What’s Your JAM? From WEE Foundation Cofounder Aparna Saroagi's IIT Delhi Gyan


Here’s some much needed wisdom from Aparna that inspired us at Building India Inc., the annual business summit by Department of Management Studies (DMS), IIT Delhi

The Women Entrepreneurship and Empowerment (WEE) Foundation started as a small initiative to strengthen the woman ecosystem is now the first such program in India with government backing. Their vision is to touch one billion women by 2020. Yes, we spelled that right.

Aparna Saroagi, founder and executive chairperson of WEE, plans to do this by encouraging and pepping up aspiring individuals wherever they can be found. For instance the multi age student gathering she met at Building India Inc., the annual business summit organized by Department of Management Studies (DMS), IIT Delhi. Aparna was back at her alma mater sharing the vision of WEE. “We want to create a chain of entrepreneurs who will pay it forward by helping other entrepreneurs out there. Help others grow and in the process, you will grow too.”

Another key goal for the foundation is gender equality to aid economic development. Aparna sincerely hopes that one day soon India will be known for gender parity. She and WEE are certainly trying to do something about it with the foundation soon planning to launch an online retail shop for businesswomen to sell their products on.

Here’s some much needed wisdom from Aparna that inspired us at Delhi IIT this weekend:

**Ever heard of JAM? There are three JAM options in life.**

**Option 1:** you can have bread and jam and be happy in life. Such a satisfying combination.

**Option 2:** You can complain about traffic jams in life that gets you down. “I don’t get funding, nobody supports me, people don’t understand me,” and the list of problems will go on.
**Option 3:** Embrace the fact that life is all about JAM. Just Achieving the Maximum.

I remember watching a movie sometime back and the hero said, “I don’t fall in love with anyone. I keep my heart safe.” His heart is safe, but it’s of absolutely no use.

**Try. Try something. Life is about taking risks, taking one step on a daily basis.**

Serendipity happens when you’re out there trying. Have you ever found this to be true? If it’s a yes, go and discover something. It’s worth it.

In my case serendipity happened and I met my cofounder at a chance meeting where we realized our vision and mission are one and same and that we need to do something about it. We designed India’s first of its kind program for woman empowerment, and so far that’s the only program approved by the Government of India supported by the Department of Science and Technology and Ministry of Electronics and Information Technology (MeitY). This same program is now present in the UK, Israel and Estonia. These countries wanted to replicate what we are doing in India. That’s the power of an idea.

If you ask me about how we started our journey, whether it was easy, all I can say is that we failed every day, we were rejected every day. That taught me that if we weren’t failing, then that we are not learning. And if you’re not learning, you’re not growing. Make sure you take your chances. Take your risks on a daily basis.

**Here’s a tip: Think of three words that you want to be defined by. Then make a conscious decision every day try to live up to those three words.**

And what happens if you don’t do anything to become these three words? Let me paint you a picture of your life with some simple maths. Let’s say you’re not doing anything new. You are where you are. After one year, where would you be? In the same place, of course!

Now let’s say you start taking one step on a daily basis. Just one step. Perhaps it’s connecting to someone, reading something, adding a new skill to your existing set. What happens then? Say you added and bettered yourself by just 1 percent on a daily basis. You do this for 365 days. Certainly a version of yourself that is stronger by a power of 365.

Here’s my suggestion to you: Please choose the words that define you and your legacy to the world. You will fail and that’s worth it. You might have dozens of failures but a few successes will take you where you want to. Whether you want to be an entrepreneur, a brand or a thought leader you can get there only if you do something about it. It’s your life.

**Try. Try something. Life is about taking risks, taking one step on a daily basis.**
IIT Kharagpur to start ‘Vastu Shastra’ classes for architecture students: Report
http://indianexpress.com/article/education/iit-kharagpur-to-start-vastu-shastra-classes-for-architecture-students-report-4616108/

The oldest IIT in the country believes one cannot be a "well-rounded architect" without basic understanding of Vastu concepts.

Believing that the foundation of traditional Indian architecture was laid out by the concepts of “Vastu Shastra”, IIT Kharagpur has reportedly decided to start “Vastu Shastra” classes for architecture students. According to a report by Times of India, the oldest IIT in the country believes one cannot be a “well-rounded architect” without basic understanding of the concepts, and hence will introduce the rudiments to first and second-year undergraduate architecture students beginning this August. The institute will also give detailed study of the subject to post graduation students and research scholars in infrastructure. The report also says that students will have to write assignments, projects and tests on the taught Vastu concepts.

According to the report, the faculty at IIT Kharagpur believe that when students are given education with Western background, they should also learn concepts in sync with ancient Indian architectural traditions. The faculty members, according to the newspaper, said that Vastu studies are not rooted in religion but have a scientific base and will provide platforms for students.

