

Mechanical Engineering Newsletter

"YANTRAMSHA"

PES INSTITUTE OF TECHNOLOGY AND MANAGEMENT,

Sagar Road, NH-206, Shivamogga – 577 204

OUR VISION

"To emerge as a center of excellence in the field of Mechanical Engineering Education, Research and Entrepreneurship".



Mechanical Engineering Program of PESITM, Shivamogga has got NBA Accreditation for 3 years of validity (Academic Years 2021-2022 to 2023-2024 i.e. up to 30.06.2024)



MoU was signed between Dept. of ME, PESITM, Shivamogga and Poorna Pragna Institute of Nanomaterials on 27th October 2021



PES Institute of Technology and Management, Shivamogga has got NAAC Accreditation for 5 years of validity (Valid upto November 21, 2026) with B++ grade from NAAC, New Delhi



MoU was signed between Dept. of ME, PESITM, Shivamogga and AdNano Technologies of Bengaluru on 28th January 2022



Nuclear power will help provide the electricity that our growing economy needs without increasing emissions. This is truly an environmentally responsible source of energy.

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- M2 To motivate the students in involving academic and research activities for their career excellence and being responsible global citizens.
- *M3 To include social, ethical and entrepreneurial values for the professional accomplishments.*

Electric CARS



The electric car was always seen as an expensive and flawed alternative to internal combustion, but in its tenth year Tesla seems to have cracked it with the Model S. Priced to compete in the luxury saloon market with rivals from BMW, Mercedes, Jaguar and Audi, the Model S kicked petrol heads' preconceptions of electric cars to the kerb with a range of almost 300 miles, performance and refinement to match the esteemed competition, and a free charging network covering much of North America's most-used highways. 2013 may not have been a year when new technology was created, but it was a year which saw technology leap from the pages of science fiction and into our everyday lives.

- Mithun P (7th Sem ME)



Six days STTP on "Advanced Research in Nonomaterials and Nano Composites" was held in the department form 20.09.2021 to 25.09.2021.



Glimpses of Industry - Institute connection which was held on 23rd October 2021 in the PESITM Premises

3D Printing Future of Additive manufacturing

Dating back to the 1980s, it's somewhat unfortunate that it took the production of a gun to propel 3D printing into the media spotlight - but thankfully there's much more to this technology than the ability to make a deadly weapon in your living room. Hailed by some as the second industrial revolution, the potential for 3D printing is simply massive; rather than ship replacement parts from factories to where they are needed, manufacturers can, in theory, print one off and use it on-site.

- Pradeep S L (8th Sem ME)



Industrial visit to M/s Bhoomika Alloys and Castings was arranged on 04.02.2022 for the 3rd Sem students of MED (PESITM)

Putting sugar on a cut or wound reduces pain and speed up the healing process.

- Zoyasaif (3rd Sem ME)

It is not that we use technology, we live technology

It is not that we use technology, we live technology

Technology is a useful servant but a dangerous master

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Things you didn't know about Sir Isaac Newton



One genius dies, another one is born. Isaac Newton was born in 1642, the same year that Galileo Galilei died.

He was an alchemist. Probably the weirdest fact about Newton is that he was a firm believer in alchemy

He was also a politician. Newton served as a Member of Parliament representing Cambridge on two separate occasions.

Newton has the most valuable tooth. One of his teeth was sold in 1816 at auction for approx. \$3,600.

A Problem Always Looks Big till you get a bigger problem than that

By Prof. Malteshkumar Deshpande



Successful engineering is all about understanding how things break or fail.

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On-Line Electric Vehicles (OLEV)



Wireless technology can now deliver electric power to moving vehicles. In next-generation electric cars, pick-up coil sets under the vehicle floor receive power remotely via an electromagnetic field broadcast from cables installed under the road. The current also charges an onboard battery used to power the vehicle when it is out of range. As electricity is supplied externally, these vehicles need only a fifth of the battery capacity of a standard electric car, and can achieve transmission efficiencies of over 80%. Online electric vehicles are currently undergoing road tests in Seoul, South Korea.

