



NEWS LETTER : 2017



**ACET**

# E Spark

Department of  
Electrical  
Engineering

ISSUE - 7

ANJUMAN COLLEGE OF ENGINEERING & TECHNOLOGY

## FROM HOD'S DESK



**Prof.Mrs. Archana Shirbhate**  
HEAD OF DEPARTMENT

It gives me immense pleasure to note that the “e-Spark-17” newsletter of Electrical Engineering Department is being released. When we have a glance at the Newsletter, it is heartening to see that exercise of staff and students had quietly happened over the past one year. The staff and students will get more recognition when the awards/achievements they won are publicized through the Newsletter. It would definitely be an inspiration and motivation for other students and staff to scale new heights. The “e-Spark-17” newsletter, the measure of progress, is edited by Prof. Shabnam Rukhsar. We are thinking to have student contribution in the newsletter. This e-newsletter contains articles and it provides an update of the activities on the campus.

**“Be so busy improving yourself so that you will have no time to criticize others”**

### CONTENTS

From HOD's Desk

Message from Editor

Faculty Achievement

Students Achievement

Placements

Toppers

Parents Meet

Alumni Meet

Short Term Training Program - 2016

National Conference 'AEAS-2016'

Student Forum Installation

- Phoenix
- Energy Conservation Cell (ECC)

Industrial Visit & Tour

Technical Articles

## Message from **EDITOR**



**Mrs. Shabnam Rukhsar Razvi**  
Assistant Professor

It is indeed a pleasure to introduce to you the 6th Issue of “e-Spark-17” newsletter which we hope you will enjoy. I seize this opportunity to thank all those who have submitted their contributions for this Issue. The assistance and guidance of Dr. Sajid Anwar, Principal of ACET, Prof. Archana Shirbhate, HOD of Electrical Department and the publications committee efforts are highly appreciated. Please feel free to provide your feedback and send pertinent information with photos for inclusion in our forthcoming issues. On that note, I wish you all the very best for the coming new session.

Happy Reading!

# Achievements

## Faculty Achievement



Prof. Syad Naimuddin, (Head, Training and Placement ) was awarded Phd In Electrical Engineering by RTMNU for his research titled “Enhancing the Power Quality and Performance of Electrical Drives for Various Industrial Applications”. He gives the credit of his success to his guide Dr. D R Tutakne, family, and friends, colleagues and Dr. Sajid Anwar, Principal of ACET.

**Prof. Syad Naimuddin,**  
Head, Training and Placement, ACET



The students of Anjuman College of Engineering & Technology belonging to Electrical Department have presented their paper on Short Term Load Forecasting using Fuzzy Logic under the guidance of Prof. Dr. Altaf Badar in different colleges. The projectees Tarak Paul, Jyotirmoy Baguli, Jeelan Waris, Arvindsingh Gusain, Rubina Sheikh, Ashwani Tale, Khushbu Chawda with their hard work and performance made their day shine and secured first positions at National Power Training Institute (NPTI), Abha Gaikwad Patil College of Engineering, Rajiv Gandhi College of Engineering & Research and Anjuman College of Engineering & Technology. The hard work was appreciated by their Principal Dr. Sajid Anwar. HOD Prof. Mrs. Archana Shirbhate applauded them for their performance. Their performance set a great example to all the other students and specially to the students of 3rd year by motivating them.

# Placement

## ELECTRICAL ENGINEERING DEPARTMENT

To place in reputed company, it's a dream of every newborn Engineer, but it comes true when it really happens. Today student got this opportunity because of their academic record, guidance of teachers and Training provided by college. Following are the list of student placed in reputed industry during 2016-17.

**Pearls  
Shining  
at the  
Campus...**

Sr. No.	No. of Students Placed	Name of the Employer	Name of the Students
1	3	<b>Amazon</b> Email: anuraagt@amazon.com Phone: 09604417515	Mishreen Sheikh Elisha Michael Khushbu Chawda
2	1	<b>Altius</b> Email: info@altius.cc Phone: 0712 246 4000	Sohel Sheikh
3	10	<b>CMS IT services</b> Email: cmsitnagpur@gmail.com Phone: 0712-2238308/6600793	Mujmil Khureshi Elisha Michael Sheikh Sohail Iqbal Tarak Paul Omprakash Thakur Mosim Rashid Khan Shubham Sawarkar Iftekhar Ahmad Jyotirmoy Baguli Khushbu Chawada
4	2	<b>Quagnitia</b> Email: reema.singh@quagnitia.com Phone: +91 8446011233/ 9075088846	Om Prakash Md.Faisal
5	3	<b>Amazon</b> Email: anuraagt@amazon.com Phone: 09604417515	Sana Sheikh Sana Khan Shruti Fundkar
6	1	<b>FACE</b> Email: info@focusacademy.in Phone: +91 422 4506070	Tarak Paul
7	1	<b>Mphasis</b> Email: akhilesh.rakshe@aspiringminds.in Phone: 9766915780	Mishreen Sheikh
8	1	<b>Global Logic</b> Email: info@globallogic.com Phone: 07104 669 900	Tarak Paul



# Toppers

The effort and dedication of these student reflects in their result.  
A heartily congratulations to all toppers.

