Newspaper Clips
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GATE 2018: एडमिट कार्ड जारी, ऐसे करें डाउनलोड gate.iitg.ac.in से

https://www.livehindustan.com/career/story-gate-2018-admit-card-issued-get-your-admit-card-from-gate-iitg-ac-in-1732048.html

ग्रेजुएट ऐप्टिट्युड टेस्ट इन इंजिनियरिंग (GATE 2018) के एडमिट कार्ड जारी हो गए हैं। एग्जाम के लिए आवेदन करने वाले छात्र गेट की ऑफिशियल वेबसाइट से एडमिट कार्ड डाउनलोड कर सकते हैं।

इस बार यह एग्जाम इंडियन इंस्टीट्यूट ऑफ गुवाहाटी आयोजित कर रहा है। यही नहीं इस साल गेट एग्जाम 23 विषयों में आयोजित हो रहा है। गेट एग्जाम (GATE 2018) साल 2018 के फरवरी महीने में 3-4 और 10-11 तारीख को आयोजित होगा।

आईआईटी गुवाहाटी ने 2010 में भी गेट (GATE) एग्जाम का आयोजन किया था। 2017 में आईआईटी रुड़की ने गेट (GATE 2017) का अगजाम आयोजित किया था।

GATE 2018 एडमिट कार्ड ऐसे कर सकते हैं डाउनलोड

सबसे पहले गेट की ऑफिशियल वेबसाइट पर जाएं www.gate.iitg.ac.in

वेबसाइट पर लॉग इन करें और एनरोलमेंट आईडी या इमेल एड्रेस और पासवर्ड से मुख्य पेज पर जाकर एडमिट कार्ड डाउनलोड करें।

पेटेंट में बॉम्बे से आगे निकला आईआईटी कानपुर

https://www.livehindustan.com/uttar-pradesh/kanpur/story-iit-kanpur-beats-bombay-1731809.html

पेटेंट में आईआईटी कानपुर सबसे आगे निकल गया है। वर्ष 2016-17 में आईआईटी कानपुर ने 53 पेटेंट दायर कराए हैं जिसमें 12 पेटेंट को मानव संसाधन विकास मंत्रालय की सहमति मिल गई है। पिछले दो वर्षों से पेटेंट के मामले में आईआईटी बाम्बे अव्वल था।

उच्च शिक्षण संस्थाओं में विश्वस्तरीय बनने की राह में पेटेंट महत्वपूर्ण भूमिका निभा रहा है। तभी सभी संस्थानों में पेटेंट कराने की होड़ मची है। पिछले तीन वर्षों के लगातार प्रयास के बाद आईआईटी कानपुर पेटेंट के मामले में सबसे आगे निकल गया है। दूसरे नंबर पर आईआईटी दिल्ली है जबकि पेटेंट दायर करने में वह सबसे आगे हैं। वर्ष 2014-15 में आईआईटी रुड़की और वर्ष 2015-16 में पेटेंट के मामले में आईआईटी बाम्बे पहले स्थान पर था।

काउंसिल ऑफ इंडियन इंस्टीट्यूट ऑफ टेक्नोलॉजी की रिपोर्ट के अनुसार वर्ष 2014-15 में आईआईटी रुड़की ने सबसे अधिक 32 पेटेंट कराए थे। आईआईटी बाम्बे ने 20, आईआईटी मद्रास ने दस, आईआईटी कानपुर ने छह पेटेंट कराए थे। जबकि आईआईटी बाम्बे ने सबसे अधिक 94 और आईआईटी खड़गपुर ने 63 पेटेंट दायर किए थे। वर्ष 2015-16 में आईआईटी बाम्बे ने 38 पेटेंट कराए थे और 151 दायर किए थे। इसी तरह आईआईटी बीएचयू ने 18 पेटेंट कराए थे। आईआईटी कानपुर और आईआईटी दिल्ली ने 10-10 पेटेंट कराए थे। जबकि आईआईटी कानपुर ने 44 और दिल्ली ने 35 पेटेंट दायर किए थे। वर्ष 2016-17 में आईआईटी कानपुर ने 53, आईआईटी दिल्ली ने 56 और खड़गपुर ने 14 पेटेंट दायर किए हैं। इसमें कानपुर के 12, दिल्ली के पांच और खड़गपुर के तीन पेटेंट हुए हैं।

आईआईटी में छात्रों की थाली तक पहुंचेगा गरमा गरम खाना

https://www.livehindustan.com/jharkhand/dhanbad/story-iit-1731971.html

रोटी, चावल, डोसा, इडली या कोई भी वेज व नॉनवेज खाना हो... अब आईआईटी आइएसएम धनबाद के हॉस्टल में मिनटों में खाना तैयार होगा। जो भी खाना खाने की इच्छा है। सिर्फ मैटेरियल तैयार रखें। वह मिनटों में तैयार होगा। वह भी बिना हाथ लगाए हुए। इसकी शुरुआत हो रही आईआईटी आइएसएम धनबाद के गर्ल्स हॉस्टल रोजालीन से।

हॉस्टल में ऑटोमेटिक मशीन इंस्टाल करने की प्रक्रिया शुरू हो गई है। सीपीडब्ल्यूडी ने यह काम पुणे की एक कंपनी को दिया है। संभावना है कि जल्द ही या नए सत्र से इसका लाभ मिलना शुरू हो जाएगा। खाना स्टीम बेस्ड तैयार होगा। छात्रों की थाली तक गरमागरम खाना पहुंचाने के लिए यह कवायद शुरू की गई है। इसकी लागत 70 लाख रुपए बताई जा रह है। रोजालीन गर्ल्स हॉस्टल की

क्षमता लगभग एक हजार है। यहां पर सफल होने के बाद चरणबद्ध ढंग से ब्वॉय हॉस्टल में भी इसे शुरू किया जाएगा। बताते चलें कि वर्तमान में रसोइया द्वारा खाना तैयार किया जाता है।

ट्राली खुद पहुंचेगी डाइनिंग हॉल तक

आईआईटी प्रबंधन की ओर से दावा किया जा रहा है झारखंड में यह पहला संस्थान है। जहां पर ऑटोमेटिक मशीन द्वारा मेनू में शामिल वेज व नॉनवेज सभी खाना स्टीम बेस्ड तैयार होगा। कई जगहों पर अभी सिर्फ रोटी मशीन से बनाई जाती है। मामले में सम्पर्क करने पर रजिस्ट्रार कर्नल एमके सिंह ने बताया कि हमलोगों छात्रों को बेहतर क्वालिटी के साथ खाना उपलब्ध कराना चाहते हैं। सबों को गरमागरम खाना देना उद्देश्य है। हमलोगों ने उड़ीसा में कलिंगा इंस्टीट्यूट में यह व्यवस्था जाकर देखी। उसके बाद वहां से भी अपग्रेड मशीन लगाने की सोची। शुरुआत एक गर्ल्स हॉस्टल से कर रहे हैं। खाना तैयार करने के साथ ही ट्राली खुद ब खुद डाइनिंग हॉल तक पहुंचेगी। डिस्ट्रीब्यूशन प्वाइंट तक पहुंचने के बाद ट्राली से छात्र-छात्राएं खाना ले लेंगे।

कार्ड पेमेंट कर कॉफी व सूप का लें आनंद

नए साल में कैंपस में छात्र-छात्राओं को कई सुविधाएं मिलने जा रही है। छात्र-छात्राओं को अब कार्ड पेमेंट से कॉफी, सूप, जूस व अन्य पेय पदार्थ ले सकते हैं। इसके लिए मशीन एकेडमिक कॉम्प्लेक्स व अन्य चुनिंदा जगहों पर लगाई जाएगी। कार्ड से छात्र पेमेंट करेंगे।

कपड़े धोने के झंझट से मिलेगी मुक्ति

रजिस्ट्रार कर्नल एमके सिंह ने बताया कि छात्रों को कपड़ा धोने के लिए परेशानी नहीं हो। इसके लिए हमलोग विचार कर रहे हैं। सभी हॉस्टल में वाशिंग मशीन या अन्य क्या सुविधा दे सकते हैं? इसपर अंतिम निर्णय लिया जाएगा।

The HRD ministry has a big appointments backlog in 2018: Here's why

http://www.business-standard.com/article/current-affairs/the-hrd-ministry-has-a-big-appointments-backlog-in-2018-here-s-why-118010400225_1.html

The long-pending appointment of UGC chairman was finalised in December, however, there is a backlog of appointments which will run into the next year

UGC NET 2017: Online submission begins. Apply NowNo plans to replace UGC, AICTE with single regulator, says MoS for HRDBHU, AMU object to UGC proposal to drop Hindu, Muslim from their namesStudent employment, inflexible university policies drive online dropoutWill prefer quitting to going on a two-month leave: BHU Vice-Chancellor

Establishment of national testing and higher education financing agencies, launching of a portal for online courses and a project for web verification of documents kept the HRD ministry busy in 2017 even as it carried a backlog of appointments to this year.

While defining of learning outcomes by the NCERT and the massive National Achievement Survey (NAS) for competency-based evaluation of school students were the major exercises conducted by the ministry's school education department in the year gone by, focus also remained on strengthening teacher training in the country.

Introduction of four years B.Ed. integrated programme with multiple pathways, formulation of guideline on the strengthening of District Institutes of Education and Training (DIETs) and amendment of the RTE Act for the training of in-service untrained teachers were among the steps taken for teacher education.

The National Centre for School Leadership (NCSL) was established to conceptualise and design the Online Programme on School Leadership and Management using Moodle platform for school principals.

The long-pending appointment of UGC chairman was finalised in December, however, there is a backlog of appointments which will run into the next year.

The posts of UGC Vice Chairman, NCERT Joint Director and Vice Chancellors of BHU and Viswa Bharti University are vacant even as the appointment process had been initiated for them.

Launch of DIKSHA (Digital Infrastructure for Knowledge Sharing), ranking of schools and higher education institutions on basis of cleanliness, automated monitoring system for mid-day meals, Swayam Prabha--an initiative to provide 32 high quality educational channels through DTH, National Academic Depository (NAD) and National Digital Library (NDL) kept the ministry's calendar occupied.

The ministry also rapped by the Supreme Court over the scrapping of moderation policy, use of word university by deemed to be varsities and imparting of technical education through distance mode by certain varsities.

The Central Board of Secondary Education (CBSE) decided to do away with the Continuous and Comprehensive Evaluation (CCE) for class X paving way for the reintroduction of board exams.

The new National Education Policy (NEP), one of the government's ambitious projects, is also likely to be delayed with the newly-constituted panel headed by former ISRO chief Kasturirangan not meeting the December deadline and seeking a three-month extension.

The IIT Public Private Partnership Bill and IIM Bill remained among the legislative reforms in the education sector in 2017.

The NCERT also decided to review its textbooks and invited suggestions from various stakeholders and ultimately incorporated the changes on recommendations of the expert panel.

Unfortunate incidents including gruesome murder of a boy in a Gurgaon school and rape of a girl by a peon in a Delhi school sparked off concerns about the safety of students in schools prompting the CBSE to issue safety guidelines including conducting a psychometric evaluation of teaching and non-

teaching staff.

