IIT-Bombay Overtakes IIT-Delhi in QS World University Rankings


The QS World University Rankings released its latest edition last night and with that we got the top ranking institution of India. IIT-Bombay toppled IIT-Delhi to emerge as the top-ranking institution. As per the QS World University Rankings, IIT-Bombay took the 162nd rank and thus moved up 17 places this year to displace IIT-Delhi as India’s top ranked institution. IIT-Delhi was also dethroned by IISc-Bangalore, which stood at the 170th rank moving ahead 20 places.

**HIGHLIGHTS**

- IIT-Bombay toppled IIT-Delhi to emerge as the top-ranking institution.
- IIT-Bombay ranks at 162 while IIT-Delhi holds rank at 172. The IISc has touched a new high and stood at 179 position.
- Other Indian universities to make an entry are- Amrita University, Amity University, Jamia Millia Islamia, Thapar University, Vellore Institute of Technology

It’s only been a year since IIT-Bombay made a comeback in the top 200 ranks. IIT-Bombay has been performing dramatically over the period of two years and has been improving its performance overall. From 219th rank in 2016, 179th rank in 2017 to 162nd rank this year, IIT-B has been performing consistently. IISc which was earlier in the top 150 institutions in the World University Rankings failed to get back in to its former position which it was two years back.

IIT-Delhi which lost its top position didn’t see a change in the performance and remained at the 172nd position position. Apart from the 6 IITs which have been maintaining its positions steadily, there are other universities which have marked their presence in the QS Ranking- Amrita University, Amity University, Jamia Millia Islamia, Thapar University, Vellore Institute of Technology. Among these new entries, Jamia Millia Islamia has been the only to be placed in the 751-800 rank, rest all of them are in the 801-1000 ranks. On the whole, 24 Indian universities have featured in the 2019 edition of the QS World University Ranking. According to Research Director at QS Ben Sowter, the rise in the number of Indian institutes featuring in the QS Ranking is also because India’s overall citations-per-faculty ratio has risen from 46.90 in 2018 to 50.74 in 2019. He added, “India’s research is demonstrably improving — but more slowly than its international competitors.”

On the International front, Massachusetts Institute of Technology (MIT) retained the top slot for the seventh year in a row. Stanford University, Harvard University, Caltech and Oxford University follow followed MIT.
आईआईटी और एनआईटी में प्रवेश के लिए इस दिन से शुरू होगा रजिस्ट्रेशन

https://www.amarujala.com/education/career-plus/know-when-registration-will-start-for-admission-in-iit-and-nit?pageId=1

आईआईटी और एनआईटी में प्रवेश के लिए 15 जून से रजिस्ट्रेशन और च्वाइस फिलिंग की प्रक्रिया शुरू हो जाएगी। बुधवार को इसके लिए आईआईटी कानपुर ने ज्वाइस सीट एलोकेशन अथॉरिटी (जोसा)2018 की वेबसाइट www.josaa.nic.in लॉन्च कर दी है। इसी वेबसाइट पर छात्रों को एडमिशन से जुड़ी आगे की जानकारी भी उपलब्ध कराई जाएगी। जेईई एडवांस का रिजल्ट 10 जून को आया है।

देश की सभी 23 आईआईटी की कुल 12079 सीटों पर प्रवेश दिया जाएगा। इसमें 11279 सीटों पर सामान्य रूप से प्रवेश दिया जाएगा। इसके अलावा सुपर न्यूमरी कोटे से 800 सीटें छात्रों के लिए बढ़ाई गई हैं। इनमें केवल छात्राओं को ही प्रवेश मिलेगा। इसके अलावा प्रत्येक आईआईटी में निर्धारित सीटों के अतिरिक्त दो विदेशी छात्रों को भी दाखिला दिया जा सकता है। जेईई एडवांस के चेयरमैन प्रो. शिभ ने बताया गया कि गुजरात तक सीटों का विस्तृत आंकड़ा जारी कर दिया जाएगा।

सात राउंड चलेगी काउंसलिंग
आईआईटी, एनआईटी, ट्रिपल आईटी, जीएफटीआई में दाखिले के लिए सात राउंड तक काउंसलिंग चलेगी। 15 जून से 25 जून तक छात्र पहले राउंड के लिए रजिस्ट्रेशन और च्वाइस फिलिंग करेंगे। 27 जून को पहले राउंड के लिए सीट अलॉटमेंट सूची जारी होगी। 28 जून से दो जुलाई तक छात्रों के प्रमाणपत्रों का वेरिफिकेशन होगा।