## 8th Semester Topper's Summer-2016 Examination



**Syed Javed**  
**1<sup>st</sup>**  
Topper  
(SGPA=9.69, 79.84%)



**Tejaswini Gawande**  
**2<sup>nd</sup>**  
Topper  
(SGPA=9.65, 81.84%)



**Monika Lakhe**  
**3<sup>rd</sup>**  
Topper  
(SGPA=9.59, 86.15%)



**Nahid Qureshi**  
**4<sup>th</sup>**  
Topper  
(SGPA=9.31, 82.00%)

## 7th Semester Topper's Winter-2016 Examination



**Rubina Sheikh**  
**1<sup>st</sup>**  
Topper  
SGPA= 8.70 (74.28%)



**Mohd. Sohail**  
**2<sup>nd</sup>**  
Topper  
SGPA= 8.53 (71.69%)



**Arshiya Firdous**  
**3<sup>rd</sup>**  
Topper  
SGPA= 8.43 (71.84%)



**Mayuri Kalmegh**  
**4<sup>th</sup>**  
Topper  
SGPA= 8.40 (71.84%)

## 6th Semester Topper's Summer-2016 Examination



**Mayuri Kalmegh**  
**1<sup>st</sup>**  
Topper  
(SGPA=8.72, 70.86%)



**Rubina Sheikh**  
**2<sup>nd</sup>**  
Topper  
(SGPA=8.38, 71.85%)



**Tarak Paul**  
**2<sup>nd</sup>**  
Topper  
(SGPA=8.38, 68.85%)



**Priya Naikwad**  
**2<sup>nd</sup>**  
Topper  
(SGPA=8.38, 67.71%)



**Arshiya Firdous**  
**3<sup>rd</sup>**  
Topper  
(SGPA=8.24, 68.28%)

## 5th Semester Topper's Winter-2016 Examination



**Amrin Ayyub Khan**  
**1<sup>st</sup>**  
Topper  
SGPA= 8.59 (74.28%)



**Aafsha Ruhi Khan**  
**2<sup>nd</sup>**  
Topper  
SGPA= 8.52 (73.14%)



**Abhishek Waghmare**  
**3<sup>rd</sup>**  
Topper  
SGPA= 8.41 (72.14%)

## 4th Semester Topper's Summer-2016 Examination



**Aafsha Ruhi Khan**  
**1<sup>st</sup>**  
Topper  
(SGPA=9.33, 80.00%)



**Amrin Ayyub Khan**  
**2<sup>nd</sup>**  
Topper  
(SGPA=8.96, 77.38%)



**Abhishek Waghmare**  
**3<sup>rd</sup>**  
Topper  
(SGPA=8.59, 72.92%)

## 3th Semester Topper's Winter-2016 Examination



**Arshad Hasnain**  
**1<sup>st</sup>**  
Topper  
SGPA= 9.15 (81.38%)



**Aabshar Ahmad**  
**2<sup>nd</sup>**  
Topper  
SGPA= 7.93 (71.07%)



**Yaishali Narayan**  
**3<sup>rd</sup>**  
Topper  
SGPA= 7.56 (68.46%)



**Sidra Khan**  
**4<sup>th</sup>**  
Topper  
SGPA= 7.44 (67.23%)

# Parents Meet

Our department take care that the parents are regularly updated about their children's performance. Parent's Meet are regularly hosted by the department. Student's attendance and academic performance are shown to the parents. Feedbacks are taken from the parent's as well as students.





# Alumni Meet' 17

organized by Electrical Engineering Department



Second grand Alumni Meet of Electrical Engineering Department organized by Anjuman College of Engineering and Technology on 11 March 2017. It was indeed heartening to see so many alumni's in the event. Alumni were introduced to ACET Alumni Association by Dr. Altar Badar .He emphasized on the benefits & significance of Alumni Association to alumni of ACET. Dr. Sajid Anwar, Principal ACET inaugurates the alumni meet function.

