
- **V S K V Harish**, “*Coordinated energy management for grid connected electric vehicles,*” Uttar Pradesh Electricity Regulatory Commission Conference 2019 “Technosphere of Electric Vehicles: Charging infrastructure, power demand estimation and pricing issues”, vol. 1, no. 1, pp. 7 - 13, **4 Feb. 2019**, Vidyut Niyamak Bhawan, Lucknow.
- Mihir Bhatt, **Praghesh Bhatt**, “*Electric Field Analysis of Transformer oil based Nanofluid*”, in International Conference on Emerging Trends in Engineering, Science and Technology, 14-15 December 2018, Charotar University of Science and Technology, Changa, Gujarat.

Faculty News

Publications – Conferences

- Nilay Patel, **Praghnesb Bhatt**, “A Novel Approach to Mitigate SSR with Modified Turbine Design Using MR Fluid” International Conference on Emerging Trends in Engineering, Science and Technology, **14-15 December 2018**, Charotar University of Science and Technology, Changa, Gujarat.
- **V S K V Harish**; N Anwer; A. Kumar, “Peer to peer electricity exchange within solar based DC microgrids,” CIGRE, CBIP, SPE - National Conference on Renewable Energy technologies and its integration with grid”, vol., no., pp. 95 - 106, **Dec. 2018**, Vadodara, Gujarat.
- **M. R. Karamta, Markana A., and J.G. Jamnani**, “EKF based dynamic state estimation of SMIB system integrated with STATCOM” in proceedings of the IEEE TENCON- 2018, IEEE region 10 international conference, held at Jeju, Korea, **Oct. 28-31**, 2018.
- **V S K V Harish**; N Anwer; A. Kumar , “Peer to peer electricity exchange among rural households,” Uttar Pradesh Electricity Regulatory Commission Conference 2018 “Creation of Eco System using Block Chain Technology for Renewable Energy Distributed Energy Generation & Supply”, vol. 1, no. 1, pp. 86-93, **10 Oct. 2018**, Vidyut Niyamak Bhawan, Lucknow.
- **J. G. Jamnani & Maulikkumar Pandya**, “Coordination of SVC and TCSC for Management of Power Flow by Particle Swarm Optimization” at 5rd International Conference on Power & Energy Systems Engineering, CPESE 2018, held at Nagoya University, Nagoya, Japan during **September 19-21, 2018**

Publications – Awards

- ✓ **Dr. Praghnesb Bhatt** was awarded the **Best Research Paper Award** for the paper titled “*Optimal Utilization of Reactive Power Capability of Renewable Energy Based Distributed Generation for Improved Performance of Distribution Network*” at the International conference on “Renewable Energy and Climate Change (REC2019)” organized by Institute of Infrastructure Technology Research and Management (IITRAM), Ahmedabad, Feb’19.



Departmental Events

INDUSTRY CONNECT 2019

Industrial delegates from various areas of electrical engineering viz., electric power sector, electronics, manufacturing, technocrats and consultants were invited to the Industry Connect 2019 event which was held on **29th Jan'19**. The event was coordinated by **Dr. Amit Sant** and **Mr. Nirav Karelia** under the headship of **Dr. J.G. Jamnani** and patron ship of **Prof. T.P. Singh**, Director, SoT.

Prof. T.P. Singh introduced the INDUSTRY CONNECT event: scope and vision behind it and elaborated how industry and academic institutions should work in synergy, in order to achieve common Socio-techno-economic benefits.



Dr. J. G. Jamnani, Head, Electrical Engineering welcomed the industrial delegates and expressed his sincere thanks to the delegates for graciously attending the event. He elaborated how the students of the department are provided with immense opportunities to interact with industry through training and placement, industrial visits, projects, internships; dissertation, etc.



The industrial delegates were accompanied by the Head and faculty members to various laboratories of the Electrical Engineering Department: Power Electronics and Drives Lab, Modelling and Simulation Lab, Electronics and Communication Lab, Switchgear and protection Lab, High Voltage Engineering and Machines Lab and Power Dynamics and Control Lab (*photographs in next page*).

