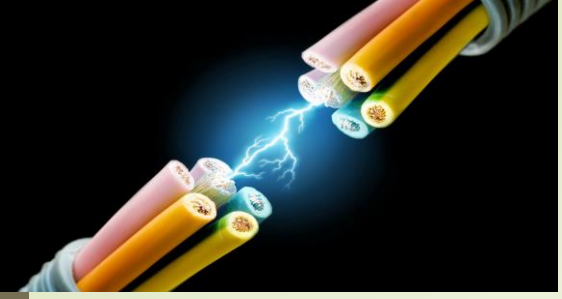



**Issue 6**
**June 2021 - MAY 2022**


**Department of Electrical Engineering**

# Electro Spark

**"Electrical Engineers always choose low Resistance Path"**



**MAHARASHTRA STATE BOARD OF TECHNICAL EDUCTION, MUMBAI HAVE AWARDED…..**



RAJARAMBAPU INSTITUTE OF TECHNOLOGY
Sangli, Maharashtra
An Autonomus Institute
Accredited with "A" Grade
by NAAC, UGC

**GRADE TO DEPARTMENT OF ELECTRICAL ENGINEERING,RIT,RAJARAMNAGAR (DIPLOMA) FOR THERE PERFORMANCE IN A.Y 2021-22**

## From the Editor's Desk

Dear Readers, Greetings. For this academic year, department has achieved 100% placement and also witnessed a higher number of Industries visiting the campus. I am sure you all go through it and join us in cherishing this milestone. Going a step further department also put in streamlined efforts to offer placement assistance to those who felt a dearth of the same. Department organized state level faculty development training programs, industrial visits and guest lectures. Thank you…..

Mr. A. S. Mulani
(Editor , Electrical Dept.)

## From the student's Desk

Affordable and quality education for every one is the foundation for a stable, prosperous, community of coming generations. There is certainly large divide between urban India and Rural Bharat, especially in terms of access and content. The recent pandemic has certainly exposed this weak underbelly of an already crumbling infrastructure of India's rural schools. This initiative is to enable affordable, accessible and sustainable infrastructure for the rural child and provide them an equal opportunity to learn.

Ms. Prajakta Waydande
S.Y. electrical
AY 2021-22

## Department vision

To develop competent engineers by providing quality technical Education in the field of electrical engineering to meet facture needs and challenges of the society and industry

## Department mission

1. To impart technical education in close interaction with industry and community.
2. To develop young minds sensitive to ethical and environmental issues.
3. To prepare young aspirants with the sprits of lifelong learning for career enhancement.

## Department Achievement's

- Diploma Electrical department accredited by NBA (National Board of accreditation) for 3 years from 2021-22 to 2023-24.
- Mr. G. R. Kavathekar worked as a Technical Reviewer for the IEEE Sponsored International Conference in Academic year 2021-22
- Mr. S. M. More Completed his post graduation in electrical power system.
- Mrs. Swati S. Patil Her name published as Reviewer for book Elements of Electronics in Tech Neo Publication.
- Mr. A. D. Nikam His name published as Reviewer for book Fundamental of Electrical Engineering in Tech Neo Publication

## Department Activity

A number of programs like guest lecture industrial visits and training workshops from various institutional organization and industrial experts were organized by department for in-depth understanding of the subject.

## Guest lecture


Introduction to practical aspects of Mumbai Power Distribution on 02/10/2021


Industrial Automation with measuring tools and AC Machine by Mr. V. D. Gurav on 20/10/2021

Energy conservation by Prof. Mahesh M. Wagh on 26/11/2021


Human rights, cyber laws and environmental acts by Mr. Digvijay Patil on 26/04/22

Project report and research paper writing by prof. S. G. Kumbhar on 19/04/22

# Industrial visits

Rajarambapu Cogeneration Plant (28 MW) on 07/12/21

Sharda Capacitors Pvt. Ltd MIDC Kupwad on 26/03/22

Shreenath Electricals MIDC Kupwad on 21/04/22

33/11 KV Substation MIDC Islampur 13/04/22

Pai Kane group goa 08/04/22

# Cultural Activities

Nishant Patil won 1st prize Online Quiz Competition on apla Maharashtra on 14/01/22

