





Our Inspiration

# Department of Electrical Engineering

# SHOCKWAVES (Newsletter) Volume-III, Issue-II

# **Final Year Project recognition**



Smt. Pratibhatai Patil
Former
President of India &
Dr. D. R. Shekhawat
Chairman, GB

#### VISION

To emerge as the leading Electrical Engineering department for inclusive development of students.

### MISSION

To provide studentcentered conducive environment for preparing knowledgeable, competent and value added electrical engineers.

The students of final year engineering department have developed a proto type model for their final year project. The title of project was "Anti-theft protection ofDistribution transformer". The project was guided by Mr. Nilesh Mahajan, faculty Electrica Engineering Department. The students of this group have bagged first prize in University level Shodhprakalpa at SSBT's COET, Bambhori. The news of this project was also telecasted on ABP Maaza.

This has created awareness to the farmers in state on how by using this technology distribution transformer can not be steal.

It was sponsored by Dwarka Industries Jalgaon. It was appreciated by the executive engineer of MSEDCL, Jalgaon.

The group comprises following students

- 1. Ahilasha Salunkhe
- 2. Ketan Isane
- 3. Harsh Palod
- 4. Lekha Dhole
- 5. Yogesh Patil

### Objectives of the Institute

- \* To impart innovative teaching and learning
- \* To provide quality education with futuristic trends in engineering and technology
- \* To develop the institute as a research center for academic excellence
- \* To ensure continual improvement in quality management system
- \* To inculcate social values, patriotism and professional ethics among the students





### **Featured Points**

- Final Year project
- Solar Mobile Charging station
- Industry lectures
- Faculty Achievement
- Students Achievement
- Campus Placement



Shri. Raosaheb Shekhawat Managing Trustee

# **Installation of Solar Mobile Charging Station**



Under MOU with Kwatts Solution department has received solar mobile charger panel. The panel has capacity to charge numbers of mobiles. The inauguration of panel was done with auspicious hands of the Principal, Dr. K. S. Wani, Dr. S. P. Shekhawat, Dr. P. J. Shah, Dr. P. V. Thakre and all staff members, students were present for the function.

## **About the Department**

The Electrical Engineering Department was T established in 1999 with intake 30. It was accredited \* for 5 years by National Board of Accreditation \* (NBA) Committee constituted under AICTE with \* effect from 19-07-2008. The present intake capacity \* of the department is 60. The department has PG \* course in Electrical Power System (EPS) with \* intake 18 from academic year 2013-14.

The Department have

- \* Well equipped Ten laboratories for UG.
- \* Two laboratories for PG (Research Lab & PG lab).
- \* Experienced & Qualified Faculty.
- \* Modern Electrical Machine laboratory
- \* Excellent Results (UG & PG)
- \* Departmental library with internet facility
- \* MATLAB, PSCAD, E-TAP, PLC & SCADA software.

# **Industry lectures**

- 1.Industry Lecture on Transformer Manufacturing and Career opportunities in Entrepreneurship by Mr. Bhaskar Borole Director, Dwaraka Industries, MIDC, Jalgaon, organized on 29th Jan 2016,11:00 am
- 2. Industry Lecture on Power System Protection by Mr. Jitendra Fulwani Add. Executive Engineer, MAHATRANSCO Bhusaval, organized on 12th Feb 2016,11:00 am.
- 3.Industry Lecture on "Personality Development and Career Guidance" by Mr. Dinesh Desai PRO, Jain Irrigation Systems Ltd. Jalgaon organized on 16th Feb 2016,4:00 pm.
- 4.Industry Lecture on "Switchgear and Relay Testing" by Mr. Ashish Pahurkar Add. Executive Engineer,

- MAHAGENCO, Koradi organized on 26th Feb 2016, At 11:00 am.
- 5.Industry Lecture on "Power Station Equipment Operation and Testing" by Mr. Rajendra Kabara Ex. Executive Engineer, MAHAGENCO Bhusaval, organized on 12th March 2016, at 11:00 am.