Five new research parks at IIT Delhi, Guwahati, Hyderabad, Kanpur and IISc Bangalore at a total cost of Rs 75 crore were approved.

The Uchchtar Avishkar Abhiyan was launched to promote industry specific-need based research besides establishment and operationalisation of six new IITs at Jammu, Bhilai, Goa, Dharwad, Tirupati, and Palakkad.

For improving gender balance in IITs, it was decided to increase female enrolment in BTech programmes from current 8 per cent to 14 per cent in 2018-19, 17 per cent in 2019-20 and

20 per cent in 2020-21 by creating supernumerary seats.

NITI Aayog to Explore Blockchain, AI for Key Sectors like Education, Health

https://inc42.com/buzz/niti-aayog-blockchain-ai/

NITI Aayog Is Working Towards Adoption of AI and Blockchain in the Areas of Governance

NITI Aayog, the government's premier policy-making body, is exploring the use of blockchain and AI technologies in areas such as education, health, and agriculture. Having completed three years since its formation, the NITI Aayog is now working towards the adoption of AI and Blockchain in the areas of governance as it believes that such technologies will result in significant benefits if deployed in these areas among others.

In a note highlighting its achievements in the last three years, NITI Aayog said it "is working on a strategy paper for blockchain in India which will outline use cases as well as map out the schemes of Government of India that stand to benefit from the utilisation of the technology."

A senior official at the Aayog, who did not wish to be identified, stated, "It is like a distributed ledger. Suppose, you have made 50000 photocopies of a book and you make some change in the original book, then the blockchain technique allows you to replicate the change in all the copies by changing just the original book. We are still exploring and believe this technology can have potentially beneficial uses in the areas of education, health, social sector etc."

NITI Aayog and the Increasing Use of Blockchain in Governance

While blockchain technology was originally used to create cryptocurrencies such Bitcoin, it is now being expanded for being used in other fields. Although the government's stand on Bitcoin still remains the same that it is not legal, blockchain is currently being employed by governments in other fields.

Along these lines, NITI Aayog had also conducted an international hackathon at IIT Delhi in November last year on blockchain in which working prototypes were solicited from premier international and

national institutes on social applications of blockchain. The objective of the event was to explore how blockchain architectures can enable a new digital infrastructure for India, improving efficiency, transparency, privacy, and cost across all sectors.

In this regard, partner organisations from private sector as well as state/UT governments are being identified to implement proof-of-concepts utilising blockchain technology in different sectors. The Aayog is also working on a platform called 'IndiaChain', which will be a shared, India-specific Blockchain infrastructure for India leveraging the Jan-Dhan-Yojana, Aadhaar, and mobile trinity and enable Blockchain developers to build social applications.

Meanwhile on the AI front, the Aayog said it is also leading the initiative of making India a leader in the global space on the Artificial Intelligence (AI) research with focus on adopting AI to address problems faced in developing countries. In this direction, the Aayog held two international scale hackathons on AI and organized a national case study competition on use of AI in the field of Agritech.

The think tank also revealed that it is at an advanced stage of developing a National Data and Analytics Portal. Apart from being a single point source of sectoral data for researchers, policymakers and citizens, this portal will enable training dataset sharing between different organisations for AI applications.

Recently SEBI Chairman Ajay Tyagi had also stated that Blockchain should not be lumped with cryptocurrency, which tends to be unstable with some even terming its increasing popularity as a "bubble". Blockchain, on the other hand, is a useful technology that should be encouraged by the government, added Tyagi.

Meanwhile blockchain has also found takers in the state governments. As per reports, several state governments, including Karnataka, Gujarat, and Maharashtra, have started evaluating the technology for purposes of e-governance. With NITI Aayog putting its weight behind cutting edge technologies like AI and Blockchain, the face of governance in India surely looks set for a transformation.

Exposure to Air Pollutants on National Highways in India

https://researchmatters.in/article/exposure-air-pollutants-national-highways-india

Road trips and long drives are adventures that many would love. For some, this may be a way to escape the city's busy life, and the pollution. Congestion and pollution in city roads are a well-known fact. But how about highways? In India, highways constitute only 1.7% of the whole road network, but carry 40% of the total road traffic. So, how much of hazardous pollutants are you exposed to when you are on your next long road trip? A new study by researchers at the Indian Institute of Technology (IIT), Kharagpur, may have an answer.

"Most traffic pollution studies are focused on cities, but what about people traveling more than 300 to 400 kilometers on a national highway? There are only 6 to 7 papers on this across the world, and in India, the number is zero", says Dr. Aditya Kumar Patra from the Department of Mining at IIT, Kharagpur, talking about the motivation behind this study. "Now that more people have begun to travel on highways for both, personal and professional reasons, it has become important to conduct such a study," he adds.

In this study, Dr. Patra and his team have explored the extent of pollutants that passengers were exposed to, in different travel modes, along a national highway in India. "We examined exposure levels to PM2.5 and carbon monoxide (CO) on three modes of travel – public bus without AC (air conditioning), non-AC car and AC car," describes Dr. Patra.

PM2.5 refers to tiny atmospheric particulate matter (PM) that have a diameter of up to 2.5 micrometers. In addition to the exhaust of a vehicle, brakes and wearing out of the tyre and resuspension of road dust can result in PM2.5 emissions. Thanks to their small size, they can be easily inhaled and penetrate the respiratory and circulatory systems. Long-term exposure to PM2.5 can cause asthma, lung cancer and cardiovascular disorders. CO is a toxic gas a high concentrate of which can lead to unconsciousness and death.

The researchers gathered data arduously by traveling for 200 kilometers up and down a busy national highway for two months, using all three modes of transport under study. They carried instruments such as the EVM-7 and the EPAM-5000 to measure particulate matter and carbon monoxide concentration in the air.

The researchers found that the documented exposure to PM2.5 exceeded the permissible limit of 25 micrograms per cubic metre, specified by the World Health Organization (WHO). It was the highest for passengers of a non-AC car (85.41 ± 61.85 µg m−3), followed by the bus (75.08 ± 55.39 µg m−3), and was the lowest for passengers in an AC car (54.43 ± 34.09 µg m−3). On the other hand, CO exposures were highest in an AC car (1.81 ± 1.3 parts per million), followed by the non-AC car (1.34 ± 1.03 ppm), and lowest in the bus (0.80 ± 0.61 ppm). These exposure levels increase due to road repairs and road extensions along the highway.

"In a car, you can be exposed to pollution such as CO due to emission leakage from the engine into the cabin. This is commonly called self-pollution. In an AC car, the CO cannot find a way to leave the car because the car's glasses are closed. This is why CO exposure is highest in an AC car," explains Dr. Patra, "However, because PM2.5 can only enter the car from the outside, AC car passengers are protected from PM2.5 exposure. This same logic can explain the findings regarding the non-AC car as

well", he adds. The reason behind passengers on a bus being exposed to lesser PM2.5 compared to a non-AC car is because of the height of the seats from the road/tail pipe level that allows more dilution of exhaust emission before it enters inside the bus, say the author.

The study also revealed a contrast in the pollution exposure levels when traveling on a highway outside and inside a city. "Most highways now-a-days bypass the cities. While you are traveling in a highway, for the part of the highway that is outside the city, the overall exposure to pollutants is less compared to the overall exposure in the part of the highway that is inside the city", highlights Dr. Patra. "There are one and a half time more pollutants in vehicles traveling on a highway through the city compared to on a highway outside the city. To avoid these high levels of exposure, I recommend always trying to bypass the city when traveling on a highway", he suggests.

The research team hopes to continue their work on similar lines by exploring how the speed of a vehicle and passenger occupancy numbers can influence pollution exposure levels on highways. "Our research can help people become more aware about choosing the most optimal mode of travel. Also, we hope that this research can help frame better pollution control strategies for highways in the future," concludes Dr. Patra.

January 4

500 Students Hired in First 5 Days- Top Reasons IIT Delhi is a dream destination for every Engineering Aspirant

https://udaipurkiran.com/500-students-hired-in-first-5-days-top-reasons-iit-delhi-is-a-dream-destination-for-every-engineering-aspirant/

From the moment when the world's leading software giant Microsoft offered an initial annual salary package of INR 1.4 crore to a student of IIT Delhi this year, many of the candidates preparing for upcoming JEE exam are staring at this reputed institution to get a seat.

The campus interview at IIT Delhi is conducted every year in two phases. Phase I starts for the final year students in the first week of December every year and Phase II commences in January till the end of May of next year.

A Quick Look at 2017 Placements at IIT Delhi

In 2017, above 300 companies offering over 500 job profiles have already registered on the training and placement portal of IIT Delhi to participate in the campus placements. Of these, 230 companies have visited the campus in Phase I and around 950 job offers were made available to the students for over 370 different job profiles.

Students also made around 150 pre-placement requests. Of those, around 80 were accepted by the organizations that were registered for placement. Many students from IIT Delhi did not register for the placements because they wanted to either pursue higher studies or initiate their startups.

Many of these offers were at international locations. Those include Singapore, Hong Kong, United States, Amsterdam and Japan. Among the international offers, six were provided by Microsoft on the first day of the placement itself. Among Indian locations, 30 offers were provided to the students by INTEL.

The job offers for IIT Delhi students also included 780 unique offers with PPO selections. In Phase I itself, around 70% students have been placed in various reputed organizations and PPOs. The overall average package of the students this year so far has been around 12 lakhs per annum.

Joint Entrance Examination – A Gateway to IIT Delhi

The only channel through which you can secure a seat at any IIT is Joint Entrance Examination (JEE) exam. JEE comprises of two separate examination stages, JEE Main and JEE Advanced.

JEE Main is the first stage examination, which is just the qualifying parameter to appear in JEE Advanced. Note that your JEE Main score hold no value in the counselling procedure of the IITs. The final exam that gives you the liberty to choose a seat at a top ranked IIT is JEE Advanced. The better you score in JEE Advanced, more are the chances that you get a seat at IIT Delhi.

Only those candidates who score equal to or more than the cutoff marks specified for both JEE Main and JEE Advanced are allowed to attend the counselling process of admission to the IITs. The registration for JEE Main has already been started and will be open for the candidates till January 01, 2018.

The difficulty level of JEE can be understood with the fact that total 1,186,454 applicants took part in JEE Main in 2017 and finally only 9,784 of them got the admissions to the various IITs. This makes the selection ratio only around 0.008 and hence JEE is considered as one amongst world's toughest entrance examinations.

What Makes IIT Delhi a Dream Destination for Aspiring Students?

The below discussed 7 reasons make IIT Delhi so special and the best choice of the aspiring students.

1- Multiple IIT Delhi Students in the Over a Crore Pay Package Club

You will be surprised to hear that not only prior-mentioned one student grabbed the salary package of above 1 crore, there have also been several other students of IIT Delhi who were offered the jobs of annual pay package of over 1 crore by various leading organizations (such as Microsoft and Uber) during the 2017 Phase I campus placement.

However, as per their policy, IIT Delhi has decided not to reveal the exact number of students with high packages in the placement. The reason being, the institution feels that such publicity of packages may affect the value of national placements over international placements, and also the core jobs over finance and consulting jobs.

