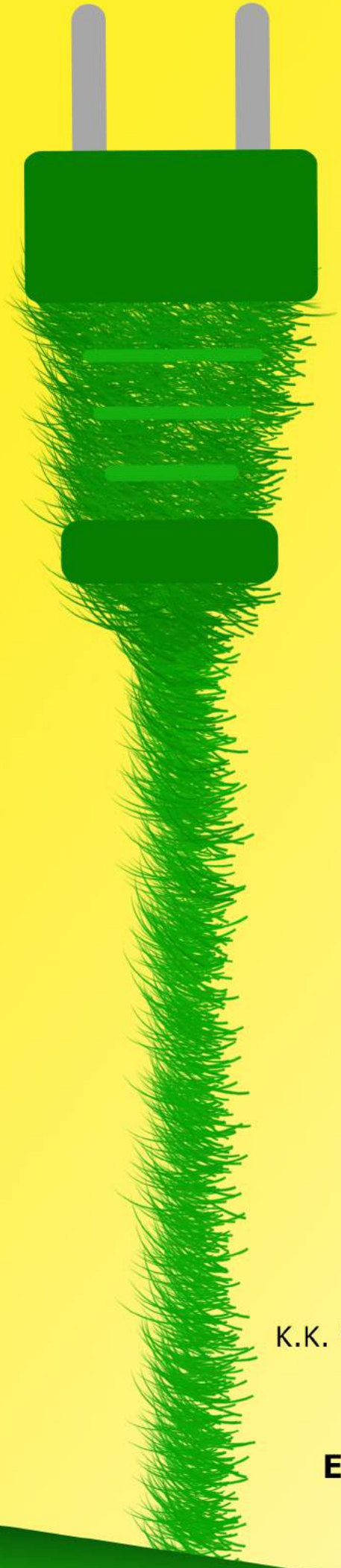


# VIDYULATA

A Half Yearly Newsletter Issue/Vol. No. 6
May 2018

K.K. WAGH INSTITUTE OF ENGINEERING
EDUCATION AND RESEARCH
**DEPARTMENT OF**
**ELECTRICAL ENGINEERING**

# CONTENTS



CONTENTS

# FROM THE DESK OF HOD

Friends,

It's immense pleasure to present this semi-annual newsletter "Vidyulata". Electrical Engineering Department is the dynamic and vibrant department with the blend of young and experienced Faculty.

Department is actively involved in academic as well as research work in current areas of Electrical Engineering and multi-disciplinary streams. The department has well equipped labs with the state-of-the-art software, hardware and machineries.

The faculty members are constantly publishing technical papers in National and International journals and conferences. Also, the department is offering consultancy services to many National/Multinational industrial organizations.

The department is fortunate to have dedicated teachers, devoted students, and committed supporting staff and expert technical staff.

Specially, I congratulate my students for participating in various extra-curricular activities, research work and competitive examinations. My best wishes to all for their bright carrier and successful life.

Dr. B. E. Kushare
Head of Electrical Engineering Dept.
bekushare@kkwagh.edu.in

# VISION AND MISSION

**Mission of the Institute**

Committed to serve the needs of the society at large by imparting state-of-the-art Engineering education and to provide knowledge and develop ATTITUDE, SKILLS and VALUES, leading to establishment of quality conscious and sustainable research oriented Educational Institute.

**Vision of the Institute**

Empowering through quality technical education.

**Vision of the Department**

Development of all round, socially responsible, innovative electrical professionals and researchers leading to empowerment to serve needs of society, meet global challenges and emerge as Centre of Excellence.

**Mission of the Department**

**M1:** Establish vibrant learning environment to enable students for lifelong learning with ethical practices to face challenges of electrical engineering field and globalization by providing state-of-the-art infrastructural facilities.

**M2:** Promote active learning, critical thinking and engineering judgment coupled with business, entrepreneurial skills.

**M3:** Expose to recent technological advancements and industrial professional practices.

**M4:** Introduce PG Programs and establish recognized research centre.

**M5:** Provide conducive environment and promote intellectual (scholarly) pursuits for encouraging innovation, research, real world problems with multidisciplinary approach.

**M6:** Offer consultancy and R&D services to various social, educational, industrial and commercial organizations for self reliance.

**M7:** Establish centre of excellence in the field of power quality and energy management.

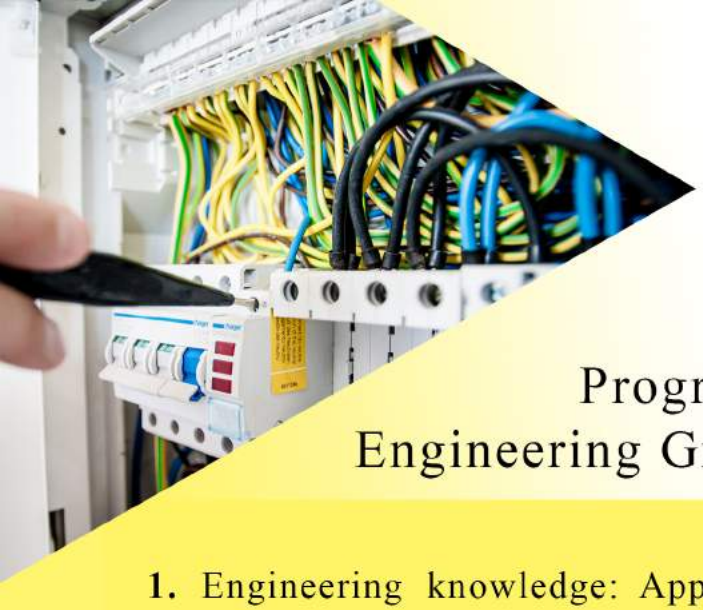
# Program Educational Objectives

**PEO1:** To provide solid foundation in mathematics, science,humanity,environment and engineering fundamentals.

**PEO2:** To train students with wider electrical engineering concepts so as to comprehend, simulate, analyze, design, solve, draw inferences, realize and foster creativity, innovation and research to excel in technical field.