"A wise man can learn more from a foolish question than a fool can learn from a wise answer"

### **Faculty Achievement**

Dr. P.V.Thakre, Professor, Faculty member of Electrical Engg. Department is among the SSBT researchers receiving grants of two lakh rupees from Rajiv Gandhi Science and Technology commission of Maharashtra. Under this scheme, 1kW solar prototype DSP based photovoltaic system has been installed in department. Power generated from this system is being utilized for electrifying HOD cabin, Faculty Cabins and computer lab.



#### **Students Achievement**

- 1. The student of M.E. Final Year of the first Batch, Ms. Priyanka Mahajan, topped university examination 2016
- 2. Ms. Sonali Lomate (TE) has been selected for university level Rifle & Pistol shooting tournaments which held at Kashi Hindu University, Varanasi.
- 3. A student of ME (EPS) Mr. Tanveer Hussain has qualified GATE-2016 examination.
- 4. The students of Final Year Ms. Abhilasha Salunkhe, Mr. Ketan Isane, Mr. Harsh Palod, Ms. Lekha Dhole, Mr. Yogesh Patil received Appreciation Letter from Chief Engineer, Jalgaon Zone, Maharashtra State Electric Distribution Company Limited on behalf of project "Antitheft Protection of Distribution Transformer".
- 5. The students of final year Ms. Abhilasha Salunkhe, Mr. Ketan Isane, Mr. Harsh Palod, Ms. Lekha Dhole, Mr. Yogesh Patil won first prize in Shodhprakalp-2016, at university level project exhibition.

# **Faculty Publications**

#### Dr. P. J. Shah

- 1. Priyanka Mahajan, **Dr. Paresh J. Shah**, Dr. Rakesh Saxena, "Analysis the response of single and multiple superconducting fault current limiters in smart grid for symmetrical fault", International Journal of Engineering and technology, vol. 5, no. 7, pp. 417-425, July 2015 (ISSN: 2049-3444). (IJ)
- 2. Gauri S. Sarode, **Dr. Paresh J. Shah**, "Voltage Sag Compensation Capacity of IDVR", European Journal of Advance in Engineering and Technology, vol. 2, no. 7, pp. 48-55, August 2015 (ISSN: 2394-658X). (IJ)
- 3. Sagar P. Joshi. **Paresh J. Shah**, "Topology for voltage sag and swell compensation by dynamic voltage restorer", International Journal of Innovation Research in Electrical, Electronics, Instrumentation and Control Engineering, vol. 3, issue 11, pp. 50-53, November 2015. (Impact factor 3.885) (**IJ**)
- 4. Sagar P. Joshi. **Dr. Paresh J. Shah**, "Voltage Sag Compensation by DVR for DIFG wind turbine system", International Journal of Recent and Innovation trends in computing and communication, vol. 3, issue 12, pp. 6679-6685, December 2015. (ISSN: 2321-8169, Impact factor 5.837) **(IJ)**
- 5. Rohit Firke, **Dr. Paresh J. Shah**, "Compensation of Reactive Power and Harmonics by Using DSTATCOM", International Conference on Global Trends in Engineering, Technology and Management (ICGTETM-2016), pp. 437-440, Jan 4-5, 2016. (ISSN: 2231-5381) (IC)
- 6. Gaurav B. Patil, **Paresh Shah**, "Comprehensive Study of Forward and Fly Back Converter for Improvement in Performance" International Journal of Science and Research (IJSR), Volume 5, Issue 3, pp. 1644-1648, March 2016 (ISSN: 2319-7064, Index Copernicus Value (2013): 6.14, Impact Factor (2014): 5.611). **(IJ)**
- 7. Madhuri N. Kshirsagar, **Dr. P. J. Shah**, "A Review of the single Phase Transformer Less Full Bridge PV Grid Inverters" IJSRD International Journal for Scientific Research & Development Vol. 4, Issue 02, pp. 1860-1864. April 2016 (ISSN (online): 2321-0613, Impact factor 2.39, indexing- Scribd, google scholar, academia.edu, issuu, research bible) (**IJ**)
- 8. Madhuri N. Kshirsagar, **Dr. P. J. Shah**, "Evaluation of Transformerless Inverters for Single Phase Photovoltaic Systems" IJIREEICE International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering Vol. 4, Issue 6, pp. 139-145, June 2016 (ISSN-Online 2321–2004, ISSN-Print 2321–5526, Impact factor 5.621, indexing- science central.com, scirate.com, Scribd, google scholar, scientific commons, J-gate, research bible etc.) **(IJ)**

#### Dr. P. V. Thakre

 Tabish shah, Dr. P V Thakre, "Regenerative braking system of electric Vehicle Driven by brushless dc motor" International Journal of Science Technology and Management, 2016 Vol 5 Issue 3, ISSN No. 2394 – 1537, pages 430-439.

