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IGNITION

IGNITE THE IM AGINATION

Department of Mechanical Engineering,
College of Engineering (Poly.), Pandharpur

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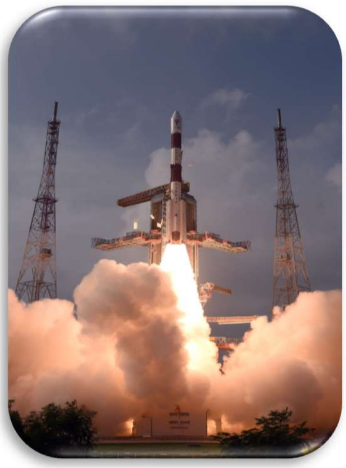


PSLV-C50 successfully launches CMS-01 from Sriharikota

India's communication satellite CMS-01 was successfully launched by PSLV-C50 on Wednesday December 17, 2020 from the Satish Dhawan Space Centre (SDSC) SHAR, Sriharikota. PSLV-C50 lifted off from the Second Launch Pad of SDSC SHAR at 15:41 hours (IST) carrying CMS-01. After a flight of about 20 minutes 12 seconds, the vehicle injected the satellite into its intended orbit. After injection, the solar panels of CMS-01 were automatically deployed and ISRO's Master Control Facility at Hassan has assumed the control of the satellite. After the successful launch, ISRO Chairman Dr K Sivan appreciated the tireless efforts of both the satellite and launch vehicle teams in realising this mission amidst the COVID-19 pandemic. CMS-01 is a communication satellite envisaged for providing services in Extended-C Band of the frequency spectrum. The Extended-C Band coverage will include Indian mainland, Andaman-Nicobar & Lakshadweep Islands. CMS-01 is the 42nd Communication Satellite of India. Talking about the upcoming PSLV-C51 mission, Dr K Sivan said "The mission will be fruition of the space reforms recently introduced in the country." Further he added that the mission will carry three satellites built by private entities.

Solankar Prakash (TY A)

Inside This Issue

- NBA Accredited
- One faculty has completed M.Tech.
- 05 staffs are appearing for M.E./M.Tech. program.
- 28 - Students scored above 99/100 in various subjects.

Vision

To be recognized for excellence in mechanical engineering education reinforced by overall development.

Mission

1. To impart value based technical education in Mechanical Engineering.
2. To enhance the technical knowledge of students.
3. To make the students ready with various skill sets in Mechanical Engineering.
4. To motivate students for lifelong learning.

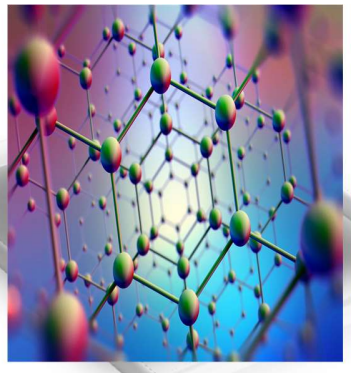
Message from the Head of Department

Wish you happy "Republic Day" to all my dear students. I congratulate all pass out students, and welcome to newly admitted first year students. As we all are facing issue of 'COVID-19' from March 2020, until now, I salute all the people who are fighting against corona virus bravely. Whole world is under fear, but positive attitude in the thing which maintains our mind stable. We learned a lesson that nobody can stop living, so we have to move ahead by adopting three rules like use of hand sanitizer, wearing mask and maintaining social distance. In this pandemic situation, education cannot stop; we solve this problem by using engineering technology. All students are involved in study by virtual learning. All faculties are conducting lectures through online method. Therefore, I can say that engineering technology is also a type of weapon to fight against invisible corona virus. Our Indian scientist, through continues research, found the vaccine against corona virus. At last, I heartily congratulate all the students for showing excellent achievement in academics. Maintain consistency and do hard work to achieve our goal. Wish you all the best for this semester.

Mr.S.V.Kulkarni

❖ Nanotechnology

Nanotechnology is the use of matter on an atomic, molecular, and supramolecular scale for industrial purposes Nanotechnology as defined by size is naturally broad, including fields of science as diverse as surface science, organic chemistry, molecular biology, semiconductor physics, energy storage, engineering, microfabrication, and molecular engineering. The associated research and applications are equally diverse, ranging from extensions of conventional device physics to completely new approaches based upon molecular self-assembly, from developing new materials with dimensions on the nanoscale to direct control of matter on the atomic scale. Scientists currently debate the future implications of nanotechnology. Nanotechnology may be able to create many new materials and devices with a vast range of applications, such as in nanomedicine, nanoelectronics, biomaterials energy production, and consumer products. On the other hand, nanotechnology raises many of the same issues as any new technology, including concerns about the toxicity and environmental impact of nanomaterials.



