

NEWS CLIPS

December 15-21, 2018

Highlights of the Week@IITD

IIT Delhi placements: Moving from Phase-I to Phase-II

December 19, 2018 http://indiaeducationdiary.in/iit-delhi-placements-moving-phase-phase-ii/

The first phase of the placement season at IIT Delhi ended on a robust note with over 750 students getting job offers of their choice. With around 900 offers logged in (including PPOs) the campus has witnessed a robust increase of about 20% in the number of companies visiting campus as well as a 22% increase in the number of selections up to this point of time last year. Many more companies are scheduled to visit in Phase II which spans January to May. 43 students got selected for opportunities abroad from the European region, Japan, Singapore, South Korea, Taiwan, US etc. with 33 opting to explore these opportunities further.

The placement season for the batch graduating in 2019 at IIT Delhi commenced in August 2018. In the run-up to placements, students were provided various facilities, training sessions and workshops to help them prepare for the coming season. These included sessions on resume making, communication skills, presentation and interviewing skills, problem-solving and case workshops as well as multiple mock placement tests. The workshops also touched upon careers in various sectors.

The institute also organized a Career Conclave with the theme of "Prism of Possibilities: Visualise, Improvise, Realise" prior to the start of campus interviews with a view to help students make more informed career choices. The conclave invited senior officials from companies across sectors to help students get a better understanding of career opportunities available in the sector. The format of the conclave was based on panel discussions followed by interactive sessions with the speakers. The institute also organised Industry Day to enhance research based connections with industry.

The campus interview processes are conducted in two phases. Phase I started on 1st December whereas Phase II will commence in January and will go on till the end of May 2019.

The first day of the placement season at IIT Delhi started on a vibrant note at 8 AM on December 1. The pre-interview processes of companies like tests/ group discussions/assignments were conducted starting from the last week of August' 2018 itself. More than 350 companies offering over 550 different profiles have registered on the Training & Placement portal to participate in campus placements for this year up to now. Many more are expected to register in the coming days. Over 150 companies should be visiting the campus in the next phase.

The rostering / company slotting system at IIT Delhi endeavours to spread out the companies to give both the students and the recruiters a varied and richer experience. Company slotting is done based Page 1 of 25

on numerous parameters including the job profile offered, growth prospects in the company and sector, reputation/brand of the company on campus, preferences of the students, past relationship/record with IIT Delhi and other IITs etc. Also, the campus believes that each day of the entire placement season (up to May) is important. Slotting needs to be done to spread the companies across all days of the recruiting season based on mutual convenience.

The status of offers received up to now through campus placement processes across profiles is as below:

Over 70% students were placed in the Core jobs (since companies offering Information Technology profiles are core to many streams including Computer Science, Electrical Engineering, Mathematics etc., and companies registered under the Others category include those offering technical profiles).

A rise has been witnessed this year in the organisations registering to hire students for core engineering profiles i.e. for electrical engineering, civil engineering, mechanical engineering, chemical engineering, etc. Artificial intelligence, data science, machine learning, stochastic modelling and predictive analysis look to be upcoming sectors as industry gears up for Industry 4.0 with an exponential increase in organisations looking for talent with this skill-set.

Highlighting this trend, Prof. S. Dharmaraja, Head T&P, said, "As we expected, offers from core companies increased. Core companies including those registering under the domain of Information Technology and Others yielded over 70% offers." Ms. Anishya Madan, Industry Liaison Officer, (T&P), said, "The efforts of the entire placement team of staff and volunteers coupled with the positive reaction from industry this year has translated into these hiring numbers. We hope this trend continues till the end of the season."

Students across streams got good offers. Students also bagged over 160 PPOs of which around 90 were accepted. A few students opted for the deferred placement options of the institute available to students interested in pursuing their start-up dreams.

Hoping for contribution from alumni, IIT-Delhi to set up endowment fund

December 17, 2018 <u>https://indianexpress.com/article/cities/delhi/hoping-for-contribution-from-alumni-iit-delhi-to-set-up-endowment-fund-5496513/</u>

The funds for each of these is between Rs 50 lakh and Rs 1 crore. The batch will decide how the money will be used.

The Indian Institute of Technology (IIT) Delhi is planning to establish an alumni endowment fund that will assist in the institute's functioning. IIT had earlier asked its alumni to pledge a part of their assets to the institute, particularly those of the golden jubilee and silver jubilee celebration batches.

"In recent reunions, particularly the golden and silver jubilee celebrations, a new trend has started. Each of the batches that have attended the recent reunions are setting up an endowment fund at IIT Delhi. The funds for each of these is between Rs 50 lakh and Rs 1 crore. The batch will decide how the money will be used. I would like to encourage all alumni batches to set up endowment funds like this," Dean Alumni Affairs Sanjeev Sanghi said at the IIT Alumni Day Sunday. "In fact, we will soon be coming up with a large endowment called the IIT Delhi Endowment, which is like an endowment that western universities have. This will be of a large scale. We hope that eventually the interest or the earnings of the endowment will be able to take care of the running of IIT Delhi. It is a very tall dream, but we would like to do it," he added.

The university has earlier received sizeable donations from its alumni for specific causes. Ramesh Kapur from the 1968 batch had pledged one million dollars to the institute, while Amarjeet Bakshi, also from the same batch, gave Rs 1 crore and pledged to give the same amount each year for the next 10 years.

The Alumni Day also saw entrepreneurs pitching their start-ups to investors. One of the start-ups was a digital prescription model worked on by Mumbai-based opthalmologist Vandana Jain, along with a co-partner.

The idea of the start-up is to digitise the experience of seeking consultation from doctors. The startup would provide digital pens and a prescription note to doctors, along with a tablet. As soon as a doctor writes with a pen on the prescription paper, it will appear on the tablet. Another start-up was a superfood snack brand, which has already made two products available in markets in Lucknow and on the Amazon app. The idea is to provide consumers healthy mid-evening snacks to satiate their hunger.

Researchers from IIT Delhi and IIT Kanpur 3D Bioprint Load Bearing Bones

December 17, 2018 <u>https://manufactur3dmag.com/researchers-from-iit-delhi-and-iit-kanpur-3d-bioprint-load-bearing-bones/</u>

Researchers from Indian Institute of technology (IIT) Delhi and IIT Kanpur have used a combination of tissue engineering and 3D bioprinting to mimic the development biology pathway through which load-bearing, long bones are formed.

In a study, researchers from both the institutes demonstrated detailed gene expression and sequential signaling pathways that get upregulated when embryonic-stage cartilage transform into bone-like cells.

