



DEPARTMENT OF MECHANICAL ENGINEERING
GOVERNMENT COLLEGE OF ENGINEERING, BARGUR-635104
MECHINFO-MARCH TERM 2015 (e-Newsletter)

Vision of the Institute:

To provide world class engineers who are ethically good, sincere, faithful and duty conscious good citizens of our motherland.

Mission of the Institute:

To groom the student community through centric quality lectures, laboratories, library and value added training.

Vision of the Department:

The Mechanical Engineering Department strives to be recognized for education and research leading to qualified engineers, who are innovative, entrepreneurial and successful in advanced fields of engineering and research.

Mission of the Department:

“Prepare Engineering Students for Successful Careers” by

- Imparting quality education to the students and enhancing their skills to make them competitive mechanical engineers.
- Maintaining vital, state-of-the-art research facilities to provide its students and faculty with opportunities to create, interpret, apply and disseminate knowledge.
- To develop linkages with R&D organizations and educational institutions for excellence in teaching, research and consultancy practices.

IN THIS EDITION..,

- Department library
- Events
- Upcoming car and bike in India
- Technical views
- Pic-Zone
- Art-Zone

DEPARTMENT LIBRARY:

Our Department library has been started. This is useful to improve the knowledge of students. The Department library has WIFI&LAN enabled.



Department library serves a useful resource for research. Faculty and students update their knowledge both in their subjects and current affairs of the world.

EVENTS:

Ornithopter Workshop:

Students Development Programme on Ornithopter were conducted for the welfare of the students under TEQIP. Trainers from ESCI (Engineering Staff College of India) gave training to students.



They have trained to design Ornithopter. But we have designed the gearing system in drawing sheet.

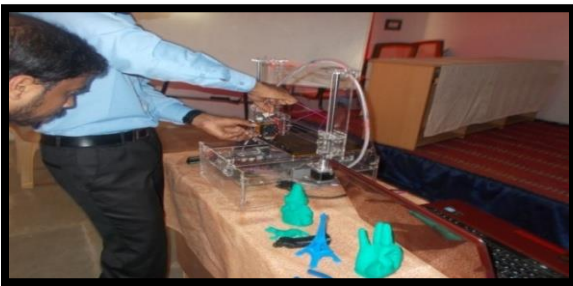


This increases our basic ideas of designing of Ornithopters.



3D Printing Workshop:

Students Development Programme on advanced 3D printing was conducted for Third & final year students on 6th and 7th march, 2015 under TEQIP-II.



The programme enriched the theoretical as well as the practical knowledge of the students in the 3D printing technology.

Students Achievement:

In our Department, a quality circle team of 5 members formed and took a problem that was major in our Department surrounding (i.e.) The Department covered with shrubs and thorns. So we decided to rectify this problem with the help of HOD and the principal and quality circle team along with some students. We successfully solved the problem in a good manner.



We have submitted this as a presentation in 17th convention of quality form of India which was

held at **Rajalakshmi Engineering College Chennai** and won 2nd prize.

UPCOMING CAR AND BIKE IN INDIA

DC Avanti:



Expected Launch: Apr 2015

Estimated Price: 35.00 Lakhs

DC Avanti is the Indian designed sports car by DC Design, a firm headed by Dilip Chhabria. Taking its name from the Studebaker Avanti of The Adventure of Tintin comics, it was unveiled at the 2012 Auto Expo Delhi as a two-seat sports car. It was initially equipped with a mid-mounted Ford Ecoboost Engine. But due to cost reasons, DC has shifted to a Renault-sourced, 2.0-litre four-cylinder turbocharged petrol engine producing 250 bhp, A Honda-sourced V6 version with 394 bhp is planned for future release. Transmission is a six-speed dual-clutch transmission. The Avanti weighs 1562 kg.

