

## Department of Mechanical Engineering, Swami Vivekanand Institute of Technology (Poly.), Solapur

15<sup>th</sup> August, 2023

### Chandrayaan -3

Chandrayaan -3 is a launched third lunar exploration mission by the India Space Research Organization (ISRO). Following Chandrayaan -2, where a last minute glitch in the soft landing guidance software led to the failure of the lander's soft landing attempt after a successful orbital insertion, another lunar mission for demonstrating soft landing was proposed. Chandrayaan -3 was a mission repeat of Chandrayaan -2 but only include a lander and rover similar to that of Chandrayaan -2. It does not have an orbiter, but its propulsion module will behave like a communications relay satellite. The spacecraft is launched on 14<sup>th</sup> July 2023. In the second phase of the Chandrayaan programme to demonstrate soft landing on the Moon, ISRO launched Chandrayaan -2 onboard a GSLV Mk III launch vehicle consisting of an orbiter, a lander and a rover. The lander was scheduled to touchdown on the lunar surface in September 2019 to deploy the Pragyan rover. The lander for Chandrayaan -3 will have only four throttleable engines, unlike Vikram on Chandrayaan -2 which had five 800 Newtons engines with a fifth one being centrally mounted with a fixed thrust. Additionally, the Chandrayaan -3 lander has equipped with a Laser Doppler Velocimeter. In December 2019, it was reported that ISRO requested the initial funding of the project, amounting to ₹75 crore out of which ₹60 crore will be for meeting expenditure towards machinery, equipment and other capital expenditure, while the remaining ₹15 crore is sought under revenue expenditure head. Confirming the existence of the project, ISRO chairman K. Sivan stated that the cost would be around ₹615 crore.

Ms. Yashshree Jadhav (SY)

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¾ Two faculty has completed M.E./ M.Tech.

¾ 01 Faculty are appearing for Ph.D program.

¾ 01 Faculty are appearing for M. Tech program.

#### Vision

Become a national leader in Mechanical Department that compatible with international standards by conventional engineering & latest technology.

#### Mission

To provide the students, with academic environment of excellence, leadership, ethical guidelines and lifelong learning needed for long Productive Career.

## Message from the Head of Department

Dear student friends,

Happy Independence day ,

Independence Day is a National Festival of India celebrated on the 15th of August. India became a free country on this day, and it's only then we could enjoy our fundamental rights laid down by the constitution. Our Independence gives us the reason to enjoy our fundamental rights laid down by the constitution. We are now a self-governed democratic country and have voting rights. The feeling of self-reliance and freedom fills the heart of the citizens with supreme happiness and joy. It is all due to the tireless efforts and numerous sacrifices of many great people who sacrificed their lives without fear. Let us promise each other in setting and reaching attainable goals, working harder and smarter and taking our school and student achievement to the next level of "GREATNESS".

In this bulletin, we have mentioned, departmental activities performed in the Academic year 2022-23 for the overall development of students

Mr. N. S. Shaikh

### Biomedical Engineering

Biomedical engineering is one of the fastest emerging trends in mechanical engineering today. It combines the concepts of design and engineering to the field of medicine and biology to modernize healthcare. Biomedical engineering can help facilitate better patient diagnosis, health monitoring, and therapy. Some of the currently existing examples of biomedical engineering are dental implants, pacemakers, and lifesaving artificial organs. This branch of mechanical engineering is projected to grow by leaps and bounds in the coming years.

### Digital Manufacturing

Automation has become the norm of the manufacturing industry, which is why there is a growing need to model automated tools, run relevant simulations, and continuously analyse the functioning of these machines. There is a growing need for manufactured goods in the market today and this is where digital manufacturing comes into play. This trend will ensure faster and glitch-free manufacturing processes which will prevent delays in manufacturing, wastage, and will ensure flexibility in the manufacturing industry.

### Green Manufacturing

The need of the hour for the human race is to ensure a more sustainable approach to life by engaging in manufacturing practices that can reduce waste, minimize pollution, utilize natural resources, and reduce emissions. This can be done through green manufacturing practices which will have a direct impact on product design, streamlined manufacturing processes, standardized regulations, and lean manufacturing.