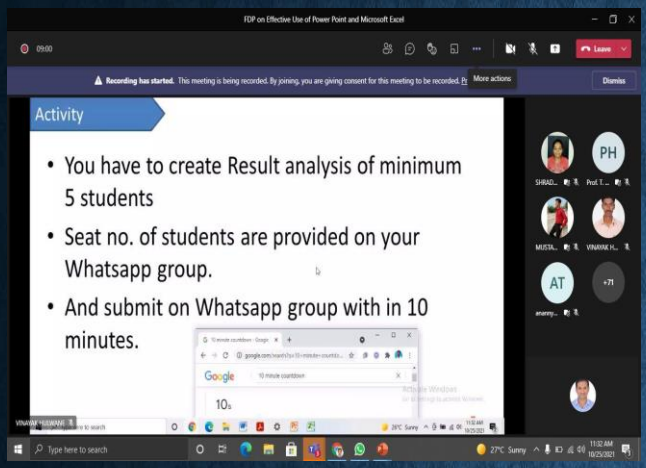
Samrudhi Patil won 1st prize on Makar Sankranti Greeting card Design Competition on 14/01/2022

Arati gavade and group won 3rd Prize in library poster competition.

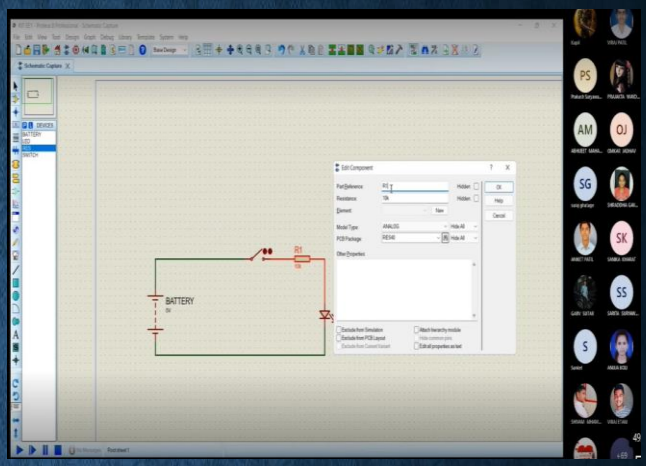

SY EE students participated in Cleanliness Drive at Ramling Bet, Bahe conducted on 5th March 2022.

TY EE students conducted “Safety & Energy Conservation Camp” at Adarsh Balak Mandir, Peth

## Training / Workshop Conducted




Organized Faculty Development program on "Effective Use of PowerPoint and Microsoft Excel" from 25/10/2021 to 27/10/2021




Conducted "Proteus software Training" for SY and TY Electrical Students from 29/11/2021 to 25/12/2021

## Research and Publications

Diploma Electrical engineering department published 29 research papers In different reputed journals in AY 2021-22.

## Training / Workshop Attended

| Sr. No | Name of faculty | No. of Training / workshop attended in AY 2021-22 |
|---|---|---|
| 1. | Mr. A. D. Nikam | 04 |
| 2. | Mr. S. M. More | 03 |
| 3. | Mrs. S. S. Patil | 03 |
| 4. | Ms. P. S. Patil | 02 |
| 5. | Mr. A. V. Kulkarni | 03 |
| 6. | Mr. G. R. Kavathekar | 05 |
| 7. | Mr. A. S. Mulani | 03 |

## Placement

| Sr. No | Name of the Company | No. of Students Placed | Package (LPA) |
|---|---|---|---|
| 1 | Bharat Forge Pune | 06 | 1.89 |
| 2 | Cummins India, Pune | 09 | 1.68 |
| 3 | EPL Ltd, Mumbai & Goa | 04 | 1.32 |
| 4 | Gold Plus Pvt. Ltd. Kagal | 02 | 1.89 |
| 5 | Precision Seal Manufacturing Ltd. Pune | 01 | 1.59 |
| 6 | TATA Magna Automotive Seating Systems Pvt. Ltd, Pune | 02 | 02 |