DIMENSIONAL DISPLAYS



Now that realistic three dimensional images have leapt from the megapixels screen to the living room television, 3D is bound for automobiles. thin Using film transistor technology, Johnson Controls created an experimental 3D instrument cluster that displays critical information in the foreground with secondary data located deeper in the driver's field of view. This technology could add realism to navigation displays and Action movie thrills to emergency lane changes.

- Sujala 3rd Sem ME

Start where you are, do what you can.... - Prathibha (3rd ME)

- Shivakumar 5th ME



THE EVOLUTION OF INTELLECTUAL FREEDOM

In order to succeed, we must first believe that we can.

- Shivalingesh (7th A ME)



Fresher day was celebrated by welcoming the 3rd sem students to the department of mechanical engineering on 18.12.2021

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SELF-HEALING MATERIALS



One of the defining characteristics of living organisms is their inherent ability to repair physical damage. A growing trend in biomimicry is the creation of non-living structural materials that also have the capacity to heal themselves when cut, torn or cracked. Self-healing materials which can repair damage without external human intervention could give manufactured goods longer lifetimes and reduce the demand for raw materials, as well as improving the inherent safety of materials used in construction or to form the bodies of aircraft.

- Bharath Maiyya 7th Sem ME

ನನ್ನವಳ ಅಂದವನ್ನು ಬರಹಗಳ ಮೂಲಕ ಹೊಗಳಲೆಂದು ಕುಳಿತರೆ, ಲೇಖನಿಯೇ ನಾಚಿ ಸ್ತಬ್ಧವಾಗಿದೆ ಅವಳನ್ನು ನೋಡಲೆಂದು.

> ---- ★ ಇಂತಿ ನಿಮ್ಮ ಕನ್ನಡಿಗ★ 🖋 ತಿಮ್ಮೇಶ್ ನಾಯಕ.ಎನ್ 🖋



Demo session on fire safety was organized for the faculties of mechanical engineering department on 08th October 2021 in the PESITM premises by the Karnataka State Fire & Emergency Services, Shivamogga

MiiPC – Power to the Parents



Parents have always complained about the safety of their children online, internet is very open, and our kids use it on a daily basis for entertainment and educational purposes while at home, this MiiPC technology helps parents control the usage of internet at home, it comes with a parental control app which you can use to block harmful websites. It is time you control what your kids see online. MiiPC is a personal computing device which runs on an Android operating system, all you have to do, is to connect MiiPC to a computer and start controlling what your kids do online.

Use its mobile app for real-time monitoring.

- Anusha R 7th Sem A sec ME

Keep your eyes on the stars, and your feet on the ground.

- Stephen F (3rd Sem ME)

Proving is just a waste of time, improving yourself is good for life

- Thimmeshnayaka N

ನೆನಪುಗಳು ಕಾಡಿದರೂ, ಕನಸುಗಳು ಉರುಳಿದರೂ, ಕಳೆದುಹೋದ ಸಮಯ ತಿರುಗಿ ಬಾರದು.

ಸ್ಮಶಾನಕ್ಕೆ ಹೋದ ಸಮಯದ ಬಗ್ಗೆ ಚಿಂತಿಸುವ ಬದಲು, ಜೊತೆಗಿರುವ ಜೀವಂತ ಸಮಯದ ಜೊತೆ ಪ್ರಯಾಣಿಸು.

--- 🖈 ಇಂತಿ ನಿಮ್ಮ ಕನ್ನಡಿಗ★ 🖋 ತಿಮ್ಮೇಶ್ ನಾಯಕೆ.ಎನ್ 🖋

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		Funds received from different agencies		
SI. No.	PI and Co-PI	Title of the Project	Agency	Fund Sanctioned
1.	Dr. Girisha L. Mr. Maltesh Kumar Deshpande	Experimental Investigations on dry sliding wear behavior of Graphene/Nano diamond reinforced Al7075 Nano composites for clutch facing applications	VGST	20,00,000/-
2.	Dr. Girisha L. Mr. Maltesh Kumar Deshpande	Development of Aluminium alloy based hybrid nano composites to evaluate mechanical characteristics, micro structure and strengthening mechanism	VTURG	8,00,000/-
3.	HOD, ME, PESITM	MODROBS	AICTE	8,00,000/-
4.	Dr. Girisha L	STTP on Advanced research in Nano materials and Nano Composites.	AICTE	3,50,000/-