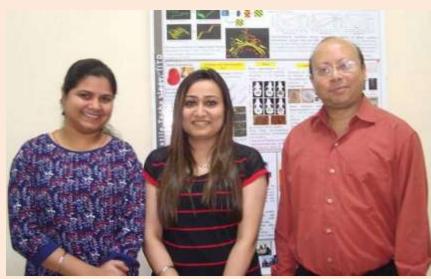
The Bone Formation Process

There are two ways through which bones are formed. For example, cranial bones (bones which enclose the brain), mesenchymal stem cells (MSCs) differentiate into bones without forming a cartilage. However, in case of load-bearing, long bones such as femur (the longest and thickest bone that extends from pelvis to the knee), stem cells first form a cartilage template, which then further differentiates to form bone cells. Bones that first form a cartilage template are designed to bear weight.

Until now, all the attempts to develop load-bearing bones using different scaffolds have been bypassing the intermediate stage of cartilage formation and differentiating stem cells directly into bone cells. Speaking about the load bearing capacity of such bones to <u>The Hindu</u>, Prof. Sourabh Ghosh from the Department of Textile Technology at IIT Delhi and one of the researchers of the

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study, said, "The efficacy of such bone constructs is yet to be demonstrated in bearing loads. There is very poor correlation between bone constructs developed in vitro and in vivo. Also, gene expression pattern of these tissue-engineered bones largely differ from human adult bone."



The team of researchers

In a paper published in the scientific journal, Bioprinting, the same team of researchers used 3D bioprinting and bioink consisting of silk proteins, MSCs and growth factors to tissue engineer the cartilage.

In their latest work, published in the scientific journal, <u>ACS Biomaterials Science & Engineering</u>, the researchers first 3D bioprinted cartilage using bioink and characterised the cartilage characteristics. The researchers then added a thyroid hormone to the cartilage to facilitate the differentiation of cartilage into bone-like cells.

How Bones formed Through Cartilage Different from Bones Formed Directly from Stem Cells?

The results of their latest research showed that unlike bone cells formed directly from cells, bones formed through cartilage differentiation exhibited a stark difference. For instance, the researchers found that gene and protein expressions resembled the ones that occur at the time of natural development of bones in the body.

Explaining the difference between the bones formed directly from stem cells and the ones developed through intermediate cartilage process, Prof. Amithabha Bandyopadhyay from the Department of Biological Sciences and Bioengineering at IIT Kanpur and a corresponding author of the paper said, "The load-bearing capacity of a bone depends primarily on the quality of extracellular matrix. In loading-bearing bones, the extra cellular matrix comprises 95% while bone cells are just 5%. So if you are trying to fabricate a load-bearing bone construct it is better to have more extracellular matrix."

"Compared to bone formed directly from stem cells, the extracellular matrix of the bone construct developed through the intermediate cartilage process was 10 times higher," added Prof. Bandyopadhyay.

"We followed a four-step process to develop the load-bearing bone. We first developed chondrocytes (cartilage) from stem cells and then differentiated them into hypertrophic chondrocytes. During this process, the sponge-like cartilage becomes a brittle tissue. While the brittleness is not good for cartilage, here it is following the development biology mechanism to become a bone," explains Prof. Ghosh.

In the third step, the hypertrophic chondrocytes differentiate into bone-like cells (osteoblasts) and finally to adult bone cells (osteocytes).

Though the paper does not reveal mechanical properties of the bone construct, the mechanical studies conducted showed that bone developed showed better results from the ones developed directly from stem cells. As a part of their future research, the researchers now plan to undertake studies on animals.

December 21

अच्छी खबर: अब इस तकनीक से तीन दिन तक फ्रेश रहेगा जूस

https://www.livehindustan.com/uttar-pradesh/story-now-juice-will-be-fresh-for-three-days-fromthis-technique-2323602.html



डिब्बाबंद जूस से जो लोग परहेज करते हैं या सेहत के लिए उसे उपयुक्त नहीं मानते, उनके लिए यह अच्छी खबर है। अब आप बिना केमिकल के तीन दिन तक जूस को ताजा रख सकते हैं। आईआईटी बीएचयू के शोधार्थी हेमंत सिंह ने कोल्डप्रेस तकनीक विकसित कर ऐसा कर दिखाया है। इस तकनीक से जूस की गुणवत्ता में कोई कमी नहीं आएगी। जूस ताजा रखने की अवधि को और बढ़ाने पर छात्रों की टीम काम कर रही है।

आईआईटी बीएचयू के मालवीय नवप्रवर्तन उद्यमिता केंद्र में फलों और सब्जियों के 20 प्रकार के रस बिना किसी प्रिजर्वेटिव और स्वीटनर्स के तीन दिन तक ताजा रखने पर इंजीनियरिंग स्नातक हेमंत सिंह ने शोध किया और कोल्डप्रेस तकनीक विकसित की। चुकंदर, लौकी, करेला, टमाटर, पालक, गाजर, अनार, अनानास, कीवी, सेव के अतिरिक्त मिक्स जूस में नौ प्रकार हैं। प्रयोग के तौर पर इस उत्पाद की मार्केटिंग वाराणसी सहित आसपास के छह जिलों में की जा रही है। वाराणसी के सरकारी-Page 5 of 25 गैरसरकारी अस्पतालों में उपचार करा रहे डेंगू के मरीजों तक पहुंचाए गए कीवी के ताजा जूस के सकारात्मक परिणाम मिले हैं। आईआईटी बीएचयू के केमिकल इंजीनियरिंग विभाग के प्रोफेसर पीके मिश्र की देखरेख में विकसित तकनीक से फलों और सब्जियों के रस की गुणवत्ता प्रभावित नहीं होती।

क्या है कोल्डप्रेस तकनीक-

हाईड्रोलिक सिस्टम पर काम करने वाली तकनीक में खास बनावट वाले ब्लेड के इस्तेमाल से फलों और सब्जियों का रस निकाला जाता है। रस निकालने के पहले उन्हें रेता जाता है। फिर कपड़े के बैग में डालकर हाइड्रोलिक प्लेट पर रखा जाता है, जो धीरे-धीरे ऊपर की ओर उठते हुए बैग को ऊपर लगे खास ब्लेड की ओर ले जाता है। कपड़े से ब्लेड आहिस्ता-आहिस्ता घूमकर रस निकालता है। आईआईटी बीएचयू के केमिकल इंजीनियरिंग विभाग के प्रो.पीके. मिश्रा ने कहा कि रसों को बिना किसी केमिकल का प्रयोग किए सात दिन तक ताजा रखने की तकनीक पर भी छात्रों की टीम काम कर रही है। उम्मीद है कि हमें जल्द ही बड़ी कामयाबी मिलेगी।

December 20

Inter IIT Sports' Meet in Guwahati: IIT Roorkee win gold in hockey https://nenow.in/north-east-news/inter-iit-sports-meet-in-guwahati-iit-roorkee-win-gold-inhockey.html

IIT Delhi won the bronze in hockey after defeating IIT Madras by 3-0 in the third-place match

IIT Roorkee won gold medal defeating IIT BHU in a one-sided final match during the penultimate day of the 53rd Inter IIT Sports Meet underway at the IIT Guwahati here.