**PEO3:**To provide conducive academic environment to inculcate professional skills, ethical practices and soft skills leading to th entrepreneurship development, enhancement of employability, success in competitive examinations and life-long learning.

**PEO4:** To relate engineering issues to socio-economic context with multidisciplinary approach to address the problem of real world.





# Program Outcomes:
# 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.

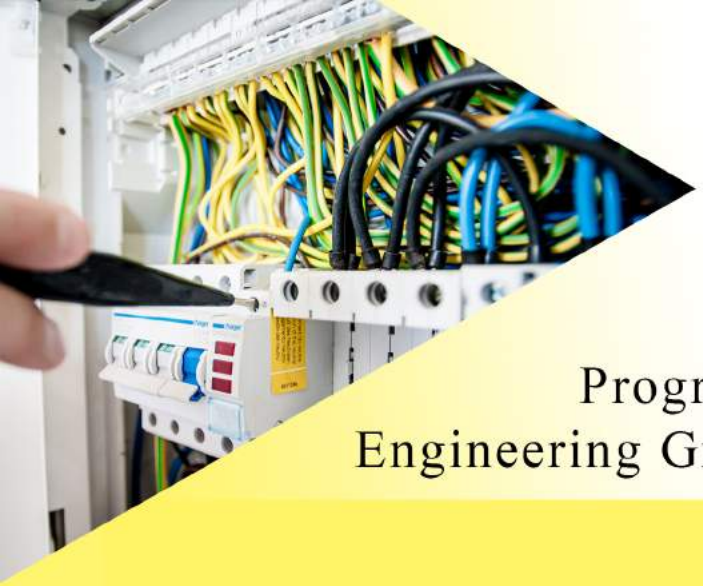
**3.** Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**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 modelling 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.





# Program Outcomes:
# Engineering Graduates will be able to:

**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 (PSO)**

**Students will be able to:**

PSO1: Apply fundamentals of Electrical Engineering to solve real time problems with social and multi-disciplinary approach.

PSO2: Model, simulate, analyze, critically evaluate and interpret the results with acquired professional skills and ethical practices, leading to enhancement of employability.

# TECHNICAL ARTICLE

## Applying Blockchain Technology to Electric Power Systems

Adithya Haribabu Vangari
(2015-16 Batch from Elect. Engg. Dept. KKWIEE&R, Nashik)

Studying at KTH Royal Institute of Technology,

I have shared my insights, which I gained from a project I was part off at ABB, Helsinki in this respective article.

**Overview**

As we know electrical power systems are not planned in a single sitting but rather, they evolve as the society develops which is directly proportional to the population growth, the standard of living, the demand for power for sustaining a stable living and surviving in extreme weather conditions.

For over the last few centuries the electrical power system was largely centralized, and the major source of power generation were fossil fuels such as coal.

From the last two decades the awareness about the environmental impact caused due to the excessive use of conventional sources of energy has increased. This awareness has enabled respective policy makers to come together on a single platform and draw out a sustainable plan for green energy incorporation for the betterment of tomorrow.

The need for a highly reliable, sustainable and efficient electrical power grid resulted into the interconnection of ICT technology with the electrical power systems along with the bilateral flow of communication technology. This according to me is the definition of 'Smart grid'.

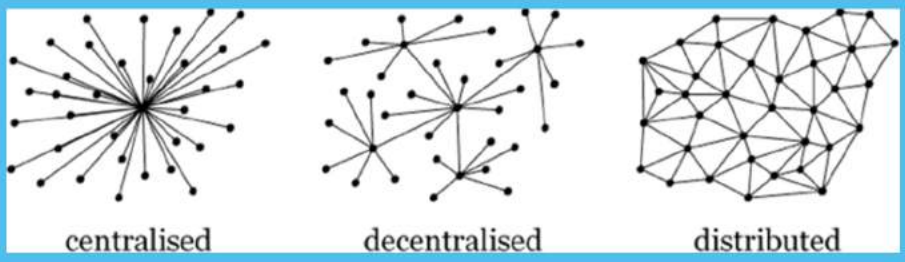
**Introduction**

Traditional electrical power systems, especially the distribution system have used greater magnitudes of voltage levels in order to transport higher volumes of power.

As there is increased penetration of renewable energy into the electrical grid, we need intelligent systems which can aid in the electricity markets by providing higher security, greater transparency, being functionally sound and economically viable.

# TECHNICAL ARTICLE

From the below figure we can see the Evolution of the electrical power grid from centralised power generation to decentralised power generation and then to distributed power generation.