Ghadage Sanket (SY A)

❖ Challenges in the 21St Century

❖ 2021 should be interesting for the Internet of Things (IoT)

IOT is changing the landscape of devices in industry and for consumers. Smart technology is slowly but surely finding its way into many businesses and private homes all around the world. 2021 is shaping up to be a great year for IoT and its impact is predicted by some to increase company revenues by as much as $344 billion next year. The efficiency that IoT devices bring to an organization and are also predicted to provide around $177 billion in cost savings. "IoT and smart devices are already increasing the performance metrics of major US-based factories. They are in the hands of employees, covering routine management issues and boosting their productivity by 40-60%."

❖ Electric Vehicles should have a good year in 2021

EV are another tech trend to keep an eye on in 2021. Their market share in the automotive sector is growing year on year and 2021 should be significant. Some new exciting models are coming on the market next year with many other manufacturers investing hard into the tech. The next decade should also see a massive increase in the number of EVs on the road. By 2030 it is estimated that somewhere in the order of 125 million should be on the road. But there are some other interesting trends within the EV market to look out for next year. Ever better batteries, the continued rollout of charging tech, autonomous driving, solar-powered EVs, electric planes, and better software are all things to look out for in 2021.

❖ Sustainable energy should see an interesting 2021

The energy sector is another interesting market to watch in 2021. The drive for ever more sustainable energy sources and ever better efficiency should see some interesting innovation next year. The energy mix for many countries should also see sustainable energy receiving a bigger bite of the cherry. "EIA forecasts that utility-scale renewable fuels, including wind, solar, and hydropower, will collectively produce 18% of U.S. electricity in 2019 and 19% in 2020."

/Gohad Sumedha (TY A)

/Khare Dakshata (TY B)

MSBTE RESULT: - SUMMER 2020

Second Year

Sr. No	Name of Student	Marks %
1	Sarade Keshav Rajendra	97.88
2	/Gohad Sumedha Trivikram	97.50
3	Solankar Prakash Bira	96.75

Third Year

Sr. No	Name of Student	Marks %
1	Ghadage Shyam Rajkumar	99.33
2	Patil Jaydeep Mahesh	99.33
3	Jagadale Akashay Jagannath	98.78
4	Khatal Sachin Saudagar	98.11

❖ **The students who scored above 99/100 in respective subjects**

Sr.No	Name of Student	Subject	Marks	Sr.No	Name of Student	Subject	Marks
1	Patil Jaydeep	AEN,ETM, IHP	**100**	15	Kamble Yashraj	IHP,ETM	**99**
2	Ghadage Shyam	AEN,IHP	**100**	16	Deshmukh Ratnadip	IHP,ETM	**99**
3	Jagadale Akshay	AEN	**100**	17	Jagdale Shardul	IHP,ETM	**99**
4	Deshmukh Ratnadip	AEN	**100**	18	Mane Kiran	IHP,ETM	**99**
5	Mane Kiran	AEN	**100**	19	Sonavane Pranav	IHP,ETM	**99**
6	Jagadale Akshay	IEQ,RET, IHP,ETM	**99**	20	Patil Rutuja	IHP	**99**
7	Ghadage Shyam	IEQ,RET, ETM	**99**	21	Kamble Amar	IHP	**99**
8	Khatal Sachin	AEN,IHP, ETM	**99**	22	Hajare Nishant	IHP	**99**
9	Patil Jaydeep	IEQ,RET	**99**	23	Patil Sujeet	AEN	**99**
10	Kumbhar Swarup	AEN,ETM	**99**	24	Kamble Santosh	IEQ	**99**
11	Shinde Ashutosh	IEQ,IHP	**99**	25	Sutar Juned	ETM	**99**
12	Mujawar Samir	IHP,IEQ	**99**	26	Shinde Nikhil	ETM	**99**
13	Kadam Dipti	IEQ,RET	**99**	27	Kadam Samir	ETM	**99**
14	Naiknaware Madhuri	IHP,ETM	**99**	28	Shikhare Rohit	ETM	**99**

EDITORIAL-

It gives me a great pleasure to present the eighth volume of our departmental newsletter ***IGNITION*** 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.

Mr. Y.D. Chavan