Ducati Scrambler:



Expected Launch: 15 Oct 2015

Estimated Price: 7.00 Lakh

Ducati India will be launching the Scrambler. Ducati sources have disclosed to ZigWheels. The Scrambler will be Ducati's cheapest offering in the Indian market and will carry a price tag of around Rs 7 Lakh (on-road Delhi). Ducati India has yet to confirm the prices of any of the models to be sold in India, or the launch dates. However, sources in one dealership have told ZigWheels that the Scrambler will 'most likely' be launched next month. The new

Scrambler's engine, is the same 803cc V-Twin engine of the Monster 795, and makes about 76PS power and offers 68Nm of torque at 5750rpm.

TECHNICAL VIEWS:

New Concept Tires:

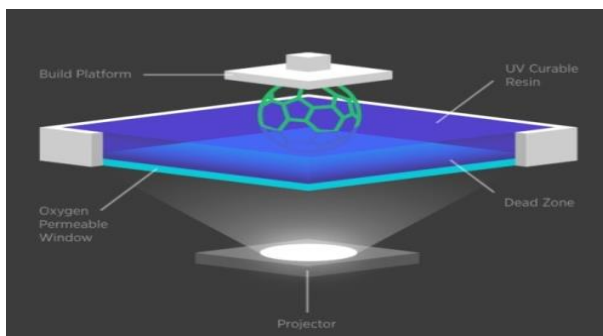
Two futuristic concept tires unveiled by Goodyear at this week's Geneva International Motor Show could radically change the role of car tires in the future.



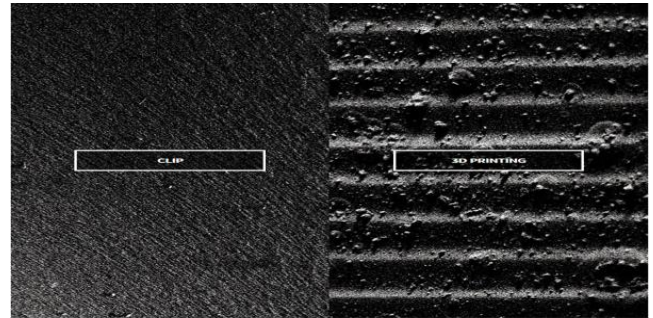
“BHO3” (left) and “Triple Tube” (right). Although the tires pictured here are only concept products at this stage, the technologies in their designs offer a glimpse of what practical innovations may be on the horizon. The first concept – named “BHO3” – offers the possibility of charging the batteries of electric cars by transforming the heat generated by the rolling tire into useful electrical energy. The second concept – named “Triple Tube” – contains three tubes that adjust tire inflation pressure in response to changing road conditions, delivering new levels of performance and versatility.

New 3D Printer:

A new 3D printer uses light and oxygen to synthesis materials from a pool of liquid, up to 100 times faster and with far more accuracy than previous methods.



A new 3-D printing technology has been developed by Silicon Valley startup, Carbon3D Inc., enabling objects to rise from a liquid media continuously – rather than being built layer-upon-layer as they have been for the past 25 years.



This method represents a fundamentally new approach to 3-D printing. It allows ready-to-use products to be made up to 100 times faster than previous methods and creates previously unachievable geometries.

Future Vehicles:

Dwindling availability of crude oil supplies has led to major economic disruption.



Transport is among the sectors most directly affected, with the cost of travel becoming one of the most important issues in the world today. As part of the recovery measures being enacted around the globe, a wholesale transition to alternative energy is taking place. Alongside this, a new generation of smaller and more efficient vehicles is emerging. The majority of new cars are now plug-in electric or hybrids, with charging points a common sight in towns and cities.

The Lockheed Martin SR-72:

The SR-72 is an unmanned, hypersonic aircraft intended for intelligence. Surveillance and

reconnaissance. Developed by Lockheed martin, it is the long-awaited successor to the SR-72 blackbird that was retired in 1998.



The plane combines both a traditional turbine and a scramjet to achieve speeds of Mach 6.0, making it twice as fast as the SR-71 and capable of crossing the Atlantic Ocean in under an hour. A scaled demonstrator was built and tested in 2018. This was followed by a full-size demonstrator in 2023 and then entry into service 2030.

ART ZONE:



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TO BE CONTINUED.....

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