Smart meters are a very important link in the smart electrical grid field. They enable monitoring of the power system in a way were there is bidirectional flow of communication between the various segments in the electrical power grid.

The incorporation of smart meters will directly or indirectly aid in increased consumer participation, provide with diverse generation options (wind power, solar power, hydro power, etc) and higher stability.

The communication link is of great importance when it comes to smart meters. Blockchain technology also known as Distributed Ledger Technology can be of greater significance if we look at the fundamental characteristics of the technology and its application into smart metering sector.

In the next sections we explore the integration of blockchain technology for peer-to-peer energy trading.

The invention part of the component/service etc. When was your product invented? What were the push/pull forces behind it? What kind of discoveries or incentives had appeared earlier that now made this thing realizable?

**Blockchain Technology:**

The term blockchain technology was first coined by a paper written by an author named Satoshi Nakamoto in the year 2008. Although the respective research paper talks about a crypto currency named bitcoin, the underlying technology behind Bitcoin is blockchain technology. This technology is of greater interest for us in this report. The most important characteristic of blockchain technology is that it enables peer-to-peer trading with the help of a mathematical function know as proof of work or proof of stake. This makes blockchain networks transparent, robust, open source and reliable.

# TECHNICAL ARTICLE

| Pull Forces/ Proactive Forces | Push Forces/ Reactive Forces |
|---|---|
| Open source | The technology is in nascent stage of development |
| High flexibility to offer public and private networks | Lack of international standards in the market |
| As the technology is in the maturing phase there are major opportunity in various sectors | Hardware infrastructure is still in the initial development phase |
| The functionality of value transfer on a blockchain is a valuable feature | |

Table: Pull and Push forces for integrating blockchain technology with power sector

## Evolution of Blockchain Technology

As we know crypto currencies such as 'Bitcoin' have made major headlines due to their exponential value gain in the international stock market [3]. Although the section of crypto currencies is not of much interest to us, the underlying technology known as the 'Blockchain technology' is of much interest when it comes to various aspects of the electrical power industry.
As we know that the present electrical grid is evolving at a fast pace due to the increased penetration of renewable and distributed energy resources, incorporation of energy storage systems and digitization. The integration of blockchain technology with the electrical grid presents with a set of challenges and opportunities.

Let's have a look at the various applications where blockchain technology can be integrated in order to get functionally sound and economically viable applications.

The most valuable characteristic of Blockchain technology is its ability to transfer value over the internet. Similar pattern of characteristic can be observed with the application of internet during the early 1990's where internet was primarily used for the transfer of information. Many think tanks around the world suggest that blockchain technology is what internet was in the early 1990's.

The respective technology can be used in various segments of the electrical grid where we can get intelligent systems that manage the payments, enable peer-peer energy trading, distribution and sale. As we know there is no need for a third-party organization for the authentication of the various transactions on a blockchain network as the respective authentication function is carried out with a computational process known as 'proof of work' or 'proof of stake'. This functionality provides us with the opportunity to substantially reduce the transactions period and simultaneously reduce the cost by avoiding third party sections in the value chain.

# TECHNICAL ARTICLE


**Business plan: Specific novelty/uniqueness of this product?**

Electric vehicle (EV) market + blockchain technology = a Good fit for Peer-to-Peer energy trading?

In this section I will propose the integration of blockchain technology as a connecting link for Peer-to-Peer energy trading in the field of Electric vehicles especially PHEV's.

In today's era where electric cars, from GM, Tesla, and Nissan, are offering customers everything they want – but without the pollution, I personally feel that a new wave of transformation in the transportation sector awaits us.

The decrease in the battery prices with increase in the performance along with high consumer demand have aided in the rapid growth of electrical vehicles sector.

This has inspired government regulatory agencies and policy makers around the world to become more optimistic and aggressive about the integration of electric vehicles as accumulative part of the transportation sector.

Closely linked to the expansion of electric vehicles is the need for sufficient publicly available charging infrastructure. This remains a crucial challenge until today as we see different charging technologies for interconnectivity trying to outdo each other in concentrating as many customers as possible to their services.

This type of decentralized public charging infrastructure results into a highly fragmented market (e.g. in Germany exist over 400 Charging Pole Operators) and thus leads to inefficient operation with regards to the value charged to the customers for the respective service provided.

This market gap due to the decentralized public charging infrastructure is the reason for integrating blockchain technology which will enable Peer-to-Peer energy trading there by resulting into a distributed public charging infrastructure.

# TECHNICAL ARTICLE

**ISO 15118: Road vehicles – Vehicle to grid communication interface**

The various communication protocols with regards to electric Vehicles (EV) which include Battery Electric Vehicles, Plug-In Hybrid Electric Vehicles, and the Electric Vehicle Supply Equipment (EVSE) are stated in the ISO 15118: Road vehicles -Vehicle to grid communication interface standard.

The respective standard also includes various communication protocol standards between the Electric Vehicle Communication Controller (EVCC) and the Supply Equipment Communication Controller (SECC) respectively. The standard ISO 15118-1:2013 provides a general overview and a common understanding the elements which govern the charge process, payment and load levelling. The internal vehicle communication between battery, the respective charging equipment and the communication of the SECC to other actors and equipment are not specified in the ISO 15118.

