# Newspaper Clips March 10-16, 2018

## March 16

# SDMC TO WORK WITH IIT-DELHI EXPERT TO STABILISE OKHLA LANDFILL

http://www.dailypioneer.com/city/sdmc-to-work-with-iit-delhi--expert-to-stabilise-okhla-landfill.html

The South Delhi Municipal Corporation (SDMC) will work with an expert from IIT-Delhi to stabilise the Okhla landfill site that has reached a staggering height of 160 feet, a senior civic official said on Thursday. The massive dump in south Delhi was commissioned in 1996.

"We have partnered with an expert from IIT-Delhi, who will work with us (SDMC) on stabilising the slope of the massive landfill site," the official said during a talk on urban solid waste management, hosted as part of the IIC talk series. "In south Delhi, 3,500 MT of waste is generated daily. And, 56 per cent of the solid waste is processed. The Okhla site has not only become an eyesore but, many of the grabage truck drivers have lost lives, over the last few years," he said. He said, the SDMC is coming up with another landfill site nearby, at a plot of about 50 acres."Out of total land, 15 acres would have a waste-to-energy plant and the rest 35 acres would have an engineered landfill site," he said.

Incidentally, the East Delhi Municipal Corporation (EDMC) had also roped in experts from IIT-Delhi last year to avoid a rerun of the Ghazipur landfill collapse and to work on measures to stabilise the dump site.

In September, two persons were killed, prompting the city's Lt Governor to stop the dumping of waste on the site.

The Ghazipur landfill came into existence in 1984 and is spread over 29 acres. It reached its saturation years ago.

Sameer Sharma, a top official in the Ministry of Urban Affairs said, "One cannot think of smart cities without proper waste management. Smart cities are not just about high-speed network and Wi-Fi."

Chitra Mukherjee of Chintan, an Indian NGO, which works with wastepickers and other recyclers, highlighted the health risks and stigmatisation faced by people working at the lowest rung in the "informal wate management sector".

# Extend research from labs to the land: Modi at 105th Indian Science Congress

http://www.downtoearth.org.in/news/extend-research-from-labs-to-the-land-modi-at-105th-indian-science-congress-59933

Modi said that it is time for India to reclaim its rightful place among frontline nations in science



Prime Minister urged the scientists to develop a mechanism for interaction with school children.

"The time is ripe to redefine 'R&D' as 'research' for the 'development' of the nation," says Prime Minister Narendra Modi today while inaugurating the 105th Indian Science Congress at Manipur University. 'Reaching the Unreached through Science and Technology' is the focal theme this year.

Speaking on the occasion, Prime Minister Modi said that hosting Indian Science Congress in North East second time over a century is a testimony to the resurgent spirit of the North East. Imphal becomes the second city in the North East to host such a prestigious event after Shillong in 2009.

Science, according to him, is a means to a far greater end; of making a difference in the lives of others, of furthering human progress and welfare.

He informed the audience that 'Ethno-Medicinal Research Centre' has been set up in Manipur to undertake research on the wild herbs found in the North-East region, which have unique medicinal and aromatic properties. He also referred to the State Climate Change Centres set up in seven northeastern states. "Our scientific achievements need to be communicated to society. This will help inculcate scientific temper among youth. We have to throw open our institutions and laboratories to our children," he says.

Urging the scientists to develop a mechanism for interaction with school children, he appealed to all the scientists participating in the congress to spend 100 hours every year with 100 students of class X, XI and XII to nurture young scientists.

"We are committed to increasing the share of non-fossil fuel-based capacity in the electricity mix above 40 per cent by 2030," says the Prime Minister. "India is a leader in the multi-country Solar Alliance and Mission Innovation. These groupings are providing a thrust to R&D for clean energy," adds Modi.

To help address brain drain from the country, a 'Prime Minister's Research Fellows' scheme has been approved, under which, bright minds from the best institutions in the country like IISc, IIT, NIT, IISER & IIIT will be offered direct admission in Ph.D in IIT & IISc, he adds.

Stating that India has a rich tradition and a long history of both discovery and use of science and technology, he says, "It is time to reclaim our rightful place among the frontline nations in this field. I call upon the scientific community to extend its research from the labs to the land."

In his 30-minute speech, Prime Minister also informed the gathering that Manipur will benefit from the newly amended National Bamboo Mission. In his speech, Manipur Chief Minister N Biren Singh said that hosting such a scientific extravaganza in the small state will give "enriching knowledge and experience to the students, scholars and particularly, the people of Manipur".

Expressing that this event will be a game changer for all of us, he also urged the students and scientists of the region to acquire the spirit of scientific enquiry and scientific temper and to think critically out of the box for a better society.

The inauguration function was also attended by Manipur Governor Dr Najma Heptulla and Union Minister of Science & Technology Harsh Vardhan, among others.

# IIT Roorkee Research Team Working On A Drug to Combat Chikungunya https://sciencetrends.com/iit-roorkee-research-team-working-on-a-drug-to-combat-chikungunya/



A research team at the Indian Institute of Technology Roorkee, India has discovered the antiviral prospective of piperazine molecule and determined the mechanism to combat the deadly chikungunya, an infectious viral disease, which is transmitted to humans by mosquitoes infected with the virus.

The research, published in Antiviral Research, from Elsevier Publishing, talks about the potential of piperazine as a pharmacotherapeutic agent and how binding of piperazine molecules to the hydrophobic pocket of the capsid protein, present in the Chikungunya virus, offers a new perspective for therapeutic intervention, thereby inhibiting the spread of the virus. This work was conducted by Aggarwal M, Kaur R, Saha A, Mudgal R, Yadav R, Dash PK, Parida M, Kumar P, Tomar S.

Piperazine is an old drug used in deworming treatments for roundworm and pinworm. Researchers, using their expertise in the field of virology and structure biology, discovered the antiviral potential of piperazine and elucidated the mechanism of inhibition of chikungunya virus using macromolecular crystallography. Using an X-ray crystallographic technique, in combination with computational biology and fluorescence techniques, the researchers found that piperazine binds to the hydrophobic pocket present on the surface of alphavirus capsid protein. This pocket plays a vital

role in replication of the virus and its spread inside a host. The inhibition of this pocket prevents spread of the virus and can help in the development of effective anti-virals against chikungunya.

Talking about the research, Dr. Shailly Tomar from the Department of Biotechnology at IIT Roorkee, India said, "Chikungunya is becoming a major public health concern, with many people being affected by it year on year. Currently, no vaccine or antiviral drug is available in the market for the treatment of chikungunya disease. The treatment focuses on alleviating the symptoms associated with the virus infection, not fighting the virus. Developing a new antiviral drug molecule can take over a decade and that is the reason why this research team is looking at repositioning existing, approved drugs and testing these to find if these might hamper or destroy vector-borne viral diseases like chikungunya."

"Our research study has shown that piperazine, a deworming drug existing in the market, is successful in restricting the spread and replication of the chikungunya virus in a lab setting. The antiviral potential of piperazine molecule and its derivatives against chikungunya is currently being tested on mice and we hope to take it to clinical trials.", said Dr. Tomar.

Using macromolecular X-ray crystallography facility at Institute Instrumentation Center (IIC) at IIT Roorkee, the detail molecular interactions of piperazine with capsid protein were exposed at the atomic level in this study. These atomic details can be further utilized for structure-based rational drug design to discover derivative molecules of piperazine for making it more effective and potent in fighting the chikungunya virus.

## IIT-M ties up with Australian varsity for research in metallurgy

http://www.thehindu.com/news/cities/chennai/iit-m-ties-up-with-australian-varsity-for-research-in-metallurgy/article23247630.ece

Culmination of work by several people, says Australian Minister

The Indian Institute of Technology - Madras has tied up with the Deakin University of Australia to conduct research in metallurgy and manufacturing materials.

The Centre of Excellence in advanced materials and manufacturing was officially inaugurated on Wednesday by Philip Dalidakis, Minister for Trade and Innovation, Victoria. The partnership with Deakin University happened because of the vision of a group of people. "In 1994, Deakin University reached out to the Indian market. It was the first Australian university to come to India. Today is the culmination of a lot of work by a lot of people," Mr. Dalidakis said.