काउंसलिंग में लाने होंगे ये दस्तावेज
- प्रतिजनाल सीट अलॉटमेंट लेटर
- 12वीं की मार्क्शीट, सर्टिफिकेट
- आवंटित सीट को स्वीकार करने के लिए ऑनलाइन जमा की गई शुल्क की रसीद
- फोटो युक्त पहचान पत्र
- हाईस्कूल की मार्कशीट
- मेडिकल सर्टिफिकेट
- आरक्षित वर्ग के छात्रों को कैटेगरी सर्टिफिकेट
- दो पासपोर्ट साइज फोटो। जिसमें से एक जेईई में आनलाइन आवेदन के दौरान प्रयोग किया गया हो।

एनआईटी की सीटों का विवरण जल्द
एनआईटी की सीटों का अभी तक विवरण जारी नहीं किया गया है। सूत्रों के अनुसार दो दिन में सीटों का पूरा विवरण वेबसाइट पर अपलोड कर दिया जाएगा। इस बार एनआईटी में भी सीटें बढ़ने की संभावना है।

IIT और DTU के छात्रों ने महिला सुरक्षा उपकरण के लिए जीता 10 लाख डॉलर का इनाम

युवा भारतीय उद्यमियों के एक समूह ने महिला सुरक्षा के लिए एक ऐसा उपकरण ईजाद करने पर 10 लाख डॉलर का पुरस्कार जीता है, जिसे महिलाएं पहन सकती हैं और किसी खतरे या हमले की स्थिति में इसके जरिए वे आपातकालीन संदेश भेज सकती हैं।

दिल्ली में 16 दिसंबर 2012 को चालीस बस में एक लड़की के साथ बर्बर बलात्कार की घटना के बाद युवा उद्यमियों के इस समूह ने महिला सुरक्षा के लिए एक उपकरण विकसित करने के बारे में सोचा
This year (2018), 800 supernumerary seats have been created specifically for female candidates in the IITs in order to improve the gender balance in IITs and as per directives of the MHRD, Government of India.

In 2018, a total of 11279 seats are being offered in the IITs, an increase of 291 seats from 2017, IIT Kanpur, the organising IIT for this year’s JEE (Advanced) said in a statement on Wednesday.

The website of Joint Seat Allocation Authority (JoSAA) 2018 (josaa.nic.in) was launched today. The results of the JEE (Advanced) are scheduled to be declared on Sunday, June 10.
As in earlier years, supernumerary seats will be created to accommodate foreign candidates along with defence services (DS) candidates (with a restriction of maximum 2 DS candidates per IIT) who qualify in JEE (Advanced) 2018.

This year (2018), 800 supernumerary seats have been created specifically for female candidates in the IITs in order to improve the gender balance in IITs and as per directives of the MHRD, Government of India. As per provisions, total supernumerary seats created cannot exceed 10% of the total seats being offered in the IITs.

**Why Girl Students Don't Make It To IITs?**


Even when Girls outperform boys in 12th board examinations in India; what is keeping them away from IITs?

As the summer temperatures rise, one hot topic often discussed is an open secret. Across all higher secondary boards, girls secure better grades than boys. This is not just the case in India, but across the world, in countries even as far afield as the USA.

May 26th added another page to this universal truth, with girls outperforming boys yet again with a pass percentage of 88.31 as against 78.99. Even the top three performers in the 12th board exams were girls. Given this, it is but natural to expect the most prestigious institutes in the country, the IITs, to be flooded with girl students. However, the reality is different. Surprisingly, an abysmally small number of girls join the IITs, with girls making up just 8% of the student strength across all IITs presently.

Pursuing engineering from the IITs is a dream for millions of Indians. The big Indian IIT dream is being sold by coaching institutes like hotcakes. Parents want to send their children to the IITs to ensure a bright future for their children that “Brand IIT” has come to symbolise. It is the same dream that drives thousands to spend their teen years in Rajasthan’s Kota, the epicentre for the IIT JEE coaching that has taken over the senior secondary science education in the country.

Getting admission to the IITs is considered a task possible only for the 'Highly Intelligent Minds'. It offers possibly the best pool of faculty in the country and is home to new ideas along with lucrative packages. With such great offerings, what is keeping the girls away from the gates of the elite institutes?

**Choice of career**

In India, most of the life-defining career decisions are taken by a child’s parent without giving much thought to their wards’ aptitude and interests. IIT, to most parents in India, is a brand which promises great learning and salary packages of many hundreds of thousands.