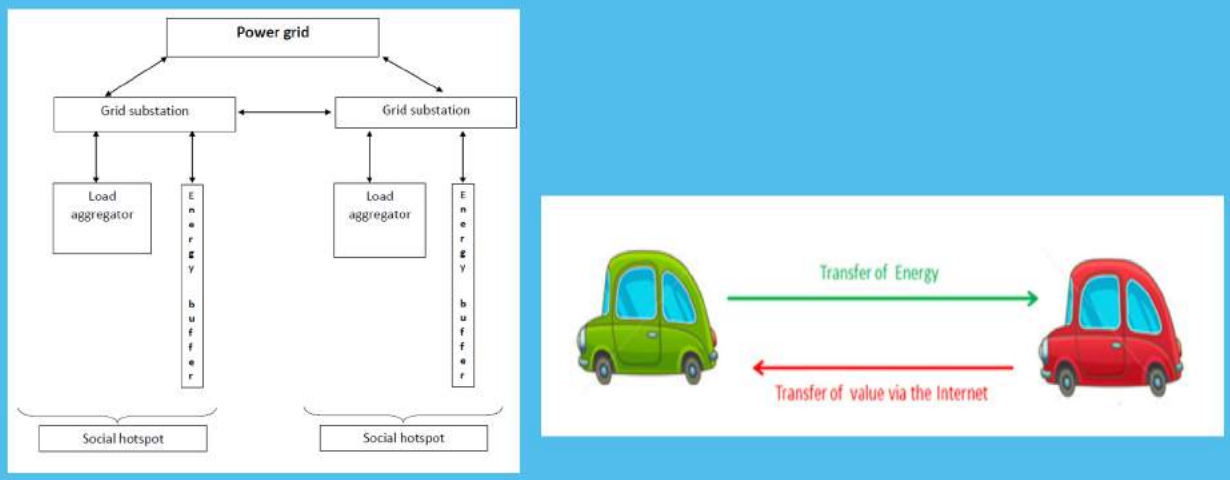



**Figure: Proposed solution for Enabling Localized Peer-to-Peer Electricity Trading among PHEV's Using Blockchains technology.**

In the above figure the 'energy buffer' represents battery systems installed in order to provide with additional energy buffer capability to the respective electrical grid in case there is greater energy demand as compared to energy supply.

The 'Load aggregator' represents grid supporting infrastructure where it provides with the function of wireless bilateral communication between a set of PHEV's and also performs the 'proof of work' computation process in order to have consensus in the respective blockchain network.

# TECHNICAL ARTICLE

**What is the market and what is the benefit for the customer?**

As we know electrical networks are not planned but they are evolved and with the exponential development of energy harvesting and bidirectional communication technology the integration of renewable energy into the present grids has increased substantially. As discussed in the above sections, we know the need for clean sources of energy has aided into the implementation and adoption of the renewable energy technology. This has resulted into a new term known as smart grid. Due to the increased penetration of bidirectional communication interface between the energy producers and energy consumers all the energy producing and energy consuming elements act as nodes. Where data is produces and analysed. The nodes can be defined to deliver the functionality of harvesting energy from different renewable energy sources by using sensor networks which have long-term monitoring and remote-control capabilities.

One of the major polluting elements today is the transportation sector. Although due to the rapid development in the energy storage sector and the various regulatory measures undertaken by many of the developed and developing countries to encourage the use of electrical vehicles the entire ecosystem related to the integration of electric vehicles to the present grid is going through rapid development. The plug -in hybrid electric vehicles (PHEVs) play key roles in the elimination of the traditional internal combustion-based vèhicles thereby reducing the carbon emissions by a huge margin at a international scale.

In case of plug-in hybrid electric vehicles (PHEVs) the flow of energy is not only from the home grid but also between vehicle-vehicle via peer-peer energy trading. This may help in shifting the peak load. A parking lot with charging stations equipped with bidirectional charging facilities can be termed as social hotspots. Here the Peer-to-Peer energy trading can be carried out. [4]Now coming back to the present scenario, in a conventional power grid the energy generated and transmitted with the help of electrical networks (usually meshed) which are complex in nature. Also, there are losses involved such as transmission and distribution losses, heat losses. This results into low overall efficiency. In a new approach, PHEVs with surplus energy can discharge energy to cater the energy demand of local charging PHEVs, thereby balancing energy supply and demand at a local level (hotspots). Although, ideally that may not be the case. Although the concerning factors such as the lifetime of the battery, privacy and fair-trading practices adversely affect the willingness of PHEV owners to participate in peer-peer energy trading market. This results into problems such as demand and supply unbalance among the PHEVs.

# ACHIEVEMENTS: STUDENTS

Miss. Komal Bhandare of B.E. Electrical represented the SPPU at Inter University at All India Level at Kurukshetra


Miss Anjali Patil won the title of NIFF Ms Maharashtra India Fresh Face 2018 and brand ambassador of NIFF 2018 at 10th Nashik International Film Festival 2018

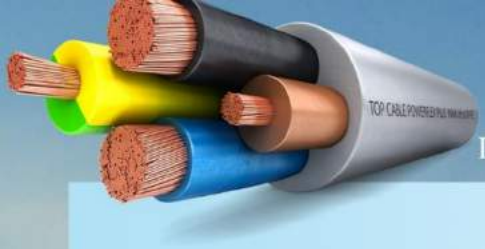
# ACHIEVEMENTS: FACULTY

Prof. Dr. B. E. Kushare, Head of Department is elected as Chairman for Board of Studies Electrical Engineering, Savitribai Phule Pune University, Pune

Felicitation of Prof. Dr. B. E. Kushare as Chairman for Board of Studies at AISSMS, Institute of Information technology, Pune

Hon'ble Shri. Sameer Wagh, Trustee, K. K. Wagh Education Society, visited Shanghai Jiao-Tong University, Shanghai on March 9, 2018, where Dr. Ravindra Munje is pursuing his post-doctoral research work. They visited Library, smart classrooms, UG and PG Laboratories, and some advanced research Laboratories. They also had a discussion with a Professor Weidong Zhang, from the Department of Automation about Chinese teaching-learning process.