The association with Deakin University was the oldest and most developed one, said IIT-M director Bhaskar Ramamurthi. The institute was keen that the centre take forward the relationship to research and development by including the industry and introduce "some really good innovation" that would reach the public.

The centre was housed in the research park "to constantly remind ourselves that the main goal is to achieve the outward thrust toward industry in the form of product and innovation start up," Mr. Ramamurthi said.

B.S. Murty, professor at the Department of Metallurgical and Materials Engineering at the institute, said the aim was not only to collaborate and have a tripartite programme and work with industry, but also to conduct joint doctoral and masters programmes.

Youngsters would be trained in materials manufacturing and metallurgy and the centre would also sponsor internships. Already, an alumna had offered to sponsor 10 students for internship at the IIT-M, especially from smaller universities in and around the city, he said.

## March 15

# IIT-R researchers decipher antibacterial mechanism of naturally occurring chemical

http://nagalandpost.com/ChannelNews/National/NationalNews.aspx?news=TkVXUzEwMDEyOTc4Nw%3D%3D

# Low High Roasted Coffee Bean Coffee Bean

# **Chlorogenic Acid Levels**

Researchers at the Indian Institute of Technology (IIT), Roorkee, have found out the mechanism that underlies anti-bacterial properties of a natural compound called ChlorogenicAcid which occurs in several plants including coffee.

They have shown that the compound binds itself to an enzyme called chlorismate mutase in bacteria, thereby inhibiting its growth and causing its eventual death.

The enzyme is in Shikimate pathway, which is one of the most essential metabolic pathways in any bacteria. It provides amino acids essential for survival of bacteria.

The shikimate pathway is present in microorganisms, plants, and apicomplexan parasites, but is absent in higher eukaryotes, which makes the enzymes of this pathway promising targets for the development of antibiotics, herbicides and pesticides.

Dr. Pravindra Kumar of the Department of Biotechnology at the Institute, while speaking to India Science Wire, said, "based on biochemical and structural findings, we have shown that chlorogenic acid, a structural analogue of chorismic acid, is an inhibitor of chorismate mutase. Biochemical and binding assays have shown the inhibitory activity of chlorogenic acid against chorismate mutase type II."

The researchers claim that molecular mechanism of antibacterial properties of chlorogenic acid has been deciphered for the first time.

"The overall structural blueprints obtained from our work can be exploited to produce a more efficient new class of antibiotics.

The atomic resolution structural snapshot of the Chlorogenic Acid binding with Chlorismate Mutase enzyme provides information, which can be used to tweak the chemical structure of Chlorogenic Acid to make a more potent inhibitor", Dr. Pravindra Kumar added.

The first results of the study were published in Scientific Reports in 2017.

The research team included Dr. Shivendra Pratap, Dr. Aditya Dev, Dr Vijay Kumar, Dr. Ravi Yadav, Dr. Manju Narwal and Dr. Shaily Tomar.

# March 14

# Indian Govt Plans to Ease Visa Norms for Foreign Faculty for IITs <a href="https://littleindia.com/indian-govt-plans-to-ease-visa-norms-for-foreign-faculty-for-iits/">https://littleindia.com/indian-govt-plans-to-ease-visa-norms-for-foreign-faculty-for-iits/</a>

The IITs are working hard to hire foreign faculty since it would help in positioning them higher in world university rankings.

The Indian human resource development (HRD) ministry is working on easing visa procedures for foreign faculty members in coordination with the ministries of home and external affairs so that they can teach at the various Indian Institute of Technology (IIT).

Last week, the IIT directors met President Ram Nath Kovind over the issue, since he holds the position of Visitor for the IITs in the country, the Economic Times reported. HRD Minister Prakash Javadekar was present at the meeting during which directors of various IITs shared their concerns over clearances required for visas for work and for attending scientific conferences at the institutes.

"The delay in getting the visas acts as an irritant for prospective faculty members," an IIT director was quoted as saying by the Economic Times. Many of the foreign faculty are hired to work for government-funded colleges for only three months. Though the IITs have been thinking of filling 20-30 per cent faculty positions with foreign teachers, the visa procedure has been a deterrent.

Javadekar is going to be working on hiring more OCI individuals. While there has been opposition from the government in hiring them for government jobs, the IITs have said that they are autonomous.

The IITs are working hard to hire foreign faculty since it would put them at a better position in world university rankings, thereby helping them go international. Interaction with foreign faculty with PhDs has helped students get more research focused. The IITs can hire faculty with foreign passports, including Overseas Citizens of India (OCI).

The premier education institutes have been fighting hard since the government of India declared that they will be enabling 10 public and 10 private Institutions of Eminence (IOE) in an effort to make them reach among the top 100 educational institutions in the world. The government has received applications from 100 universities. .

The selected 20 institutions will be named as "Institutions of Eminence," and will have greater autonomy to admit foreign students up to 30 per cent of admitted students; to recruit foreign faculty up to 25 per cent of faculty strength; to offer online courses up to 20 per cent of its programs; and to enter into academic collaboration with institutions ranked among the top 500 in the world without the permission of UGC. They will also be free to fix and charge fees from foreign students without restriction; and have flexibility of course structure in terms of number of credit hours and years to take a degree, and fixing of curriculum and syllabus, the HRD ministry had stated in December 2017.

The government is also mulling over easing visa norms for foreign students, who take up only 1 per cent IIT seats currently.

### **IITGN** becomes 1st **IIT** to offer PhD to B.Tech grads

http://www.dnaindia.com/ahmedabad/report-iitgn-becomes-1st-iit-to-offer-phd-to-btech-grads-2593686

To overcome the dearth of good PhD scholars, the Indian Institute of Technology, Gandhinagar becomes first such institute in the country to offer a PhD to a Bachelor of Technology graduate.

To prevent B.Tech graduates from opting for jobs or going for M.Tech, IITGN yet another time pioneers in taking this bold step.

Confirming the same, Dr Sudhir Jain, Director, IITGN said, "We did not get good PhD students as after B.Tech, most would either get lured to join big companies and the rest would join M.Tech. Of those who join M.Tech, the ratio of them opting for further studies becomes minimal due to various reasons. This was the main reason we thought to tap good B.Tech students for our PhD programme before they sit for an interview and give them option to explore the world of PhD with us."

B.Tech students from NITs and other select colleges and are among the top five rank holders in the department at the end of their third year will be able to apply for PhD at IITGN.

We recognize the importance of creating opportunities for aspiring young learners to gain entry into the exciting arena of scientific research. The start early PhD fellowship is conceived to meet this need. The full-time residential fellowship is designed to enable budding engineers to gain early entry into the PhD programmes at IITGN. The aim is to put promising young undergraduate students from diverse disciplines on the fast-track mode of cutting-edge technological research in order to prepare them to participate in the process of nation-building, professor Jain added.

#### **REQUIREMENTS**

B.Tech students will require CPI/CGPA of not less than 6.0 at end of the third year

No GATE qualification requirement

For fellowship, with GATE score, Rs 35,000 per month will be given, without GATE score, Rs 25000 per month.

# IIT Madras deploys CSR funding to great effect in societal projects, R&D and incubators

http://indiaeducationdiary.in/iit-madras-deploys-csr-funding-great-effect-societal-projects-rd-incubators/

Chennai: Indian Institute of Technology Madras faculty are researching transformational products and services that can serve humanity in ways not even thought of as yet. However, the translation from laboratory to actualization is frequently a difficult one.

IIT Madras invites the corporate sector to partner and contribute to the Institute start-up vision for the nation through CSR before the 31st March 2018 deadline for corporates under Government Regulations.

Speaking on the importance of CSR funding for Research, Prof. R. Nagarajan, Dean (International and Alumni Relations), IIT Madras, said, "Laboratory solutions need to be proven on the ground. Every solution for a critical need — be it in water, in energy, in sanitation, in education, in land use — needs to be researched and developed in an academic setting, but eventually implemented in needful communities."

"It is in this latter phase that IIT Madras sees a huge need and opportunity for CSR funding," added Prof. Nagarajan.