Fortunately, there are parents who let their children follow their heart and let their dreams soar. This encourages them to set out on a voyage of self-discovery. After all, not everyone is after money alone. There are children who find happiness in doing something they love. Be it the arts, sports or
their own boss, there are things which bring a sense of satisfaction and happiness to many, feelings which cannot be bought with money.

**Financial Issues**

Higher Education and Coaching Institutes do burn a big hole in their pockets. The fees for these institutes are skyrocketing. This burden of coaching institutes, college fees and cost of living is way too high for a lot of them. The harsh reality is that in a society which believes daughters are destined to leave their homes to stay with their in-laws, investing lakhs on their education is never considered a smart option. A graduation in pure sciences comes easy and cheap. Societal biases are one of the major factors for poor ratio of women in IITs. Most girls don’t have access to the kind of facilities that boys of their age have. Most parents are not willing to invest in their daughter’s coaching for the IITs. As a result of this, girls are denied a fair playing field in the entrance exams.

**Notion of engineering being unsuitable for girls**

Take a look around a typical Indian engineering firm today, and you’d be lucky to spot more than a handful of women employees. In India, in particular, it seems to be the industry's reputation that is holding women back. Engineering is often viewed as a career option for males. It’s not necessarily a misogynistic industry as such, but it has always attracted more men. It could be suggested that women automatically reject these types of jobs without even finding out much about them.

There is a vicious circle as the lack of women mentors makes it more challenging to inspire the next generation of young women to enter the profession.

**Safety Concerns**

Incidentally, recent developments have highlighted the Indian streets as being unsafe for women. In a country, where girls can’t move out after sunset safely, going for coaching classes which go till late in the evening while staying away from home for four long years is a very big deal. Hence, for many girls, there is a problem of their families imposing restrictions on them due to safety concerns.

**What’s next?**

E-Learning, which has been serving the masses lately, comes as a boon to many girls who cannot afford to go to coaching classes and seek quality education. Smartphone and Internet connectivity gives them access to the most renowned teachers across India without even moving out of their home. The fact that all this can be acquired just by spending nominal amount is encouraging and hopefully will boost the dismal numbers.

Concerned by the slump in the number of female candidates at the IIT, the Joint Admission Board (JAB) decided to admit more women from the 2018 academic session. The board has approved a quota of supernumerary seats for women in a phased manner, reaching up to 20% by 2026 and would start at 14% from this year.

In an age when we can be proud of gender equality, engineering continues to stand out as one of the few remaining male-dominated sectors. But if the sector is to achieve the growth potential that is predicted for the coming decade, a concerted effort is needed to attract more women into the profession.
Ather launches indigenously built high-end e-scooters
https://timesofindia.indiatimes.com/companies/ather-launches-indigenously-built-high-end-e-scooters/articleshow/64473092.cms

Ather Energy, the electric vehicle maker that is funded by Hero MotoCorp, Tiger Global, and Flipkart founders Sachin Bansal and Binny Bansal, on Tuesday launched two e-scooters. The much anticipated launch has been delayed by about two years, but Ather founders Tarun Mehta and Swapnil Jain said they used the time to build a far more robust vehicle than would have been the case otherwise.

The flagship Ather 450 gives a top speed of 80 km/hr and a range of 70 km. It is priced at Rs 1.25 lakh, which appears steep, but the company said the total cost of ownership will be lower compared to an equivalent petrol scooter once it crosses 50,000 km. With an acceleration of 3.9 seconds from 0 to 40 km, this scooter is the quickest in the scooter category, Mehta and Jain said. The two founded Ather in 2013, six months after they graduated from IIT-Madras.

The few e-scooters that India has seen so far have been mostly imports from China. Ather’s is a completely indigenously built vehicle, including most crucially the battery – which is what the IIT graduates initially focussed on – and comes with an enormous amount of software that provides the user with a navigation map, usage information and alerts about any potential malfunction.

"We are also working on geo-fencing capabilities in the vehicle, so that the scooter does not move beyond the radius that you set. This will prove very effective if you have a teenage son or you don't want the bike stolen. Also, with our smart capabilities, the bike or any of its parts cannot be stolen – the moment someone tries to do that, the vehicle will freeze, there will be a lockdown of the hardware. We also have capabilities at our end to track the scooter movement," said Mehta.

Mehta said the company has filed 42 patents and 122 design registrations for its two scooters. While the majority of its patents are filed in India, the company has also filed a few in South East Asia and the US, keeping in mind possible future expansion plans. The first launch is in Bengaluru. The scooter will be taken to other cities over time. Prior to the
launch of the vehicles, Ather launched about 30 charging points in Bengaluru. It expects to set up 60 charging points by year-end in Bengaluru and will expand to cities such as Chennai and Pune in the coming months.