During the visit of Hon'ble Shri. Sameer Wagh to Shanghai Jiao Tong University. From left to right Hon'ble Shri. Sameer Wagh, Professor Weidong Zhangand Dr.Ravindra Munje on March 9, 2018



# PLACEMENT

| Sr. No. | Name of the student placed | Name of the Employer |
|---|---|---|
| 1 | Andhale Tejashwini | Rishabh Instruments Pvt. Ltd. |
| 2 | Deshmukh Abhijeet | Rishabh Instruments Pvt. Ltd. |
| 3 | Kanse Ashutosh | Rishabh Instruments Pvt. Ltd. |
| 4 | Kulkarni Pranav | Rishabh Instruments Pvt. Ltd. |
| 5 | Mistri Neha | Rishabh Instruments Pvt. Ltd. |
| 6 | Tejal Malode | Rishabh Instruments Pvt. Ltd. |
| 7 | Takate Amol | Rishabh Instruments Pvt. Ltd. |
| 8 | Shinde Maroti | Torrent Power Ltd. |
| 9 | Bharaskar Sheetal | Torrent Power Ltd. |
| 10 | Tayade Minal | Torrent Power Ltd. |
| 11 | Ugale Deepali | Torrent Power Ltd. |
| 12 | Sood Ayush | Torrent Power Ltd. |
| 13 | Thakur Prashant Shriram | Torrent Power Ltd. |
| 14 | Mahajan Milan Subhash | CG Power & Industrial Solutions |
| 15 | Shinde Kiran | Konecranes Lifting Businesses Pvt. Ltd. |
| 16 | Chaudhary Priyanka | Konecranes Lifting Businesses Pvt. Ltd. |
| 17 | Sonawane Ankita | Konecranes Lifting Businesses Pvt. Ltd. |
| 18 | Wakhare Prasad Vivek. | R R Plast Extrusion Pvt. Ltd |
| 19 | Shinde Yash Rajendra | R R Plast Extrusion Pvt. Ltd |
| 20 | Shinde Darshana Kishor | R R Plast Extrusion Pvt. Ltd |
| 21 | Chaudhari Kalpesh Pramod | R R Plast Extrusion Pvt. Ltd |
| 22 | Godshelwar Shweta | R R Plast Extrusion Pvt. Ltd |
| 23 | Gond Gaurav | Mahindra & Mahindra Ltd. |
| 24 | Deshpande Shruti | Mahindra & Mahindra Ltd. |
| 25 | Rajhans Kshipra | Mahindra & Mahindra Ltd. |
| 26 | Kulthe Hemangi | Mahindra & Mahindra Ltd. |
| 27 | Rajhans Kshipra | Fin IQ Solutions Pvt. Ltd. |
| 28 | Sahare Pallavi | Mufront Technologies Pvt. Ltd. |
| 29 | Shelke Vaibhav | Mufront Technologies Pvt. Ltd. |
| 30 | Suryawanshi Rohit Shivaji | Mufront Technologies |
| 31 | Tayade Minal | Surfmii Promotions Pvt. Ltd |
| 32 | Singh Kunwar Pal | Surfmii Promotions Pvt. Ltd |
| 33 | Sonar Shamali | Hind Rectifiers |
| 34 | Yadav Abhishek | Amazon Ltd. |
| 35 | Yeola Pooja | ICICI Prudential |



# INDUSTRIAL VISITS

**S. E. Electrical Engineering**

| Sr. No. | Subject | Name of Industry | Date |
|---|---|---|---|
| 1 | Electrical Machine 1 | Lotus Transformer, PVN Transformer, Ambad MIDC, Nashik. | 23/01/2018 |
| 2 | Power System-I | 132 kV Takali Substation, Nashik | 20/02/2018 |
| 3 | Audit Course - I | Deshmukh Solar Energy Pvt. Ltd. Adgaon | 24/02/2018 |
| 4 | Audit Course - I | | 28/02/2018 |
| 5 | Numerical Methods and Computer Programming | TAACT, Satpur, Nashik | 03/03/2018 |
| 6 | Fundamentals of Microcontroller and its Application | Motwane Industries Pvt. Ltd, Nashik | 04/03/2018 |
| 7 | Network Analysis | Motwane Industries Pvt. Ltd, Nashik | 04/03/2018 |
| 8 | Fundamentals of Microcontroller and its Application | TAACT, Satpur, Nashik | 10/03/2018 |
| 9 | Numerical Methods and Computer Programming | TAACT, Satpur, Nashik | 10/03/2018 |
| 10 | Electrical Machines-I | Crompton Greaves Ahmednagar | 11/03/2018 |
| 11 | Power System-I | 132 KV MSETCL Takali | 17/03/2018 |
| 12 | Electrical Machines-I | Crompton Greaves Ltd., Ahmednagar | 17/03/2018 |
| 13 | Fundamentals of Microcontroller and its Application | Motwane Manufacturing Company Pvt. Ltd | 03/04/2018 |
| 14 | Network Analysis | | 03/04/2018 |