Social entrepreneurship is another front where CSR funding can make a significant impact. While support from Government in sustaining this process is crucial, the role of the corporate sector cannot be overstated, and the Companies Act, 2013 provides an ideal route for the latter through the Corporate Social Responsibility (CSR) channel.

Business houses from different parts of the country have come forward as partners to support socially relevant projects at IIT Madras using their Corporate Social Responsibility (CSR) budget. IIT Madras has received support for its Incubators and also for faculty R & D projects with social impact.

The funding obtained through CSR in funnelled into socially relevant projects by IIT Madras faculty. **They're spread across seven sectors, namely** 

- Ø Agriculture and Farm Tech
- Ø Water technology
- Ø Education and Entrepreneurship
- Ø Energy
- Ø Health
- Ø Environment
- Ø Heritage

#### The projects taken up include

- · Rural electrification project using a Solar-DC technology of IIT Madras. This is a five year project being taken up at an estimated cost of Rs. 135 cr.
- · Sustainable water and energy management in agricultural activities and Bridging the Gaps in Supply Chain and Marketing of Farmers/Producer Organisations
- · Urban Lake Integration for Water Utilization and Recreation,
- · An Innovative 'C-4' Model for High School Student

Mr. Joseph Thomas, Vice President (Development, Development Office), IIT Madras Alumni Charitable Trust, International and Alumni Relations office, said, "We still need industry to understand that supporting a Technology and Business Incubator promotes innovation and job creation."

The Bangalore-based Titan Company Limited, AMEX, Goldman Sachs, Chennai-headquartered Cholamandalam Investments and Finance Company Limited, and others have both provided support to the IIT Madras incubators that are recognised by Government of India.

Indian Additives Limited, Chennai, has supported water and waste management work in a nearby village a few kilometres away from their base of operation. This 3 year project was carried out by a team of Professors and students from IIT Madras.

Pune-based Aricent have partnered with IIT Madras National Programme on Technology Enhanced Learning (NPTEL). The CSR support has been given to create free online course material, enable transcription into vernacular of some courses and support examination fees of deserving candidates. Around 56,000 students have benefited from the scholarship. Other companies are now coming forward to support NPTEL.

The TTK Group having its Corporate Office in Bangalore has supported the "TTK Center for Rehabilitation Research and Device Development (R2D2)". The Centre conducts research related to human movement, the influence of orthotic and prosthetic devices on human movement, and the design and development of mechanisms, products and assistive devices for people with impairments. Additional support for this group has been provided by the Wellcome Trust for the specific development of a standing wheelchair.

## **IIEST** gets its first full-time director

https://timesofindia.indiatimes.com/city/kolkata/iiest-gets-its-first-full-time-director/articleshow/63293317.cms

KOLKATA: Partha Chakrabortyfrom the electronics department at IITBHU was on Tuesday appointed the first full-time director at IIEST, Shibpur. He will succeed Ajay Ray, who became the vice-chancellor in 2009, when the institute was still Bengal Engineering and Science University (Besu), and later, the director in March 2014, when the technology college was upgraded to Central-run IIEST.

The change in guard took place a day after Ray wrote to the ministry of human resources development, stating that his poor health would prevent him from taking on further responsibility. The ministry had kept Ray among the six shortlisted names for the director's post but Chakraborty was finally selected.

Chakraborty confirmed over phone that he had received his appointment letter but added that he would first have to complete his teaching assignments and academic commitments at BHU before taking over the charge of the Shibpur campus. "I have received my appointment letter for the position of the IIEST, Shibpur director and am extremely happy. But I don't think I will be able to take charge before the end of April, by which time I will try to wrap up the ongoing semester and also some academic commitments I have here. Even at Shibpur, I would like to teach and be part of academics over and above my administrative responsibilities," he said.

From Kolkata, Chakraborty completed a large part of his education here. Earlier, he held another key administrative position when he was the director of Motilal Nehru National Institute of Technology (MNNIT), Allahabad. As an electronics engineering faculty member at IIT BHU, Chakrabarti contributed significantly to experimental and theoretical research in the areas of microelectronics and photonics. He was the coordinator of the Centre for Research in Microelectronics and the founder-coordinator of Micro-Electro-Mechanical Systems (MEMS) Centre, both at BHU. His research group has strong collaborations with the Optoelectronics Researchgroup, Lancaster University, Lancaster, UK and the Nanomaterials research group, University of New South Wales, Australia.

Citing his reason for not willing to continue with the Shibpur position, Chakraborty's predecessor Ray stated that the nine long years of his tenure had taken a toll on his health. The campus had been on the boil with teachers making several demands, many of which Ray could not fulfil because of his "caretaker" status.

## IIT professor joins Unicorn India Ventures as adviser

https://www.biospectrumindia.com/news/66/10589/iit-professor-joins-unicorn-india-ventures-as-adviser.html

Mukherji will serve on the firm's Investment Committee, which is responsible for taking funding decisions.



Professor Soumyo Mukherji, a senior faculty member at Indian Institute of Technology-Bombay (IIT-B), has joined Mumbai-based VC firm Unicorn India Ventures as an adviser.

Mukherji is a chair professor in the department of biosciences and bioengineering at IIT-B, and will serve on the firm's Investment Committee, which is responsible for taking funding decisions.

Mukherji's primary research areas include biosensors and bioinstrumentation for wide-scale deployment.

Unicorn India focuses on investments in deep domain and hi-tech businesses and has backed startups exploring Internet of Things (IoT), 3D and robotics technology.

Mukherji will be involved in decision-making on investments in sectors such as electronic, system design and manufacturing (ESDM), robotics, cybersecurity, Internet of Things (IoT), nanotechnology and medical devices.

He will also mentor companies in Unicorn India's existing portfolio with regard to research and development of products under development.

# How IIT Hyderabad is playing a big role in a Modi government's educational project

http://www.financialexpress.com/education-2/how-iit-hyderabad-is-playing-a-big-role-in-a-modigovernments-educational-project/1098683/

The Teaching Learning Centra at IITH was started in 2015 under the Pandit Madan Mohan Malviya National Mission on Teachers and Training (PMMMNMTT).



Indian Institute of Technology (IIT) Hyderabad's Teaching Learning Centre is training teachers from different colleges and institutions on teaching strategies to professionals of the 21st century.

Indian Institute of Technology (IIT) Hyderabad's Teaching Learning Centre is training teachers from different colleges and institutions on teaching strategies to professionals of the 21st century. The initiative is part of a project of Ministry of Human Resource Development. The tech-university has already trained over 1,500 teachers across different engineering disciplines in the past few years. It includes subject-specific training as well as general induction programs.

Dr Mudrika Khandelwal, Assistant Professor, Department of Materials Science and Metallurgical Engineering, IIT Hyderabad while speaking about the training program said: "I believe that if the 21st-century learners are different and the expectations from them by employers are different, why should the teaching and curriculum remain the same? Educators need to be the bridge between the expectations and the traits of the students."

The Teaching Learning Centra at IITH was started in 2015 under the Pandit Madan Mohan Malviya National Mission on Teachers and Training (PMMMNMTT). It was established to promote discipline-specific curricula, learning materials, pedagogy which will be useful to teachers at the graduate and post-graduate level.

Dr Mudrika Khandelwal while talking about the induction of new faculty said: "We have already inducted over 100 faculty members into Phase 1 of the induction program. We are now organizing subsequent sessions on various topics over the next three months to complete the training. A workshop on pedagogic techniques and teaching and learning methods was organized on 27th and 28th February 2018 and was followed by one on assessment and evaluation, university structure on 3rd and 4th March 2018".

The Teaching-learning centre at IIT Hyderabad is also collaborating with TASK (Telangana Academy for Skill and Knowledge) in conducting teacher effectiveness workshops for women teachers from colleges in Telangana. Prof. Shubha Ranganathan, Prof. Haripriya Narasimhan and Prof. MP. Ganesh, along with Prof. Mudrika Khandelwal from IIT Hyderabad are active members of this initiative.