## Rankers 2021-22

| First Year | | |
|---|---|---|
| 1St | MANE KIRAN KRUSHNAJI | 84.5% |
| 2nd | DESAI SAMRUDDHI SATISH | 81.88% |

| Second Year | | |
|---|---|---|
| 1St | JADHAV OMKAR NIVRUTTI | 84.26 % |
| 2nd | JADHAV PRATHAM PRADIP | 83.74% |

| Third Year | | |
|---|---|---|
| 1St | AWATI PRATIKSHA PRADEEP | 90.93% |
| 2nd | PATIL ANKITA ANANDRAO | 90.40% |

## Student Articles

### Electricity Theft

Samruddhi gavade
FY EE

The state power utility firm announced that it had detected power thefts to the tune of over Rs 317 crore in 2021-22 by conducting raids at 22,987 places across the state. "We came across pilferage of more than 557 million units of electricity and registered several FIRs at local police stations. We have recovered fines of nearly Rs 172 crore so far," a senior official said.

The detection also helped reduce distribution losses and created a deterrent for other criminals, said MSEDCL managing director Vijay Singhal, who said there will be "zero tolerance" for power thefts across states.

There are 71 squads across the state with 345 officials who have been working on tip offs and conducting raids -- resulting in large-scale detection. Stealing electricity is a non-bailable offence. Under section 135 of the Electricity Act 2003, the offender can be punished with a fine, a jail term of up to three years, or both, once proven guilty.

### Need of Innovation in Solar Energy

Mustakim Sande
SY EE

Solar energy is playing a pivotal role in compensating the electrical energy as there is short fall in this energy due to more demand and decline trends of conventional source of energies exhaustion of fuels like coal, petroleum, natural gases and constant of environmental and climatic changes to cope up this photovoltaic installation is being done in an electrical system to compensate and enhance the energy. an photovoltaic installation in an electrical system is made from the assembly of various photovoltaic units that uses solar energy to produce the electricity in a cheaper way from sun power. Till now the use and scope of solar energy is limited and has not reached up to masses Moreover the efficiency of the system is also low due to which the output is not sufficient as compared to input as in some installed case of solar panel it has been observed that efficiency is not more that 27%.

**Recent Trends in solar energy**

Today's industrial solar cell technology is dominated by the "standard solar cell process" -a p-type silicon wafer, a phosphorus-doped emitter with a screen-printed front-side contact grid, an aluminum back surface field (BSF) and full-area metallization.

Saniya Landage
SY EE

This "simple" BSF process has boosted the solar industry in the last two decades, transforming it from lab-scale pilot lines into an industry that produces several gigawatts per year. Lately, the PERC concept ("passivated emitter and rear contacts") has received increased attention as a promising way to achieve higher solar cell efficiencies. PERC addresses the losses caused by the rear-side contacts through a dielectric passivation layer on the rear. The full-area contact previously used is reduced to points or lines where the coating is removed locally before metallization. It is expected that PERC will gain a significant market share in the coming years, mostly at the expense of BSF technology.

Several other future technologies are soon the be launched on the market– based on concepts that, like PERC, go back in time 20 years. Heterojunction (HJ) solar cells and interdigitated back contact (IBC) cells have already been mass-produced at some "pioneer" companies for years. Now, with dropping cell prices and lower margins, these old and at the same time new designs are again becoming the focus of the entire

**Feedback**

Pratiksha Awati
TY EE

I would sincerely appreciate the efforts extended by Chief editor and H.O.D., RIT. Newsletter team in publishing enriched the informative things of department newsletter. It's worth appreciating that the contents are informative about, Industrial Visit And Guest Lecture, faculty and students achievements. Photo quality is too good. I take this opportunity to offer my heartiest congratulations to Electrical department.