#### Mr. V. S. Pawar

- 1. S.S.Bhuskute, **Vijay S. Pawar** and D.S.Patil, "Modeling & Simulation Of Solid State Transformer", International Journal of Engineering Sciences & Research Technology, Volume 5 (3): March, 2016 ISSN No.: 2277-9655, pp 551-558.
- 2. Bhagyashree Patil, **Vijay S. Pawar**, "A Review on conditioning and monitoring of non linear load electrical load in the view of power quality", International Journal of advanced Research in Electrical, Electronics and Instrumentation Engineering, Vol. 5, Issue 4, April-2016, ISSN 2321-6905, pp. 3120-3124.

#### Mr. M. M. Ansari

- 1. Bhushan Chaudhari, **M Mujtahid Ansari** and Nilesh Mahajan," Photovoltaic System with Step Up Converter" in International Journal of Science Engineering and Advance Technology, IJSEAT Vol 3 Issue 12 ISSN 2321-6905, Peer –reviewed IP 3.436 Dec 2015 PP 1407-1412. **(IJ)**
- 2. Bhushan Chaudhari, **M Mujtahid Ansari** and Nilesh Mahajan, "Review of Step up Converter with Voltage Multiplier for Photovoltaic System" in International Journal of Innovative Research in Advanced Engineering (IJIRAE) ISSN: 2349-2163 Issue 11, Volume 2 (November 2015) Impact Factor Value ISRAJIF: 1.857 PIF: 2.469 Jour Info: 4.085 Index Copernicus 2014 = 6.57 PP51 -56 (IJ)
- 3. **M Mujtahid Ansari** and Vikas Patil ,"Enhancement of PV –MIC Performance by Controlling PV –Panel Temperature", in International Journal of Advance Research in Electrical, Electronics and Instrumentation Engineering, Vol 4, Issue 8 August 2015, PP7297-7305, ISSN (print) 2320-3765, ISSN (online) 2278-8875. Impact Factor 5.016, The Journal is indexed in: InnoSpace SJIF Scientific Journal Impact Factor DOI;10.15662/ijareeie.2015.0408056 (IJ)
- 4. Dr. B H Jain, **M Mujtahid Ansari** and Vikas Patil, "Evaluate PV- Panel Performance Enhancement with MATLAB" in International Journal of Electrical Engineering & Technology (IJEET), Volume 6, Issue 7, July-Aug 2015, pp. 23-37 ISSN 0976-6545(Print) ISSN 0976-6553(Online) Journal Impact Factor (2015): 7.9817 Calculated by GISI (www.jifactor.com) Thomson Reuters' research ID-H 377-2015 Indexed Journal. ID: 40220150607003 **(IJ)**
- 5. Tanveer Husain, M M Khan and M M Ansari, "Power Flow Studies for radial and Mesh Distribution System" in proceeding of International Conference on Global Trends in Engineering, Technology and Management organized by SSBTs College of Engineering and Technology, Bambhori Jalgaon on 4<sup>th</sup> 5<sup>th</sup> January 2016. (Proceeding as Special Issue 2016 ISSN: 2231-5381PP 461-466, impact factor 1.795.) (IC)