# JEE Main 2016 topper Deepanshu Jindal shares last few days preparation strategy

http://indianexpress.com/article/education/jee-main-admit-card-2018-jee-main-2016-topper-deepanshu-jindal-shares-his-last-few-days-preparation-strategy-5097279/

# JEE topper tells us the importance of mock tests, practising OMR sheets filling and how it is natural to feel stressed during this phase

Life has changed for JEE Main 2016 topper Deepanshu Jindal who scored 321 out of 360 in the engineering entrance exam. After cracking JEE Advanced, he got admission in IIT Delhi in his favourite course B Tech in computer science. The robotics club and other extra-curricular activities are keeping him busy and he is yet to decide whether he'll take up some job or would go for higher studies. He tells indianexpress.com, how he prepared for the JEE Main, what he did during the last few days and why it is important to love what you read.

#### Why do you think IITs remain top choice among engineering aspirants?

IIT edge over other colleges due to their learning environment that grooms you holistically. The students have freedom to do what they wish to during spare time and the hostel culture provides ample opportunities for it, yet when it comes to academics IIT Delhi is known for its disciplinary approach. Also the learning here is more concept oriented with emphasis on practical applications.

#### When did you started preparing for JEE Main?

When I was in class 11, I joined coaching. So my time was divided between school and tuitions. However, I used to devote atleast an hour or two to self-study. No matter how much is being taught to you, until you revise it, you can never learn. The coaching classes gave a structured way to my preparation as also inculcated discipline in me.

#### What tips would you like to give to JEE aspirants?

JEE Main tests your pressure handling skills and how quick you can think (atleast for ones who wish to attempt the whole paper). I would suggest aspirants to go through as many mock tests as they can and keep a count of time they take to solve different sections.

Also OMR filling is a skill in the test as many students tend to make mistake in that during exam. So it is recommended if they can also practice OMR filling.

#### Were you also simultaneously preparing for JEE Advanced?

I never prepared separately for JEE Mains and Advanced. From the beginning, my emphasis was towards understanding the concepts and practising as many problems as I could. In fact, during the initial phase of preparation, I mostly focussed on subjective questions to clear the concepts with heavy reading of standard reference books and NCERT. Therefore, I was prepared for boards as well as competitive exams and didn't need to study separately.

#### Did you feel nervous during the last few days?

The weeks just before JEE were stressful and I hardly got time to unwind. When I felt anxious, I tried meditating or talking to a few of my close friends or just going for a short jog. It is natural to be a bit stressed at that time but it is good if you can talk about it to your parents and friends.

#### How active were you in social media?

I was pretty active on social media in class 11 but had to cut down upon it during class 12. A fair bit of activity is good for unwinding but one should be cautious of spending too much time on it.

#### What are you plans after passing IIT-D?

I have not decided yet but I wish to pursue a career in technical field only. Maybe I will pursue PhD or in another five-six years, run my own start-up company.

## March 13

## **IIT-JEE (Advanced) likely to follow GATE format**

https://timesofindia.indiatimes.com/home/education/news/iit-jee-adv-likely-to-follow-gate-format/articleshow/63278004.cms



KOLKATA: The rules for the IIT-JEE (Advanced) 2018 examination, to be held on May 20, have been framed based on the Graduate Aptitude Test in Engineering (GATE).

The test will be computer based for the first time. According to the initial proposal, candidates may be permitted to occupy their seats 30-40 minutes before the start of the examination, and can log in and start reading the instructions 20 minutes before beginning the test.

Candidates, however, will not be allowed to enter the hall after 9:30 am for the morning session and after 2:30 pm for the afternoon session. Neither can they leave the hall before the test ends. This was decided at the meeting of the IITJEE sub-committee.

Among other proposals forwarded to the Joint Admission Board are providing scribble pads for rough work, which will have to be submitted afterwards. "Candidates will not be allowed to tamper with the computer system provided to them or even the wiring. If found violating the rule, the student's candidature will be cancelled," said a source.

"A virtual calculator will be available on the computer screen during the examination. Students can only use it during the examination. This time the candidates have been barred from using their own calculators, mobile devices, watches or even electronic devices," added the source.

## IITs to have pool of foreign faculty

#### http://www.dnaindia.com/education/report-iits-to-have-pool-of-foreign-faculty-2593274

In order to address the shortage of faculty, the Indian Institutes of Technology (IITs) are going to create a pan-IIT faculty pool of foreign faculty members and best PhD scholars in each institute who can teach across all institutes.

Inviting renowned alumni to teach in these institutions for a single semester is also a part of the plan to boost faculty strength. They will teach under the "Teach-a-Semester" plan of IITs.

IITs, like many other centrally funded technical institutes, have been struggling with the issue of faculty shortage for a long time. Vacancy in some IITs are as high as more than 50%, sources pointed out.

Steps to tackle the faculty shortage in IITs was discussed in the meeting of IITs with President, the Visitor of these institutes, recently. As per the minutes of the meeting, "In order to address the shortage of faculty in all these premier educational institutions, IITs unanimously agreed that to attract and recruit quality faculty from abroad, a Pan-IIT faculty pool may be created."

IITs will also work towards making necessary amendments in the statutes after following due process for faculty recruitment.

"For Indian faculty members, each institute will identify the best PhD scholars and share their details with other Institutes for the purpose of being taken as faculty. In addition to this, the details of all those prospective faculty who were interviewed but could not be selected may be shared with other Institutes," mentioned the minutes, accessed by DNA.

A parliamentary panel on Ministry of Human Resource Development, in a report submitted in Parliament in November 2016, had said among the older IITs, Bombay had a vacancy of 38.66%; Kharagpur 42.42%; Roorkee 41.88%; Delhi 33.11%; Guwahati 26.50% and IIT-BHU 53%.

The central-government funded technical institutes will also work towards getting more foreign students. As reported by DNA earlier, IITs are going to have a 20 percent supernumerary quota for foreign students in each of the institutes. They will also be taking up the issue of foreign faculty and students with Ministry of Home Affairs and Ministry of External Affairs, in order to simplify processes for hassle-free visas.

#### **LACK OF STAFF**

Inviting renowned alumni to teach in these institutions for a single semester is also a part of the plan to boost faculty strength. They will teach under the "Teach-a-Semester" plan of IITs.

Steps to tackle the faculty shortage in IITs was discussed in the meeting of IITs with President, the Visitor of these institutes.

IITs will also work towards making necessary amendments in the statutes.

## HRD appoints directors of IIT Kanpur, Dhanbad

http://indianexpress.com/article/india/hrd-appoints-directors-of-iit-kanpur-dhanbad-5095652/

Under the new policy, the director's post is advertised as vacant and the incumbent, if interested in another term, will have to compete with other candidates for the job, the HRD Ministry informed the Lok Sabha.



The HRD Ministry on Monday appointed Abhay Karandikar and Rajeev Shekhar as the new directors of IIT-Kanpur and IIT-Dhanbad, respectively. While Karandikar is a professor of electrical engineering at IIT Bombay and also the institute's Dean (Faculty Affairs), Shekhar teaches materials science and engineering at IIT Kanpur. Karandikar succeeds Indranil Manna, while Shekhar succeeds DC Panigrahi.

These are the first appointments after the government tweaked the selection procedure for IIT directors last year.

As first reported by The Indian Express on September 7 last year, HRD Minister Prakash Javadekar scrapped the policy of allowing an incumbent IIT director to continue for a second term based on his performance evaluation by a committee. This was done four years after the previous UPA dispensation gave serving directors the opportunity for a second term without being pitted against competitors.

Under the new policy, the director's post is advertised as vacant and the incumbent, if interested in another term, will have to compete with other candidates for the job, the HRD Ministry informed the Lok Sabha this month in reply to a question. The change in procedure was passed after Panigrahi and Manna expressed interest in a second term.

#### GATE 2018 FINAL ANSWER KEY RELEASING ON 14TH MARCH

HTTPS://NEWS.AGLASEM.COM/FINAL-ANSWER-KEY-OF-GATE-2018/

On the basis of the challenges submitted by the candidate, IIT Guwahati will publish a final answer key on March 14, 2018.



The IIT Guwahati is going to release the final answer key for GATE 2018 on March 14, 2018. The candidates were allowed to submit the objection(s) in the official answer key from February 21 to 23, 2018 onwards.