“Vastu Shastra has its beginnings in Rig Veda and is scientific in its tenor. Today, the whole world is looking at green living, thanks to the way we are suffering due to erratic concretisation. The concept of Vastu revolves around the healthy relationship of nature and infrastructure, hence its modern relevance,” Joy Sen, a faculty member of the institute was quoted by Times of India.

IIT-B Program to help colleges to incubate start-up culture
https://www.brainbuxa.com/education-news/iit-b-program-to-help-colleges-to-incubate-start-up-culture-6272

Indian Institute of Bombay, which has an experience of nurturing more than 100 entrepreneurs in the area of technology, has recently come-up with a program with the aim of helping technical institutes in cultivating start-up Eco-system. With around 30 successful graduate start-ups to its credit, the institute’s Society for Innovation and Entrepreneurship (SINE) is starting a program which will help engineering colleges to promote the system of startups.

In the new program, 30 engineering colleges participated from across the country at IIT-B where they attended a four day course on innovation, entrepreneurship and incubation. After the program, an engineering college in Assam is almost ready to start its own incubation center.

“While most colleges have the intent to establish an incubation center, they don’t know how to go about it. On the other hand, those who have incubation centers are not able to make good use of it. The course helps bridge these gaps,” said Milind Atrey, the professor in-charge for SINE. “While most colleges have the intent to establish an incubation center, they don’t know how to go about it. On the other hand, those who have incubation centers are not able to make good use of it. The course helps bridge these gaps,” said Milind Atrey, the professor in-charge for SINE.

**SINE was established in 2004 and since then it has not only helped in incubating 103 startups but it also provided physical support and needed infrastructure.**
"This is the first time SINE is sharing its leanings and experiences for the benefit of other institutions" said Atrey.

The course covered sessions on intellectual property, social entrepreneurship and technology trends. A special session on government schemes which are for promoting the entrepreneurship was also the part of course.

Jaspal Singh Sandhu set to be new UGC vice-chairman

In a major decision, the Human Resource Development Ministry has decided to appoint Jaspal Singh Sandhu as vice chairman of University Grants Commission (UGC), the fund granting arm of the ministry. "The name of Sandhu for the coveted post has been cleared after scrutinizing over 200 applications for the post. Sandhu made it to the final list among the 17 applicants, who were called for the interview by search and selection committee of the ministry," a senior HRD official said. The final order in this regard would be published very soon after completing some necessary formalities. According to the official, Sandhu ranked at top position among all the applicants during the interview which was conducted recently. The official further added that the ministry has started the process to recruit new chairman of the UGC. Sandhu, who is Professor in Department of Sports Medicine & Physiotherapy, Guru Nanak Dev University, Amritsar, is currently holding the post secretary in the commission. He has held many academic and administrative posts prior to his stint at the UGC. It goes to Sandhu credit for introducing novel courses in sports sciences such as Ph.D and doctor of medicine in sports medicine, etc.

The women's quota plan in IITs is well thought out, but will it address the real problem?

From 2018, IITs will start implementing the supernumerary quota for women students by increasing seats in a phased manner.

Every year, lakhs of aspiring engineers take the IIT JEE, hoping to secure admission into the country’s premiere science institutes. And according to Timothy Gonsalves, Director of IIT Mandi in Himachal Pradesh, of the 4600 women who qualified for the entrance last year, only 850 of them joined IITs.

To address these dipping numbers of women students in IITs, the institutes’ Joint Admission Board (JAB) decided on April 15 to increase the number of students IITs will admit from 2018 onwards. The JAB gave a go ahead to a proportion of supernumerary (over and above the original intake) seats to be added for women applicants.

Speaking to TNM, Gonsalves, who chaired the panel which proposed the quota, says it would be implemented in a phased manner till 2020: “Next year, we will increase seats by 14%, by 17% in 2019 and 20% and 2020.” All these candidates will have to clear the IIT JEE and be in the top 20 percentile of their respective boards.

Gonsalves added that the quota will be phased out by 2026.

The move by the IITs is meant to address the skewed gender ratio in the institutes as well as to provide a better chance to women candidates who are already performing well to access better education through IIT.

According to Manish Gohain’s report in TOI, of all the students going to IITs in 2014, only 8.8% were women. While the proportion increased to 9% in 2015, it decreased in 2016 again, coming down to 8%.

Why the skewed gender ratio
“Many women may not join because of family pressures, where their families aren’t too comfortable sending them away to study. The option then is to look for IITs nearby, but they may not have the rank required to secure admission there. That’s why we have increased the number of seats, so the institute nearby is able to take them in,” Gonsalves explains.