IIT Roorkee won the game by 5-1 and were 3-0 up in the first quarter already. IIT Delhi won the bronze in hockey after defeating IIT Madras by 3-0 in the third-place match.

In badminton, IIT Kharagpur and IIT BHU set to face each other in the finals after defeating IIT Delhi and IIT Roorkee respectively in the semi-finals by a score of 3-1 each. IIT Delhi and Roorkee will also battle against each other for a Bronze medal.

In basketball, IIT Delhi, BHU, Kanpur and Roorkee qualified into the semi-finals after beating IIT Dhanbad, Bombay, Kharagpur and Guwahati in the quarterfinals respectively. IIT Kanpur won by a slight margin of 55-53 against IIT KGP in one of these quarterfinal matches.

In cricket, IIT Guwahati's journey came to an end after they lost their quarterfinal match against IIT Kanpur by 20 runs. In other quarterfinal matches, IIT Madras, Bombay and Delhi defeated IIT BHU, Mandi and Roorkee to qualify for semifinals. The games in cricket, however, were reduced to 10 over only due to rains.

Even in football luck was not on the hosts'side as IIT Guwahati lost the semi-final against IIT Roorkee by 0-4. In the other semifinal, IIT Delhi defeated IIT Kanpur in a nail-biting match and are now set to face against IIT Roorkee in the final on 21st December. They won 6-5 in a thrilling penalty shootout

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after their match ended 0-0 in normal regulation time. For Bronze medal, IIT Guwahati will face IIT Kanpur on Friday.

In the sport of lawn tennis, the current champions of the event IIT Guwahati once again qualified for the finals after defeating IIT Kharagpur by 2-0 in both singles and doubles. They will face the winner of IIT Madras and IIT Delhi in the finals.

In squash, IIT Bombay won the gold medal after defeating IIT Kharagpur in the finals by 2-0. In the third-place match, IIT Madras secured the bronze medal after beating IIT <u>Delhi</u> by 2-1.

In table tennis, IIT Bombay and IIT Kharagpur are set to face each other in the final. IIT Bombay defeated IIT Roorkee by 3-0 in the first semifinal whereas IIT Kharagpur got the better of IIT Madras after winning 3-2 against them in a close second semifinal.

In volleyball, IIT Roorkee, Delhi, Bombay and BHU secured their seat into the semi-finals after beating IIT Kharagpur, Madras, Dhanbad and Kanpur respectively in quarterfinals.

The competition was no less fierce amongst women, the women's lawn tennis and table tennis matches were a sight to behold. In lawn tennis, IIT Bombay won the gold after winning the final match against IIT Madras by 2-0 in both singles and doubles. IIT Roorkee also managed to secure the bronze medal after defeating IIT Kharagpur in the third-place match.

In table tennis women category, the host IIT Guwahati are set to face IIT Delhi in finals where the gold medal is up for grabs on Friday. They defeated IIT Madras by 2-0 to qualify for the finals. In the third-place match, IIT Roorkee and IIT Madras will fight against each other for the bronze medal.

In Basketball, IIT Delhi qualified into the final after beating IIT Madras by 42-19 in a one-sided semifinal match. They'll face the winner of IIT BHU vs IIT Roorkee in the final.

In volleyball women's category, IIT Roorkee and IIT Madras will face each other in the final after IIT Bombay and Kharagpur's fight for a bronze in the match for bronze in the third-place match.

IIT Madras to Host the Sportstech Summit from 3rd January 2019

https://technosports.co.in/2018/12/20/iit-madras-to-host-the-sportstech-summit-from-3rd-january-2019/

Today, technological developments have completely changed how we play, watch, and think about sport. The viewing experience, for example, has been enhanced by camera technology that gives audiences better access to point-of-view footage throughout the game.

Tools such as the cameras worn by cricketers in their helmets and those in goal posts give audiences a much better view of the field. Athletes are able to tune their performance to a greater degree than ever before, thanks to the data being collected as they train or compete.

Sporting events are no longer passive. Sports fans now expect an active connection with the teams and players, and new technology is serving this cause making sports an immersive and interactive spectator journey. Audiences now have greater access to analysis, statistics and a living room experience that often betters the live atmosphere of the game.

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But this is just the start. The 2020 Tokyo Olympics plan to provide a grand platform for the introduction of new innovations in Sports Technology. Some of the plans for the 2020 games include a Robot Village: where a small army of Robots will serve all international visitors.



Intel's True VR platform will light up the sky above the stadium with its Shooting Star Drones, which can create 3D images as an alternative to traditional fireworks. Innovations such as these are a signal as to where Sports Technology is going, its prominence in our lives, and its capabilities in sporting events such as the Asian Games and the Olympics.

In short, sports has fully embraced the digital age, and it can only make the experience better with technology reaching new peaks every year.



Noticing this phenomenon, Shaastra, the technical festival of IIT Madras, was determined to promote this growing trend. As a consequence, Shaastra and Global Sports Commerce present the SportsTech Summit 2019 from 3rd to 6th January 2019. With tracks such as Tech in Action, Analytics: the Numbers Game and Brands, Fans and Leagues, the Summit aims to cover all the aspects of Sports Technology.

The Summit will include lectures on several topics from eminent personalities from the field of SportsTech, a panel discussion on 'Building the Next Great Sports League', and demonstrations and workshops by partners such as Star Sports and Sportz Interactive.



Furthermore, to help the participants get a better insight into the real-life problem statements of Sports Technology, the Summit Team organized a Hackathon in collaboration with GSC.

The winners of the hackathon will receive prize money and mentorship from the experts in the field of Sports Technology and get a chance to pitch their solution during the Summit. Altogether, the Summit serves to be a holistic experience for all those interested in the field.

NetApp announces research grants to IITs, IISc for data management

https://www.timesnownews.com/education/article/netapp-announces-research-grants-to-iits-iiscfor-data-management/334158

The fellowship programme has so far granted 31 research partnerships with IP (Intellectual Property) free grants up to \$20,000 over the last 10 years in the country, the company said in a statement.

NetApp, a leader in the Hybrid Cloud data services, on Thursday announced three research grants to the Indian Institute of Technology (IIT Jodhpur, Kharagpur) and the Indian Institute of Science (IISc) for the advancement of research in data management space.

The company awarded fellowships to professors from IITs and IISc to further research in the areas of data management and security.

"The grants come with no strings attached and we don't claim any IP from the research, allowing for open technology propagation," said Deepak Visweswaraiah, Senior Vice President and Managing Director, NetApp.