2- IIT Delhi Holding International Ranking

IITs are counted amongst the most reputed and top engineering institutes not only in India, but also across the globe. Their ranking is calculated based on various parameters such as the difficulty level of the entrance exam, selection ratio, cutoffs and placements.

Quacquarelli Symonds (QS) issues an annual ranking of all the famous institutions across the world. It is the matter of pride for us that 3 IITs are listed in the Asia's top 50 institutions and universities as per this year's QS ranking. Additionally, the top 7 IITs in India found their place in the top 100 world's institutes of the QS rank list.

IIT Delhi has been listed amongst both of these. The prestigious institute has received the 71 rank at the QS World Ranking 2017. Additionally, it was also ranked at the 41 position in the Asia's best institutes.

3- IIT Delhi Students to be mentored by International Universities

As per a report, the world-class Washington University signed an agreement to mentor selected students of IIT Delhi. Additionally, IIT Delhi has become the first Indian institute to be a partner of McDonnell International Scholars Academy of the Washington University.

The speakers of Washington University state that the students of IIT Delhi would be the world leaders in future. With this international collaboration, the students being mentored would get a chance to work on the global problems.

The Washington University along with IIT Delhi recently has organized the 'Forum for India' platform to address how the man-made energy resources in use affect various factors such as agriculture, environment and health, specifically with respect to climate change.

4- Special Focused Placement Training for the Students

IIT Delhi conducts various placement training sessions and workshops for their students to prepare them on various job assuring areas. These include resume making, communication skills, presentation skills, interview skills, problem solving skills, case workshops and multiple mock placement interviews.

The rationale behind these placement workshops is to assure 100% jobs to IIT Delhi students who register at the institute's placement cell. Students enjoy attending these sessions and acknowledge the cell's contribution, once they get a desired job.

5- Plenty of Companies Visit for the Campus Placement

A good job is never a big concern for an optimistic and aspiring IIT Delhi student. Because there is always a big queue of the world-leading organizations who seek a chance to pick the appropriate students to pick-up their businesses.

Apart from the 300 companies, which already have visited IIT Delhi in Phase I, over 100 more companies are likely to visit the institute's campus in Phase II (and more are still registering).

Over 500 students were hired with more than 25 international offers in just the first five days of Phase I of campus interview process. Of these, over 200 offers were provided only on the inaugural day.

6- Steady Rise in Placements Year Over Year

This year, there have been 15% rise in just undergraduate placements in IIT Delhi from that of 2016. Additionally, the placements of the postgraduate students have also seen a raise of 20% from that of 2016.

In 2016 also, around 200 multinational companies visited IIT Delhi and offered numerous jobs to the students. From those, 20 students received offers at international locations with a base pay of over $100,000 or INR 65 lakhs annually.

7- IIT Delhi Students Are Inventers for the Society

The students of IIT Delhi invent many live projects during their academics as well as post completing their studies. For instance, three IIT Delhi pass outs founded a startup in year 2015 that converts the smoke of the diesel to the black printer ink and paint.

They invented a device that could be fitted on a diesel generator and can capture 90% of the harmful emission. The generated ink is named as POINK (ink from pollution) and is used in various fields such as textile printing, cardboard printing, painting and paper printing.

Many big brands such as Dell, BSNL, MTNL, ATC and Reliance, are the customers of POINK. This invention not only found a way to manufacture cheaper printer ink and paint, but also reduces health hazards to an extent.

It was a great pride for our country that their startup won the 'University of Chicago's Urban Labs India Challenge' award in 2016. The fund for this startup was supported by many international organizations.

In another invention, IIT Delhi students are working with the Defense Research and Development Organization (DRDO) to develop a lighter, smart, intelligent and relatively cheaper jacket for soldiers. Such jackets would contain integrated interconnects, antennas, sensors and chips.

Former Indian President and Afghanistan President as Keynote Speakers at Techfest, IIT Bombay

http://indiaeducationdiary.in/former-indian-president-afghanistan-president-keynote-speakers-techfest-iit-bombay/

Mumbai: Techfest of IIT Bombay is well-established today as Asia's largest annual science and technology festival. It receives patronage from Make In India, UNESCO, SAYEN, Digital India and CEE with a footfall of more than 1,60,000 people comprising mainly of youth from across the nation. It has an outreach of over 2,500 colleges across India and over 500 overseas. This year, the 21st edition of the festival will be held from December 29 to 31, 2017. The themes of the festival are digitalization, sustainability and biotechnology.

With great pride, Techfest of IIT Bombay launches the Leadership Summit with the keynote address by the 13th President of India Shri Pranab Mukherjee and former President of Afghanistan Hamid Karzai. Other speakers of the Summit include Manohar Parrikar, former Defense Minister and current Chief Minister of Goa along with Jayant Sinha, current Minister of State for Civil Aviation. The Summit is being aided by the #AskTheLeader Campaign that will allow the youth to interact with these leaders.

λ Shri Pranab Mukherjee: The former President of India, who has also held the Finance, Defense and External Affairs ministry before, will deliver his address and interact with the youth of the nation at 2 pm on December 29, 2017. He will discuss Digital India and the role of engineers in bringing India to the forefront of the race to become a digital economy.
Venue: Convocation Hall, IIT Bombay

λ Hamid Karzai: The former President of Afghanistan, a true reformer and an eloquent speaker will deliver the keynote on the lines of Sustainable Development: Harnessing natural resources at optimum level by conserving them and the future of earth by 2022 at 2 pm on December 31, 2017. He will express his views on various sustainable development policies that have been adopted in Afghanistan and his idea of the same for India and the rest of the world.
Venue: Convocation Hall, IIT Bombay

λ Shri Manohar Parrikar: The former Defense Minister of India and the current chief minister of Goa, an IIT Bombay alumni will inaugurate the DRDO exhibitions and the International exhibitions. He will speak about “Make in India in Defense sector”. India is amongst the largest importers of defense equipment in the world. He will also discuss establishment of ‘Smart Cities and the role of engineers in it’ at 11 am on December 29, 2017.
Venue: Convocation Hall, IIT Bombay

λ Shri Jayant Sinha: The Minister of State for Civil Aviation will be a part of the summit to discuss “Opportunities and challenges for youth in the Indian Economy”. He will speak on importance of Sustainable Development at 4 pm on December 29, 2017.
Venue: Convocation Hall, IIT Bombay

आईआईटी कानपुर में 75 करोड़ से बनाया जाएगा रिसर्च पार्क

https://www.livehindustan.com/uttar-pradesh/kanpur/story-research-park-ll-be-developed-in-iit-kanpur-1729778.html

आईआईटी कानपुर में 75 करोड़ की लागत से साइंस एंड टेक्नोलॉजी रिसर्च पार्क बनाया जाएगा। नए साल के पहले दिन ही मानव संसाधन विकास मंत्रालय ने यह बजट स्वीकृत कर दिया है। बजट की पहली किस्त पांच करोड़ संस्थान को मिल गई है। मंत्रालय ने आईआईटी कानपुर के अलावा आईआईटी दिल्ली, आईआईटी गुवाहाटी, आईआईटी हैदराबाद और आईआईएससी बैंगलुरू में भी पार्क के लिए 75-

75 करोड़ रुपये का बजट स्वीकृत किया है। इस पार्क की मदद से अन्य शैक्षिक संस्थानों, शोध संस्थानों को रिसर्च के लिए प्लेटफार्म उपलब्ध कराया जाएगा।

आईआईटी कानपुर में साइंस एंड टेक्नोलॉजी रिसर्च पार्क पिछले दो साल से प्रस्तावित था। एक जनवरी 2018 को मंत्रालय ने बजट पास कर दिया है। जल्द ही पार्क का निर्माण शुरू हो जाएगा। पार्क बनने में करीब दो से तीन साल का समय लगेगा। इस पार्क से संस्थान के छात्रों के लिए बेहतर प्लेसमेंट का ऑफर मिलेगा तो अन्य कंपनियों को शोध के लिए एक प्लेटफार्म। रिसर्च पार्क का सेटेलाइट सेंटर आईआईटी के नोएडा कैम्पस में स्थापित किया जाएगा। इसका निर्माण कार्य चल रहा है।

रिसर्च पार्क में लैबोरेटरी, लाइब्रेरी, टेक्नोलॉजी और डेवलपमेंट से संबंधित हर वह सुविधा होगी जो बड़ी कंपनियों के प्रोडक्ट रिसर्च में मददगार साबित हो सकती है। सिडबी की मदद से रिसर्च पार्क को उद्यमिता का बड़ा सेंटर बनाया जाएगा। यहां सरकारी और गैर सरकारी कंपनियों को भी रिसर्च की सुविधाएं उपलब्ध कराई जाएंगी। इस सुविधा का आईआईटी शुल्क भी वसूलेगा। इसका सबसे बड़ा फायदा छात्रों को मिलेगा। जो कंपनियां प्रोडक्ट के रिसर्च के लिए आएंगी, वे इन छात्रों के साथ काम करेंगी। इससे वे कंपनियां छात्रों को सीधा जॉब का ऑफर दे सकती हैं।

आईआईटी के कार्यवाहक निदेशक प्रो. मणींद्र अग्रवाल ने कहा, आईआईटी में साइंस एंड टेक्नोलॉजी रिसर्च पार्क बनने के लिए मंत्रालय ने बजट स्वीकृत कर दिया है। 75 करोड़ के बजट में पांच करोड़ रुपये की पहली किस्त भी संस्थान को मिल गई है। जल्द ही पार्क का निर्माण कार्य शुरू हो जाएगा। उम्मीद है कि दो साल में पार्क बनकर पूरी तरह तैयार हो जाएगा। संस्थान नोएडा में इसका सेटेलाइट सेंटर भी तैयार करा रहा है। रिसर्च पार्क बनने से सरकारी व गैर सरकारी कंपनियों के साथ-साथ छात्रों को सीधा लाभ होगा।

दो साल पहले हुआ था शिलान्यास: आईआईटी कानपुर में साइंस एंड टेक्नोलॉजी रिसर्च पार्क बनने का प्रस्ताव दो साल पुराना है। वर्ष 2016 में मानव संसाधन विकास मंत्रालय के सचिव विनयशील ओबेराय आए थे और उनका इसका शिलान्यास किया था। इस पार्क के लिए मंत्रालय ने 70 करोड़ रुपये का बजट प्रस्तावित किया था।

आठ संस्थानों के पास होंगे अपने रिसर्च पार्क : केंद्र सरकार शोध को लगातार बढ़ावा दे रही है। जल्द ही आठ संस्थानों के पास अपने रिसर्च पार्क होंगे। आईआईटी बाम्बे और आईआईटी खड़गपुर में रिसर्च पार्क पास हो चुका है। इसके लिए मंत्रालय ने 100-100 करोड़ रुपये का बजट पास किया है। एक जनवरी 2018 को पांच अन्य आईआईटी में रिसर्च पार्क के लिए भी मंत्रालय ने 75-75 करोड़ रुपये का बजट स्वीकृत किया है। इस बजट से आईआईटी कानपुर, आईआईटी गुवाहाटी, आईआईटी हैदराबाद, आईआईटी दिल्ली और आईआईएससी बैंगलुरू में रिसर्च पार्क बनेगा। आईआईटी गांधी नगर में रिसर्च पार्क के लिए डिपार्टमेंट ऑफ साइंस एंड टेक्नोलॉजी ने 90 करोड़ रुपये का बजट दिया है।