**T. E. Electrical Engineering**

| Sr. No. | Subject | Name of Industry | Date |
|---|---|---|---|
| 1 | Power System-II | 132 kV Sub- Station, Takali, Nashik. | 12/01/2018 |
| 2 | Utilization of Electrical Energy | IREEN, Nashik Road | 24/02/2018 |
| 3 | Utilization of Electrical Energy | Mangal Polysacka Pvt. Ltd. B133/144, STICE, Musalgaon Sinnar, Nashik | 28/02/2018 |
| 4 | Utilization of Electrical Energy | Masina Alloys Pvt. Ltd. Plot No. D-8, STICE, Musalgaon Sinnar, Nashik | 28/02/2018 |
| 5 | Energy Audit and Management | Times of India, Airoli, Mumbai | 04/03/2018 |
| 6 | Utilization of Electrical Energy | Indian Railways Institute of Electrical Engineering, Nashik Road | 17/03/2018 |
| 7 | Control System-I | Sahyadri farmers Producer Company Ltd, Nashik | 20/03/2018 |
| 8 | Power System-II | HVDC Station Padghe | 21/03/2018 |
| 9 | Energy Audit and Management | Times of India, Airoli | 26/03/2018 |
| 10 | Design of Electrical Machines | Lotus Transformer, PVN Transformer, Ambad MIDC, Nashik. | 06/04/2018 |
| 11 | Design of Electrical Machines | PVN Transformers and Electricals, Plot No. W 32 (B), Behind NAMCO Bank,, MIDC Ambad, Nashik | 08/04/2018 |

**B. E. Electrical Engineering**

| Sr. No. | Subject | Name of Industry | Date |
|---|---|---|---|
| 1 | HVDC & FACTS | ±500 kV HVDC Terminal Link, MSETCL Padghe | 22/01/2018 |
| 2 | Switchgear & Protection | Crompton Greaves Ltd.-Nashik | 12/02/2018 |
| 3 | Power Electronics Controlled Drives | Jawahar Shetkari Sahakari Soot Girni Ltd. Hutatma Shirishkumar Nagar, A.P. Morane (Laling), Dhule 424 001 | 16/02/2018 |
| 4 | Switchgear and Protection | Larsen & Toubro Ltd. A9, MIDC Industrial Estate, Ahmednagar | 25/02/2018 |
| 5 | HVDC & FACTS | M. S. E. Transmission Co. Ltd. 500 kV HVDC ID Unit, Padghe, Tal. Bhivandi, Dist. Thane 421 101 | 15/03/2018 |
| 6 | Power Electronics Controlled Drives | Nashik Ispat Pvt. Ltd. MIDC, Malegaon, Sinnar, Nashik | 28/03/2018 |
| 7 | Smart Grid | M. S. E. Power Co. Ltd. 50 MW + 75 MW Solar Photovoltaic Plant, Tal. Sakri, Dist Dhule | 04/04/2018 |

# EXPERT LECTURES

| Sr. No. | Name of Expert Person | Industry (or) Organization Name | Topic |
|---|---|---|---|
| 1 | Mr. Sohil Shah & Mr.Ajinkya Chopade | Career Launcher, Nashik | Career Guidance & Higher Education |
| 2 | Mr. Subhash Rajguru | Entrepreneur | Entrepreneurship |
| 3 | Mr. Shailesh Parashare | Teknocrats Control Systems Pvt Ltd | Energy Conservation Devices |
| 4 | Mr. John Yesuraj | General Manager- R&D, CG Power And Industrial Solutions Ltd | Project Guidance |
| 5 | Mr. Rahul Patil | Deputy Manager- R&D, CG Power And Industrial Solutions Ltd | Gas Insulated Switchgear |
| 6 | Mr. Ravindra Wadikar | CEO M/s. Electromotives | Power Electronic Controlled Drives " |
| 7 | Mr. Sachin Mishra | Product Manager at ABB | Medium Voltage Switchgear |
| 8 | Mr. Amit Gore | Director, Akshay Study Abroad | Studying Abroad - Requirements, process and career opportunities |
| 9 | Mr. Mandar S. Gokarn | Director, Sanjay Tools & Adhesives | Entrepreneurship |
| 10 | Mr. Chainesh Patil | Schneider | Energy Management System |
| 11 | Mr. Milind Dalvi | Schneider Mumbai | Machines & Switchgear-Industrial Application |
| 12 | Mr. Anant Waghchoure | Megger, Electrical/Electronic Manufacturing | Condition Monitoring |
| 13 | Mr. Sohil Shah & Ajinkya Chopade | Career Launcher, Nashik | Career Guidance & Higher Education |
| 14 | Mr. Subhash Rajguru | Entrepreneur | Entrepreneurship |