Mr. Lendave Pranav (SY)



## India at the 2022 Commonwealth Games



India competed at the 2022 Commonwealth Games at Birmingham, England from 28 July to 8 August 2022. It was India's 18th appearance at the Commonwealth Games. In July 2022, the Indian team of 106 men and 104 women competing in 16 sports was named.[2] India is not competing in 3x3 basketball, beach volleyball, netball and rugby sevens. Indian para-athletes are competing in athletics, para power lifting, swimming and table tennis. Hockey player Manpreet Singh and badminton athlete P. V. Sindhu served as the country's opening ceremony flag bearers. Squash player Anahat Singh became the youngest Indian athlete to compete at the Commonwealth Games was the oldest player in the contingent. India's first medal of the Games was won by Sanket Sargar with a silver in weightlifting. Saikhom Mirabai Chanu won the first gold medal for the country at the Commonwealth Games 2022. India won its first ever medals in Lawn Bowls after Women's Fours team won Gold Medal and also Men's fours won Silver medal. Sharath Kamal won four (3 Gold and 1 Silver) medals in Table Tennis. India ended the games as the best nation in 4 sports : Badminton, Table Tennis, Wrestling and Weightlifting, and second best in Boxing

Mr. Sarwadnya Samarth (SY)

## Advanced Driver Assistance Systems

This is a category of systems that can ensure that you know when vehicle is in your blind spot, can keep you a safe distance from the car in front of you, and can keep your vehicle from drifting into another lane. One of the first examples of an Advanced Driver Assistance System (ADAS) was antilock brakes. These are now standard equipment on every new car. In modern vehicles, there are often come in bundled safety suites. Some examples are Toyota Safety Sense, Subaru EyeSight, Ford CoPilot360, Honda Sensing, and Nissan Safety Shield 360. Even if a car has ADAS as a bundle or suite of features, many automakers sell them as standalone options or include them as part of a specific trim level.

Mr. Abhishek Gajul (SY)







## Value Addition



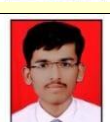
- ¼ Personality Development Program on Soft Skill Development by Dr. Vishal Nikam & Mr. Sunil Kadam on 26/02/2023
- ¼ Industry expert lecture on Industrial Engg. & Quality Control By Mr. Sudhir Palsule on 05/04/2023
- ¼ Industry expert lecture on Emerging Trends in Mechanical Engineering by Mr. Swapnil Bhuite on 31/03/2023
- ¼ Industry expert lecture on Role of Mechanical Engineers in Industry by Mr. Prathamesh Gaikwad on 25/03/2023
- ¼ Guest Lecture on Industrial Engineering and Quality Control by Dr. N.D. Misal on 02/03/2023
- ¼ Guest Lecture on Advanced Manufacturing Process by Mr. R.N. Dhane on 24/11/2022
- ¼ Industry Visit arranged in Leena Engineering Works on 27/03/2023
- ¼ Industry Visit arranged in Sterling Motors on 01/04/2023
- ¼ Our MOU Partners
 

1. Leena Engineering Works	2. Bhuite Industries
3. Kame Enterprises Pvt. Ltd.	4. Sterling Motors







**MSBTE RESULT: - SUMMER 2023****Third Year**

Sr. No.	Name of Student	Marks %	Photos
1	ADSULE PAWAN	80.56	
2	DUDHGUNDI SHUBHAM	79.89	
2	PATHRUT ADITYA	79.89	
3	KAMURTHI DEEPAK	73.44	

**First Year**

Sr. No	Name of Student	Marks %	Photos
1	OMRAJ PATIL	86.27	
2	YASHSHREE JADHAV	83.87	
3	PRANAV LENDAVE	83.73	

**PLACEMENT 202223**

Sr. No.	Name Of Student	Name of Company	Photos
1	ADSULE PAWAN	TATA Motors Ltd.	
2	PATHRUT ADITYA	JK Systems	
3	VYAVHARE BALU	JK Systems, BAJAJ Auto Ltd.	
4	DIKONDA ADITYA	JK Systems	
5	KAMURTHI DEEPAK	TATA Motors LtdBAJAJ Auto Ltd.	
6	DUDHGUNDI SHUBHAM	BAJAJ Auto Ltd.	

## DEPARTMENTAL EVENTS



Industrial Visit at Sterling Motors



State Level Event-VIVEKPOSTEROLIC



Industry Expert Lecture by Mr. Swapnil Bhuite



FDP on Stress Free Teaching by Dr. Prakash Salunkhe

## EDITORIAL

It gives me a great pleasure to present the ninth volume of our departmental newsletter **KAIZEN** to you which gives us the opportunity to put forth the achievements of our Department. In this issue, we have covered different activity carried out at the Department of Mechanical Engineering. I am thankful to all the faculties & students who have contributed to this newsletter.

Ms. S.S. Bhosale