By afternoon on Tuesday, the startup had received over 100 orders. "We have also seen a lot of interest at our experience centre in Indira Nagar (Bengaluru),” Mehta said.

**NIT-T bags state PCB’s green award for eco-friendly practices**  

National Institute of Technology (NIT), Trichy, has bagged the Green Award-2017 from the Tamil Nadu Pollution Control Board (TNPCB) for best practices in environmental protection and sustainable development.

Two other educational institutions which were conferred the award were Vellore Institute of Technology (VIT) University and Gandhigram Rural University.

NIT-T director Mini Shaji Thomas received the award from chief minister Edappadi K Palaniswami during a function at the Secretariat in Chennai on Monday.

While congratulating each and every member of the institution, including the faculty, staff and students, who worked hard to achieve this feat, she credited the eco-friendly initiatives of the institution towards creating a sustainable environment.

A team consisting of various faculty members under the director was formed to prepare a detailed proposal in October 2017. Dean (planning and development) C Natarajan who was part of the team said that maintaining a dense green cover apart from effective waste management was key to bagging the award.

“NIT-T has developed new technology and programmes for better environmental protection and utilisation of renewable energy,” said Mini Shaji.

As part of the green initiative and energy conservation measures, battery operated vehicles have been introduced on the campus.

**June 5**

**NITI Aayog launches a new course at IIT Roorkee – Here are program details**  
In a bid to make Indian cities more sustainable, the NITI Aayog on Monday launched a new course on ‘Urban Analytics – Evaluating and Measuring Sustainability of Cities’ at Indian Institute of Technology (IIT), Roorkee.

In a bid to make Indian cities more sustainable, the NITI Aayog on Monday launched a new course on ‘Urban Analytics – Evaluating and Measuring Sustainability of Cities’ at Indian Institute of Technology (IIT), Roorkee. The course was launched under Global Initiative on Academic Network (GIAN), a program of Ministry of Human Resource and Development. Addressing the inauguration ceremony at IIT Roorkee, RP Watal, Principal Adviser, NITI Aayog said, “Urban planning and knowledge crusaders I am glad to see this multi-disciplinary gathering of participants from different walks of life, including professionals from government and private organizations, who can put the knowledge to immediate use. I am also concerned about smaller cities and towns which are growing fast and they have no idea of the growth process. Planners need to urgently look into both the megacities and smaller cities.”

Watal further urged the participants to come forward with innovative and context-specific solutions in solving the issues in Indian cities. He also stressed the need to harness the potential of GIS (Geographic Information System) for making Indian cities more sustainable.

**Key details of ‘Urban Analytics – Evaluating and Measuring Sustainability of Cities’ course:-**

– The course will focus on the challenges faced by cities, which accommodate over half of the world’s population.

– The course will provide students with knowledge and resources to understand the implications of urbanization for sustainable development.

– The course will provide students with the knowledge to appreciate the drivers of urban growth and its uneven impact on different places and peoples.

– The course will evaluate the conditions of sustainability in different urban regions using conceptual and analytical tools.

– The course will critically examine current debates within sustainability as it relates to urban areas and be able to contribute to that debate.

Addressing the conference, Prof AK Chaturvedi, Director IIT Roorkee said that the move will be useful for future development. “It is interesting that we have reached a stage where we can talk about measurement of sustainability. If we can measure sustainability, it would be useful for future development and help the world achieve the goals of SDG 11.”

While Prof. Subhro Guhathakurta, Director, Center for Spatial Planning Analytics and Visualization (CSPAV), Georgia Institute of Technology, USA emphasised on the need to develop a spatial data to monitor and maintain with researchers for analysis. “It is not very easy to measure sustainability. But Indian cities lack the very basic resource of data. I have a feeling that there is no spatial data on an Indian city. It is an urgent need to develop spatial data and institutions that maintain, monitor and collaborate with researchers for analysis. This analysis further helps cities to maintain sustainability.”
Prof. M Parida, Dean (Sponsored Research and Industrial Consultancy) IIT Roorkee has asked for more funding from an organisation like DST. “We need more research funding from organisations like DST, and IIT Roorkee may take the lead in urban planning research and development of research agenda under a dedicated group within DST,” said Parida.

GIAN is a scheme introduced by the HRD Ministry to boost the higher education in collaboration with International collaboration.

**Solar power station at IIT Bhubaneswar**


IIT Bhubaneswar has successfully commissioned a solar power generating station of 490 KWp capacity at its permanent campus.