Smart Herb Garden



Creative idea developed by Click & Grow, technology is advancing every day, now this Smart Herb Garden high tech will help us create smart gardens in our homes and offices. I just love planting small gardens in my office, so this Smart Herb Garden just makes the all process very simple and fabulous. With this Smart Herb Garden, you can be in position to grow all types of herbs without worrying about things like water, nutrients or light. All you have to do is to plug it into the wall then add enough water, then the device will handle the rest. Some of the herbs you can plant in this Smart Herb Garden include, Mini Tomato, Chili Pepper, Garden Sage, Coriander, Basil and Lemon Balm. But you don't have to be limited , you can try out other plants with this Smart Herb Garden.

- Manjunath P T 7th Sem B Sec ME



Interactive session was conducted for the faculties of mechanical engineering department with Mr. K Jayanna, DGM (Rtd.,), Bosch, Bengaluru on 10th Feb. 2022 in the mechanical seminar hall of PESITM.



Another technology that has been with us for years but never had its big break in the consumer market, Apple's Touch ID fingerprint sensor on the iPhone 5s lets users unlock the device and pay for iTunes content without entering their password or PIN. Fingerprint scanners have appeared in consumer tech before - Dell laptops featured them years ago - but if there's a company and a product that can make biometric security mainstream, it's Apple and the iPhone. In a year that saw cyber security dragged to the attention of internet users the world over – users who all too often choose '123456' as their password - Apple's assault on alternatives to traditional digital security may have come at just the right time. – **Shivakumar 3rd Sem ME**

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Agile Robots



Computer scientists have created machines that have the balance and agility to walk and run across rough and uneven terrain, making them far more useful in navigating human environments. walking is an extraordinary feat of biomechanical engineering. Walking every step requires balance and the ability to adapt to instability in a split second. It requires quickly adjusting where your foot will land and calculating how much force to apply to change direction suddenly. No wonder, then, that until now robots have not been very good at it.

- Ajay R 7th Sem ME

Have a hunger to LEARN, be an eager to EARN.

--- 🛧 Thimmeshnayaka N

Safety Truck Developed by Samsung and Leo Burnett



Both Jan Koum and Brian Acton - who earlier worked together at Yahoo - were rejected by Facebook and Twitter in interviews, before they went full-time with WhatsApp. Imagine how different the world would be if even one of those interviews had gone better. Every year, thousands of people get hurt or die in traffic accidents, in part because their visibility gets blocked by a lumbering vehicle. This is especially true in Argentina, known for its winding, narrow roads. There, however, Samsung and ad agency Leo Burnett have partnered on a creative solution: a system that relays video footage from the front of a truck to four screens on its back, giving drivers a clear view of what's ahead. During its initial test, the Safety Truck covered some 620 miles (1,000 km) over three days without incident. Now Samsung is refining the technology and working with Argentine officials to roll it out more broadly. "We believe this will change the history of road safety," says Sang Jik Lee, president of Samsung **Electronics** Argentina.

- Vaishnavi 3rd Sem ME



International women's day was celebrated for the PROUD WOMENS OF Mechanical engineering department on 08.03.2022

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Special Events captured through camera and social media



We need articles for future additions of Newsletter

Please consider providing a short item of news, or an in depth article for the next edition of the newsletter. We would like to invite everybody to submit a short story/article/announcement that can fit in the following structure:

News items and announcements -

- > Short, topical, news oriented technical/ non-technical topics.
- Paintings, sketches, comics, poems, dag-writings, short stories etc.
- Major and minor technical articles are also accepted.
- > Jokes, Punch dialogues, quotes of your own could be included.
- > All of above said matters could be accepted in English or in kannada formats

Feel free to communicate with the student and staff coordinators for more details.

- Editor





(L to R) Mr. Jayakrishna K (7th Sem) Ms. Vaishnavi H R (3rd Sem) Mr. Uzair Khan (7th Sem) Dr. Basavarajappa Y. H. (HOD/ ME) Dr. Ashok R. Banagar (Asst. Prof.) Mr. Shivakumar M. (5th Sem)