An example is Poorva’s* friend, Nimisha*. Both of them hail from Nagpur, Maharashtra and secured admission in IIT Gandhinagar. Poorva says that while she was able to come to Gandhinagar to pursue her PhD, Nimisha’s parents objected to her going away. Since Nimisha didn’t qualify for IIT Mumbai, she ended up joining NIT in Nagpur itself.

Poorva thinks therefore, that the move is a step in the right direction. But not everyone is entirely convinced. 27-year-old Shalini, who graduated from IIT Delhi in 2011 says that the problem is deeper.

“The general mindset is that girls are more ‘creative’ and boys are better suited for the analytical stuff. So many girls are discouraged from seriously pursuing a technical field seriously. But I do hope that increasing the number of seats helps tackle this problem in some way,” Shalini says.

Saloni, a 26-year-old PhD student at IIT Gandhinagar says: “I don’t see how the exclusive seats will help on their own. What could help more, perhaps, is a fee concession. Many families may still not be willing to spend huge amounts on the girl’s education. You reduce the fee and maybe you can get more girls to come to IIT.”

But for Gonsalves, the idea behind the increased number of seats is quite clear. “We aren’t claiming to solve the society’s problem. The simple logic behind this is that is 4600 women are qualifying IIT JEE, then they should be able to access the education to hone them better,” he maintains.

The quota is supernumerary which means the IITs will also have to manage their resources for the higher number of students they will receive. Gonsalves says that resource management is already a part of the plan.

“We have been planning to increase our overall intake by 75,000 to 1 lakh by 2020. Institutes have already undertaken construction of hostel campuses and labs accordingly. This is also why we are implemented the quota from 2018, so that we are prepared with the resources needed for almost 600 more women across IITs,” he says.

### April 16

**IITs to add 20% seats to get in more women**


The move is aimed at improving the poor enrollment of women in the IITs.

THE INDIAN Institutes of Technology (IITs) have decided to introduce a supernumerary quota for women from 2018 to improve the gender composition of their classrooms. The decision to introduce 20 per cent additional seats, exclusively for women, was taken at a meeting of the Joint Admission Board (JAB) of the IITs on Saturday afternoon. The implementation of this will be staggered over three years — 14 per cent additional seats in 2018, 17 per cent in 2019, and 20 per cent in 2020.

“The 20 per cent supernumerary quota will kick in only if the admission of female candidates to a course is abysmally low. For instance, if there are 100 seats and only 10 of them have been taken by women, then the institute will add 20 per cent seats over and above the actual strength, but only for women. The effort will be to lower the cut-off till these extra seats are filled up by women,” said an HRD official, who did not want to identified.
The move is aimed at improving the poor enrollment of women in the IITs. In 2014, 8.8 per cent women were admitted; the figure went up to 9 per cent in 2015, but dropped to 8 per cent in 2016. Meanwhile, the Joint Seat Allocation Authority or JOSAA, which looks into matters related to joint counselling of IITs and NITs, also met on Saturday and decided that these institutes will hold seven rounds of admission counselling this year. Students who do not join their chosen course after the fourth round will have to forfeit 50 per cent of their admission fees. Last year, IITs and NITs had conducted six rounds of counselling.

IITs and NITs have also been asked to review the popularity of their courses and report any seat cut they wish to implement for any programme to the JOSAA by next week. These measures are aimed at reducing the number of seats which fall vacant every year. Last year, almost 3,000 seats across 23 IITs, 32 NITs and some centrally-funded technical institutions remained vacant despite six rounds of joint counselling. Of these, 73 seats were vacant at the IITs and 1,518 at the NITs.

**Appointment of UGC’s Chairman will take time**

The appointment of chairman of the University Grants Commission (UGC) is likely to take time as the Ministry of Human Resource Development (MHRD) is yet to finalise the names for the post.

However, the MHRD has already constituted a three-member committee to search for a new chairman for the Commission as the tenure of Ved Prakash ended on 3 April 2017. Prakash had been appointed UGC chairman on 18 January 2013.

Currently, Professor V.S. Chauhan, a former Chemistry professor of Delhi University, is officiating in place of Ved Prakash. Chauhan had also headed the UGC Pay Review Committee.

According to sources in the MHRD, the search and selection committee would be headed by Dr H.R. Nagendra, who is Chancellor of Swami Vivekananda Yoga Anusandhana Samsthana (S-VYASA).

Sources have said that the government had also appointed two other names to be on the committee — former Lucknow University Vice-Chancellor D.P. Singh and former Saurashtra University Vice-Chancellor K.P. Joshipura.

The search and selection committee has not held any meeting so far.