![Solar panels](image_url)

IIT Bhubaneswar has successfully commissioned a solar power generating station of 490 KWp capacity at its permanent campus. Roof tops of all the existing buildings are utilised for installing solar panels and power generating equipment.

Inaugurating the project on Monday, Director Prof RV Raja Kumar said the institute has decided to make the campus green and installation of solar power station is one step in this regard. “We have also been undertaking a massive plantation drive of 30,000 trees during the last three rainy seasons.

The institute has already awarded contract to create STP and ETP in the campus through NBCC and it is working on rain water harvesting as the buildings are designed to be equipped with rain water collection system,” he said. The project not only provides power through solar generation but also generates enough data and information for research on solar PV renewable energy systems.

The solar PV panels were commissioned on May 14 and the generation is found to be fully in tact till date. The successful installation is likely to inspire surrounding institutes in Bhubaneswar to go for clean and green energy.

**IIT engineers tap nuclear test ban monitor to build a whale atlas**

http://indianexpress.com/article/india/iit-engineers-tap-nuclear-test-ban-monitor-to-build-a-whale-atlas-5204237/
Pinto and her colleague, assistant professor Tarun K Chandrayadula, are tracing migratory patterns of baleen whales, among the largest animals on earth, across the Indian Ocean to build a “whale atlas.”

They are developing a method to detect and localise whales

IT IS an indecipherable call. It has popped up every year for the past 15 years, around the same month, but for the two IIT-Madras engineers listening in, they “don’t know where it is coming from” — or how much the thing, speaking this tongue, weighs.

“We are picking up a very strong call, in the entire dataset,” Nikita Pinto, MS student at the IIT’s department of ocean engineering, told The Indian Express. “Every year, it turns up at the same month. We don’t really know which whale is making this sound. We can’t find it in previous published literature but it is a distinct sound.”

Pinto and her colleague, assistant professor Tarun K Chandrayadula, are tracing migratory patterns of baleen whales, among the largest animals on earth, across the Indian Ocean to build a “whale atlas.”

Borrowing acoustic signals recorded by CTBTO, the comprehensive nuclear-test-ban treaty organisation, which monitors nuclear testing across the world, the two have just begun a research project to map whales in the region.

“We use the vast recordings from the CTBTO network to get the acoustic data. These hydrophones are deployed in groups of three, and are referred to as triads. These triads are currently in place at Diego Garcia (central Indian Ocean), Cape Leuwin (Western Australia), and Crozet Islands (close to Antarctica),” says Chandrayadula.

Though the hydrophones that record low frequency sounds from less than 10Hz to up to 100 Hz are only a few in number, low frequency sounds travel far in the deep ocean. “They propagate up to thousands of kilometres, because of a special waveguide property of the ocean,” he says.

The two engineers are working with recordings since the early 2000s. “A big contributor to the background spectrum are sounds made by fin whales, and blue whales. These animals make these sounds while scouring long distances across the ocean basins, looking for mates and food,” says Chandrayadula.
The blue whale, and fin whale populations are currently endangered. “Acoustics is thus a vital part of their life cycle. We are currently using these acoustic recordings to track the whales, their migratory patterns, and their potential relationship to changing oceanic conditions,” he says.

Pinto summarises their work by saying they are developing a method to detect and localise whales. “This field of marine mammal bio-acoustics, is mostly dominated by people who are biologists and in this case marine biologists who are, looking at data and trying to make inferences and predictions about what is going to happen and how they (whales) are going to change their behaviour,” she says.

“We are looking at this more from an engineering-math angle, rather than how whales are behaving. It would be interesting to see how our work and the outcome of that could help marine biologists, conservation policy experts and even help better map shipping routes that avoid places where whales congregate,” says Pinto.

Mapping the whales is important for conservation. “If we know the position of the whales at different times of the year, we know where their habitats are, which conservationists can use. Population estimation is a key part of conservation efforts,” says Chandrayadula. “By tracking these animals we should be able to separate the sounds in location, so that we know if it is the same animal making sounds at a higher level, or actually different animals.”

However, there are challenges. Locating a moving animal across the ocean basin is a difficult problem, he says. “This problem involves various other issues such as building mathematical models for whale sounds, understanding how low frequency sounds travel, the relationship of the changing oceanography (across time, and distance), and finally a system that will incorporate these in to a tracking framework that will give us estimates of the locations across depth and range,” he says.

For now, the focus is entirely on the Indian Ocean. “For instance, we don’t even know if we have covered and understood all the whale species in this region,” says Pinto.

