



॥ ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षण प्रसार ॥ - शिक्षणमहर्षी डॉ. बापूजी साळुंखे

Shri Swami Vivekanand Shikshan Sanstha's

Dr. Bapuji Salunkhe Institute of Engineering & Technology, Kolhapur

Approved by AICTE, DTE - D6468, Affiliated to MSBTE - 1213 (1st Shift), 1693 (2nd Shift)



Department
of

Electrical
Engineering

Newsletter

April 2023

1. Vision Mission

2. PEOs

3. Committee

a. Chief Editor (HoD) – Mr. Bhat P.P.

b. Executive Editor – Mr. Naik S.I.

c. Faculty Member –

1. Mrs. Konnur N S

2. Mr. Berlekar P.P.

d. Student Members (2)

1. Pawar Devrat TY Elec.

2. More Tanmay SY Elec

Chief Editor's Desk:-

This Newsletter of Electrical Engineering Department is enlightening the various activities held during last six months in Department. This is first issue which contains overall departmental activities of students, faculty members at various platform. I hope this newsletter will encourage our students and faculties in academic and for overall development of department and institute. My dear students and faculty always give their best develop to our Electrical Engineering department also with their efforts we can achieve our goal of NBA in near future.

Mr. P.P. Bhat

○ Academic Achievements

MSBTE RESULT WINTER 2022

Class	Rank	Name	Percentage
FY	FIRST	JADHAV SRUSHTI CHANDRAKANT	85.29
	SECOND	BIRAJDAR SIDDHARTH SANJAY	82.71
		DEWARDEKAR DEEYA NAGESH	82.71
	THIRD	PATIL DIKSHA SUDAM	82.57
SY	FIRST	KOLAPATE NILESH DHONDIBA	81.38
	SECOND	PATIL RANVIR BABAN	81.25
	THIRD	KUPWADE JAYDEEP DIPAK	80.25
TY	FIRST	BHOI SHRAVANI SANTOSH	88.90
	SECOND	SURYAWANSHI MAYURESH LALASAHEB	87.00
	THIRD	MOHITE GOURAV PRASHANT	86.90

Co-Curricula Achievements:-

- 1) More than 10 students from SY and TY Electrical has participated in national level technical event "Technova 23" at **Government Polytechnic, Kolhapur** and won various prizes as well.
- 2) More than 8 students from SY and TY Electrical has participated in national level technical event "Reflex 2K23" Electrosark at **AMGOI, Vathar**.
- 3) More than 10 students from FY, SY and TY computer has participated in national level technical event "DIGIFEST 2K23" at **NPK, Kolhapur** and won various prizes as well.

o Extra-Curricular Achievements:-

- 1) Aaditya Chougule from TY Electrical had participated in Zonal Cricket tournament at Sanjay Ghodawat Institute, Atigre.
- 2) Sankalp Patil from TY Electrical had participated in Zonal Cricket tournament at Sanjay Ghodawat Institute, Atigre.
- 3) Aayush Udagatti from FY Electrical had participated in Zonal Wrestling tournament at Shree Warana Shikshan Mandal, Amrutnagar, Warana. and won **First Prize**
- 4) Harshad Jambhale from SY Electrical had participated in Zonal Volleyball tournament at Hollywood's academy, Sanjivan Polytechnic, Panhala
- 5) Gururaj Maskar from SY Electrical had participated in Zonal Volleyball tournament at Hollywood's academy, Sanjivan Polytechnic, Panhala

Industrial Visit

1) Industrial Visit to “**Suntake Solar System**” for TY Electrical on 06th April 2023

Purpose: Industrial Visit to “**Channel B**” at Kolhapur was arranged on 06th April 2023 TY Electrical students to identify various elements of Solar System and learn the Working of solar system



Industrial Visit to “Suntake Solar System”

2) Industrial Visit to “33 KV MSEDCL Substation, Shivaji University” on 06th April 2023

Purpose: Industrial Visit to “33 KV MSEDCL Substation, Shivaji University” was arranged 06th April 2023 for SY Electrical to Identify Equipment's in substation, need of substation.



**Industrial Visit to “33 KV MSEDCL Substation,
Shivaji University”**

Industrial Guest Lecture

1) Industrial Guest Lecture on “***Power Factor improvement***” by Mr. Promod Gurav:

Purpose: Guest lecture on “***Power Factor improvement***” was arranged for Second year & Third year Electrical engineering student’s. Objective of that lecture was to Understand the need of power factor improvement, Drawbacks of lagging power factor.



Alumni Guest Lecture

2) Alumni Guest Lecture on “*Career opportunities after diploma*” by Ms. Bhagyashri patil:

Purpose: Guest Lecture on “*Career opportunities after diploma*” was arranged for second & third year electrical engineering student’s. Objective of that lecture was known the future opportunities in software development as a electrical engineer.