The reputation and strength of an educational institution over a period of time depends to a large extent upon the interest that the institution takes in its alumni and their continued education, the closeness that the alumni feel to their Almamater and the bonds of

kinship that develop among the alumni themselves. The institute's activities and programs for its alumni are directed towards these ends. The Alumni Association aims to provide various educational activities for the benefit of its members with the active cooperation of the faculty. The institute has plan for the alumni conference to be organized every year with a specific theme, which will serve the purpose of continued education for a wide section of the alumni. ■■■

## Two week STTP on

## “Orientation Workshop on Outcome Based Accreditation in Engineering Education”



A two week STTP from 17.04.2017 to 28.04.2017 on “Orientation Workshop on Outcome Based Accreditation in Engineering Education” was organized by Department of Electrical Engineering of Anjuman College of Engineering and Technology. The STTP aims to introduce outcome based teaching-learning process by changing the thought process of faculty with regards to his/her approach, activities and attitude towards imparting education. It was an Inter-disciplinary STTP which got entries from all colleges and all the branches of engineering and technology as well as applied sciences. Vibrant and enriching technical sessions for exchange of ideas and innovations marked the success of the STTP. The STTP was inaugurated by the hands of Chief Guest Dr. Mahesh. K.

Yenkie, Dean Science & Engineering RTMNU and Professor in Chemistry at LIT College. Guest of Honour Dr. S. P. Untawale, Principal DMIET & R Wardha. Dr. Sajid Anwar, Principal A.C.E.T; Prof. Archana Shirbhat, HoD, Electrical Dept and Convenor, Dr. Altaf Badar, Coordinator, Prof. Pramod Gadge, NBA Coordinator, Prof. Nahid Khan Co-coordinator, faculty members and participants were present on the event. The STTP continued till 28/04/2014 and ended with the valedictory session, Prof. Nahid Khan , Co-coordinator of STTP proposed a vote of thanks . All the Faculty members Prof. Syed Naimuddin, Prof. Dr. Irfan Ahmed, Prof. Ruhi Sheikh, Prof. Akil Ahmed, Prof. Nawaz Sheikh, Prof. Yamin Sayeed, Prof. Shabnam Rukhsar, Prof. Mohd. Safique, Prof. Ishraque Ahmed, Prof. Shahid Arafat and all supporting staff members contributed their unremarkable efforts to make this program grand successful. ■■■

# NATIONAL CONFERENCE ON ADVANCES IN ENGINEERING AND APPLIED SCIENCE



Electrical Engineering Department of Anjuman College of Engineering & Technology organized a national conference on “Advances in Engineering and Applied Science”. This conference was inaugurated with the hands of Prof. Dr. Sajid Anwar, Principal, Anjuman College of Engineering & Technology, Sadar, Nagpur and Mr. Chandrakant R&D Engineer Robokart,

Mumbai. Prof. Archana Shirbhate head of the department, Prof. Pramood Gadge, Prof. Altaf Badar, Prof. Dr. Irfan Ahmad Convener and Prof. Yasmin Ansari Co convener congratulated the student committee members and staff for successful conduction of national level conference. More than seventy entries were received. Haris Khan and group from CSE branch of ACET won first prize, MD. Mubashsir Naved and group from mechanical branch of ACET won first prize. Sharddha Wade & group from ETC branch of SRMCEW won first prize, Shruti Pantasunane and group from ETC branch of SRMCEW won second prize, Tarak Paul & group and Shruti Fundkar & group from Electrical branch won first prize. Ketan Dadhe & group from Electrical branch of DBACER won second prize.

## Student forum “PHOENIX” and “Energy Conservation Cell (ECC)”



Dignitaries sitting on the dais with newly installed forum member team heads

Electrical Engineering Department of Anjuman College of Engineering & Technology Installed its student forum “PHOENIX” and “Energy Conservation Cell (ECC)”. Dr. R. M. Mohril inaugurated the forums and shared his immense experience and knowledge with the student. Prof. Dr. Sajid Anwar, Principal, A.C.E.T ; Prof. Archana Shirbhate, H.O.D (Electrical Deptt) A.C.E.T; Dr. Irfan Ahmed Student coordinator ; Prof. Yasmeen Sayeed Student Co-coordinator were present.

The forum installation was followed by two days workshop on Solar Panel Design, A large number of students got benefited from it. Rashid Sheikh highlighted

the last year activities conducted under the forum with the discussion on the future events , Elisha Micheal proposed votes of thanks. Faculty under the department are Prof .Pramod Gadge, Dr. Altaf Badar, Prof. Ruhi Sheikh, Prof. Najma Ansari, Prof. Akil Ahmad, Prof. Nawaz Sheikh, Prof. Shabnam Rukhsar, Prof. Nahid Khan, Prof. Md Safique, Prof. Ishraque ahmed, Prof. Shahid, Mr. Fahim Siddique, Mr. Tajul Ashraf, Mr. Syed Maqsood, Mr. Nadimuddin, Mr. Javeed Nasim , Mr. Sheikh Riyaz, Mr. Nasir Khan and Mr. Abid and student forum committee member had taken efforts to make the event successful.