| | | | |
|---|---|---|---|
| 15 | Mr. Hira Jadhav | Ram Solar Private Ltd. | Sustainable Energy: Solar Power |
| 16 | Mr. John Yesuraj | General Manager- R&D, CG Power And Industrial Solutions Ltd | Project Guidance |
| 17 | Mr. Suresh Bhandekar | Ex Chief Engineer, MahaGenco | Electrical Safety |
| 18 | Mr. Sachin Mishra | Product Manager at ABB | Medium Voltage Switchgear |
| 19 | Mr. Amit Gore | Director, Akshay Study Abroad | Studying Abroad - Requirements, process and career opportunities |
| 20 | Mr. Mandar S. Gokarn | Director, Sanjay Tools & Adhesives | Entrepreneurship |
| 21 | Mr. Chainesh Patil | Schneider Electric | Energy Management System |
| 22 | Mr. Milind Dalvi | Schneider Electric Pvt Ltd. | Machines – Industrial Applications |
| 23 | Mr. Anant Waghchoure | Megger India Pvt Ltd. | Condition Monitoring |

*conducted by same expert for first and second shift

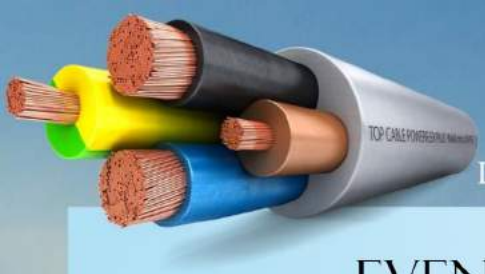
# EVENTS ORGANISED BY DEPARTMENT

| Sr. No. | Title of Event | Dates of Event | Total No. of Participants |
|---|---|---|---|
| 1 | National level workshop on "Smart Grid Technologies and Applications of IOT" | 29th – 30th Jan. 2018 | 113 |
| 2 | LV Switchgear selection and its application | 12th – 13th March 2018 | 67 |
| 3 | FDP on Hands on training on ANSYS software and its application | 22nd – 23rd March 2018 | 33 |
| 4 | PSRES 2018 | 23rd – 24th March 2018 | 115 |
| 5 | Working Model Contest, IET Karmaveer Expo 2018 | 23rd – 24th March 2018 | 244 |

## IET- Karmaveer Expo 2018

March 23-24, 2018

- Total Models presented in group-A: 38 and participants: 114
- Total Models presented in group-B: 18 and participants: 62
- Total Models presented in group-C (IOT): 08 and participants: 23
- Total Models presented in group-D polytechnic groups: 15 and participants: 42
- School Entry: 01 Participant: 03
- Total Models presented in Expo 2018: 80 and participants: 244
- Total Posters Presented: 48 and participants: 103





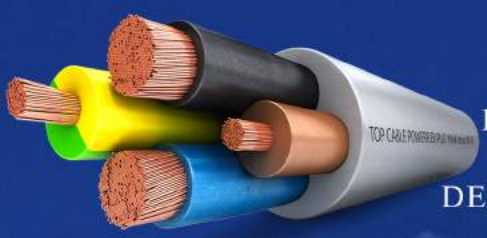
# EVENTS ATTENDED BY STUDENTS

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | Bibaswan Bose | ICSCET | Paper Presentation | Universal College of Engineering | 5/1/2018 | Participation | National |
| 2 | Suryawanshi Rohit | Robo Race-2018 | Project Competition | City Centre Mall, Nashik | 25/2/2018 | Participation | Regional |
| 3 | Karan Singh | 4th Shikhrewadi Badminton Tournament 2018 | Sports | Medical Practitioners Association, Nashik | 26-28/1/2018 | Runner-Up | Regional |
| 4 | Tanu Mishra | Workshop | Internet of Things | Cognifront Academy | 10/1/2018 | Participation | International |
| 5 | Patil Prerna | Sport Commitee | Basket Ball | SPPU University | 2017-18 | Participation | National |
| 6 | Yaduraj Bharode | Blood Donation | Blood Donation | Civil Hospital Nashik | 27/3/2018 | Participation | National |
| 7 | Siddharth Shridhar Naik Kalia | NPTEL Online Certification | Power system Engineering | IIT Kharagpur | April - 2018 | Participation | National |
| 8 | Sushant Sanjay Kolhe | NPTEL Online Certification | Matlab Programmimg for Numerical Computation | IIT Kharagpur | March - 2018 | Participation | National |
| 9 | Sushant Sanjay Kolhe | NPTEL Online Certification | Cryptography and network Security | IIT Kharagpur | March - 2018 | Participation | National |
| 10 | Shrivastav Adarsh | Robocon 2018 | Robotic Contest | MIT, Pune | 3/3/2018 | Participation | National |
| 11 | Shrivastav Adarsh | Mathworks | MATLAB Onramp | MathWorks | 1-3/3/2018 | Participation | National |
| 12 | Shrivastav Adarsh | Practical Workshop | Advanced Etheical Hacking & Digital Security | IRT | | Participation | National |
| 13 | Sanket Shahane | Robocon 2018 | Robotic Contest | MIT, Pune | 3/3/2018 | Participation | National |
| 14 | Sanket Sanjay Shahane | Workshop | New Trends in Renewable Energy | Amrut Vahini College of Engineering, Sangamner | 15-16/2/2018 | Participation | National |
| 15 | Daspute Tejas Vinod | Workshop | New trends in renewable energy sources | AMRUTVAHINI COE, Sangamner | 15-16/2/2018 | Participation | Inter Collegiate |
| 16 | Adhav Abhijit Madhukar | Workshop | New trends in renewable energy sources | AMRUTVAHINI COE, Sangamner | 15-16/2/2018 | Participation | Inter Collegiate |
| 17 | Deshmukh Arjun Rajendra | Workshop | New trends in renewable energy sources | AMRUTVAHINI COE, Sangamner | 15-16/2/2018 | Participation | Inter Collegiate |
| 18 | Yash Wankhedkar | The Startup League | The Startup League | Million Minds | 2017-2018 | Participation | State Level |
| 19 | Nilesh Balu Gaikwad | Victor 2nd National Para Badminton Championships -2018 | Victor 2nd National Para Badminton Championships-2018 | Victor 2nd National Para Badminton Championships-2018 | 23-25/3/2018 | Participation | National |
| 20 | Dimple Vivek Chaudary | Work shop | Gornment Certificate Course in Solar Energy | IDEMI | 18/2/2018 | Participant | State |