In February, 2017, a Sri Lankan marine biologist Asha de Vos documented an “unusually coloured, small baleen whale” off the southern coast of Sri Lanka. It turned out to be the first record of the little-known Omura’s whale in the region.

Pinto says: “The way people have been looking at datasets previously has been by breaking it up into little chunks, looking at just a few months. If we look at over 15 years, one thing we noticed is that whale calls are changing in their nature. Is this because ambient ocean noise itself has increased over the years?”

Ask Chandrayadula about what these indicate and he says: “We have also noticed from our analysis that the Sri Lankan blue whales are signing at a consistently lower pitch than they were at the start of 2000s. Is this due to increasing ocean acidity, or background noise, we do not know. But the animal has changed its behaviour over the past 15 years, but what is it in response with, we do not know.”
For now, he can only guess what that distinct sound is about. “The call can potentially be from the Northern Indian Ocean whale, which stays close to our waters. We want to find out more.”

**IISc Folks Develop State-Of-The-Art ‘LifeBox’ For Drone Transport of Organs!**


The ‘LifeBox,’ according to the IISc researchers, is a system that extends the preservation time of the organ, specifically the heart for now, and allows for increased travel time and distances.

One of the most important and innovative initiatives of the Indian traffic police is the Green Corridor—a special on-road route to enable harvested organs like the heart and liver to travel to another hospital where they are needed for the purpose of a transplant.

The initiative facilitates the manual operation of street signals, to avoid red lights and peak traffic and greatly reduces the transport time of organs in cities.

You can read in detail about what Green Corridors are and how they saved the lives of two heart patients in Mumbai, [here](https://www.thebetterindia.com/144073/iisc-folks-develop-state-of-the-art-lifebox-for-drone-transport-of-organs/).

Green Corridors arose out of the need to deliver organs on time as they cannot be preserved for long. The conventional method used to transport the organs is the ice-box which functions as a container and tries to preserve the organ for a specified time period.

However, what medical personnel need is something that extends the life of the organ, and this is what a team at the Indian Institute of Science (IISc) has managed to create with a new state-of-the-art innovation—the LifeBox.

The LifeBox was developed by research students Deval Karia, and Rohit S Nambar and they were supervised by Prof B Gurumoorthy and Prof Ashitava Ghosal of the Centre for Product Design and Manufacturing (CPDM).

“The established method of ‘ice-box’ storage coupled with a ‘Green Corridor’ based transport has several drawbacks. The window is narrow, and it requires a tremendous amount of effort and coordination between several regulatory authorities,” says Prof Ashitava Ghosal to the Times of India.

The ‘LifeBox,’ according to the IISc researchers, is a system that extends the preservation time of the organ, specifically the heart for now, and allows for increased travel time and distances.
The LifeBox achieves the extension of the preservation time by a medically prescribed method which impedes heart metabolism through the proper control of temperature and metabolites. It also keeps pumping in liquid, allowing the heart to perform its pumping function, even on the move, continuously.

It is clear that the LifeBox, along with other upcoming technologies like drones and UAVs, is a promising alternative to the methods being used currently.

“In comparison to a benchmark device currently undergoing FDA approval in the USA, this new design has helped achieve an estimated 91% reduction in energy consumption and a 65% reduction in weight for a six-hour preservation time. We are working on patenting the innovation,” the researchers said to TOI.

**Fire damages IIT-Madras propulsion lab**


A fire broke out in the propulsion laboratory of the aerospace department in IIT-Madras on Tuesday morning, damaging expensive equipment. There was no casualty.

The fire broke out due to an electric short circuit in a junction box.

Security guards noticed the fire around 6.30am and informed the fire and rescue service department. Fire tenders from Guindy and Raj Bhavan reached the spot.

Fire and rescue services personnel battled for nearly an hour to put out the blaze. They prevented it from spreading to other labs.

Fire personnel said that the department had a cluster of labs. "We prevented the fire from spreading to other labs. It would have been a major tragedy if the fire had not been put out in time" said a fireman.

The Kotturpuram police registered a case and further investigations were on.

**IIT-B TO SHAKE UP BLOCKCHAIN, CRYPTOCURRENCY UNDERSTANDING**
Ties up with financial technology company Ripple for R&D in new age fields.

The rapid rise in the popularity of cryptocurrency, blockchain technology and digital payments has not only attracted the attention of investors, financial companies and regulators but also educational institutions keen on promoting the need for further innovation in these new age fields. Taking the lead, Indian Institute of Technology, Bombay, (IIT-B), on Monday, signed a memorandum of understanding (MoU) with Ripple, a financial technology company, to help surmount the challenge of understanding digital wallets.