January 3

इंटर आईआईटी कल्चरल मीट में धनबाद का बेहतर प्रदर्शन

https://www.livehindustan.com/jharkhand/dhanbad/story-better-performance-of-dhanbad-in-inter-iit-cultural-meet-1728384.html

आईआईटी कानपुर में आयोजित इंटर आईआईटी कल्चरल मीट में आईआईटी आईएसएम धनबाद के छात्र-छात्राओं ने शानदार प्रदर्शन किया। विभिन्न प्रतियोगिताओं में दूसरे आईआईटी को पीछे छोड़ छात्र-छात्राओं ने पहले और दूसरे स्थान पर कब्जा जमाया। वहीं छात्र-छात्राओं ने जमकर वाहवाही लूटी। ओवरऑल 18 आईआईटी में आईआईटी धनबाद को सातवां स्थान मिला। पहले स्थान पर आईआईटी दिल्ली, दूसरे में मुंबई और तीसरे स्थान पर खड़गपुर के छात्र रहे। स्टेज प्ले में धनबाद को पहला स्थान मिला। एकल गायन में दिव्यांक गौतम और अयराल दूसरे स्थान पर, कस्टम डिजाइन में तीसरे स्थान पर दीपक कुमार उरांव, हेमंत कुमार, शुभम् आदित्य, शिप्रा सौम्या, स्टैंडअप कॉमेडी थर्ड निशांत दीक्षित व गौरव त्रिपाठी, आर्ट ऑफ फोटोशॉप में तीसरे, लाइव स्केचिंग में चौथे फाइन आर्ट में पांचवें नंबर, मीडिया एंड जर्नलिज्म इवमेंट में पांचवें, स्ट्रीट प्ले में पांचवें समेत अन्य ऑनलाइन फोटोग्राफी, ऑनलाइन बुक रिव्यू प्रतियोगिता में भी बेहतर किया। आईआईटी आईएसएम धनबाद के छाओं ने इस सफलता पर खुशी मनाई। आईआईटी बनने के बाद से ही छात्र-छात्रा इसकी तैयारी में जुट गए थे। उम्मीद है छात्र अगली बार और बेहतर करेंगे। इससे पहले, छात्र-छात्राओं ने इंटर आईआईटी स्पोर्ट्स मीट में हिस्सा लिया था।

बदमाशों-घुसपैठियों को पकड़वाएगा 'स्मार्ट आई', IIT रुड़की ने तैयार की CCTV मोबाइल एप्लिकेशन तकनीक

https://www.livehindustan.com/uttarakhand/roorki/story-iit-roorkee-create-cctv-mobile-application-technique-to-handle-with-criminals-and-intruders-1728201.html

आईआईटी रुड़की के सिविल विभाग ने सीसीटीवी कैमरे से जुड़ी एक ऐसी तकनीक ईजाद की है जो देश के साथ साथ घरों की सुरक्षा के काम आएगी। आईआईटी ने इस 'स्मार्ट आई तकनीक' का पेटेंट भी करा लिया है। सिविल इंजीनियरिंग विभाग के अध्यक्ष प्रो. कमल जैन का कहना है कि उन्होंने देश सीमा पर इस तकनीक का इस्तेमाल करने के लिए रक्षा मंत्रालय को पत्र भेजा है।

प्रो. जैन का कहना है कि घरों, दफ्तरों और अन्य प्रतिष्ठानों में सुरक्षा के लिए लगाए जाने वाले सीसीटीवी कैमरे में कई कमियां होती हैं। सीसीटीवी का डाटा भी सुरक्षित नहीं रहता है और कई बार शातिर अपराधी खुद को बचाने के लिए इसके सारे उपकरण तोड़ देते हैं या हार्ड डिस्क निकालकर ले जाते हैं। इस समस्या को दूर करने के लिए आईआईटी ने यह सीसीटीवी मोबाइल एप्लिकेशन विकसित की है।

कैसे काम करती है यह तकनीक

प्रो. जैन ने बताया कि इस तकनीक के जरिए सीसीटीवी कैमरे को इंटेलिजेंस कैमरे के रूप में तब्दील किया गया है। इस तकनीक से जुड़ा सीसीटीवी कैमरा जहां लगा होगा, वहां की तस्वीर खींच कर तुरंत एमएमएस और ईमेल से उस मोबाइल तक पहुंचा देगा, जो इस कैमरे से जुड़े होंगे। उन्होंने बताया कि सीसीटीवी कैमरे में यह स्मार्ट आई तकनीक इंस्टाल की जा सकेगी। इसे एक ही बार ईमेल और मोबाइल से जोड़ा जाएगा।

पंद्रह हजार आएगा खर्च

अगर आपने घर में सीसीटीवी कैमरा लगाया है तो पंद्रह हजार रुपए खर्च कर आप अपने सीसीटीवी को इस तकनीक से लैस कर सकते हैं। प्रो. जैन ने बताया कि इस तकनीक को पेटेंट करा लिया गया है। आईआईटी में आम लोगों के लिए यह तकनीक उपलब्ध है।

आईआईटी कानपुर ने मद्रास में फिर जीती चैंपियनशिप

https://www.livehindustan.com/uttar-pradesh/kanpur/story-iit-kanpur-wins-championship-1728057.html

आईआईटी कानपुर की टीम शानदार खेल का प्रदर्शन करते हुए फिर चैंपियन बनी। आईआईटी मद्रास में हुई इंटर आईआईटी स्टाफ स्पोर्ट्स मीट में आईआईटी कानपुर की टीम 66 अंकों के साथ विजेता रही। दूसरे स्थान पर 36 अंकों के साथ मेजबान मद्रास की टीम रही।

आईआईटी मद्रास में 25 से 30 दिसंबर के बीच 24वें इंटर आईआईटी स्टाफ स्पोर्ट्स मीट का आयोजन किया गया। प्रतियोगिता में 18 आईआईटी के 764 खिलाड़ियों ने विभिन्न खेलों में अपनी प्रतिभा का प्रदर्शन किया। बैडमिंटन (पुरुष), फुटबाल (पुरुष), बास्केटबाल (पुरुष) और लॉन टेनिस (पुरुष) प्रतियोगिता में आईआईटी कानपुर ने गोल्ड मेडल जीता। इसी तरह एथलेटिक्स (महिला), बैडमिंटन (महिला), टेबल टेनिस (महिला) और एथलेटिक्स (पुरुष) प्रतियोगिता में सिल्वर मेडल जीता। 800 मीटर दौड़, 1500 मीटर दौड़, डिसकस थ्रो में भी आईआईटी कानपुर के खिलाड़ियों ने स्वर्ण पदक जीता। पुरुष की रिले टीम में आईआईटी कानपुर को दूसरा और 400 मीटर दौड़ में तीसरा स्थान मिला। आईआईटी कानपुर के कर्मचारी जिमखाना के अध्यक्ष प्रो. इंद्र शेखर सेन और सचिव राजेंद्र कनौजिया

ने बताया कि टीम के शानदार प्रदर्शन से चौथी बार ओवरऑल चैंपियन बनी है। इससे पहले कानपुर की टीम वर्ष 2013, 2014 और 2016 में भी चैंपियन रह चुकी है।

GoodNews: IIT-Bombay Moves towards Women-Friendly Campus

https://www.thequint.com/news/india/iit-bombay-to-get-more-women-on-campus

After taking feedback of stakeholders over a period of two years, the Indian Institute of Technology (IIT), Bombay has decided to increase the presence of women on campus.

In order to get more women on the IIT-Bombay campus, the committee has chalked out a plan in which they aim to promote success stories of students and alumni to school going girls, provide work from home facility for researchers who have small children.

Apart from engaging more women in the institute, which has been running on the same set of goals since the year 2000, IIT Bombay will also engage with society and industry.

As per reports by the *Times of India*, IIT- Bombay will take up ten research projects with the local and state governments. There are plans to incubate at least five start-ups and commercialise ten patents in a year. These are the few targets that the institute aims to achieve in the next five years.

Apart from achieving all its major targets since 2000, IIT Bombay is still struggling with certain issues such as the faculty taking up part-time employment in the industry, evening programmes for industry personnel, flexible teaching schedules, a smaller student-teacher ratio, no grading in first-year undergraduate programmes, and attracting international students.

While speaking to the Times of India, a professor associated with Institute Strategy and Planning Committee (ISPC) said that the committee has introduced specific metrics and targets to measure performance in 2022.

According to the professor, the institute is also planning to start newer programmes, including filmmaking, fine arts, and some in existing branches like earth science, biology and social sciences. Apart from that, there will also be focus on developing a cleaner and greener campus.

Water Urbanism Project: IIT Kharagpur Joins Hand with US Universities

https://www.ndtv.com/education/water-urbanism-project-iit-kharagpur-joins-hand-with-us-universities-1795172

The IIT Kharagpur has joined hand with three Ivy League universities of the United State for water urbanism project at Varanasi.

KOLKATA: The IIT Kharagpur has joined hand with three Ivy League universities of the United State for water urbanism project at Varanasi. Water urbanism is a geo-hydrological exploratory study of Varanasi, where river Ganga is integrated with the past and present of the ancient city and key to the growth of the city over the ages. The Water urbanism project is part of the multi-focal point of research under the Science and Heritage Initiative (SandHI) spearheaded by IIT Kharagpur.

To conduct the Water urbanism exploratory study from January 5, a 50-member team of students,

research scholars and academicians from three Ivy League US universities are collaborating with IIT Kharagpur.

The three Ivy League varsities are Graduate School of Architecture, Planning and Preservation of Columbia University led by Professor Kate Orff and Prof Geeta Mehta, University of Pennsylvania led by Prof Dilip DaCunha and Harvard University led by Prof Julia Watson.

"Water urbanism enables inter-disciplinary study of infrastructure, healthcare and hydrology of a region. Through it integrated urban planning and system can be designed in sync with the natural environment of the region instead of isolated urban developments," Professor Bhargab Maitra, Head, Ranbir and Chitra Gupta School of Infrastructure Design and Management, IIT Kharagpur said.

Professor Joy Sen, Head, Department of Architecture and Regional Planning at IIT Kharagpur, said the exploration work will be conducted from January 5-14.

IIT BHU and BHU, Varanasi are part of the water urbanism project as well. Director IIT BHU Prof Rajeev Sangal and Director IIT Kharagpur Professor Pratim Chakrabarti are the two key advisers of the project.

A frontline team of the British Geological Survey (BGS) are also expected to join with Dr Martin Smith of BGS and Professor Abhijeet Mukherjee of IIT Kharagpur providing the geo hydrological insights to the exploration.

"The Water Urbanism Project: Varanasi 2018 will open up new frontiers and explore potential of Varanasi, which the UNESCO has identified as 'the World Heritage City of Deep Culture and Music," Sen said.

A similar field exploration and development plan in water urbanism had previously been conducted in Kolkata.

