# **Departmental Achievements**

- We got Excellent Remark from EIMC Committee for A.Y. 2018-19
- Our student got 1st prize in state level quiz competition conducted by MSBTE
- 2 faculties completed MSBTE sponsored training in Siemens and at Sanjay Ghodawat Polytechnic etc.
- 08 Industrial guest lectures are arranged for students.
- 7 Industrial visits are arranged for our students
- 15 Days AutoCAD Work shop conducted.
- 6 MoUs with Industries.

#### Vision

To provide diploma education strengthened with basic knowledge and skills along with professional ethics enabling students to reach higher goals in Electrical Engineering.

### Mission

- 1. To impart value based technical Education in Electrical Engineering.
- 2. To improve Technical knowledge of students.
- 3. To make the students equipped with various skill sets in Electrical Engineering.
- 4. To inspire students for lifelong learning.

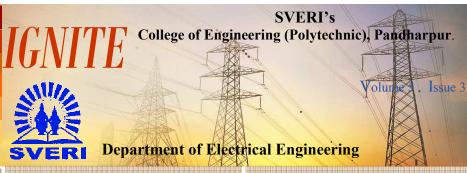
DEPARTMENTAL RESULT FOR A.Y. 2018-19				
1	Ms. Chavan Gitanjali Madadeo	96.13%	1st Year	
2	Ms. Lade Kalyani Balasaheb	95.00%	1st Year	
3	Mr. Sagar Vishal Bhagwan	94.88%	1st Year	
1	Ms. Ritapure Vaishnavi Vidyadhar	90.97%	2nd Year	
2	Mr. Gade Rahul Hanumant	90.75%	2nd Year	
3	Ms. Kokare Kajal Maruti	88.87%	2nd Year	
1	Mr. Bansode Girish Mahendra	93.63%	3rd Year	
2	Ms. Sonawane Neha Haridas	91.75%	3rd Year	
3	Ms. Salgar Komal Digambar	91.38%	3rd Year	

#### **EDITORIAL**

It gives us great opportunity to present the Fifth issue of our departmental newsletter "**Ignite**", which gives us the chance to focus on achievements in our department and new and emerging trends in Electrical engineering.

I am thankful to all the students and faculties who have contributed during the preparation of this newsletter. We have tried our best and given positive efforts, expecting creative responses from everyone to continue the flow of knowledge through this newsletter.

Mr. S.M. Ghodake



### **About Department**

Electrical Engineering Department has been started in 2011 with intake of 60. Our department has 08 well-equipped laboratories. We have established the association "EESA" with the department of Electrical Engineering in which we conduct various activities like Quiz competition, Paper Presentation etc.

# Wish You Happy Independence Day

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# **New technologies Transforming the Grid Edge**

The electricity system is in the midst of a transformation, as technology and innovation disrupt traditional models from generation to beyond the meter. Three trends in particular are converging to produce game-changing disruptions: Electrification of large sectors of the economy such as transport and heating Decentralization, spurred by the sharp decrease in costs of distributed energy resources (DERs) like distributed storage, distributed generation,

demand flexibility and energy efficiency Digitalization of both the grid, with smart metering, smart sensors, automation and other digital network technologies, and beyond the meter, and a surge of power-consuming connected devices .with the advent of the Internet of Things (IoT).

By Mr. Mane H. M.

## **Message of HOD**

It is our pleasure to present seventh News Letter "Ignite" of our department to all students. This News Letter is the one of the ways in which we can disseminate the information about department. It covers various technological articles, departmental activities, achievements of students and staff members.

Mr. S.B.Pawar

#### Wireless Power Transfer

One alternative to batteries, especially for small Internet of Things (IoT) devices, is wireless charging. This option is already familiar to many smartphone owners, who no longer have to worry about the charging port being damaged through wear and tear. Now, the challenge for engineers is to extend the range and



capacity, so that a greater variety of IoT devices can be powered this way.

Electric cars will soon have wireless charging as standard. Instead of large charging docks, which are subject to vandalism, drivers can simply park on a charging spot without needing to plug in. Soon, it may even be possible to charge your electric vehicle while it's moving.

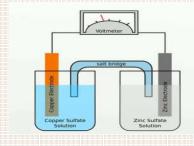
In our increasingly digital world, having no electricity is a disaster. These trends will lead us toward a future where the lights never go out unexpectedly. However, when loss of power ruins things for individuals and businesses, Sealevel has remote monitoring capable IoT products to help bring the lights on, and keep them on. Contact us today for a free quote or browse our site.

Mr. Santosh D. Kolekar

# Nanowire Batteries

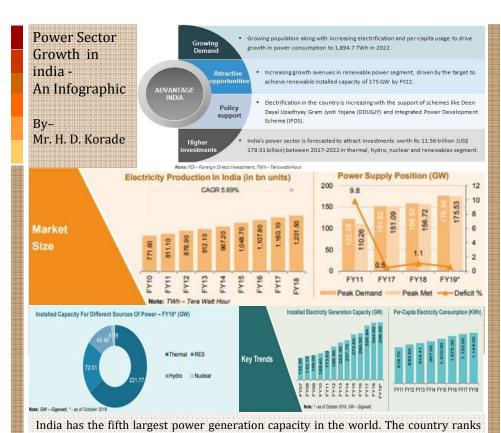
Lithium ion will probably continue to be the battery technology in your pocket for the next decade, but even with that technology there is room for improvement. One of the big issues is durability – a standard lithium-ion battery simply stops working after a few thousand charges.

There has been a recent breakthrough, however, in nanowire batteries. Using gold nanowires encased in an electrolyte gel, these batteries can be recharged an incredible 200,000 times



without any loss in functionality or capacity. Getting this technology into production is another matter. The researcher behind it doesn't expect to see mass-market nanowire batteries for at least three years, but it promises to transform power storage.

Mr. Girish Bansode



third globally in terms of electricity production. In May 2018, India ranked 4th in the Asia Pacific region out of 25 nations on an index that measures their overall power. Electricity production in India reached 1,201.543 Billion Units (BU) during FY18. Renewable energy is fast emerging as a major source of power in India. The Government of India has set a target to achieve 175 GW installed capacity of renewable energy by FY22. Wind energy is the largest source of renewable energy in India, accounting for 48.08 per cent (34.62 GW)\* of total installed renewable capacity (72.01 GW)\*. There are plans to double wind power generation capacity to 60 GW by 2022. India has also raised the solar power generation capacity addition target by five times to 100 GW by 2022. The Union Government of India is preparing a 'rent a roof' policy for supporting its target of generating 40 gigawatts (GW) of power through solar rooftop projects by 2022. All the states and union territories of India are on board to fulfill the Government of India's vision of ensuring 24x7 affordable and quality power for all by March 2019. As of December 20, 2018, a total of 18 states have achieved 100 per cent household electrification. The Government of India launched a voluntary based programme to promote energy efficient chiller systems in India. It labels the energy performance