# EVENTS ATTENDED BY FACULTY

| Sr. No. | Name | Title | Organized by | Date | Duration |
|---|---|---|---|---|---|
| 1 | G. N. Jadhav | Computer Aided Power System Analysis | NITTTR Chandigarh | 29-30 March, 2018 | Two days |
| 2 | Dr. M. P. Thakre | Quality Enhancement of Teachers | KKWIEER, Nashik | Feb-April, 2018 | 2 Week |
| 3 | A. N. Game | Quality Enhancement of Teachers | KKWIEER, Nashik | Feb-April, 2018 | 2 Week |
| 4 | O. N. Buwa | Quality Enhancement of Teachers | KKWIEER, Nashik | Feb-April, 2018 | 2 Week |
| 5 | M. M. Gokarn | Quality Enhancement of Teachers | KKWIEER, Nashik | Feb-April, 2018 | 2 Week |
| 6 | J. D. Patil | Recent Technology for energy Management in Smart Grid | VNIT, Nagpur | 29 Jan-3 Feb, 2018 | 6 days |
| 7 | A. M. Jain | Solar Energy Harvesting | SGGS, Nanded | 27-31 March, 2018 | 5 days |
| 8 | A. N. Game | Solar Energy Harvesting | SGGS, Nanded | 27-31 March, 2019 | 5 days |
| 9 | Dr. M. P. Thakre | Advanced Computational tools in Engineering & Technology | GCOE, Nagpur | 19-23 March, 2018 | 5 days |
| 10 | J. P. Shah | Artificial Intelligence techniques for Smart Grid Applications | NIT, Warangal | 3-7 April, 2018 | 5 days |
| 11 | N. N. Jangle | Online NPTEL certification course on, "Effective Engineering Teaching in Practice". | IIT Madras | Feb. - March 2018 | 4 Week |
| 12 | T. N. Date | Nalanda Business Associates, FDP | Nalanda Business Associates-Pune | 9-10 Feb, 2018 | 2 days |
| 13 | Dr. B. E. Kushare | B.E. Syllabus revision workshop | AISSMS COE-Pune in association with SPPU | 30 Jan. 2018 | 1 day |
| 14 | S. S. Khairnar | B.E. Syllabus revision workshop | AISSMS COE-Pune in association with SPPU | 30 Jan. 2018 | 2 days |
| 15 | N. N. Jangle | Recent trends in renewable energy technology power quality enhancement and electrical drive | PDPU, Gandhinagar | 8-9 March, 2018 | 2 days |
| 16 | O. N. Buwa | Recent trends in renewable energy technology power quality enhancement and electrical drive | PDPU, Gandhinagar | 8-9 March, 2019 | 2 days |
| 17 | M. M. Gokarn | Recent trends in renewable energy technology power quality enhancement and electrical drive | PDPU, Gandhinagar | 8-9 March, 2018 | 2 days |
| 18 | R. A. Ahire | "Security in Embedded System's and IOT" | NDMVP KBGTCOE, Nashik | 27 – 28 Feb. 2018 | 2 days |
| 19 | R. A. Ahire | Vacational Training | Nexus Control, MIDC Ambad, Nashik. | 08 - 18 May 2018 | 11 days |
| 20 | R. A. Ahire | NPTEL Online Course: Business English Communication | Online Course | Feb-Mar 2018 | 4 Week |
| 21 | M. R. Rade | NPTEL Online Course: Power System Engineering | Online Course | Feb-April 2018 | 12 Week |





Published on: Wednesday,
30/05/2018
Published: Half Yearly in month of
December and May

Chief Editor:
**Prof. Dr. B. E. Kushare**
Head of Department,
Department of Electrical Engineering,
K. K. Wagh Institute of Engineering Education and
Research, Nashik – 422 003.

Students Editors:
**1) Miss. Rajhans Kshipra Sunil**,
President, Engineering Federation for Electrical Council &
Technology (EFFECT), Department of Electrical Engineering
**2) Mr. Patil Niranjan Ashok**,
President, IET (UK) Young Member Section, Department of
Electrical Engineering

*This newsletter has covered all the events which organized in and by Electrical Engineering Department, K. K. Wagh Institute of Engineering Education & Research, Nashik. We are here going to invite suggestions, feedback and query for improvement in future newsletters, if any, with the warm regards.*