Scientists develop a more efficient and cost-effective strategy for battling fungal infections

https://researchmatters.in/shots/scientists-develop-more-efficient-and-cost-effective-strategy-battling-fungal-infections

Scientists from the Indian Institute of Technology (IIT) –Madras have developed an efficient, safe and cost-effective treatment strategy for fighting fungal infections, by linking anti-fungal drugs with sugar polymers in order to create gel-like formulations called hydrogels.

Fungal infections have always been difficult to treat, especially so in people with compromised immune systems. Amphotericin B, popularly called AmB, is one such anti-fungal drug which has been used to combat such infections for more than five decades now. However, since AmB doesn't dissolve in water-based medium, its therapeutic use is solely dependent on the use of lipid-based carriers called liposomes, which help transport the drug inside the human cells. Given the fact that these AmB-containing liposomes are very expensive to produce, do not remain stable for long, and require continuous administrations to the patients, scientists have long been on the lookout for better alternatives to liposomes.

One such alternative could be the use of alginates, which are naturally occurring polysaccharides or polymers made out of sugars. Now, alginates could be degradable or non-degradable by the body, depending on the molecular weight of the polysaccharide. Oxidized alginate polymers are degradable by the body, and can thus be used as a carrier for delivering various drugs in the body. Oxidized alginates are particularly useful as they can be used to cross-link other sugars and protein molecules with the desired drug, in order to form a gel-like substance. Such hydrogels, as they are popularly known, can ensure a much more controlled and sustained release of the drug inside the body, and are ideal for carrying anti-fungal drugs lie AmB which require prolonged release periods.

Scientists at IIT Madras have now studied the use of oxidized alginates as a potential cross linking agent for AmB, in order to prepare biodegradable anti-fungal hydrogel which can be used for diverse medical applications like wound dressing, tissue engineering and drug delivery applications. This is the first such study to examine the properties and suitability of oxidized alginates as a carrier for the anti-fungal compound, Amphotericin B.

The study found that hydrogel produced using AmB and sodium alginate served as a potent anti-fungal agent against various fungal infections, and had the potential for prolonged release of AmB when implanted. This hydrogel was also highly soluble in water, making it suitable for administration to patients, and also exhibited significantly reduced toxicity and other side effects as compared to traditional AmB formulations. This discovery could potentially lead to the development of more efficient, safe and cost-effective anti-fungal treatments in the future.

IIT Madras launches Winter Course on Machine Intelligence and Brain Research

https://indiaeducationdiary.in/iit-madras-launches-winter-course-machine-intelligence-brain-research/

Chennai: Indian Institute of Technology Madras has launched a 'Winter Course on Machine Intelligence and Brain Research' at its Center for Computational Brain Research (CCBR), which is conducting its Annual Workshop from 2nd to 7th January 2018.

The Winter Course on Machine Intelligence and Brain Research is a 2-credit elective course for IIT Madras students. It offers rare insights into the fields of Neuroscience and Artificial Intelligence. It is currently being offered to 25 students selected on the basis of their exceptional academic performance and interests among a pool of 92 applications. The admission is expected to increase in the coming years.

Speaking after inaugurating the workshop today (Tuesday, 2nd January 2018), Prof. Bhaskar Ramamurthi, Director, IIT Madras, said that the CCBR was expanding rapidly. "Like any research in Frontier areas, these expansions were occurring in directions that were not preconceived. We're confident of having a large breakthrough in this Centre, which has faculty from several departments working with them".

"Fast progress in Machine Learning will help us better understand the Human Brain, which in turn will improve Machine Learning. It will lead to Machines that will have some intelligent capabilities," added Prof. Bhaskar Ramamurthi.

Prof. Partha Mitra, Crick-Clay Professor of Biomathematics, Cold Spring Harbor Laboratory, USA and H N Mahabala Chair at CCBR, IIT Madras, gave the Workshop Introduction and gave a lecture on 'Brain Circuits and Machine Intelligence.'

"Artificial Intelligence in a broad sense involves multiple disciplines and not just computer science… The Brain is nature's algorithm and Biology already has its AutoML. It's called evolution," said Prof. Partha Mitra

Speaking about the new course, Prof. Partha Mitra said that it would look to combine biology with engineering and put them hand-in-hand.

Later in the day, Prof. VS Ramachandran, Director of the Center for Brain and Cognition, University of California, San Diego, gave a lecture on "Embodied brains and disembodied minds: What neurology can tell us about human nature'."

This year's workshop consists of a broad spectrum of international lecturers, who are world renowned experts in the fields of artificial intelligence and neuroscience. CCBR's chair professors, Prof Partha Mitra from Cold Spring Harbor Laboratory, USA; Prof Mriganka Sur from Massachusetts Institute of Technology, USA; and Prof Anand Raghunathan from Purdue University, USA, aim to impart their knowledge on the developing fields of artificial intelligence and the inner workings of the brain.

A total of 250 people, including 150 from outside IIT Madras, registered to participate in the workshop.

Others eminent speakers include Prof Paul Martin, University of Sydney, Australia; Prof Jonathan Victor, Cornell University, USA; Prof Trichur Vidyasagar, University of Melbourne, Australia; Prof Jonathan Fritz, University of Maryland, USA; Prof Atsushi Iruki, RIKEN Brain Science Institute, Japan; Prof Saikat Chatterjee, KTH EE school, Sweden.

The Center for Computational Brain Research (CCBR) at IIT Madras is supported by Mr Kris Gopalakrishnan, co-founder of Infosys and current chairman of Axilor Ventures. The Center aims to provide a two-way interface between the growing fields of artificial intelligence and neuroscience and is currently based at IIT Madras. The schedule of the workshop is available at: https://ccbr.iitmadras.in/workshops

January 2

Fight Delhi air pollution with Rs 10 Nano filter; here's how and where to buy 'Nasofilter'

http://www.financialexpress.com/india-news/fight-delhi-air-pollution-with-rs-10-nano-filter-heres-how-and-where-to-buy-nasofilter/998312/

A product called 'Nasofilter' that costs Rs 10 is designed by Alumni, professors and students of the Indian Institute of Technology (IIT), Delhi, in collaboration with Nanoclean Global Private Ltd.

A nano-respiratory filter worth just Rs 10 has been designed to tackle deteriorating air quality in the national capital.

A nano-respiratory filter worth just Rs 10 has been designed to tackle deteriorating air quality in the national capital. A product called 'Nasofilter' that costs Rs 10 is designed by Alumni, professors and students of the Indian Institute of Technology (IIT), Delhi, in collaboration with Nanoclean Global Private Ltd, reported the Indian Express. This nano-respiratory filter is meant to protect users from air pollutants, including PM 2.5 particles, and reduce risk of respiratory diseases. Nasofilter will be available for purchase from today. The product will initially be available online before it hits retail shops. People can buy these filters from the website – nasofilters.com from. In some time, these filters will be available on all recognised e-commerce websites, and finally in retail shops.

Nanoclean Global Private Ltd is the company which was incubated at IIT-Delhi to produce the filters. Prateek Sharma, who is the chief executive officer of the company explained how this filter works. He was quoted as saying that these filters stick to the user's nasal orifice and restrict foreign particulate

matter from entering the body. It is a use-and-throw biodegradable product, which is highly efficient in restricting particulate matter, and at the same time gives very little pressure drop, which makes it unique. Sharma added by saying that as the cost of the product is low, it can be used by the masses. He said the filters would keep away PM 10 particles 100 per cent, and PM 2.5 particles by 95 per cent. The filters can last up to 8-10 hours. “From tomorrow, the filters will be available on our website nasofilters.com. After a few days, we will make them available on all recognised e-commerce websites, and finally in retail shops. We hope to start physical sale in January. It would come in box of 10 nasofilters initially. Subsequently, we will also introduce a box of 30,” Sharma said.

Besides Sharma, the team comprises faculty members Manjeet Jassal and Ashwini K Agrawal, alumni Sanjeev Jain and Tushar Vyas, and a student, Jatin Kewlani. The initiative received the ‘Startup National Award’ 2017 by former President Pranab Mukherjee, and also made it to the South Korean government’s list of ‘Top 50 technical startups in the world’.

IIT wait for pay hike, 2 months after order

https://www.telegraphindia.com/india/iit-wait-for-pay-hike-2-months-after-order-197985

New Delhi: IIT and NIT teachers and faculty members at central universities are still waiting for higher salaries although two months have passed since the government issued orders to revise their pay scales.

While some of the Indian Institutes of Technology have cited lack of funds, others blamed it on the delay in fixing individual packages.

The central universities have cited lack of any communication from the University Grants Commission.

The human resource development ministry had two months ago issued separate orders, one for teachers of centrally funded technical institutions like the IITs and the National Institutes of Technology, and another for university and college teachers.

Both orders spoke about revising the basic pay but didn't mention allowances like those for house rent and research. The orders said the allowances would be announced later in consultation with the finance ministry. Till Monday, the allowances had not been announced.

The wait has coincided with the finance ministry's insistence that institutions generate funds internally to bear a part of the revised pay.

The institutions have been protesting it, hence the allowances are not being announced, said an official source.

The government has not announced a revision in pension too. "The government must give revised pension... (it is) the right of retired staff," A.L. Agrawal, a retired IIT Delhi professor, said.

Professor M.L.N. Rao, president, All India IIT Faculty Federation, on Monday wrote to teachers of all the IITs for a meeting soon to work out their future course of action.

Earlier, in October, IIT teachers had held token protests against the delay in the payment of revised salaries.

An administrative officer at IIT Madras said lack of funds was behind the delay. "The arrears at any old IIT will be over Rs 50 crore, and I don't believe we have this kind of money floating around in the budget. In the absence of release of funds, the communication of pay revision orders is rather hollow," the official said.

Another IIT official said individual packages had not been formalised yet.

IIT Delhi director Ram Gopal Rao hoped the revised pay would be implemented from January. "We have been trying to implement the revised pay scale. We hope the faculty will get the revised pay from January," Prof. Rao said.

Delhi University executive council member Rajesh Jha said none of the central universities had implemented the revised scale. "The universities are waiting for an order from the UGC," Jha said.

IIT-Bombay mulls course on filmmaking

http://www.dnaindia.com/mumbai/report-iit-bombay-mulls-course-on-filmmaking-2572249

Students might soon be able to study filmmaking at the Indian Institute of Technology-Bombay (IIT-B) as per a recently released strategic plan for 2017-22. As per the plan, the institute intends to start a new Master's programme in filmmaking considering the huge demand for the course in the city.

The institute recently released its strategic plan for the next five years, which says it will focus on its growth in some of the key areas like broadening educational areas, enhancing student experience and diversity and broadening its fund base. A master's course in film making and a course in Fine Art are expected to soon be the new additions to the existing programmes at IITB, as per the plan.

Apart from starting new courses in the areas of Mathematics, Earth Sciences, Biology, Management and Social Sciences, the institute also plans to increase its funding for research with the target of Rs 500 crore per year for the next five years allotted to research related activities.

"We intend to start a course on filmmaking and fine arts understanding the industry needs and the proximity to the film industry. The process of starting a course is long and involves several stages of paperwork and approvals. The plan has however outlined our intention to work towards these areas" said Prof Devang Khakhar, Director, IIT-B

As per the plan, the objective is to add 2,000 seats in hostels for students and 400 seats for married research scholars. Khakhar said that the institute hopes to have two new hostels in its campus within the next 5 years.