Personality Development Lecture



Women's Day Seminar



Life Skills Development Program





FACULTY TRAINING PROGRAM

Sr No	Resource Person/Institute	Date	Topic	Attended BY
1	L&T, Pune	3 to 4 April 2023	LV Switchgear	Mr. S I Naik
2	Vivekanand College, Kolhapur	17 Feb. 2023	Digital Creativity Skills for Faculty	Mr. P. P. Bhat
3	Vivekanand College, Kolhapur	17 Feb. 2023	Digital Creativity Skills for Faculty	Mr. P. P. Berlekar
4	Vivekanand College, Kolhapur	17 Feb. 2023	Digital Creativity Skills for Faculty	Mrs. N. S. Konnur
5	Vivekanand College, Kolhapur	17 Feb. 2023	Digital Creativity Skills for Faculty	Mr. S I Naik

Faculty Article

SOLAR ENERGY

By Mr S I Naik

The Sun has been worshiped as a life-giver to our planet since ancient times. The industrial ages gave us the understanding of sunlight as an energy source. India is endowed with vast solar energy potential. About 5,000 trillion kWh per year energy is incident over India's land area with most parts receiving 4-7 kWh per sq. m per day. Solar photovoltaic power can effectively be harnessed providing huge scalability in India. Solar also provides the ability to generate power on a distributed basis and enables rapid capacity addition with short lead times. Off-grid decentralized and low-temperature applications will be advantageous from a rural application perspective and meeting other energy needs for power, heating and cooling in both rural and urban areas. From an energy security perspective, solar is the most secure of all sources, since it is abundantly available. Theoretically, a small fraction of the total incident solar energy (if captured effectively) can meet the entire country's power requirements.

There has been a visible impact of solar energy in the Indian energy scenario during the last few years. Solar energy based decentralized and distributed applications have benefited millions of people in Indian villages by meeting their cooking, lighting and other energy needs in an environment friendly manner. The social and economic benefits include reduction in drudgery among rural women and girls engaged in the collection of fuel wood from long distances and cooking in smoky kitchens, minimization of the risks of contracting lung and eye ailments, employment generation at village level, and ultimately, the improvement in the standard of living and creation of opportunity for economic activities at village level. Further, solar energy sector in India has emerged as a significant player in the grid connected power generation capacity over the years. It supports the government agenda of sustainable growth, while, emerging as an integral part of the solution to meet the nation's energy needs and an essential player for energy security.

National Institute of Solar Energy has assessed the Country's solar potential of about 748 GW assuming 3% of the waste land area to be covered by Solar PV modules. Solar energy has taken a central place in India's National Action Plan on Climate Change with National Solar Mission as one of the key Missions. National Solar Mission (NSM) was launched on 11th January, 2010. NSM is a major initiative of the Government of India with active participation from States to promote ecological sustainable growth while addressing India's energy security challenges. It will also constitute a major contribution by India to the global effort to meet the challenges of climate change. The Mission's objective is to establish India as a global leader in solar energy by creating the policy conditions for solar technology diffusion across the country as quickly as possible. The Mission targets installing 100 GW grid-connected solar power plants by the year 2022. This is line with India's Intended Nationally Determined Contributions (INDCs) target to achieve about 40 percent cumulative electric power installed capacity from non-fossil fuel based energy resources and to reduce the emission intensity of its GDP by 33 to 35 percent from 2005 level by 2030.

In order to achieve the above target, Government of India have launched various schemes to encourage generation of solar power in the country like Solar Park Scheme, VGF Schemes, CPSU Scheme, Defence Scheme, Canal bank & Canal top Scheme, Bundling Scheme, Grid Connected Solar Rooftop Scheme etc.

Various policy measures undertaken included declaration of trajectory for Renewable Purchase Obligation (RPO) including Solar, Waiver of Inter State Transmission System (ISTS) charges and losses for inter-state sale of solar and wind power for projects to be commissioned up to March 2022,

Must run status, Guidelines for procurement of solar power through tariff based competitive bidding process, Standards for deployment of Solar Photovoltaic systems and devices, Provision of roof top solar and Guidelines for development of smart cities, Amendments in building bye-laws for mandatory provision of roof top solar for new construction or higher Floor Area Ratio, Infrastructure status for solar projects, Raising tax free solar bonds, Providing long tenor loans from multi-lateral agencies, etc.

Recently, India stands 4th in solar PV deployment across the globe as on end of 2021. Solar power installed capacity has reached around 61.97 GW as on 30th November, 2022. Presently, solar tariff in India is very competitive and has achieved grid parity.