Now on the basis of the objections raised by the candidate, a final answer key will be published online at gate.iitg.ac.in. With the release of final answer key, you can not submit any further objections. The final answer key will form the basis of the GATE 2018 Result, which is scheduled to be announced on March 17, 2018.

Various PSUs accepts the score of GATE as one of their selection criteria. Some of the recruitments are underway at the moment while some are expected to start after the release of the GATE 2018 results.

The result will be published online and the candidates will be able to check their result by entering their Enrollment ID / Email ID and Password. The GATE scorecard will provide the details of the performance level of the candidate in a particular subject. The GATE 2018 score is valid for three years from the date of announcement of the results.

Upcoming Important Da	ites	
Display of Final Answer Keys on the website	Wednesday	14 <sup>th</sup> March 2018
Announcement of the Results in the Online Application Portal	Saturday	17 <sup>th</sup> March 2018
GATE ScoreCard available for download on GOAPS Portal	Tuesday	20 <sup>th</sup> March 2018

The scorecard for GATE 2018 will be available for download by online mode only. No candidate will receive it by any other mode. The candidates can download their score card between March 20 to May 31, 2018, from the GOAPS portal. However, to obtain the soft copy of the GATE score card after the last date, you must pay an amount of Rs. 500 for obtaining it before December 31, 2018.

Though the date for publishing the final answer key and result is specified, however, the time is not known. By observing the previous year trends it can be expected that GATE 2018 Final Answer Key and Score Card shall be available by 10:00 AM onwards.

To qualify GATE 2018, the candidates need to obtain marks equal to or more than the cut off marks. The cut off marks for GATE 2018 is not yet announced by IIT Guwahati, however, it is usually between 21 to 40. So for this year as well the candidates can expect the same.

Last year the cut off for CE, ME, stream in General category was 28.70, 25.8 for OBC and 19.10 for SC/ST/PH. For ME stream the cut off for General was 32.87, for OBC it was 29 and 21 for SC/ST/PH. In EE stream the cut off was 25.20 for General category, 25.20 in OBC and 16.70

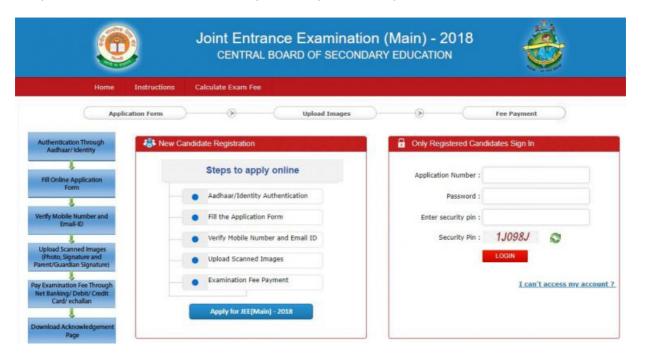
in SC/ST/PH. For EC and CS stream, the cut off in General, OBC, and SC/ST/PH category was 25.00, 22.50 and 16.60. For IN stream, 34.60 in Gen, 31.10 in OBC, 23.00 in SC/ST/PH. For CH stream, the cut off in Gen category was 44.30, 39.80 in OBC, and 29.50 in SC/ST/PH. Last but not the least, in BT stream, the cut off was 38.90 in Gen, 35.00 for OBC, and 25.90 for SC/ST/PH.

Graduate Aptitude Test in Engineering (GATE) is basically an examination which is taken by candidates seeking admission in master's program in various IITs as well as other technical institutions in the country. The score obtained by GATE is not only used for admission purpose but also for employment.

# JEE Main 2018 admit card released at jeemain.nic.in, here's how to download

http://indianexpress.com/article/education/cbse-jee-main-2018-admit-card-released-download-at-jeemain-nic-in/

JEE Main 2018 admit card: The pen-paper (offline) exam will be held on April 8, 2018 and the computer-based (online) exam will take place on April 15 and April 16, 2018.



JEE Main 2018 admit card is available for download at jeemain.nic.in

**JEE Main 2018 admit card:** The admit card for the Joint Entrance Examination (JEE) Main 2018 has been released by the Central Board of Secondary Education (CBSE) on the official website – jeemain.nic.in. All those candidates who had registered for the same can download their respective cards at the official website itself. The pen-paper (offline) exam will be held on April 8, 2018 and the computer-based (online) exam will take place on April 15 and April 16, 2018.

Clearing the JEE mains and advanced papers will make candidates eligible for admission to Bachelor of Technology (BTech), Bachelor of Engineering (BE) and Bachelor of Architecture (BArch) courses

at Indian Institutes of Technology (IIT), National Institutes of Technology (NITs) and Indian Institutes of Information Technology (IIITs) across India.

A score of at least 75 per cent in class 12 board exams or a place among the top 20 percentile of the Boards is required to be eligible for JEE main or advanced. For candidates of the SC and ST categories, this has been lowered to 65 per cent.

#### JEE Main admit card 2018, steps to download

- Step 1: Log on to the official website mentioned above
- Step 2: Click on 'Download admit card' link
- **Step 3:** In the provided fields enter your application number, password and security pin
- Step 4: Click on login
- **Step 5:** Your admit card will be displayed on the screen
- Step 6: Download the same and take a printout for future reference
- Read | JEE Main 2018: Steps to download admit card

The admit card contains important details like exam centre, time, name, date of birth, gender, state code of eligibility and category. In case of any discrepancy, communicate to JEE (Main) Secretariat/ CBSE immediately for necessary action. Students need reach the examination venue at least two-and-a-half hours before the start of the examination.

#### JEE Main 2018 exam pattern

Paper-1 of JEE Main 2018 will be held through online or offline mode. A candidate will opt for any of them. It will carry questions from chemistry, physics and mathematics subjects. A total 90 objective type questions will be asked carrying equal weightage for all subjects. Each correct question will carry 4 marks and 1 mark will be deducted for each incorrect response.

Paper 2 of JEE Main 2018 will be conducted for admission to undergraduate architecture courses and the test will be offline only. JEE Main Paper 2 consists of three parts which are mathematics, aptitude test and drawing test. It carries a total of 50 questions for aptitude test, 2 questions for drawing test and 30 questions from mathematics. The exam duration is three hours and the marking scheme is same as paper 1.

#### JEE Main answer keys

The answer keys and images of response sheets (OMR sheets) of the offline exam and answer keys of computer-based examination will be displayed on the website during April 24 - 27, 2018. The candidates, who are not satisfied with the captured response, may challenge by filling the online application form and paying a sum of Rs.1000/- per question The challenge of answer keys will also be accepted online only through the link available on the website till April 27 on payment of Rs.1000/- per question.

#### PM Modi calls upon IITs to devise low cost solar-powered kitchens

http://www.newindianexpress.com/nation/2018/mar/12/pm-modi-calls-upon-iits-to-devise-low-cost-solar-powered-kitchens-1786026.html



LUCKNOW: Calling upon Indian Institutes of Technology (IITs) to devise no-cost solar-powered kitchens for the burgeoning domestic market comprising 25 crore families, Prime Minister Narendra Modi lauded Indo-French initiative for the promotion of solar energy after inaugurating 100 MW solar power plant in

Mirzapur on Monday.

Referring to the initiative at a gathering of over 11,000 women at the Women Empowerment Ceremony in Varanasi later in the day, the PM said: "India and France are working together to utilize solar power

to meet the requirement of clean energy across the globe." The PM was in Varanasi, his parliamentary constituency, to host French President Emmanuel Macron on Monday.

He exhorted the IITians to focus on solar energy sector for innovations so as to cut down the expenditure on fuel for cooking food in over 25 crore kitchens of country. He added that country was taking big strides in that direction and more major projects in solar energy sectors were in pipeline.

Expressing his gratitude to the people of Varanasi for extending such impressive welcome to the foreign dignitary, the PM felt that the exuberance of the holy city would inspire each and every French to visit it after the grand reception given to President Macron.

He reiterated the need to keep the city clean as it was a land blessed with rich cultural heritage which inspires the people across globe to visit it at least once in their lifetime.