ON THE ANVIL

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Glaring loopholes in new draft rules for groundwater extraction

http://www.downtoearth.org.in/news/a-job-half-done-59357

The new draft rules for regulation of groundwater are a move towards decentralisation but many key concerns have been overlooked

Beed, Maharashtra: People using a tube well to draw water. Between 1950 and 2010, the number of tube wells drilled in India increased from 1 million to nearly 20 million

India's much sought after, and fast depleting, natural resource is up for another round of contests between users. The new proposed set of regulations for use of groundwater has led to an avalanche of debates and discussions. At the core of this is the contest between who should use it how much and what penalties to be levied for its unjudicious use. Regulating groundwater has been a very contentious debate. It can be gauged from the fact that the Union Water Resources Ministry came out with new draft rules for regulation of groundwater resources in October 2017—less than two years after the previous one in 2015—and has sent it to all the states for their response. While the states are yet to respond, experts point out at many loop-holes in the rules.

The new draft rules have been introduced to check and correct the ominous situation of groundwater depletion in India. Statistics about India’s groundwater depletion are depressing. According to a 2016 report by the Parliamentary Committee on Restructuring the Central Water Commission and the Central Ground Water Authority (CGWA), “the growing dependence on groundwater has taken the form of unsustainable over-extraction, which is lowering the water table and adversely impacting drinking water

security". In order to keep this depletion under check, the government has at least 80 "notified" areas from where groundwater can't be extracted for other than drinking and domestic purposes.

One can withdraw water for industrial purposes only from "non-notified" areas which are further classified as "safe", "semi-critical", "critical" and "over-exploited" based on groundwater resources estimation. The CGWA has conducted four estimates after Independence. The last was done in 2013, the report of which was released in June 2017. In the 2013 estimate, 6,584 blocks of the country were assessed. Out of them, 1,034 were classified as over-exploited. Over 4,000 blocks are safe (see `A steady decline'). "India's groundwater resources are under threat. Between 1950 and 2010, the number of tube wells drilled increased from 1 million to nearly 20 million," a 2016 World Bank report says.

Glaring loopholes

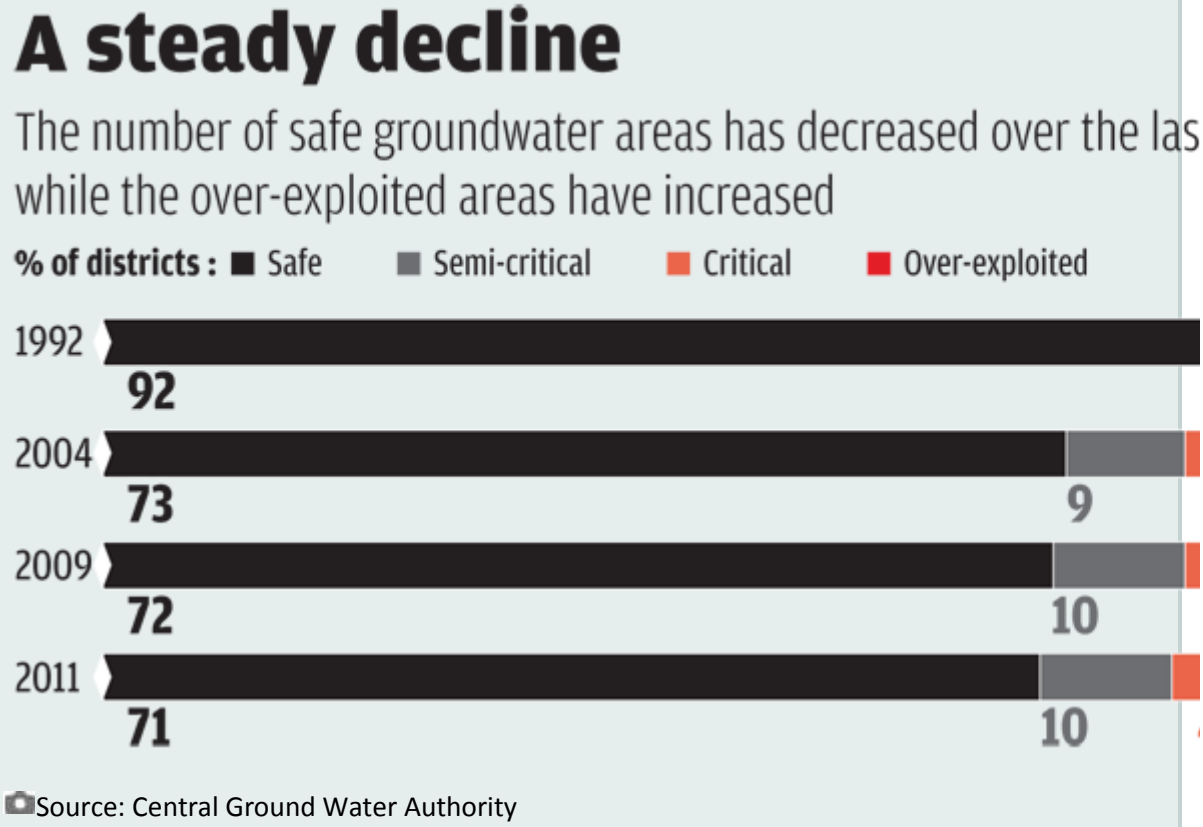
One of the key changes introduced in the new draft rules is that now the District Magistrates (DMs) have been given the power to grant No Objection Certificate (NOC) to an industry if it wants to extract groundwater within certain prescribed limits. Beyond that, the case will be dealt by state groundwater boards and CGWA. Earlier, only CGWA had this power. A K Gosain of IIT-Delhi's civil engineering department says while this may be a right move towards decentralisation, the local district officials have to be scientifically-equipped before that. "She/he is only going to give permission on the basis of categorisation of areas conducted by CGWA. Last such data is of 2013. It is very old to be relied upon because the situation on ground like pre-monsoon and post-monsoon scenarios and soil quality among other factors change very dynamically."

The provision of artificial recharge has also been discarded in the new rules. All industries extracting groundwater were supposed to take up artificial recharge of acquifers by rainwater harvesting. Instead, a compensatory fee has been introduced now. Gosain points out this may be a good move as there was no check on the quality of recharge by private proponents earlier. "There was nobody to see whether they were dumping polluted water," he says. However, assistant professor in Delhi University's geology department Shashank Shekhar says, "What is more important is that we should have a robust impact assessment of any groundwater recharge structure. A GIS-based portal at CGWA should at the click of a mouse give the details of the recharge structures."

Gaps in new draft rules

- District Magistrates have been given the power to grant NOC to an industry if it wants to extract groundwater. But local officials will have to have scientific knowhow before they can go ahead with such an action
- Artificial recharge by industry has been discarded. A compensatory fee has been introduced. States will do such recharge now. But, there is no blueprint on how they will do so

- There is no defined upper limit for extraction of groundwater. This creates a situation where the more you pay, the more you can extract
- The government has dispensed with the mandatory clause of reuse of extracted water. In the existing rules the minimum limit of reuse has been clearly defined



The compensatory fee will go to respective states, which, in turn will do artificial recharge. Hydrogeologist P S Datta says that no matter who is doing the recharge, it is the monitoring of the recharge which matters. “No amount of policing by the government will be effective. It is the community which can best do it,” he says. However, the new rules are silent on it. Moreover, there is no defined upper limit for extraction of water. The more you pay, the more you extract. This is alarming considering the fact that groundwater resources are already on a decline. “CGWA was supposed to undertake a study of grey areas in over-exploited blocks. At least, for such areas an upper limit should have been fixed,” says Gosain.

The government has also dispensed with the mandatory clause of reuse and recycle of extracted water. In the existing rules the minimum limit of reuse was clearly defined, the draft rules just say that the proponents shall do it and no limit has been set.

“Even if the fixed limits have been dumped, a provision of increasing the efficiency of recharged water

could have been introduced," says Gosain.

The draft rules talk of industry's water audit to be done by bodies like the Federation of Indian Chambers of Commerce & Industry and the Confederation of Indian Industry. "An audit of industry by industries' body would be a farce," says Shekhar. A third party has to do it, experts say.

Most importantly, experts say, India has not been able to map more than 25 per cent of acquifers. "If we can't map them, how are we going to take care of them," he asks.

On the condition of anonymity, a scientist in the Central Ground Water Board told Down To Earth (DTE) that DMs have been allowed to give permission because many small-scale industries complained that they have to deal with many middlemen to reach CGWA. DTE tried to contact the chairman of CGWA Akhil Kumar but several attempts to reach him over phone did not yield any result. A detailed e-mail questionnaire asking for the rationale behind allowing DMs to give permission, fee structure, doing away with artificial recharge and other provisions were sent to him. However, he did not respond at the time of filing this report.

UCEED Admit Card 2018 Hall Ticket Released Download @ www.uceed.iitb.ac.in for 20th Jan Exam

http://allindiaroundup.com/admit-cards/uceed-admit-card-2018-hall-ticket-released-download-www-uceed-iitb-ac-in-for-20th-jan-exam/

Industrial Design Centre (IDC), IIT Bombay, under the guidance of the UCEED Admissions Committee is scheduled to conduct Undergraduate Common Entrance Exam for Design (UCEED) on 20th January 2018. A huge number of candidates who are looking for the admissions into various programs applied for the exam. Candidates who had applied are searching for the UCEED Admit Card 2018 as it is the crucial document to carry for the exam and contains details regarding exam venue, roll number etc. IDC Bombay released UCEED Admit Card 2018.

India ties up with USA, UK among others to boost higher education

https://timesofindia.indiatimes.com/home/education/india-ties-up-with-usa-uk-among-others-to-boost-higher-education/articleshow/62330680.cms

NEW DELHI: With the aim of improving the quality of higher education, India has established joint research programmes with countries like the United States, the United Kingdom, Israel, Norway and New Zealand under the Special Scheme for Faculty Development to provide an opportunity to

teachers to pursue academic/research activities and to help in establishment of Inter University Centers (IUCs) that provide state-of-the art equipments and facilities.

The other initiatives for giving a boost to higher education include the Uchchatar Avishkar Yojana (UAY), Impacting Research, Innovation and Technology (Imprint) and research facilities made available at IITs and IISc. In a written reply to the Lok Sabha, junior human resource development minister Satyapal Singh stated that objectives of the UAY scheme are to promote innovation in IITs, addressing issues of manufacturing industries, to spur an innovative mindset, to coordinate action between academia and industry, and to strengthen labs and research facilities.

Apart from Imprint, whose objective is to identify areas of immediate relevance to society requiring innovation, direct scientific research into identified areas, ensure higher funding support for research into these areas, and measure outcomes of the research effort with reference to impact on the standard of living in the rural/urban areas, the ministry also stated that five new research parks at IIT Delhi, IIT Guwahati, IIT Kanpur, IIT Hyderabad, and the Indian Institute of Sciene in Bengaluru at a total cost of Rs 75 crore each have been approved by the government.

Approval has also been accorded for continuation of two already approved research parks at IIT Bombay and IIT Kharagpur at a cost of Rs 100 crore each. The research park at IIT Gandhinagar at a total cost of Rs 90 crore is being funded by the department of science and technology.