“This is a partnership between a financial technology company and an academic institution, to promote revolutionary impact of blockchain technology, cryptocurrency, cryptography and related topics of mutual interest. It will also foster a widespread adoption and innovation in these fields globally,” said IIT-B’s director Devang Khakhar.

In addition, IIT-B has announced its plans to set up a Centre for Excellence to support academic research, innovation and technical development in these domains. As part of the MoU, IIT-B will not only receive a financial donation from Ripple but also its expertise. Ripple enables sending money globally using blockchain; the company has offices across the world, including Mumbai. According to Khakhar, Ripple’s partnership will lend IIT-B new avenues for high quality research and development. “Besides, it will add value to the global ecosystem,” he said.

The donation will go towards academic research and technical projects. While Ripple has promised dedicated funding for five years, more details are being worked out between IIT-B and Ripple, which will also provide strategic guidance and technical resources to the institute.

Ripple – under the University Blockchain Research Initiative – is partnering with 17 global institutions. Eric van Miltenburg, senior vice-president of global operations at Ripple, said, “Academia has traditionally been a critical driver of technical innovation. University Blockchain Research Initiative is the acknowledgment of the importance of the unique role universities play in advancing the understanding and application of cryptography and blockchain technology.”

NIT Warangal to ban plastic

At Kakatiya University, staff and research scholars organised a rally from the first gate to the second gate of the campus.
KU staff and research scholars at a rally on the campus on Tuesday.

The World Environment Day was observed by different agencies in the city on Tuesday. National Institute of Technology (NIT), Warangal, observed the World Environment Day here on Tuesday. NIT Director Prof Ramana Rao highlighted the importance of plastic pollution with various statistics and declared that plastics will be banned from the campus. He also announced drastic measures to reduce the use of plastic on the campus.

Offering plants in pots instead of bouquets to guests, cloth or jute conference bags, etc., were some of the actions proposed. Earlier, Prof Jayakumar, Dean and Professor of Civil Engineering, briefed about the importance of World Environment Day celebrations. Later, the Director and the Registrar Goverdhan Rao administered the pledge on reducing the use of plastics on the campus. Earlier in the morning as a part of the Social responsibilities, Malabar Gold and Diamonds arranged a plantation programme where 100 rose saplings were planted as part of their commitment to preserving the environment.

At Kakatiya University, staff and research scholars organised a rally from the first gate to the second gate of the campus. Plastic bottles on either side of the road were removed by the staff. Registrar Prof K Purushotham along with University college Principal Prof T Ravinder Reddy flagged off the rally.

Meanwhile, Collector Amrapali Kata participated in the World Environment Day programme organised by the GWMC at Public Garden in Hanamkonda, and said that they are encouraging the production of jute and paper bags, and urged the interested entrepreneurs to register their names with the Project Director of MEMPA for assistance.

June 4

**IIT Delhi study shows how fake news could be fought**

A new study conducted by IIT Delhi suggests that it may be effective to combat the phenomenon of fake news by building decentralized models to identify fake information and counter it with true information and facts, or as the paper calls it — anti-rumour.

The study was conducted by the department of computer science and engineering at IIT Delhi. The authors studied several models to prevent the spread of fake information and news via social media.
and messaging applications. It attempts to offer possible solutions for combatting rumours and fake news with three different models. The models are based on the intentional spread of counter-information to fight the specific false information, either by an authority, a regulatory body, a watchdog, and so on or by enlightened citizens who spread anti-rumour on a voluntary basis.

**Devolution of information check**

Notably, the paper says that in all the models studied, once a rumour is detected (no matter in which ways) due to fast growth power of social networks, the spread of fake information can be controlled. The paper has concluded that decentralized models — the beacon model and the neighbourhood model — are more effective than a delayed model, which banks on the probability that a relevant authority might identify a rumour days/weeks after it has started spreading than combat it with anti-rumour.

A delayed model involves an authority possibly identifying rumours days or weeks after it began spreading. There may be a time-lag during which the misinformation has spread fast and wide. The other two models are decentralized models reducing the role of the authority. The second model, the Beacon model, suggests vigilante agents or nodes implanted within a platform to look out for the spread of such rumours. “Once a beacon receives a rumour, it immediately starts spreading anti-rumours to combat the rumour.” says the paper. The third model, the Neighborhood model, entails users of a platform voluntarily spreading anti-rumours after identifying a self-evident rumour.

Such a message or counter-information is called an anti-rumour. “Anti-rumour is a message like any other in a social network, except it is sent with the express intent of debunking a rumour,” writes Amitabha Bagchi, one of the authors, in a blog post.