The fellowship programme has so far granted 31 research partnerships with IP (Intellectual Property) free grants up to \$20,000 over the last 10 years in the country, the company said in a statement.

For 2018, the NetApp Faculty Fellowship (NFF) was awarded to Professor Vijay Kumar of IISc Bengaluru to support research in private information retrieval and coded computation to enhance security in the age of Cloud Computing.

"The best research is done when you are working on something which has some practical relevance apart from theoretical interest. What this partnership with NetApp has allowed us to do is to bridge this gap, because by talking to companies, we get a sense of what the data industry is looking for," said Kumar.

Another fellowship went to Professor Bivas Mitra of IIT Kharagpur for research on Machine Learning (ML)-based model development for storage system trouble-shooting and workload characterisation.

Professor Subhajit Sidhanta of IIT Jodhpur has been granted the NetApp Student Fellowship (NSF) to investigate the trade-off in performance and consistency for widely distributed systems used in IoT and Fog computing.

"Through the fellowships, NetApp encourages leading-edge research in storage and data management, and seeks to foster relationships between academic researchers and our technical community," said Visweswaraiah.

The programme offers recipients opportunities to conduct research in areas like ML, IoT, Artificial Intelligence (AI), Blockchain, data lakes, data analytics and cybersecurity.

IIT Mandi Catalyst business incubator is calling for applications from startups and entrepreneurs

https://www.indiatoday.in/education-today/news/story/iit-mandi-catalyst-calling-for-applicationsfrom-startups-and-entrepreneurs-html-1413685-2018-12-20

The Exploration Program by IIT Mandi Catalyst aims to help aspiring entrepreneurs and start-ups refine business ideas, create prototypes and test for market potential. Last date to apply is December 31.



The Exploration Program by IIT Mandi Catalyst is a pre-incubation programme which can help aspiring entrepreneurs and start-ups go from business idea to final model.

Indian Institute of Technology (IIT) Mandi's Catalyst, Himachal Pradesh's first Technology Business Incubator (TBI), is inviting applications from start-ups and aspiring entrepreneurs for the next batch of the start-up Exploration Program.

The start-up Exploration Program of Catalyst is a pre-incubation programme which can help participants refine their business idea, create a prototype, and test for market potential. It plans to support 30 startups in the coming year.

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Speaking about the Catalyst, Dr. Puran Singh, Faculty-in-charge of IIT Mandi Catalyst, said, "Catalyst has ambitious plans for the year 2019. We intend to support as many as 30 startups this calendar year. The programme is most suited for startups in early stages looking for low cost environment to build up the product."

What kind of startup support will IIT Mandi Catalyst provide?

Catalyst mainly incubates technology-based start-ups in many relevant domains such as road safety, healthcare, agriculture, disaster prevention, waste management, eco-tourism, and clean energy.

Catalyst will provide administrative and infrastructure support, expert services including financial and legal advisory besides training and mentoring support from experts in various domains.

It will also provide financial support and assist in raising further funding.

More on the application process

The last date to apply for this programme is December 31, 2018.

Interested startups can apply through: http://bit.ly/catalyst18apply

How will the startup selection work?

Shortlisted applicants will have to present their initial pitch to a panel of experts followed by multiple discussion rounds to evaluate and establish the novelty and workability of ideas

Selected teams will be guided by IIT Mandi Catalyst to explore various business and technology aspects of a business idea leading to the refinement of ideas

Successful completion of the Exploration Program would open the door for a one-year support programme through which Catalyst provides up to Rs 15 Lakh seed fund using which start-ups are expected to commercialise

Catalyst-supported start-ups are also provided financial support by the Himachal Pradesh Center for Entrepreneurship Development

The support includes Rs 25,000 per month sustenance allowance and Rs 10 Lakh for marketing and commercialisation

For more details see: www.iitmandicatalyst.in

About IIT Mandi Catalyst

Launched in 2016, IIT Mandi Catalyst is the first Technology Business Incubator (TBI) in the state of Himachal Pradesh. Supported by Department of Science and Technology of the government of India, Catalyst aims to incubate technology-based start-ups focused on economic and/or social impacts.

As the name implies, it serve as a 'catalyst' to nurture and guide entrepreneurial initiatives with social and/or commercial objectives. IIT Mandi Catalyst was awarded INR 5 crores funding from DST for the period 2016-21. IIT Mandi has committed about INR 8 crores for the same duration.

December 19

IIT-Kanpur may expel 135 students over academic performance

https://timesofindia.indiatimes.com/india/iit-kanpur-may-expel-135-students-over-academic-performance/articleshow/67153897.cms

IIT-Kanpur administration has decided on terminating 135 students from the institute for failing to perform well in academics. The decision was taken in the senate meeting held on campus on Monday.

The university administration termed the termination to be temporary as any final decision would be taken in the next senate meeting on December 31. Calling the termination routine, deputy director IIT Kanpur Manindra Agarwal said, "135 students have been terminated for failing to perform well in academics. It is temporary. These students will get a chance to appeal for reinstatement. Those who failed to do well even in the past and have a poor track record, will be terminated permanently. Others would be reinstated."

"The students have got a week's time to appeal against their termination. Their appeal would be heard during the senate meeting following which a final decision would be taken. Many a time students are unable to perform well due to sickness or other unavoidable reasons. Such students have a good track record otherwise so usually they get a chance to study again in their respective courses", Prof Agarwal added.

December 18

Stipend hike row: Researchers from across country to hold protest outside MHRD

https://indianexpress.com/article/education/stipend-hike-row-researchers-from-across-country-tohold-protest-outside-mhrd-5498682/

Student representatives to hold silent protests outside MHRD on December 21. Over 400 postcards, 5000 signatures already reached PMO, MHRD office till now.

Demanding increase in their monthly stipend, research scholars from educational institutes across the country, including the IISc and IITs, will hold a peaceful protest outside the Human Resources Development ministry in New Delhi on December 21. They earlier held a signature campaign and have sent letters stating their demands to the MHRD, UGC, Department of Science and Technology (DST) and other funding bodies.

The researchers are demanding hike in the monthly stipend from Rs 25, 000 for JRF fellow to Rs 50,000; and Rs 28,000 per SRF fellows to Rs 56,000, along with an annual inflation-based increment. Their demands also include timely distribution of funds and inclusion of PhD research personnel in the list of categories considered under the pay commission revision which ensures DA and annual salary revision along with ad-hoc reminders every four years.

"We have sent several letters to MHRD, PMO and DST by post, email and even sent faxes to their respective offices. But we have not received any reply. We are forced to hold a nation-wide protest. From IIT-BHU alone 50 representatives have agreed to reach the MHRD office as of now and student representatives from other institutions have also agreed to join. Rest of the students will observe protest in their respective campuses on December 21," said Mayank, a research scholar from IIT-BHU.