The PM dedicated seven projects and laid foundation of 19 more worth of Rs 719 crore for Varanasi after flagging off a new `Varanasi-Patna Janshatabdi Express train at Manduadih railway station. He assured that efforts for its modernization and expansion will continue for more employment generation.

On making river Ganga pollution free, the PM said that the projects concerned were in progress and they would start yielding results soon. He mentioned that construction of sewage treatment plants of

Rs 600 crores were already at the verge of completion in Varanasi.

Modi, who distributed keys of PM Gramin Awas Yojana, certificates and cheques of financial aides and assistance to women beneficiaries of different government schemes at this function, heaped praise

UP chief minister Yogi Adityanath for completing the housing projects bang on time. He also greeted

the CM for accelerating the pace of central government projects in state. He said that the outcome of investments attracted by Yogi government at recently held investors' summit would be evident in UP very soon as the work on defense corridor and other major announcements were set to take off soon.

## March 12

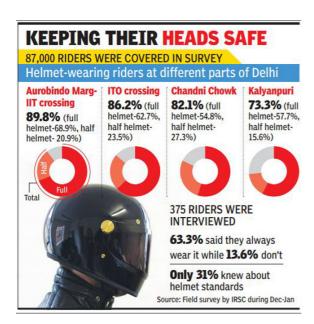
## 'Less than 50% of riders wear helmet properly'

https://timesofindia.indiatimes.com/city/delhi/less-than-50-of-riders-wear-helmet-properly/articleshow/63260869.cms



NEW DELHI: The national capital may have a better record of two-wheeler riders wearing helmets but a majority of them could end up with head injuries in case of accidents as they don't strap the headgear properly.

A survey conducted at four major traffic junctions in December-January found that more than three-fourths of two-wheeler riders used helmets and less than 50% of them tied the helmets properly.



The study was carried out by Indian Road Safety Campaign (IRSC), a students organisation of IIT-

Delhi, in association with Transportation Research and Injury Prevention Programme (TRIPP) of the institute. Video recording for 14 days at ITO crossing, Aurobindo Marg-IIT junction, Red Fort traffic intersection and a crossing in Kalyanpuri in East Delhi were studied. "Videography was done for nine hours every day at each location during the study period. Data on 87,000 two-wheelers was analysed," Amar Srivastava of IRSC said.

The survey also included interview of over 300 two-wheeler drivers. According to the findings, 50% of pillion riders were found not wearing helmet and about 40% of all headgear users were spotted wearing half helmets. Such helmets do not cover the chin.

According to UN Motorcycle Helmet Study, bikers are 26 times more likely to die in road crashes than drivers of passenger cars and wearing an appropriate helmet improves their chances of survival by 42% and helps avoid 69% of injuries to riders.

Former AIIMS chief Dr M C Misra said the best way to prevent traumatic brain injury was to use reasonable quality helmet and fasten it.

"In 2010, the Supreme Court had passed an order saying that provision of helmet along with sale of two-wheelers is mandatory. "This judgment has not been put into reality and it has not been enforced across India. About 30-40% of trauma victims sustain brain injuries (head injury). Patients with severe traumatic brain injury need maximal cost intensive resources in hospital, but never ever return to society functional and productive," Misra said.

Last week, road transport secretary Y S Malik had flagged the issue of people not strapping helmets and had said such a practice has a lot to do with the culture of driving in India.

# IIMB and IIT Madras offer 10-month certification for working professionals

https://timesofindia.indiatimes.com/home/education/news/iimb-and-iit-madras-offer-10-month-certification-for-working-professionals/articleshow/63265238.cms



The Indian Institute of Management, Bangalore (IIMB) and the Indian Institute of Technology (IIT), Madras, have collaborated to offer a certificate programme in technology and management.

"While the programme is not a substitute for an MBA or a BTech, it covers most of the core courses covered in a general MBA programme. It is aimed at giving young students and working professionals with two-five years of experience an understanding of the recent developments in technology and management. It will be useful for those unable to take two years off for a regular incampus programme," said PD Jose, programme director, and faculty in the strategy area at IIM Bangalore.

The 10-month programme comprises of 10 courses in management and engineering disciplines and 12 campus-connect sessions in each institute over three modules, delivered by the faculty.

Since inter-disciplinary skills are the need of the hour, this certification will be a great value-addition. On successful completion of the programme, students will receive a certificate.

The programme seeks for a work experience of three years or more, and is also open to IIMB and IIT Madras students. Registrations have opened in March, and enrolments will begin soon after.

# Cognizance 2018, IIT Roorkee's annual festival, promises to be big https://www.yovizag.com/iit-roorkee-annual-festival-cognizance/



As the spring is almost in the air, IIT Roorkee is coming up the largest annual technical festival, Cognizance 2018. The festival will be a plethora of exciting events with the theme base on "Dreaming Discoveries".

Cognizance will be providing ingenious students a platform for displaying their technical acumen through over broad spectrum of competitions and events conducted in it. Their workshops will surely help the tech-enthusiastic students to stay updated with the latest technical knowledge and the exhibitions evince the cutting-edge technology from around the globe.



The annual festival of IIT Roorkee codifies Insomnia, a nocturnal coding event based on exploiting both patience and programming skills of participants; Mindsweeper, an event questioning the mettle and coding skill of the participants; and case studies denominated as AI, teAch, Blockrush, AddictEd and Artboard, and a lot more.

Cognizance will also organize robotics combat (Armageddon), drone racing both on land (Powerdrift) and in water (Poseidon), drone making competition like Aeronova, Cyborg Breakin, and Quadrone to cross the obstruction framed in robotics store competing with each other for their way to rise victorious.

Cognizance is also set to provide knowledge and skills in technical fields like ethical hacking, web development, cloud computing, app development, IoT, Mercedes engine, embedded systems, machine learning and AI through various multifaceted workshops.

Towards finance & management, Cognizance will witness BStreet, Let's Advertise, Cogni Street, workshops like Social Media Marketing, Cryptocurrency & Blockchain and a lot more which will be a traders paradise.

Cognizance will witness the incorporation of departmental events and workshops involving a paper presentation of research work conducted by participants in the presence of professors from each department of IIT Roorkee.

The college festivals welcome all the gamers to present their gaming skill in CS, Dota, NFS, Fifa, Rubik cube and Sudoku challenges and win prize amount worth up to 6 Lakhs. Some fun and online events will also be conducted for expounding their tech-skill in a chain reaction, Laser-o-Reflect, etc.

Ratan Tata, Shashi Tharoor, CNR Rao and other Nobel laureates are coordinately invited for Guest Lectures to boost knowledge in their expertise area.

For the first time since its inception, Cognizance is going to introduce LitFest, where the blending of art and technology will be visualized through Blogomania, Parliamentary Debate, microfiction workshops, Rekhta Foundation's Urdu poetry workshops and many more. Sonu Nigam, Shreya Ghoshal, Piyush Mishra and AIB will amuse the audiences on 3 days techtainment nights that means a new adventure each day and night.



Cognizance will agglomerate over 200 events in its store encompassing every wavelength of the technical spectrum rewarding prizes over Rs 20 lakhs and various goodies to the commendable and worthy victors.



For more information regarding the events, please visit their website <a href="https://cognizance.org.in/">https://cognizance.org.in/</a>.

# UGC to Higher Educational Institutes, set up "Students Counselling System"

http://digitallearning.eletsonline.com/2018/03/ugc-to-higher-educational-institutes-set-up-students-counselling-system/

University Grants Commission has reminded all Higher Educational Institutes (HEIs) to set up a "Students Counselling System" to address problems and challenges faced by students.

"Setting up of counselling centres is part of the guidelines issued by UGC regarding safety of students on and off campuses of higher education institutions and has already been communicated to all institutions concerned. One of the most important components of the guidelines was that all

higher education institutions should mandatorily place a students counselling system for effective redressal of problems and challenges faced by a student," says the letter.

The system is supposed to act as a bridge to fill communicative and formal gap between the students and the institutions. In one of its letters issued last week, the commission asked universities as well as all the colleges to set up "Students Counselling System" for students to avail the services of trained psychologist as per the need.

