Latest Developments in Automobile Sector

India's first-ever hydrogen fuel cell powered bus by Tata Motors is here! Made in India bus emits only water





Tata Motors in association with Indian Oil Corporation has flagged off the trials of India's first ever Hydrogen Fuel Cell powered Bus. Indian Oil R&D is celebrating its 47th foundation day, marked by the beginning of the hydrogen fuel cell bus's testing in real world. The said project has partial financial support from Department of Science & Industrial Research, Ministry for Science & Technology and the Ministry for New and Renewable Energy. Another landmark for the hydrogen fuel cell tech is the fact that the bus was fueled at the country's first hydrogen dispensing facility at R&D Centre of Indian Oil. The two companies, Tata Motors and Indian Oil will be carrying out prolonged testing of the hydrogen fuel cell bus to understand the efficiency and durability of the new and clean mobility solution in the long run in a better way.

Such projects reflect positively on the Indian government's 'Make in India' initiative with Tata Motors being on the forefront of introducing clean vehicles for mass transportation. While we've seen luxury buses from Volvo and Mercedes-Benz, Tata Motors' new buses also offer a promise for a clean environment. Buses that run on hydrogen fuel cell tech are already in use in many countries. Over 100 fuel cell buses are a part of London's transport system.

Hydrogen fuel cell technology is about three times more efficient than a traditional combustion engine. A fuel cell operates quite like a battery but without having to charge. The fuel cell generates electricity and water as long as the fuel - hydrogen and oxygen, are supplied to it.

Tata Motors first unveiled the hydrogen fuel cell bus at its Pune facility in January this year. The company launched the Star bus Electric 9m, Star bus Electric 12m and the Star bus Hybrid 12m range of buses which are designed, developed, powered by alternative fuels and made in India. Tata Star bus Fuel Cell bus produces only water and heat as a byproduct, thus, producing zero emissions.

Hydrogen powered Tata Star bus fuel cell bus is a zero-emission vehicle best suited for inter-city transportation for the masses and been developed in a partnership of ISRO (Indian Space Research Organization).

Note: Autotrendz does not assume any responsibility for the information furnished, views expressed by the individuals. Published & printed by Prof. Rahul D. Rajopadhye, Head, Automobile Engineering Department, on behalf of RMCET, Ambav-415804.: Designed by: Suraj Yadav, .Edited by: Prof. S.D.Rawool (For Private Circulation Only)



Department Vision

To mold the students into professional and competent automobile engineers, who can meet the global demands.

Department Mission

- 1. To prepare students for utilizing more creative thinking and inattentiveness.
- 2. To develop 'educational pathways' so that students can maximize on their optional career choices.
- 3. To inculcate integrity, honesty and team building through curricular, co-curricular activities.

Elon Reeve Musk

Elon Reeve Musk (born June 28, 1971) is a South African-born Canadian American business magnate, investor and engineer. He is the founder, CEO, and lead designer of SpaceX; co-founder, CEO, and product architect of Tesla, Inc.; and co-founder and CEO of Neuralink. In December 2016, he was ranked 21st on the Forbes list of The World's Most Powerful People. As of February 2018, he has a net worth of \$20.8 billion and is listed by Forbes as the 53rd richest person in the world.

Born in Pretoria, Musk taught himself computer programming at the age of 12. He moved to Canada when he was 17 to attend Queen's University. He transferred to the University of Pennsylvania two years later, where he received an economics degree from the Wharton School and a degree in physics from the College of Arts and Sciences. He began a PhD in applied physics and material sciences at



In May 2002 Musk founded SpaceX, an aerospace manufacturer and space transport services company, of which he is CEO and lead designer. He co-founded Tesla, Inc., an electric vehicle and solar panel manufacturer, in 2003, and operates as its CEO and product architect. In 2006 he inspired the creation of Solar City, a solar energy services company that is now a subsidiary of Tesla, and operates as its chairman. In 2015 Musk co-founded OpenAI, a nonprofit research company that aims to promote friendly artificial intelligence. He co-founded Neuralink, a neurotechnology company focused on developing brain-computer interfaces, in July 2016 and is its CEO. He founded The Boring Company, an infrastructure and tunnel-construction company, in December 2016 and serves as CEO.