The stipend for research scholars were last hiked in 2014. "Since I have joined the research, apart from the inflation, there has been a hike of mess fee, semester fee and other expenses well. The mess fee alone has increased from Rs 15,000 to Rs 27,000 since then but our stipend has remained the same. This hike is needed for our basic day to day expenditure," said Abdul Ali, IIT-Bombay.

Replying to queries sent by indianexpress.com, Secretary, MHRD, R. Subrahmanyam said that the MHRD was discussing the matter with the DST. He also informed that the DST is "probably carrying this matter to Cabinet soon."

Many students had also raised concerns over the 'high stipend' given to the PMRF fellow (Rs 75,000), stating that this has created a divide. One of the postcards sent to the PMO had stated, "The present PMRF scheme only addresses a very small part of the student community and a larger part is still left out."

To this, Subhramanyam said, "PMRF stands on a different footing since it is engaged in cutting-edge research and the selection criteria, expectations (from PMRF scholars) are totally different."

However, this has not gone down well with other researchers. Many students are calling the move "highly biased".

"We understand that there is a selection criterion for PhD students under PMRF which allows them to explain the relevance of their research. But we are not even given that chance. The MHRD should hold national-level interview sessions for all PhD students and whoever has most socially relevant topic with social impact and has clarity of research path should also be considered 'cutting-edge'," said Vivek Sharma, chairperson, IISc student council.

"More students are getting tilted towards moving to some foreign institutes or getting corporate jobs where they get adequately paid for their labour," read one of the 400 postcards research scholars had sent to the PMO. "I hope you understand that research needs more involvement than a job," it added.

IIT BBS to get state-of-the-art lab for its Centre of Excellence

https://timesofindia.indiatimes.com/home/education/news/iit-bbs-to-get-state-of-the-art-lab-forits-centre-of-excellence/articleshow/67139379.cms

A state-of-the-art laboratory of the SK Dash Center of Excellence of Bio-sciences and Engineering and Technology (SKBET) of IIT Bhubaneswar will be inaugurated on Tuesday.

S K Dash, one of the pioneers in the field of probiotics, provided a gift fund for setting up of SKBET in the specific areas of bio-molecular and food technology leading to capacity building at IIT

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Bhubaneswar.

In the School of Basic Sciences of the institute, SKBET is now hosting the Probiotics and Human microbiome research laboratory. It is applying innovative approaches and state-of-the-art technology to understand and solve problems that are related to human gut microbiome associated diseases, probiotic and prebiotic intervention in various diseases.

Apart from human probiotics, researchers are also actively working on various environmental probiotics that are useful for maintenance of soil health in agriculture, water health in aquaculture, and probiotic blended feed for fish and prawn.

The SKBET research laboratory has a world-class set up to carry out research in the areas of microbiology, molecular biology, and cell biology. The state-of-the-art laboratory has procured many high-end instruments to carry out various experiments.

"Our team is actively working on a few next-generation probiotic strains with a goal to address many non-communicable diseases. We also have an aim of identifying and collecting various beneficial strains from the Indian population and establishing a local microbial bank. We are working to develop various probiotics blended products based on our research findings," said an official release.

"Our previous studies on preschool children have established an inverse association of fecal Lactobacillus and fecal total iron concentration. Also, we have identified a Lactobacillus strain that is effective in clearing Salmonella infection. Our team has developed a product (a blend of 13 probiotics strains) that is effective in preventing eutrophication in aquaculture and maintain the soil and water health," said Saroj Nayak, head of School of Basic Sciences.

December 17

HRD ministry panel wants Institutes of Eminence to get Rs 1,000 crore to boost research

https://theprint.in/governance/hrd-ministry-panel-wants-institutes-of-eminence-to-get-rs-1000crore-to-boost-research/164788/

Empowered expert committee says fund should be above general research pool grant and be available to institutions based on their performance.

An empowered expert committee (EEC) headed by former chief election commissioner N Gopalaswami, set up in February this year by the Union government to select 'Institutes of Eminence', has called for the creation of a special Rs 1,000 crore fund that can be accessed by the faculty and students of these educational institutions to bolster a culture of research and publication.

The panel has also asked for "leaner and efficient" managements of educational institutions and described existing governance structures as a "dampener to better performance", according to a government official familiar with the matter.

In its second report presented to the Union human resource development (HRD) ministry and the University Grants Commission (UGC) earlier this month, the four-member panel said it has already mooted the idea of a central research grant fund, the officials added.

"The EEC now proposes the creation of a special fund, say of Rs 1,000 crore to begin with, to which all the selected educational institutions and their faculty can have access so that the culture of research and publication becomes stronger which is essential if these institutions have to move up the rankings ladder," the committee has said in its report, one of the officials cited above said on condition of anonymity.

A second government official, who asked not to be named, said that the committee has said the fund should be above the general research pool grant or already existing funds for research, and should be available to institutions based on their performance as 'Institutes of Eminence'.

The second official added that the panel said this would create a healthy competition between institutions, not only to maintain and improve their scores but also get better international recognition.

The Gopalaswami committee was formed by the Narendra Modi government to identify institutions which have the potential to figure in the top 500 of global educational rankings. Research is a key factor considered when global rankings by agencies such as QS and Times are computed.

Earlier this month, the committee submitted its second report, taking the institutions it has recommended for the IoE status up to 30.

Fifteen of these are in the private sector, including the Raghuram Rajan backed KREA University, Shiv Nadar University in Greater Noida, Jamia Hamdard in New Delhi, and VIT, Vellore. Another 15, such as Delhi University, Jadavpur University, BHU Varanasi and Aligarh Muslim University (AMU), and IIT-Delhi, are in the public sector.

The Gopalaswami committee has also stressed that "heavy governance structures" of Indian educational institutions need to be replaced by leaner and efficient mechanisms so that institutions can have more time and energy to focus on gaining and disseminating knowledge.

UGC is likely to examine the report of the panel in a meeting in January, said the second official.

"Funds for research are without question a positive and good idea. It is important as research is a key factor as to where an institution stands globally. However, another aspect is that there should be mechanisms that allow more dedicated funds for research across all institutions," said former UGC member Inder Mohan Kapahy.

Top Engineering Institutions in Delhi/NCR based on NIRF Ranking 2018 <u>https://timesofindia.indiatimes.com/home/education/news/top-engineering-colleges-in-delhi/ncr-based-on-nirf-ranking-2018-bu/articleshow/67123973.cms</u>



There are many prestigious engineering institutions/universities/colleges located across Delhi National Capital Region (Delhi-NCR). Some of the most prestigious institutions located in Delhi-NCR includes - IIT Delhi, Delhi Technological University (DTU), NSIT, NIT etc. There are more than 30 engineering colleges in Delhi alone. The engineering universities/institutes/colleges located in Delhi NCR are both private and public. These academic institutions offer infrastructure, placement, campus experience etc. to students from across the country and abroad.