The Counselling System would also include faculty member as the counsellors who would remain in constant and close be allotted a number of students and in close touch with the students allotted to them. The teacher counsellors will act as a guide to students helping them move up in their careers by understanding their emotional and intellectual needs.

According to letter, "It should be a unique, interactive and target-oriented system, involving students, teachers and parents to address common student concerns ranging from anxiety, stress, fear of change and failure to homesickness and a slew of other academic worries. It should bridge formal as well as communicative gaps between the students and the institution at large."

## March 11

#### **IIT's Worried with Shift from Grants to Loans for Infrastructure**

http://indiaeducationdiary.in/iits-worried-shift-grants-loans-infrastructure/

The central ministry has declared a new provision according to which, a big change is expected in the funding model for all Centrally Funded Institutions of the country. The same has alarmed various CFIs such as IITs, NITs and IIMs. The new scheme named- "RISE" is short for Revitalizing Infrastructure and Systems in Education. The chance was introduced through the Union Budget this year.

According to the new scheme, the Govt. will be providing money to CFIs for new infrastructure and development projects but it would not be considered as funds and instead is to be treated as loan. The loans will be taken as 10-year loans from "HEFA" or Higher Education Funding Agency".

According to reports, Govt. has allotted a quarter of loans on offer and merely Rs. 25,000 Crore is assigned for 23 IITs. IIT authorities have questioned the same and have raised concerns that this sudden shift of funding to loans can eventually harm their financial stature. The institutes may have to increase the tuition fee of courses offered at the institutes. Registration for JEE Main 2018 for IITs is also likely to get expensive as it will no longer be funded by the Government.

The older IITs are the one raising the issue from the front. The same will be raised in front of the Honorable President of India in a meeting. President Ram Nath Kovind is supposed to have a meeting with all the heads of IITs, NITs and IISERs to discuss the issue in depth.

The reason of the older IITs' vicious movement against the "RISE" scheme is not completely selfless. The institutions which are built after 2008 only have to pay the 25 % of the principal amount of the loan whereas the remaining have to pay the wholesome principal amount of the loan during 10 years.

In both the cases the interest of the loan will be given by the Govt. The directors of IITs are concerned about raising money to make payment for the loan amount as there are only three ways for an educational institution to raise money for its operation—

- 1. Research projects: This may one of the best fund raising opportunities in western universities but in India the research funding is not paid to the institutions directly which results in less funds.
- 2. Alumni Donation: Again in India this option has not gained popularity yet.
- 3. Tuition Fee: Fee of reputed centralized institutions like IITs are highly subsidized. The tuition fees obtained from students cannot be considered enough to pay the full amount of loans measuring in Crores.

Despite these factors the Govt. has disregarded the chances of instability in the financial structure of CFIs. According to the Govt. older IITs and other CFIs earn a high amount of annual turnover each year which can be as large as Rs. 40 Crore.

The Govt. also mentioned that the loan is not mandatory. Govt. will still be funding the institutions their running expenses in the same manner as before. If there is any requirement for extra funding, then only CFIs should opt for loan. Due to the "RISE" scheme the CFIs can loan 10 times the amount they can escrow. And as a matter of fact IITs will be assigned the largest percentage of the total loan value. Entrance exams for IITs- JEE Main 2018 will be conducted April 15- 16, 2018. Lakhs of students appear for the exam every year.

The above scheme has no effect on private engineering colleges. The fee and funding of private engineering colleges will remain the same. Students are advised to appear for private engineering exams such as SET 2018, VITEEE 2018, MU-OET 2018.

## **IIT Kharagpur Management School Sets Sail towards Globalization**

http://indiaeducationdiary.in/iit-kharagpur-management-school-sets-sail-towards-globalization/

Kharagpur: Twenty five years ago, IIT Kharagpur's Vinod Gupta School of Management began a momentous journey. It was the first management school to be set up in an IIT. On March 10, 2018, VGSOM the prestigious business school's silver jubilee celebrations kicked off Two stalwarts who have been instrumental to its birth — former director and renowned scientist, Padma Shri Dr K.L. Chopra, and the noted industrialist, philanthropist and IIT Kharagpur alumnus, Mr Vinod Gupta were guests of honour for the event.

Recalling the history of the foundation of management education in the IIT system Prof. Prabina Rajib, Dean of VGSoM, said, "What happened in IIT Kharagpur in 1993 was unheard of. In no other IIT has a pathbreaking private initiative been responsible for the founding of a management school. This institution, with its unique curriculum, was set up with government funding that matched the seed money provided by Mr Gupta, who continues his active association with IIT Kharagpur."

As to why Mr Gupta thought his alma mater should have a management school of VGSoM's calibre, he says, "In this modern world, business leaders need to be strong in analytical abilities. Engineering education provides that foundation. Most other business schools take students without analytical background and therefore they lag behind when they start their business careers."

It is now the next level of evolution for Vinod Gupta School of Management which is among India's business management schools. VGSoM, unlike other management schools, has aligned its academic programs and research to the IIT system. This has led the School to become the centre point of the much coveted financial engineering program at IIT Kharagpur, the multi-institutional Postgraduate Diploma in Business Analytics and collaborative Fintech project with SBI.

"Instead of being a 'me-too' kind of business school, VGSoM is thinking ahead. Its focus on technology and analytics is the result of this thinking" added Prof. Prabina Rajib.

The idea was iterated in the inaugural speech of Prof. P P Chakrabarti, Director, IIT Kharagpur. He said "We now look forward to contributing to India's economic growth through this technology enabled management education. VGSOM will be working with other institutions and also departments at IITKgp in areas such as Quality, Medical Science and Technology, Manufacturing etc. Each of these areas would take our country forward and all of them require high quality management skills" said Prof. Chakrabarti.

He invited the senior alumni from IIT's oldest management school to teach at VGSOM as Adjunct Faculty with the option of electronically enabled classroom teaching.

A panel discussion was deliberated on March 10 that will see an assembly of some of the brightest minds in the academia and industry. The panelists were Prof. Damodar Acharya, former director of IIT Kharagpur and former chairman of the school, former Deans of VGSoM — Prof. Kalyan Chakravarti, Prof. Shekhar Chaudhuri, Prof. S Srinivasan, Prof. Arabinda Tripathy and Mr Sourav Niyogi, VGSoM alumnus and Managing Director, Accenture. This panel along with the School's patrons and alumni considered a 10-year vision plan or the VGSOM. Among other initiatives, the plan included a Data Analytics and Financial Engineering (DAFE) lab and an international centre for VGSOM to facilitate international collaboration.

VGSoM has lived up to the vision of its founding fathers and blazed its own trail. It specializes in operations management, technology consultancy, marketing, finance and offers its MBA students a wide variety of new-age electives that are related to digital marketing, machine learning, taxation, block chain technology, business analytics and so on. The Executive MBA program at the IITKgp's Kolkata and Bhubaneswar extension centers which strengthened the presence of the Institute in these two cities mentioned Prof. K L Chopra in his speech. The School is now ranked by MHRD among the top 10 business schools in India with high emphasis on research and more than 100% placement offers.

Bengaluru researchers develop cost effective dialysis machine

https://www.biospectrumindia.com/news/77/10581/bengaluru-researchers-develop-cost-effective-dialysis-machine.html

The machine, RxT17, started undergoing clinical trials recently at the JSS Medical College Hospital, Mysuru.



Researchers at Renalyx Health Systems in Bengaluru have come up with a made-in-India dialysis machine, which is expected to reduce cost of the medical procedure.

The machine, RxT17, started undergoing clinical trials recently at the JSS Medical College Hospital, Mysuru.

The machine is cloud-enabled and can be connected to a mobile app, so that nephrologists can monitor its functioning and the patient's response from anywhere.

The company has patents and active collaborations with premier institutions, including IIT Kharagpur, Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR) and PESIT in Bengaluru.

The company intends to take the new dialysis machine to rural areas too, given its ability to connect seamlessly and its capacity to run on solar power. Such features are not available in dialysis machines imported from Japan, the US and Germany.