## **Faculty Publications**

#### Mr. S. M. Shembekar

- 1. Sidhhant N. Patil, S.M. Shembekar, "A review on UPQC based One Feeder and Double Feeder Distribution System for Power Quality Improvement", International Journal on Recent and Innovation Trends in Computing and Communication, Volume:3, Issue:9, September 2015, ISSN:2321-8169, pp 5687-5692. (Scientific Journal Impact factor: 5.837) (IJ)
- 2. K.L. Deshmukh, **S.M. Shembekar**, "Harmonics Reduction by using SRF based Shunt Active Power Filter", International Journal of Modern Trends in Engineering and Research", Volume:2, Issue:7, July 2015 [Special Issue of ICRTET' 2015, 2-4 July 2015], e-ISSN: 2349-9745, pp1561-1566. **(IJ)**
- 3. Miss P.A. Sonawane, **S.M. Shembekar**, "A Performance Analysis of STATCOM on Distance Protection Relay", International Journal for Scientific Research and Development (IJSRD), Volume:3, Issue:10, December 2015, ISSN (online): 2321-0613, pp 851-854. **(IJ)**
- 4. Sidhhant N. Patil, **S.M. Shembekar**, "Power Quality Improvement using Unified Power Quality Conditioner", International Journal of Modern Trends in Engineering and Research, (IJMTER), Volume:3, Issue:3, March 2016, ISSN (online): 2349-9745, ISSN (Print): 2393-8161, pp 26-32. [Scientific Journal Impact Factor (SJIF): 3.518]. **(IJ)**
- 5. Ms Harshali Wani, **S.M. Shembekar**, "Dynamic Sag Correctors: The Solution for Power Quality Problems in Industrial Section", International Journal for Scientific Research and Development, Volume 1, Issue 1, 2016, ISSN (online): 2321-0613, pp 871-875. **(IJ)**
- 6. Ms Harshali Wani, **S.M. Shembekar**, "Analysis of Parasitic Boost Active Voltage Quality Regulator without Transformer for Power Quality Improvement", International Journal of Advance Engineering and research Development, Volume 3, Issue 6, June 2016, e-ISSN (O): 2348-4470, p-ISSN (P): 2348-6406, pp 281-291. (Scientific Journal of Advance Engineering and research Development). (Scientific Journal Impact factor SJIF: 4.14) (IJ)
- 7. Nikhil B. Borse, **S.M. Shembekar**, "Review of Dual UPQC Control Techniques for Power Quality Improvement", International Conference on Global Trends in Engineering, Technology and Management ICGTETM-2016, 4-5 January 2016, ISSN: 2231-5381, pp 529-532. **(IC)**
- 8. Miss P.A. Sonawane, **S.M. Shembekar**, "Modeling and Design of Distance Relay tripping Characteristics by STATCOM", International Conference on Global Trends in Engineering, Technology and Management ICGTETM-2016, 4-5 January 2016, ISSN: 2231-5381, pp 167-170. (IC)
- 9. Sidhhant N. Patil, **S.M. Shembekar**, "Enhancement of Electric Power Quality using Unified Power Quality Conditioning System", International Conference on Global Trends in Engineering, Technology and Management ICG-TETM-2016, 4-5 January 2016, ISSN: 2231-5381, pp 292-296. (IC)

#### Mr. D. S. Patil

S.S.Bhuskute, Vijay S. Pawar and D.S.Patil, "Modeling & Simulation Of Solid State Transformer", International Journal of Engineering Sciences & Research Technology, Volume 5 (3): March, 2016 ISSN No.: 2277-9655, pp 551-558.

#### Mr. N. S. Mahajan

- Pravin Bhatu Mali, Nilesh S. Mahajan, "Investigation of Impact of FACTS Controller in Transmission Line Network", International Journal of Engineering Research & Technology, Volume. 5 - Issue. 05, May – 2016, ISSN: 2278-0181 pp. 328-331 (IJ)
- Bhushan S. Chaudhari, M. Mujtahid Ansari, Nilesh S. Mahajan, "Photovoltaic System with Step Up Converter", International Journal of Science Engineering and Advance Technology, IJSEAT, Vol. 3, Issue 12, December-2015, ISSN 2321-6905, pp. 1407-1412 (IJ)
- 3. Swapnil V. Narkhade, **Nilesh Mahajan** and M. M. Ansari, "Investigation of Different Multilevel Current Source Inverter topologies for Grid Connected PV System", International Conference on Global Trends in Engineering Technology & Management January 2016, International Journal of Engineering Trends and Technology, ISSN No.: 2231-5381 Special Issue 2016. **(IC)**

#### Mr. S. S. Bhuskute

1. **S.S.Bhuskute**, Vijay S. Pawar and D.S.Patil, "Modeling & Simulation Of Solid State Transformer", International Journal of Engineering Sciences & Research Technology, Volume 5 (3): March, 2016 ISSN No.: 2277-9655, pp 551-558.