S N Bose's accomplishments were far ahead of his times and society, says PM Narendra Modi

https://indiablooms.com/news-details/N/36864/prof-s-n-bose-s-accomplishments-were-far-ahead-of-his-times-and-society-says-pm-narendra-modi.html

New Delhi/Kolkata, Jan 1 (IBNS): Prime Minister Narendra Modi delivered his address on the occasion of the curtain raiser ceremony of the commemoration of Prof. S.N. Bose's 125th birth anniversary, in Kolkata via video conference from New Delhi, on Monday.

Addressing the gathering, the PM said, "I have had the pleasure of interacting with renowned Scientists in the beginning of every year. I am glad that today, an auspicious opportunity allows me to share some thoughts with you."

"Today, we open a year-long celebration of the 125th year of Acharya Satyendra Nath Bose, who was born on this day in 1894. I have learnt a great deal about his accomplishments that were far ahead of his times and society," the Prime Minister said.

Excerpts from his speech:

"Distinguished Scientists and Students, You all have studied and are probably also experts of Quantum Mechanics. I have not studied it. But I understand that there are many lessons that Physics can teach us in day to day life. A classical particle cannot escape easily from inside a deep well. But a quantum particle can!

For one reason or another, we have confined ourselves into isolation. We hardly cooperate, collaborate and share our experiences with fellow scientists of other Institutions and National Laboratories.

To reach our true potential and to take Indian science to its rightful glory, we should be like a quantum particle that escapes its confinement. This is even more important today, as Science becomes hugely multi-disciplinary and requires concerted efforts.

I have been talking about the need for greater sharing of physical and research infrastructure, which is expensive and has an increasingly short lifetime.

I am told that our science departments are now working on a multipronged approach. I understand that a portal is being developed for sharing of scientific infrastructure that would allow transparent and efficient tagging and sharing of resources.

A mechanism is being put up for strong collaborations between academic and R&D institutions. City based R&D Clusters are being created to bring together all Science and Technology partners from Academia to Institutes, to Industries to Startups.

The success of this effort, will depend on our ability to bring all institutions and labs under this strategy. It requires whole-hearted support from each of us. The mechanism should ensure that a scientist from the remotest corner of the country has seamless access to resources in, say, IIT Delhi, or say, a CSIR Lab in Dehradun. Our aim should be to ensure that the whole of our efforts and actions is always greater than the sum of the various parts.

Friends, for various reasons, we missed the first Industrial revolution. We cannot miss similar opportunities today. Upcoming sectors such as Artificial Intelligence, Big Data Analytics, Machine Learning, Cyber-physical systems, Genomics, and Electric Vehicles are new challenges that require your attention. Please ensure, that as a country, we keep pace with these emerging technologies and innovations.

The way our scientific community tackles these challenges, will determine our success in smart manufacturing, smart cities, Industry 4.0, and the Internet-of-Things. Our scientific ecosystem must connect directly with innovators and entrepreneurs to cultivate, channelize and empower them.

Friends, inaugurations serve a purpose, only if you have a follow-up plan of action. I am happy to learn that this one has exciting and important follow-up events lined up.

I am told that over 100 outreach lectures in Schools and Colleges are planned. Several national and international conferences, and competitions on 125 solutions to scientifically challenging problems are also on the agenda.

Brilliant ideas retain their relevance far beyond the time that they were mooted. Even today, the work of Acharya Bose continues to inspire scientists.

I wish you all the very best, in your endeavour to succeed in the emerging frontiers of scientific research. I feel confident that through your tireless efforts, the Nation will have an ever better and brighter future.

I wish you all a very fulfilling and creative New Year."

On New Year eve, they hit roads to spread awareness

https://timesofindia.indiatimes.com/city/thiruvananthapuram/on-new-year-eve-they-hit-roads-to-spread-awareness/articleshow/62329559.cms

Thiruvananthapuram: "Drink and drive, and we'll show you a few new bars," was the message tweeted by the verified twitter account @BlrCityPolice of Bengaluru city police. Though residents here did not get any such response from city police, there indeed was some interesting campaign against unsafe driving practices on the New Year eve. Many motorists who parked their vehicles near popular party destinations found handwritten notes on their car windows with messages such as "Seat belts are life belts. Always wear it. HNY".

A group of people, who are keen on road safety, celebrated New Year by spreading awareness among motorists against issues such as drunken driving and the need to use seatbelts and helmets. They ditched usual campaign materials and used a simple sticky note and marker pen to spread their message.

The idea was first mooted by Sony Thomas, road safety consultant, World Bank. Thomas along with road safety campaigner Rajesh T C, medical practitioners Dr Manoj Vellanad and Dr Rajesh Krishnankutty, Natpac consultant T V Sathish, KSTP engineer Arun Karma and Class IX student Aswaghosh Syndhav hit the major corridors of the city on the New Year eve to paste the messages on vehicles.

Thomas said that they had a different New Year this time. "We had decided not to distribute printed pamphlets. Handwritten notes give a feeling of a personal communication. Around 900 sticky notes, each carrying different hand written messages, were pasted," he said.

Rajesh said that they walked through roads such as Statue, Panavila-Aristo road, Althara Junction-Cotton Hill road, etc. for the campaign. "Most messages were prepared by the evening. We also wrote some instant messages like when we noticed a two-wheeler without a rear view mirror," Rajesh said.

Interestingly, Thomas' Facebook post about the campaign has inspired similar campaigns in various parts of the country. "Students of IIT Delhi organized a similar campaign after seeing my Facebook post. Campaigns were held in Rajasthan and Gujarat. Global Alliance of NGOs for road safety opined that the campaign was very effective and expressed interest in organizing similar one in coming days," Thomas said.

Rise in ‘texting, talking and driving’ trend in India worrying say researchers in IIT Bombay

https://researchmatters.in/article/rise-%E2%80%98texting-talking-and-driving%E2%80%99-trend-india-worrying-say-researchers-iit-bombay

Noticing a worrying increase in reaction time by drivers indulging in talking and texting while driving, researchers at IIT Bombay feel the situation could reach alarming proportions if not checked.

The study by Indian Institute of Technology Bombay (IITB) showed how using mobile phones while driving can not only distract drivers but also affect their ability to react to situations. The study showed that calling and texting while driving severely degrades the performance of a driver.
"There is lot of difference in the driving behaviour between Indian drivers and drivers in the developed nations, like poor lane disciplines and a small gap between two vehicles. Moreover, there is also a difference in the phone use habits. About 60% of drivers use phones while driving among all the participants in the present study, which shows a huge 'talking and driving' trend among the Indian drivers", says Prof. Nagendra R. Velaga, Associate Professor at IITB. He, along with his co-author Ms. Pushpa Choudhary, have undertaken this study.

The study was conducted on 100 licensed drivers of three different age groups: young (below 30 years of age), mid- age (30 - 50 years) and old (above 50 years). Using a simulator, the participants drove under five scenarios. The first was without using a phone. The second included having a simple conversation over the phone like 'Where did you go for your last trip?' The third scenario included having complex conversations like solving arithmetic problems and logical puzzles. The fourth scenario focused on simple texting where the driver replied with short text messages of up to 10 characters, and the fifth on complex texting where the drivers replied with longer text messages.

For each of these scenarios, the total drive was 3.5 km long, and had one hazardous event -- a parked vehicle or a pedestrian crossing the road. The researchers then measured the 'reaction time' for each driver. "The reaction time is the time elapsed after spotting the hazard until the driver takes the first reaction to the event like releasing the accelerator pedal or applying the brakes", explains Prof. Velaga. The results of the study showed an alarming increase in the driver's reaction time for all of these scenarios. For the hazardous event of pedestrian crossing, drivers having a simple conversation took 40% longer to react, compared to those who did not use a phone. The scenario where drivers indulged in complex texting caused a whopping 204% increase in the reaction time. The results were similar when handling the other hazardous event of a parked vehicle crossing the road. Here, simple conversation caused a 48% increase in reaction time while complex texting caused a 171% increase. In summary, both types of phone use (talking and texting) proved to be significant factors in degrading the driving performance.

"The main reason behind the increased reaction time during the use of the phones is the reduced scanning of the roadway ahead, and thus a failure to notice sudden events which leads to a huge increment in the reaction time", says Prof. Velaga. But what causes these severe differences between texting and calling? "While talking, the drivers can look at the roadway ahead and therefore notice the event earlier than while texting", he reasons.

According to a report by the World Health Organization, road accidents are the 9th leading cause of deaths. In India, a country where an accident happens every minute and a life is lost every four minutes, a previous study revealed that 31% of the drivers who used a mobile phone during driving met with accidents. The current study analysed and modelled the effects of mobile phone distraction on reaction time of drivers belonging to different age groups in India.

The researchers plan to enhance the study further by considering different event scenarios and also the effects of different types of distractions like eating/drinking while driving, or playing music. They would also like to discuss the findings of the study with policy makers and the government.

The findings of the study reiterates the fact that using mobile phones while driving in India can be a hazard for the drivers and pedestrians on the road. While there are rules in India that ban the use of phones while driving, they are often broken. "The findings of the study may serve as an informative reminder to society that phone use during driving is not only harmful to the person who is driving but also to other road users", signs off Dr. Velaga.

Engineering Colleges finally join 'Swachh Bharat' initiative, ask hostel residents to wash bed sheets once every year

http://www.fakingnews.firstpost.com/india/engineering-colleges-finally-join-swachh-bharat-initiative-ask-hostel-residents-wash-bed-sheets-every-year-2491

New Delhi: More than three years have passed, engineering colleges never took any steps to join Swachh Bharat campaign.However, after PM Modi's Mann Ki Baat last Sunday where he talked about world's biggest nationwide cleanliness survey that would start on January 4th, worried engineering colleges have asked hostel students to clean their bed sheets.

"Not only they have to clean it now, have asked wardens to collect one undertaking from each student that they will wash their bed sheets at least once every year. After every wash, they need to write last clean date against their Aadhaar number on top of the bed sheet. If they fail to do so, they will not be allowed to sit in the exams," said R.C. Rao, principal of Gunupur engineering college.

"*Desh Swachhata mein Itna aage ja raha hai*, If PM Modi finds out some of our hostel students do not wash bed sheets even once in four years, *woh to humara college ka license cancel kara denge AICTE ko bol ke*", Mr. Rao said.

Mr. Rao added, “It’s not like these students do have time or money to clean the bed sheets, it’s lack of will. These students are smart. They all use black color bed sheets, no one can spot how many kgs of dust has gone in to them”.

“What to talk about other students, my own son who came home after completing his degree, when I put his bed sheets in to washing machine, the new washing machine stopped working. The technician while showing me few kgs of black tar refused to waive off repairing cost even in warranty period. While showing me the user manual he said if hostel students bed sheets are put, this machine will not work. Please read manual before use, he stressed,” said Mr. Rao.

Sameer Pradhan, a student was asking his warden, “What about majority students like him who do not have bed sheet? Mandatory hai toh, survey se ek din pehle le aayenge”.