Dialysis machines are imported from Germany, Sweden and China at a cost of Rs 10-11 lakh a piece. A dialysis session costs between Rs 2,500 and Rs 4,000. The new machine is likely to be priced at Rs 4 lakh and it could reduce the cost of dialysis to Rs 1,000.

## March 10

# Thales and Indian Institute of Technology Madras sign Memorandum of Understanding

 $\underline{\text{http://indiaeducationdiary.in/thales-indian-institute-technology-madras-sign-memorandum-understanding/}$ 



Chennai: Thales and the Indian Institute of Technology Madras (IIT Madras) today signed a Memorandum of Understanding (MoU) to create a jointly supervised PhD fellowship programme in coordination with CNRS. Thales and IIT Madras look forward to strengthening Indo-French scientific collaboration while contributing towards the development of highly specialised technical skills in India. The MoU exchange ceremony took place in the presence of Mr Prakash Javadekar, honourable Minister of Human Resource Development, Government of India, and H.E. Frédérique Vidal, Minister of Higher Education, Research and Innovation, Government of France, at The Knowledge Summit.

Thales already has similar agreements for jointly supervised PhDs with prestigious institutions like Indian Institute of Science (IISc) Bangalore, IIT Bombay and IIT Delhi. These agreements underline Thales' research focus and collaborations with academia to create technologies for smarter and faster decision making for problem solving in complex situations.

Speaking at the ceremony, Emmanuel de Roquefeuil, Vice President & Country Director, Thales in India said, "As a global technology leader, we are always excited about investing in the future through varied initiatives focused on research and engineering. Given this focus, IIT Madras is a natural partner and we are very proud of this association. We believe it will serve our common objective of fostering a strong Indo-French research ecosystem and also support the Skill India initiative of the Indian government."

Prof. Bhaskar Ramamurthi, Director, IIT Madras, said, "We greatly value this partnership with Thales as our students will benefit from access to world class research environments and guidance from highly capable academics and researchers. It is these partnerships which not only help develop technologies for tomorrow but also bring industry and academia closer. IIT Madras has earlier entered into joint Ph.D. degree agreements with University of Bordeaux and École Centrale de Nantes in France. This partnership with Thales will facilitate these collaborative research programs."

Dr. Srinivas Kaveri, Director, CNRS in India, said, "Partnerships like these help strengthen Indo-French relations, promote cultural diversity and enable sharing of ideas between Indian and French researchers. This unique programme will bring together shared minds to foster innovations and technologies for tomorrow."

The students selected for the jointly supervised PhD fellowships will have an Indian supervisor and a French co-supervisor (from one of the identified CNRS laboratories). Selected students from IIT Madras will have the opportunity to conduct a part of their research projects in France in areas like

electromagnetism and antennas simulation and modelling, airborne complex system engineering, artificial Intelligence and data management systems, and advanced electronics systems and nanotechnologies.

Partnering with top universities worldwide is an important aspect of innovation for Thales which created joint projects with over 50 prestigious universities and research laboratories worldwide. Journal 'Nature' ranks Thales among the 100 leading companies for high-quality science worldwide. The Group also ranks among the world's 100 most innovative companies by Clarivate Analytics.

## Now, low viscosity fuel oil from plastic waste

http://www.thehindu.com/sci-tech/science/now-low-viscosity-fuel-oil-from-plastic-waste/article23034098.ece



"We hope to create ideal operating conditions to provide high-quality oil with less pollution," says Pankaj Tiwari (left).

Prolonged pyrolysis at 300-400 degree C in inert conditions yields high calorific value oil

Certain plastic wastes can soon help fuel your cars. Researchers from IIT Guwahati have successfully converted packaging plastic waste to plastic-derived oil (PDO), which has characteristics similar to diesel.

Low- and high-density polyethylene (LDPE, HDPE) and polypropylene are commonly used as packaging materials and end up in the waste stream. According to a 2016 Central Pollution Control Board report, almost 15,000 tonnes of plastics waste is generated per day in India.

The researchers collected the waste (biscuit wrappers, shopping bags, food containers, shampoo bottles) from houses, cleaned and segregated them according to the resin identification code. These codes on plastics indicate the type of plastic resin it is made of.

Using a semi-batch reactor, the different wastes were heated for six to seven hours at 300-400 degree Celsius. "Heating at very high temperatures in inert conditions caused the plastic to convert into wax, so we chose this particular temperature range in which the plastic turned to plastic-derived oil and stayed in its oil state," explains Pallab Das, PhD scholar at the institute and first author of the paper published in Resources, Conservation and Recycling.

But burning plastic waste generates pollution, particularly dioxins which are toxic to humans. "There is no oxygen in the three plastic wastes that is heated that we are also not supplying any oxygen. Pyrolysis is done under inert conditions. Only hydrocarbon gases such as methane, ethane and

propane were produced and there was negligible amount of carbon dioxide and carbon monoxide produced," says Das.

#### **Further research**

"More experiments need to be carried out to get a trade-off between the quality of the oil and the environmental pollution caused by the pyrolysis process. We are working on this and hope to create an ideal operating condition which can provide high-quality oil with less pollution," says Dr. Pankaj Tiwari, Assistant Professor, IIT Guwahati, and corresponding author of the paper. "Compared with combustion, pyrolysis causes less pollution."

The researchers then studied the properties of the new plastic derived oil. One of the oil samples from polypropylene showed a high research octane number of approximately 92. Octane number indicates the quality of the gasoline range fuel. Premium petrol has research octane number of 98 to 100.

The oil also showed low viscosity and had high calorific value. Calorific value denotes the amount of heat generated when unit amount of sample was burnt with oxygen supply. The new oil had calorific value greater than 45 MJ per kilogram. Calorific value of petrol and diesel is 46-48 and 44-46 MJ per kilogram, respectively.

"We are yet to carry out engine tests. Once tested, these oils can soon find application in transport and industrial sectors," says Dr. Tiwari.

# Proud moment! This IIT Bombay alumnus is new CTO of Twitter – Things to know about him

http://www.financialexpress.com/industry/technology/proud-moment-this-iit-bombay-alumnus-is-new-cto-of-twitter-things-to-know-about-him/1093344/

Twitter on Friday appointed an Indian Institute of Technology (IIT) Bombay alumnus Parag Agarwal as its Chief Technology Officer (CTO).



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Twitter on Friday appointed an Indian Institute of Technology (IIT) Bombay alumnus Parag Agarwal as its Chief Technology Officer (CTO). Agarwal will be succeeding the Adam Messinger, who left the

position in 2016, according to a report by CNBC. The appointment of Agrawal, who completed his PhD in computer science from Stanford University in 2011, was announced internally in October 2017.

Agrawal joined Twitter in October 2011 as an ads engineer, and he most recently held the title of Distinguished Software Engineer. Before joining Twitter, he did research internships at AT&T, Microsoft and Yahoo. His contributions at Twitter include leading efforts to increase the relevance of tweets in Twitter users' timelines using Artificial Intelligence (AI).

Al also helps Twitter in preventing abuse on the social network. "In his capacity as CTO, he's focused on scaling a cohesive machine learning and Al approach to our consumer and revenue product and infrastructure teams," a Twitter spokesman told CNBC.

Twitter also announced this week that it intends to hire a Director of Social Science in an attempt to "increase the collective health, openness, and civility of public conversation" on its platform.

This isn't the first time Twitter went some time without a CTO. Its first CTO, Greg Pass, arrived in 2008 after Twitter bought Summize and left in May 2011. Messinger, a former Oracle executive, joined Twitter in November 2011 but only took over as CTO in March 2013.

Meanwhile, Twitter's CEO Jack Dorsey on Friday said that the microblogging platform intends to find a way to allow all users to verify. "And to do it in a way that is scalable, [so] we're not in the way and people can verify more facts about themselves and we don't have to be the judge or imply any bias on our part," he said during a Periscope live stream.

Twitter introduced its blue checkmark to signify verified users in 2009. Initially, the distinction was bestowed mainly on celebrities, athletes and public figures to curb impersonators. Then the badge was rolled out to journalists and other users. To obtain a verified checkmark, users have to apply with a reason for why they need one.