Engineering Admissions

Admissions to most of the engineering institutions are based on entrance exam scores and interview round. Some of the prominent engineering entrance exams include - JEE Main, JEE Advance (for IITs), GATE, SAT etc. Few engineering institutions also conduct their own entrance examination to provide admission into the engineering courses. The candidates need to check to apply for these entrance examination to get admission to engineering courses. Based on the marks obtained, a list of shortlisted candidates is published by the institutions for group discussion and or interview round. The candidates who clear both - the entrance exam and group discussion and or interview round are finally selected for the admission to engineering courses. However, there are some private engineering colleges/institutes/colleges that offer admission to engineering courses without any entrance exams.

Engineering Course Specialisations

There are various institutions that offer specialisations in various branches of engineering. Some of the most popular disciplines/specializations of engineering include - <u>Mechanical</u> <u>engineering</u>, <u>Biotech engineering</u>, <u>Computer Science Engineering</u>, <u>Electronics & Communication</u> <u>Engineering</u>, <u>Engineering Physics</u>, Civil Engineering, Chemical Engineering, Electrical Engineering, etc.

How to Select the Best Engineering Institution?

The students aspiring to be an engineer can shortlist the engineering college/institute/university based on the ratings. There are many government and private rating agencies that rate academic institutions based on several factors such as - reputation of the institution, infrastructure, academic excellence, education quality, past placements, faculty competence, etc. The students can shortlist institutions based on these parameters and then refine the list further by locality, fee structure, scholarship offered etc.

NIRF Engineering Institutions Ranking 2018

The National Institutional Ranking Framework (NIRF) is a national rating agency that was launched in 2015 to rank higher educational institutions in the country based on objective criteria to promote

competitive excellence in the higher educational institutions. Based on NIRF's 2018 ratings, we have listed down the top Engineering universities/colleges/institutes in Delhi/NCR. Check the list below:

Top Engineering Colleges/Institutes/Universities in Delhi-NCR

| Institution | Location | Ranking |
|---|----------|---------|
| Indian Institute of Technology | Delhi | 3 |
| Jamia Millia Islamia | Delhi | 32 |
| Delhi Technological University | Delhi | 41 |
| Indraprastha Institute of Information Technology Delhi | Delhi | 66 |
| Jaypee Institute of Information Technology | Noida | 70 |
| Guru Gobind Singh Indraprastha University | Delhi | 85 |

IIT-M to partner with digital firm Thales to design processors

http://www.newindianexpress.com/cities/chennai/2018/dec/17/iit-m-to-partner-with-digital-firm-thales-to-design-processors-1912785.html

IIT Madras researchers recently designed, fabricated and booted up India's first indigenouslydeveloped RISC-V Microprocessor — 'Shakti'.

Indian Institute of Technology - Madras (IIT-M) has collaborated with Thales, a French multinational company that designs and builds electrical systems, to produce processors with high global safety standards, said a statement from the institute on Monday. Thales and IIT-M have planned to take up joint research programmes in areas such as aerospace, space, transportation, security and defence. One of the most important objectives of the project is to design a SHAKTI RISC-V processor, with the highest safety-critical standards, the statement said.

Thales will draw on its expertise in the security and dependability of critical embedded systems to establish the best security practices for hardware development, the statement said adding, "The ultimate objective is to improve the security and dependability of the Internet of Things (IoT) devices, embedded systems and machine learning implementations."

IIT Madras researchers recently designed, fabricated and booted up India's first indigenouslydeveloped RISC-V Microprocessor — 'Shakti'. The Shakti family of processors are targeted for mobile computing devices, embedded low power wireless systems and networking systems besides reducing reliance on imported microprocessors in communications and defence sectors. The microprocessor is on par with international standards.

Lead researcher, Prof Kamakoti Veezhinathan, Reconfigurable Intelligent Systems Engineering (RISE) Laboratory, Department of Computer Science and Engineering, IIT Madras, said, "With the advent of Page **17** of **25** more and more safety critical systems adopting electronics hardware for intricate control and monitoring, fault-tolerance and security features are of prime importance in next-generation processors.

IIT Bhubaneswar's IoT solution to analyse LPG consumption declared winner of 'Grand India IoT Innovation Challenge'

https://www.digit.in/general/iit-bhubaneswars-iot-solution-to-analyse-lpg-consumption-declaredwinner-of-grand-india-iot-innovati-45313.html

The 'Grand India IoT Innovation Challenge' was organised by Tata Communications and CII's; The winners Prajjawala received a cash prize of Rs 5 lakh.



Prajjawala from IIT Bhubaneswar has won the first prize of 'The Grand India IoT Innovation Challenge,' organised by Tata Communications and Confederation of Indian Industry (CII). The team designed an IoT-based solution to measure, track, transmit, store and analyse consumers' LPG consumption and won Rs 5 lakh.

Tata Communications, a leading digital infrastructure provider, today announced the winners of 'The Grand India IoT Innovation Challenge,' (#giiotic); a 4-month long contest organised in partnership with Confederation of Indian Industry (CII). Riding on the theme, 'Solutions that create a better society,' engineering students from select colleges across India were invited to build prototypes of IoT enabled solutions by leveraging Tata Communications' IoT infrastructure and expertise.

While the ideas received were diverse, majority of them were underpinned by the need for efficient civic administration and public safety – demonstrating that transformation is not just about digitisation of processes, but creating value for citizens and businesses, based on smarter systems that enable smarter use of data.

The first winner Prajjawala from IIT Bhubaneswar designed an IoT-based solution to measure, track, transmit, store and analyse consumers' LPG consumption. Prajjawala received a cash prize of INR 5 lacs. The second winner Dominators from Army Institute of Technology designed an IoT device that can be plugged to a streetlight, creating a heat map of mosquitoes for the municipal authorities to assess and plan mosquito control.

Third prize was jointly awarded to – Sanrakshak from VIT Chennai who created affordable sensors to provide real-time data on the occurrence of faults on the railway lines, ensuring safe and secure journey for travellers and Short Circuits from BITS Pilani which addressed power deficiency issues by accessing the energy stored in electric vehicles, when not in use. The second winner was given cash prize worth INR 3 lacs and the third place secured INR 1.5 lacs each.

Tata Communications will look to extend its support to the winning teams in scaling the idea to an operational business model.