# Industrial Visit & Tour

Department organizes industrial visit and tour for development of student, every year.



**Hydroelectric Power Plant, Pench (Totladoh)**



**Industrial Visit to 5MW Solar Power Plant, Chandrapur**



**Industrial Visit to HVDC Terminal, Chandrapur**



**Load Dispatch Center, Ambazari, Nagpur**



**Khaparkheda Steam Power Plant**



**High Rise Transformer at MIDC, Nagpur**



**Industrial Tour to Gangtok, Pelling & Darjeeling**





# Technical Article

## New Wind Turbine Generates Electricity Without Rotating Blades A breakthrough in Wind Energy Technology

IT'S NO LONGER SURPRISING TO encounter 100-foot pinwheels spinning in the breeze as you drive down the highway. But don't get too comfortable with that view. A Spanish company called Vortex Bladeless is proposing a radical new way to generate wind energy that will once again upend what you see outside your car window.

Their idea is the Vortex, a bladeless wind turbine that looks like a giant rolled joint shooting into the sky. The Vortex has the same goals as conventional wind turbines: To turn breezes into kinetic energy that can be used as electricity. But it goes about it in an entirely different way.

Instead of capturing energy via the circular motion of a propeller, the Vortex takes advantage of what's known as vorticity, an aerodynamic effect that produces a pattern of spinning vortices. Vorticity has long been considered the enemy of architects and engineers, who actively try to design their way around these whirlpools of wind. And for good reason: With enough wind, vorticity can lead to an oscillating motion in structures, which, in some cases, like the Tacoma Narrows Bridge, can cause their eventual collapse.

The Vortex's shape was developed computationally to ensure the spinning wind (vortices) occurs synchronously along the entirety of the mast. "The swirls have to work together to achieve good performance," Villarreal explains (one of the founder member). In its current prototype, the elongated cone is made from a composite of fiberglass and carbon fibre, which allows the mast to vibrate as much as possible (an increase in mass reduces natural frequency). At the base of the cone are two rings of repelling magnets, which act as a sort of nonelectrical motor. When the cone oscillates one way, the repelling magnets pull it in the other direction, like a slight nudge to boost the mast's movement regardless of wind speed. This kinetic energy is then converted into electricity via an alternator that multiplies the frequency of the mast's oscillation to improve the



energy-gathering efficiency.

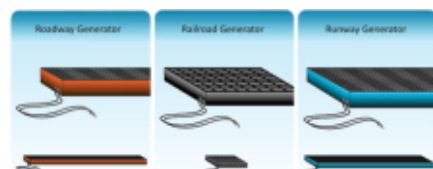
Its makers boast the fact that there are no gears, bolts, or mechanically moving parts, which they say makes the Vortex cheaper to manufacture and maintain. The founders claim their Vortex Mini, which stands at around 41 feet tall, can capture up to 40 percent of the wind's power during ideal conditions (this is when the wind is blowing at around 26 miles per hour). Based on field testing, the Mini ultimately captures 30 percent less than conventional wind turbines, but that shortcoming is compensated by the fact that you can put double the Vortex turbines into the same space as a propeller turbine.

The Vortex team says there are some clear advantages to their model: It's less expensive to manufacture, totally silent, and safer for birds since there are no blades to fly into. Vortex Bladeless says its turbine would cost around 51 percent less than a traditional turbine whose major costs come from the blades and support system. Plus, Suriol says, it's pretty cool-looking. "It looks like asparagus," he says. **"It's much more natural."**



**Mohd. Faisal**  
8<sup>th</sup> Semester

## New Piezoelectric Railways Harvest Energy From Passing Trains



Piezoelectric technology generates energy from pressure and stress on certain surfaces, and we've seen it harvest electricity from roads and dance floors to power lights and signs. Recently Israeli company Innowattech unveiled a new use for this versatile energy tech – they're planning to install piezoelectric pads throughout the country's railways to generate electricity. The company has previously used piezoelectric pads on Israeli highways, and now they're using similar (albeit larger) devices on railways. Innowattech plans on substituting 32 standard railway pads with their own piezoelectric IPEG PADS, which are of a similar design. In addition to generating energy, the new IPEG pads can determine the size of the wheel that passes over them, as well as the speed and weight of the vehicle. A prototype of the energy-generating system was installed last year by the Technion University and Israel Railways in order to show the benefits of the technology. The project discovered that a railway track with trafficked by 10 to 20 ten-car trains could produce as much as 120 kWh, which could be used to power infrastructural systems such as signs and lights. Any surplus energy would then be uploaded to the country's power grid.



**Saurabh Rahangdale**  
8<sup>th</sup> Semester