Departmental Events

INDUSTRY CONNECT 2019



Departmental Events

INDUSTRY CONNECT 2019

List of Attendees from Industry (Alphabetical order)

1. **Dr. S. H. Chetwani** Head R&D, ERDA, Vadodara.
2. **Mr. Madhur Gupta** Senior Engineering Leader, GE Hydro, Vadodara
3. **Mr. Darshan Patel** Owner, Leaftronix, Gandhinagar
4. **Mr. P Bhavesh Pethani** CEO, Vision Embesoft Solution, Gandhinagar
5. **Mr. Arun Rao** General Manager (Distribution), Torrent Power, Ahmedabad
6. **Mr. Prashant Shah** Senior Manager Maintenance, AI Engineering, Odhav, Ahmedabad
7. **Ms. Shivani Sharma** Sr. Technical Consultant - Power Consulting, ABB India Ltd., Vadodara
8. **Mr. S. M. Takalkar**
9. **Mr. Keval Velani** Takalkar Power Engineers and Consultants Pvt. Ltd., Vadodara



Student Spotlight

E-BAJA 2019

A group of 24-students from both Electrical Engineering and Mechanical Engineering departments participated in **E-BAJA 2019** event which was held at Indore, organized by SAE (Society of Automotive Engineers) India and Mahindra & Mahindra (Pvt.) Ltd.

E-BAJA is All-Terrain Electrical Vehicle design competition where every team has to design ATM from scratch. **Mr. Ravi Botta** was the faculty mentor of E-BAJA team from electrical department.



Student Spotlight

E-BAJA 2019

Achievements @E-BAJA 2019:

- ❖ Technical inspections for both Electrical and Mechanical parts were cleared **in first attempt** only.
- ❖ PDPU team was one of the 13 teams who took part in final **ENDURANCE** round.
- ❖ PDPU secured **12th All India Rank** in the competition and stood **2nd** in the GUJARAT.
- ❖ **Three (3) students** have been shortlisted for HR round for Placements.

NPTEL 2018-19

PDPU secured 13th position nation-wide for NPTEL courses and examinations for the term of July - Dec 2018. A total of 412 courses were enrolled by 59 students out of which One (1) Elite + Gold certificate, 31 Elite certificates were awarded and 21 successfully completed the course. **Mr. Ravi Botta** was coordinating the NPTEL-Electrical Engineering data.



Student Spotlight

SIAT 2019 (First Prize Award)

Symposium on International Automotive Technology (SIAT) 2019 was the 16th event in the series, organized by Automotive Research Association of India (ARAI), in association with SAEINDIA, NATRIP and SAE International (USA), at Pune (India), from 16–18 January 2019 under the theme *“Empowering Mobility - The Safe & Intelligent Way”*.



Mr. Kishan Srinivasan and **Mr. Binit Patel**, IV year students, won the **first prize** under sustainable category with our poster titled as “Development of BLDC motor controller for electric vehicle”, under the guidance of **Mr. Vipin Shukla**.

PLACEMENT STATISTICS

Out of **63 students** eligible for placement, **40 students** have been offered placements in several industries. Also, **103 students** of B.Tech-VIII semester have opted for Comprehensive Project (CP).

Student Spotlight

ENERGY AUDIT PDPU CAMPUS

Energy and Safety Audit of PDPU campus is under execution since **January 2019** with coordination from Gujarat Energy Research and Management Institute (GERMI) and is being exercised by JP Technosoft Pvt. Ltd.



A total of **12-students** from III year and IV year of the department are working on this project. **Dr. Amit Sant** and **Dr. V. S. K. V. Harish** are coordinating this task. Electrical measurements have been recorded for the E-, D- and C-Block buildings of the campus. In the coming months, Air Conditioning and computer loads shall be recorded.

Future Events

Short Term Training Program

The department will be conducting a **Short Term Training Program** on *Advances in Emerging Power Systems Operations, Control and Protection* during **5th – 9th March 2019**. Eminent professors, researchers and engineers from industry contributing in these areas will deliver lectures during the program and share their experience and expertise with the participants. **Dr. J.G. Jamnani** and **Dr. Vivek Pandya** are the coordinators. **Dr. Bhinal Mehta** and **Dr. Siddharth Joshi** are Co-Coordinators. Any correspondence related to the program can be addressed to **Dr. Praghmesh Bhatt**, Associate Professor, EED through <epsocp@gmail.com>.

Research Conclave 2019 – IIT Guwahati (Mar'19)

Mr. Shivank Vyas, IV year, has been selected for the final round of *Redstart: The Startup Challenge*. Research Conclave provides a platform to nurture young minds towards research, innovation, and entrepreneurship. He is working under mentorship of **Mr. Vipin Shukla**.

Newsletter Coordinator:

V.S.K.V. Harish

Assistant Professor

Harish.VSKV@sot.pdpu.ac.in

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