The first edition of The Grand India IoT Innovation Challenge witnessed 757 applications from a closed contest (open to only 27 engineering colleges and universities) across India. Of these only 10 teams made the cut to the finale. The jury comprised of VS Shridhar, Senior Vice President and Head of Internet of Things (IoT) at Tata Communications; Rohit Srivastwa, Senior Director at Quick Heal Technologies Ltd. as a representative of CII; Arvind Tiwary, Chair-IoT Forum at TiE Bengaluru; Anita Rajan, Chief Operating Office, Tata Strive and Rajendra Shende, Chairman of TERRE Policy Center.

For four-months, shortlisted teams were given exclusive access to Tata Communications' dedicated LoRaWAN[™] IoT network, Raspberry Pi[™] kits along with expert mentorship from Tata Communications' IoT Product & Solutions team to build their ideas into prototypes that demonstrates engineering expertise, has an innovation quotient, market relevance and commercial viability.

"There is a need to build a holistic IoT ecosystem that will enable the use of technology to solve India specific problems. We firmly believe that this technology can contribute to improving quality of living and making our cities engines of economic growth and prosperity," said VS Shridhar, Senior Vice President & Head, Internet of Things, Tata Communications. "Through our LoRaWANTM based LPWAN and cloud-based IoT platform we have been successfully catering to experiential and growing needs of the entire spectrum – the Government, large enterprises and start-ups. We now want to encourage young minds, especially the engineering students, to engage meaningfully in this ecosystem. We are confident that their contribution will create large-scale, innovative solutions for public good. The overwhelming participation we have received for this challenge, demonstrates their keenness to participate and make a difference. We see it as a validation of our endeavour to build a strong talent pipeline by offering students a practical experience of ideating, prototyping, building and scaling a solution for the betterment of our society."

According to a survey of 774 companies across four industries (conducted by World Economic Forum and Observer Research Foundation), nearly 84% companies will need to re-train their existing employees with new technologies such as IoT, big data, cloud computing and AI to address the skill gap.

Tata Communications and CII identified this missing link and earlier this year, partnered to launch the CII – Tata Communications Centre for Digital Transformation, to help organisations in India unlock the true benefits of digital technologies.

"One of the main challenges that India faces is the professional skill gap, where it has a big talented workforce but very few experienced on the emerging technologies," said Anjan Das, Executive Director, CII. "We are deeply thrilled to strengthen and take forward our partnership with Tata Communications through The Grand India IoT Innovation Challenge. This initiative is in line with the objective of the CII – Tata Communications Centre for Digital Transformation, to catalyse digital change for the nation by accelerating adoption of new age technologies and championing the cultivation of new talent to drive innovation forward. Through this challenge, India's students (our future leaders) have demonstrated their inclination towards using IoT to create path-breaking

solutions for a better society and the need for right mentorship and IoT infrastructure, which is being addressed by Tata Communications, a leading player in the sector."

Tata Communications is already laying the foundation for IoT in India with the world's largest LoRaWAN network spanning across 2000 communities and 38 cities in the country to create an end-to-end connected ecosystem. This will give rise to a new civic operating system which will be fuelled by data to enable seamless and secure connectivity between devices to make public services more accessible, reduce environmental impact and empower communities at large.

First International Conclave on Energy Storage Devices organised by IIT Roorkee

https://www.theindianwire.com/education/first-international-conclave-energy-storage-devicesorganised-iit-roorkee-88069/



Indian Institute of Technology (IIT) Roorkee, recently held an international meeting and industryacademia conclave on Energy Storage Devices (IMESD) from December 10 to 12. The conclave was organised by Department of Physics, IIT Roorkee, titled 'Energy Storage Devices: Recent Advances and Future Challenges'. Over 300 participants representing 14 countries took part in the event.

The focus of the conclave was on the role of Energy Storage Devices in reducing the carbon footprint, in line with Paris Agreement.

Speaking on the occasion, Prof Arumugam Manthiram from University of Texas, Austin emphasized the need of efficient trained manpower to deal with the development of indigenous battery technology. Prof Manthiram is an eminent scientist and co-inventor of many materials being used in commercialized battery system.

He also advised that IITs, NITs, National Labs and Industry must form an association at national level where IIT Roorkee can play a vital role, as the institute is well-equipped with the facilities required for research & development of energy storage technologies.

Prof Vijaya Mohanan K Pillai, former director of CSIR-CECRI and NCL Pune, a policy maker and an excellent scientist, suggested in his address an urgent need for development of affordable material and energy storage technologies to support our Electric Vehicle program for self-sustainable growth of Nation.

Padmashree awardee Prof Ashok Jhunjhunwala, stressed on the need for developing robust charging platform and battery recycling technologies along with indigenous development of secondary batteries specifically for electric vehicle application.

Companies working in the area of energy storage devices such as Amar Raja Batteries Ltd. (Amaron Batteries), TVS Motors, XNRGI (Exponential Energy), USA, BHEL, BEL, MNRE, DRDO showed keen interest to support IIT Roorkee storage program/facility at the Department of Physics, under the mentorship of Prof. Yogesh Sharma.

During the event, XNRGI committed to support one PhD student from Department of Physics, IIT Roorkee under the Prime Minister Research Fellowship (PMRF) Program of Govt. of India.

IIT Kharagpur developing app to help smokers quit

<u>https://economictimes.indiatimes.com/news/science/iit-kharagpur-developing-app-to-help-smokers-quit/articleshow/67135030.cms</u>



A research team at IIT Kharagpur has developed a prototype of sensor-based activity tracking kit which can monitor the activities in daily lives along with the smoking habits.

Researchers at the Indian Institute of Technology Kharagpur (IIT Kgp) are developing a mobile application to help smokers quit. The app could be integrated with a fitness band or a smartphone to track and alert users with an alarm when they try to light a cigarette. A simultaneous alert will go to a friend, relative or doctor of the smoker to intervene and deter the smoker from smoking.

A research team led by Ram Babu Roy, assistant professor at Rajendra Mishra School of Engineering Entrepreneurship at IIT Kgp, has developed a prototype of sensor-based activity tracking kit which can monitor the activities in daily lives along with the smoking habits.

"In near real-time approach, an intervention in the form of a text/audio/video message or a phone call from family members/friends/doctor will convince the smoker to stop smoking while he is smoking," said Roy.

A smartphone-based application is also underway that would analyse the tracking kit data and send alerts for unhealthy lifestyle with suitable recommendations. The innovation is a sensorbased technology for automated recognition of addictive and depressive behaviour.

The proposed solution is based on the basic premise that the person under consideration wants to quit smoking and is willing to abide by the prescribed course of action, said Roy.

A smoking behaviour profile of the person based on historical data on his or her activities would be first created. Based on the profile, estimates of the cumulative effects of smoking on the individual would be done, following which information about potential health hazards of continuing smoking (such as increased risk, reduction in lifespan) would be sent to the individual. Alerts would also be sent to the individual's contacts.