Coimbatore: AICTE blinks, revises student-faculty ratio

http://www.newindianexpress.com/states/tamil-nadu/2018/jan/02/coimbatore-aicte-blinks-revises-student-faculty-ratio-1742178.html

COIMBATORE: Following strong opposition from teachers to the All India Council for Technical Education’s (AICTE) move to reduce the faculty-student ratio from 1:15 to 1:20, the council has decided not to consider adjunct faculty members in calculating the ratio.

In the 2017-18 academic year, the AICTE allowed technical institutions, including engineering colleges, to employ people from industry as adjunct faculty or resource persons to provide students industrial exposure and improve their employability. According to the rule, at least 80 per cent of the faculty members should be regular, full-time people; the remaining can be adjunct faculty/resource persons.

However, from the academic year 2018-19, adjunct faculty/resource persons will not be included in calculating the faculty-student ratio. Only regular faculty members will be counted for computing the ratio.
This decision was taken after the academic community, particularly teachers, strongly opposed the AICTE’s recent decision to reduce the student-faculty ratio from 1:15 to 1:20. Academics argued that this would affect research work. However, in the case of Architecture and Planning, adjunct faculty or resource persons up to 30 per cent are permissible, as the programme requires exhaustive practical field exposure, AICTE said.

In all other programmes, under exigent conditions like delay in recruitment or relieving/retirement of regular faculty members, adjunct faculty/resource persons up to 10 per cent of the requirement may be availed. This too is allowed only for a period not exceeding one academic session.

However, T D Eswaramoorthy, secretary of All India Federation of Self-Financing Technical Institutions, said, “If adjunct faculty is not considered while calculating the ratio, many colleges will not employ adjunct faculty. From the industry side, people who are interested in sharing ideas and teaching will not get opportunity.”

Stiff opposition

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January 1

IITs told to earn for pay

https://www.telegraphindia.com/india/iits-told-to-earn-for-pay-197778

New Delhi: The government has asked centrally funded technical institutions, including the IITs and the NITs, to revise the pay scales of non-teaching staff with the rider that a part of the additional requirement has to be generated internally.

The human resource development ministry issued an order on Friday to over 100 institutions asking them to implement the revised pay scales in keeping with the recommendations of the 7th Central Pay Commission (CPC).

The order referred to a finance ministry directive of January 13, 2017, asking autonomous institutions to generate funds internally to the extent of bearing at least 30 per cent of the additional cost for implementing the revised pay.

"The revised pay scales based on the 7th CPC strictly in accordance with Ministry of Finance...," the order issued by deputy secretary Malathi Narayanan said.

"The institutions which are in a position to fully meet the additional financial impact or the institutions which are not in a position to meet their 30 per cent or any lesser amount from their resources, the revised pay scales are allowed only after adjusting the amount so calculated. It is therefore mandatory that the internal resources are strictly and realistically kept in view for this purpose," the order said.

In effect, the order gives institutions a degree of flexibility but without exempting them completely from the responsibility of generating internal resources.

The IITs, NITs and the Indian Institutions of Science Education and Research have always depended on government grants to pay the salaries

IIT Roorkee continues to be recognized as one of the best technical institutions among older IITs

http://indiaeducationdiary.in/iit-roorkee-continues-recognized-one-best-technical-institutions-among-older-iits/

Roorkee: Indian Institute of Technology Roorkee witnessed a successful year with major accomplishments in academics, research as well as in fundamental sciences, engineering and management studies. Overall, it was a year of growth, exemplary recognition and outstanding research from both faculty and scholars in 2017. It has been a successful year with many firsts. Few major highlights from 2017 are:

Research:

IIT Roorkee has the rare distinction of having work carried out in its campus being published in Nature publishing journals and other international journals with high repute. The five top most journals that scientists from all over the world aspire for. research by Prof. Shailly Tomar, Department of Biotechnology developed medicine for Chikungunya; Prof. Ranjana Pathania, Department of Biotechnology developed path-breaking technique to help reverse drug resistance; Prof. K.L. Yadav, Department of Physics to develop a low- cost method of Osteoarthritis; Prof. Davinder Kaur, Department of Physics developed breakthrough In Memory Device Technology; the Early Earthquake Warning system developed and installed by Prof. M. L. Sharma, Department of Earthquake Engineering; Prof. N.K. Padhy and Prof. E. Rajasekar from Department of Electrical and Architecture respectively for smart grid project; Morphological Study of Ganga, Sharda and Rapti Rivers by Prof. Z Ahmad from our Civil Engineering department, or the 'Low-cost Jamun Solar Cells' developed by Prof. Soumitra Satapathi's group in the Department of Physics are some of the outstanding work being undertaken by the researchers at the Institute to address critical problems of the society.

Awards and Achievements:

In the past year, the Institute witnessed many student and faculty achievements. Prof. G.D. Ransinchung R.N., Mr. Surender Singh (Research Scholar), Prof. Praveen Kumar and Prof. Manoranjan Parida received IRC National Award on Road Research; Prof. Kaustav Chatterjee, Department of Civil Engineering was selected for the John Carter Award 2017 for his outstanding research potential in Geomechanics. Sidharth Arora, PhD Scholar in the Department of Biotechnology for being awarded the Biotechnology Ignition Grant (BIG) by BIRAC for his project on production of thermo-tolerant and acid-stable Phytase in a novel solid-state fermentation (SSF) bioreactor. A team of students Ekdeep Lubana, Anisha Godha, Ankit Bagaria and Utkarsh Saxena won the First prize of 25,000 Euro at the Ericsson Innovation Awards 2017, in a global competition at Nobel Museum in Stockholm, Sweden. The IITR team developed an app SNAP which uses a precision agriculture technology based on principles of hyper-spectral imaging of crop leaves to determine the optimum fertilizer inputs for the crop. Also, Mr. Raja Jain, 3rd year student, Department of Biotechnology and Ms. Nimisha Gupta, 4th year student, Department of Chemical Engineering, IIT Roorkee, have Developed EvaCool, a Low-Cost Evaporative Air Cooling Solution and emerged as the winners in the finals of Go Green in the City 2017. An IIT Roorkee team consists of Mr. Rohit Joshi and Mr. Renju K Kokkattu was selected as the winners of B-Plan Competition of Droom's merchandise. Additionally, the IIT Roorkee PhD student Mr. Repaul Kanji won France-India 24H Chrono Entrepreneurship Challenge.

International and National Major Research/Consultancy Sponsored Projects:

IIT Roorkee was part of major international and national projects carried out this year. The Institute partnered with organisations and other institutes from Russia, France, Belarus, UK, Canada, Mexico, Germany and Korea for international projects. The number of major sponsored or consultancy projects with funding of more than Rs. 50 lakhs are 38.

Placements:

The Indian Institute of Technology Roorkee witnessed one of the best placement season this year with over 843 offers handed out to students in first phase of placements. A total of 205 companies visited the campus for recruiting students.13 International offers were handed out to students by Microsoft, Webstaff Co. Ltd. and Mercari. 5 PSU companies ONGC, ISRO, IOCL, C-DOT and UIAI participated in the placements. 37 start-up companies offered jobs to the students. 824 Under graduate and 502 Post Graduate students had registered for placements this year, out of which the offers to Under Graduate students were offered 630 jobs and Post Graduate students were offered 212 in the first phase.

Convocation:

IIT Roorkee celebrated its 17th Convocation on 23rd and 24th September 2017.The Convocation ceremony was organized for two days and 2153 degrees were awarded to students. Key highlights of Achievements this year at IIT Roorkee:

· Key research from the Institute published in Nature publishing group – the three top journals for scientific research

· Various faculty members research was major highlights in media

· Prof. Kaustav Chatterjee, Department of Civil Engineering was selected for the John Carter Award 2017 for his outstanding research potential in Geomechanics

· Sidharth Arora, PhD Scholar in the Department of Biotechnology for being awarded the Biotechnology Ignition Grant (BIG) by BIRAC

· A team of students Ekdeep Lubana, Anisha Godha, Ankit Bagaria and Utkarsh Saxena won the First prize of 25,000 Euro at the Ericsson Innovation Awards 2017

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· Mr. Raja Jain, and Ms. Nimisha Gupta Developed EvaCool, a Low-Cost Evaporative Air Cooling Solution.

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· IIT Roorkee PhD student Mr. Repaul Kanji won France-India 24H Chrono Entrepreneurship Challenge.

Exhibitions of Techfest, IIT Bombay to be inaugurated by Shri. Manohar Parrikar

http://indiaeducationdiary.in/exhibitions-techfest-iit-bombay-inaugurated-shri-manohar-parrikar/

Mumbai: Exhibitions at Techfest, IIT Bombay have historically been one of the major attractions of this three-day festival. They compile, showcase and hence educate the commoners about the plethora of latest scientific and technological advancements from all across the globe. In addition, the platform provided by exhibitions is not only for the tech enthusiasts and knowledge seekers to grasp an overview of showcased breakthroughs first-hand from the makers but also for the proud developers to share their learning and achievements with a largely avid crowd.
The exhibitions arena will be inaugurated by Shri. Manohar Parrikar at 10 AM on December 29, 2017 followed by his keynote at the Leadership Summit.

Some of the highlights from the exhibitions scheduled for Techfest 2017 are as follows:
Synergy Moon & Space Kidz India (Lightest ever satellite to be launched in space)
• Team Synergy Moon is a group of varied diversity, depicted by representation from 15 countries
• Along with Space Kidz India, it will develop the communications, camera and control systems for the vehicle, which will participate in Google Lunar Xprize for a prize worth USD 20,000,000.
• This will be the lightest vehicle to land on moon, if successful.
• Space Kidz India is the only organization to represent the country at the "London Olympics, 2012"
Hypervsn™, Kino-Mo (UK) (Best hologram technology in the world to be showcased in India for the first time)
• It is an exhilarating visual spectacle of 3D images with holographic effect that makes the audience fall for the illusion of objects floating in mid-air, something that 99.9% of the visitors of Techfest will

experience for the first time.
• Kino-Mo has been duly awarded for its feats by entering the Top 3 British Innovations of 2014. It was named among the world's 10 Most Impressive Technologies by Mashable and USA Today.
Nao robot, Softbank Robotics (Japan) (a robot that can learn a lot of skills)
• Nao is a humanoid robot aimed towards education, enjoyment and elderly help.
• It is a highly customizable robot, which can be taught appropriate skills to carry out various tasks, imbedded with desired qualities for the required behavior.
• It accomplishes a varied spectrum of tasks like supporting autistic children to acting as a receptionist in a theme park.

Moon Rover, Team Puli, Hungary (rover to be launched in space)
• It is a dedicated team of young professionals who have made gritty and repeated attempts at making prototypes of Moon Rover
• It is currently participating in the Moon Village initiative of the European Space Agency apart from working with Astrobotic Inc. to develop their final Moon Rover model which is to be launched in space on Atlas 5 rocket of United Launch Alliance.

Fable Robot, Denmark (endless possibilities of designs and multitude of functions)
• The Fable system is a tailor-made medium to catch the imagination of students.
• It can easily be programmed to get desired behavior and can be linked to external devices.
• The modular geometry of the robot which allows joining different blocks one by one thus providing unprecedented freedom in terms of physical design and creativity.
Puzzlebox Orbit, USA (mind-waves controlled)
• The Puzzlebox Orbit is a brain-controlled helicopter
• One can steer the Orbit by concentrating and clearing their mind.