#### **RESULT 2015-16, SEM-II** UG



Ms. Rane Puja B.



Ist Topper (8.96)



Ms. Pawar Dipali Bhagwan



Ist Topper (8.63)



Ms. Narkhede Prajakta R. Ist Topper (9.09)



Ms. Salunkhe Abhilasha N. IInd Topper (9.00 SGPA)

#### SE



Ms. Rane Jagruti Sanjay IInd Toppers (8.83)

#### TE



Mr. Patil Sahebrao B. IInd Topper (8.36)

## BE



Mr. Patil Shubham R. Ist Topper (9.09)



Ms. Baviskar Pooja A. IInd Topper (9.04)



Ms. Chavan Puja R. IIIrd Toppers (8.78)



Mr. Kanojiya Ranjeet R. IIIrd Topper (8.30)



Mr. Somwanshi Snehal K. Ist Topper (9.09)



Ms. Sarode Ashwini J. IIIrd Topper (9.02)

### **University Topper of First Batch of M.E. Electrical Engineering (Electrical Power System)**



The student of M.E. Final Year of the first Batch, Ms. Priyanka Mahajan, topped university examination 2016. She has received guidance from Prof. & Head, Dr. P. J. Shah, for her project titled "Design and Analysis of power system with superconducting fault current limiting model". She has got 73.10 % marks in examination. She has presented seven technical papers in various International Journal and Conferences. All faculty of the department have congratulated her for securing first position at university level.

# Campus Placement of the Department

| Sr.<br>No. | Name of Student   | Batch     | Date of Cam-<br>pus Drive     | Name of Company                                 | Total |
|------------|---|-----------|-------------------------------|---|-------|
| 01         | Patil Sagar Dilip   | 2014-2015 | 22.08.2015                    | Freshtrop Fruits Ltd.,<br>Nasik                 | 01    |
| 02         | Lavane Nikhil   | 2014-2015 | 12.10.2015                    | Mahindra CIE Automotive<br>Ltd., Pune           | 01    |
| 03         | Isane Ketan M.  | 2015-2016 | 18.01.2016                    | BDS Digital Technologies<br>& Solutions, Mohali | 01    |
| 04         | Dhole Lekha Dimeshwar Salunkhe Abhilasha N Pawar vinay vijay Patil Mohit Suresh   | 2015-2016 | 20.01.2016                    | Fairdeal Power,<br>Parwanoo (HP)                | 04    |
| 05         | Dethe Dhiraj Deore Ravina Pundalik  | 2014-2015 | 10.02.2016                    |   |       |
| 06         | Raisoni Gaurav Subhash Kulkarani Rutuja Sunil Patil Amol Vikas Bhole Kamlesh Gajanan Patil Shubham Ramesh Baviskar Pooja Ashok Rajput Lalitnarayan Vitthalsing Mahakal Samrrudhi D. | 2015-2016 | 11.02.2016                    | AGS Transact Ltd.,<br>Mumbai                    | 10    |
| 06         | Palod Harsh Govind Patil Shubham Ramesh   | 2015-2016 | 15.02.2016<br>&<br>16.02.2016 | Shriram Group of Companies, Chennai             | 02    |
| 07         | Dethe Dhiraj<br>Pawar Jayesh<br>Patil Samadhan  | 2014-2015 | 25.04.2016                    | EMCO Ltd., Thane                                | 03    |
| Total      |   |           |                               |   | 22    |

# **News Letter Committee**

Faculty members: Mr. V.S. Pawar (Editor)

Mr. D.S. Patil (Designer and Editor)

Students: Mr. Ranjit Kanojiya (BE)

Ms. Amita Bonde (BE)

Mr. Akshay Kirange (TE) Ms. Puja Rane (TE) Mr. Ashish Zope (SE) Ms Mayuri Yeole (SE)



Dr. K. S. Wani **Principal** 



Dr. S. P. Shekhawat **D. O. A.** 



Dr. P. J. Shah **HEAD**