The other two models are based on decentralized systems which bank on either agents capable of identifying false and dangerous information or two, on all users who can identify fake news common sensically.

**The problem of fake news in India**

In India, fake news is used extensively by political parties to influence voters and citizens. The primary platform for the spread of such information is WhatsApp. Fake news propaganda in India has varied from hate messages, misinformation the current administration’s policies. The problem is aggravated as mainstream media organizations also report the unverified news.

**Director IIT calls on Jai Ram Thakur**


Director IIT Mandi Prof. Timothy A. Gonsalves called on Chief Minister Jai Ram Thakur here today. Chief Minister while appreciating the several research projects to find solutions to the problems of Himalayan region laid stress on use of advanced technology affordable and ecologically sensitive. He said that over 100 Himachali youth were enrolled in the institution for prestigious IIT degrees. Chief Minister also informed that IIT Mandi has two business incubators to foster start ups. IIT Mandi catalyst focuses on technology oriented business and was currently incubating 14 start ups by IIT students, faculty and entrepreneurs. Whereas EWOK was an unique incubator businesses by village
women. Director, IIT Mandi Prof. Timothy A. Gonsalves apprised the Chief Minister about specific initiatives taken by the institute. He informed the Chief Minister that beginning from the green fields of Kamand in 2010, IIT Mandi has grown to a vibrant institute of technological research, learning and innovation. He said that the faculty has brought in about Rs. 70 crore of sponsored research funding. Dean Infrastructure and Services, Prof. S.C. Jain and Dr. Subrata Ghosh of School of Basic Sciences were also present on the occasion.

**IIT Bhubaneswar Hosts ‘Vigyan Jyoti’ To Encourage Girl Students Pursue Career in Science**

http://odishatv.in/odisha/iit-bhubaneswar-hosts-vigyan-jyoti-to-encourage-girl-students-take-up-science-300199

The Indian Institute of Technology (IIT) Bhubaneswar is hosting a two-week residential training programme to encourage meritorious girl students in Class XI to pursue career in science, technology, engineering and mathematics.

The special programme titled ‘Vigyan Jyoti,’ that commenced today will continue up to June 24. As many as 40 girl students mostly from government school across Odisha are participating in the event.

For the next two weeks, prominent female scientists, faculty, entrepreneurs and administrators will share their experiences with the students and inform them about the career options available in field of science and technology, business and administration.

The students will be taken on trips to planetariums, science labs, research centres and places of historical interest, informed the authorities. Inspiring movies and documentaries on interesting science topics and biographies of famous female achievers will also be shown to motivate the students.

“The Vigyan Jyoti programme is funded by Department of Science and Technology (DST). Besides the travel, boarding, and lodging, the IIT Bhubaneswar is proving the participants with a scholarship of Rs. 5000,” informed a senior official.

“The holistic programme aims to encourage and inspire girl students to pursue higher education and become self-reliant. Such an exposure for girl students coming from rural background would help understand how to plan their journey from school to college and thereafter from research to a job of their choice in the field of science,” said the institute’s registrar in-charge, Debaraj Rath.

**June 2**

**Global internships for IIT-Ropar students**


Attracting best offers from international universities, IIT-Ropar BTech third year students are going global for summer internships.
The summer internship (which requires at least 40 working days) gives them not only an opportunity to explore their area of interest, but also in exploring the research culture in top universities abroad. A conscious effort by the IIT-Ropar to get more international internships has led to a two-fold increase this year as compared to the last year.

This year, 24 students from all branches (mechanical engineering, computer science & engineering and electrical engineering) will be joining various international universities for the summer internship.

The universities include the Singapore University of Technology and Design, National Chiao-Tung University in Taiwan, the University of Bremen Germany, and the National Taiwan University of Science and Technology (Taiwan Tech).

**IIT-Kharagpur signs MoUs with Australian universities**


MOU’s are signed with University of Melbourne and University of Australia

IIT-Kharagpur has signed agreements with University of Melbourne and University of Newcastle of Australia for joint study programmes, said a statement issued by the institute on Friday.

From the semester beginning in July, full-time Dual Doctoral Programmes (DDP) will be rolled out in collaboration with University of Melbourne. The MoU with University of Newcastle is focused on joint academic and research programmes, joint supervision of doctoral and masters students and other exchange and knowledge sharing initiatives.

“We are delighted that University of Melbourne... will now be our partner in grooming a very select group of doctoral students from our two countries,” said Prof Baidurya Bhattacharya, IIT-Kgp Dean of International Relations.