> "I think it is possible for an ordinary people to choose to be extraordinary." ---Elon Musk



Stanford University in 1995 but dropped out after two days to pursue an entrepreneurial career. He subsequently co-founded Zip2, a web software company, which was acquired by Compaq for \$340 million in 1999. Musk then founded X.com, an online payment company. It merged with Confinity in 2000 and became PayPal, which was bought by eBay for \$1.5 billion in October 2002.

Achievements

Staff Achievements

- Prof. R.D. Belekar has received Minor Research Grant of Rs. 30,000/- from Mumbai University for year 2017-18.
- ✤ Prof. S. S. Surve guided the students for Students' GO-Karting championship.
- ✤ Prof. G.V. Wafelkar has completed M.E. in "Heat Power" from Pune University.
- ✤ Prof. P. L. Mane presented a paper on "Development of speed control and accident alert system for bike" in CTRD 2K17 2018 at RMCET, Ambav during December 2017.

Prof. S. D. Rawool attended one week STTP on "Design, Validation and Case Studies of Machine Elements using ANSYS/SOLIDWORKS" at SJCEM, Palghar from 3rd to 7th July 2017.

Students Achievements

- ✤ Ms. Samidha Tanawade secured first prize in Table Tennis competition at GIT, Khed.
- * Mr. Siddhesh Koltharkar Secured First rank in Drone Racing and Second rank in Robo Race in "Electrofocus 2K17" at FAMT Ratnagiri.

Events & Activities

1. One-Day Seminar on "Robotics & Automation" by Mr. Govind Oza Director at Pari robotics & automation Pvt. Ltd, Pune was organized on 19th August 2017 by Department of Automobile Engineering at R.M.C.E.T, Ambav.



2. Week Workshop on "Industrial Fluid Mechanics" by Prolific Systems & Technologies Pvt. Ltd. was organized during 12th to 15th September 2017 by Mr. S. D. Rawool for B.E Automobile students.



- 3. A Seminar on "Hydro Electric Power" by Mr. Rahul Bodhe (Engineer at Maharashtra State Power Generation Company Ltd.) was organized on 22nd September 2017 by Mr. P. L. Mane for B.E Automobile students.
- 4. One-Day seminar on "Virtual Lab Awareness" was organized on 29th September 2017 by department of Automobile Engineering at R.M.C.E.T, Ambav.
- 5. Two Days Seminar on "Heat Transfer" by. Prof. Amol Yadav was organized on 10th to 11th October 2017 for third year students.

Your work is going to fill a large part of your life, and the only way to be truly satisfied is to do what you believe is great work. And the only way to do great work is to love what you do. If you haven't found it yet, keep looking. Don't settle. As with all matters of the heart, you'll know when you find it



Siddhiraj Tandel (TE Auto)



Ashutosh Pabya (TE Auto)



Sagar Wankhede (TE Auto)

Thousands of candles can be lighted from a single candle, and the life of the candle will not be shortened. Happiness never decreases by being shared.

Creative Section



सुचत नाही काही आता

सुचत नाही काही आता गोंधळून तू टाकलेस मला, आठवणींना देवून ऊजाळा विसकटून तू टॉकलेस मला.

> दाखवलास तू स्वभाव तुझा इतकी हट्टी झालीस कधी, अन् तेच प्रश्न विचारन्याची इतकी प्रेरणा आली कधी.

माहीत होते सर्व तूला तरी अनजान बनुन तू का राहीलीस, जाणुन बुजून तू सुद्धाँ मला फसवत तरी का राहीलीस.

> विचारताना हे सर्व तुला जराही माझा विचार नाही का ग आला? काय वाटेल माझ्या मनाला याचा अंदाजही बांधता नाही का ग आला?

उलटे सूलटे प्रश्न विचारुन शेवटी गोंधळून तर टाकलेसच तू मला ! आता तरी सांग अगं का विसकटून टाकलेस मला का विसकटून टाकलेस मला...

Prathmesh Lad (BE Auto)

--Buddha