"The profile can help in designing incentive plans (may be used by insurance companies to increase/decrease the health insurance premium) as well as setting up of customised intervention plans," said Roy. "Those who reduce their smoking may get some congratulatory message about reduced risk/increased lifespan."

The team is working towards filing a patent for further commercialisation of the product. "This is the first such app worldwide to track smoking activity. The proposed kit aims to develop this one that may be incorporated in the existing app on fitness," said Roy

December 15

IIT Placements 2018: Big cheer! Many students get over Rs 1 crore salary package – All you need to know

https://www.financialexpress.com/jobs/iit-placements-2018-big-cheer-many-students-get-over-rs-1-crore-salary-package-all-you-need-to-know/1414223/

IIT Placements 2018: As suggested by various media reports and details shared by IITs on their official website, this year around 10 IITians were offered salary packages of even more than Rs 1 crore.



As many as 3000 jobs offers were made to the students during the first 4 days of the placement sessions across all the 23 Indian Institutes of Technology (IITs). (Reuters)

IIT Placements 2018: As suggested by various media reports and details shared by IITs on their official website, this year around 10 IITians were offered salary packages of even more than Rs 1 crore. This year's placement session has recorded an increase in the number of students who have been offered top salaries from some of the world's top companies. According to a Times of India report, this year a large number of students found places in the mechanical, R&D, computer science and electrical sectors.

As many as 3000 jobs offers were made to the students during the first 4 days of the placement sessions across all the 23 Indian Institutes of Technology (IITs). These also included the pre-placement offers (PPO) made to them. There is an increase of 30 per cent in the overall placements as compared to 2017. IIT Delhi Director, V Ramgopal Rao while talking about this year's placements said that an overall growth in various sectors is indicated across the various sectors. The same is visible in the increasing job opportunities that students are receiving.

Apart from this, four IIT BHU students this year have been offered a salary as high as Rs 1.52 crore by a USbased company. Microsoft stood out during this year's placement session. It hired at least six students from Roorkee and Kanpur. They have been offered an annual package as high as Rs 1.5 crore. Final placement data is yet to be disclosed by the respective IITs.

IIT-B students develop method to advance stem cell growth in laboratory

https://mumbaimirror.indiatimes.com/mumbai/other/iit-b-students-developmethod-to-advancestemcell-growth-in-laboratory/articleshow/67100303.cms



The researchers from Department of Chemical Engineering at work

A team of students from Indian Institute of Technology, Bombay, have developed a method to advance the growth of stem cells in a lab. This method helps address the global issue of stem cells losing their breeding capacity once removed from the tissue.

A major snag in the clinical applications of stem cells in regenerative medication is the limited availability of stem cells in each tissue and generating them in a lab is difficult as their capacity to divide slows down once removed from the human body.

Guided by associate professor Abhijit Majumder, seven students of the Department of Chemical Engineering, IIT-B, have identified a material-- polyacrylamide (PAA) hydrogel-- that can help maintain stem cell division even after it is removed from the body. The team claims that the material can help generate 500 times more cells than what is grown today. Funded by the Wellcome Trust/DBT India Alliance, a public charity funded by the Department of Biotechnology, and the IIT B seed grant, the research is currently under peer-review.

"While we can have embryonic stem cells from developing embryos, our adult body also has a pool of reserved stem cells. These cells are known as 'adult stem cells'. These cells maintain the cell numbers in each tissue and organ by replenishing the regular loss of cells in our body either due to natural cell death or due to a disease or injury," explained Majumder.

One such adult stem cell 'Mesenchymal stem cells' (MSCs) are present in many tissues including bone marrow, fat, dental pulp, and umbilical cord. These cells have the potential to multiply, help heal wounds and repair the immune system of the body. When cultured in a lab, these cells stop proliferating after a certain point.

The IIT team, however, cultured the MSCs on the PAA gel for 50 days and found that the cells continued to grow even after 50 days of culture. They also found that the size and shape of the cells were maintained in the process. "As a result, we got 500 times more cells from gel than what was obtained from plastic plates [the usual process]," he added.

According to Majumder, if one cell multiplies to become four million cells after 50 days when cultured on plastic plates, the cell cultured on the PAA gel gives two billion cells within the same time span.

"We have produced a paper and it is currently under review. We hope to get it published in a science journal by January next year," said Majumder.

'Strong interaction between industry and institute is vital for growth' <u>https://timesofindia.indiatimes.com/city/trichy/strong-interaction-between-industry-and-institute-</u> is-vital-for-growth/articleshow/67099583.cms

Saifur Rahman, president of Institute of Electrical and Electronics Engineers (IEEE), Power & Energy Society (PES) and director of Advanced Research Institute, Virginia Tech, USA, on Friday, said that a strong industry-institute interaction by providing a platform for academic researchers and engineers is important for growth.

Speaking at the inauguration of the 20th national power systems conference held at the National Institute of Technoclogy-Trichy (NIT-T), on the topic -- A smart city and its attributes – he said that solutions could be found for present and future problems by exchange of ideas. He said India has the second largest IEEE membership next to the USA. IEEE members need to address societal needs with their contributions, he said.

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Rahman said the conference will help to give solutions to existing power sector scenarios while stressing on the importance of smart grid in the present power sector.

Director of NIT-T, Mini Shaji Thomas spoke about the need to aim their research towards a social motive and the need to bind industries and institutes.

K V S Baba, chairman and managing director, Power System Operation Corporation (POSOCO) shared his views on energy conservation and environmental management.

During the conference, academic excellence award-NPSC 2018 was given to Bhim Singh, IIT Delhi. Industry excellence award-NPSC 2018 was given to K Rajamani, chief consultant, Adani Electricity, Mumbai.

The conference was attended by eminent academicians, faculty members and students from technical and educational institutions.

Nasscom ties up with IIT-Madras for skill development

https://theprint.in/governance/hrd-ministry-panel-wants-institutes-of-eminence-to-get-rs-1000crore-to-boost-research/164788/

IT industry body Nasscom on Saturday announced a partnership with the Indian Institute of Technology (IIT) Madras for reskilling students and employees in the Information Technology sector and IT-enabled Services (ITeS).

The partnership is aimed at building an able workforce to support the industry and other stakeholders, Nasscom said in a statement.

"This collaboration is in line with Nascomm's FutureSkills Platform, that is targeted at reskilling or upskilling four million people from the IT-ITeS industry, students entering the workforce and employees of other industries and government who need to learn digital skills of the future," it said.

Commenting on the partnership, Amit Aggarwal, CEO, IT-ITeS Sector Skills Council, Nasscom, said this MoU "will be a significant catalyst for the IT-ITeS industry's FutureSkills initiative, which aims to get India accelerated on the path to becoming the global hub for talent for the new emerging technologies like AI (Artificial Intelligence), IoT (Internet of Things), cyber security, big data, cloud and blockchain."