The post for the vice-chairman of the UGC is also vacant, and the commission has published an advertisement to fill up the vacancy. The MHRD has constituted a separate search and selection committee for the appointment of the vice-chairman.

According to the sources, in order to avoid “controversies”, the MHRD, headed by Prakash Javadekar, has asked both the committees to consider such names for both the posts of UGC’s chairman and vice-chairman, who have wide acceptance among the academia for their excellence.

The members of the search and selection committee for the appointment of the vice-chairman include the Secretary (Higher Education), former UGC chairman Prof Ved Prakash, former Kavikulaguru Kalidas Sanskrit University, Nagpur, Vice-Chancellor Pankaj Chande, Karnataka Central University Chancellor N.R. Shetty and former North Gujarat University Vice-Chancellor Balvant Jani, sources confirmed.
Amitabh Bachchan to appear in 'Padman' as himself

Megastar Amitabh Bachchan has revealed that he will star in R Balki’s upcoming film "Padman" as himself.

The 74-year-old actor confirmed the news on his blog, where he said that he filmed a few shots along with lead actors Akshay Kumar and Sonam Kapoor at IIT Delhi for the film, where he will be seen in small role.

"R Balki shoots a film with Akshay Kumar and Sonam at the IIT Delhi, one of the most prestigious institutes of world reckoning and wishes that I make a small appearance as myself for a few shots..." wrote Bachchan in his blog.

The "Pink" actor also shared a few photographs with Akshay and Sonam from the sets of the film.

This will be Bachchan and Balki’s fourth collaboration together after "Cheeni Kum", "Paa" and "Shamitabh".

He also did cameos in films produced by Balki, such as "English Vinglish" and "Ki & Ka".

**April 15**

UGC approves over 35,000 journals, releases the list
http://indiatoday.intoday.in/education/story/ugc/1/929613.html

The UGC has given approval for over 35,000 journals. The research work published in them would be considered for the purpose of promotion and direct recruitment of varsity teachers.

The University Grants Commission (UGC) has given approval for over 35,000 journals. The research work published in them would be considered for the purpose of promotion and direct recruitment of varsity teachers.

Since quite long, the teaching community and other stakeholders have been demanding a list of notified journals for a long time to set a benchmark for research and allied activities in the field of higher education.

An official said that the UGC has released the list of the approved journals, and the research work published only in them would be considered for the purpose of Career Advancement Scheme (CAS) and recruitment of teachers and other academic staff.

**List of journals will be available on UGC website**

In a letter addressed to vice-chancellors of all universities, UGC secretary Jaspal Sandhu said, "The list of journals is available as a web-based database with search and browse interface on the UGC website. Universities can recommend inclusion of additional peer-reviewed journals that are not listed in the existing list through a university-level academic journal expert committee."

The Commission has instructed the varsities to send their recommendations before May 15. Listed journals are indexed in Web of Science, Scopus and Indian Citation Index. Journals covered in a selected indexing and abstracting services have been also added to the approved list.

The list is broadly categorised into three streams - Science, Social Sciences and Arts and Humanities.
IIT-M ties up with four companies for new industry-academia initiative

Indian Institute of Technology Madras (IIT-M) has announced a new initiative to facilitate Industry-Academia talks on research in collaboration with four companies under the name as Research Connect.

The companies it tied up with include leading chip manufacturer Intel Corporation, Japanese multinational conglomerate Hitachi, Swedish high-tech engineering multinational corporation ABB, and Chinese multinational networking and telecommunications equipment company Huawei.

The Research Connect aims to link industrial R&D experts and IIT Madras research scholars and faculty to augment the existing research initiatives of IIT Madras. These initiatives include Research Park, Incubation Cell, Industrial Consultancy and Sponsored Research (ICSR). The tie-up seeks to bring the industrial research fraternity and scholars at IIT Madras together, to pursue a result-oriented discussion on how research done by the various labs at the institution can be focused to deliver solutions catering to industrial needs.

IIT-M, with 16 academic departments, 550 faculty and 9,000 students from 18 countries, has advanced interdisciplinary research academic centres and over 100 laboratories for teaching and research.

IIT-Kharagpur developing tools to make computers understand Bengali

IIT-KHARAGPUR is working with Google to develop a Bengali treebank to help understand grammatical structure of Bengali texts as well as their meaning, a statement issued by the engineering institute on Friday said. Researchers at the department of Computer Science and Engineering at IIT-KGP are developing tools to help computers understand Bengali texts. They are working with the Department of Information Technology to develop various resources and tools for Bengali. The research will enable the computer to read Bengali documents on the users’ behalf. “Such tools will enable a far better online experience for a Bengali language user,” said Sudeshna Sarkar, Head of the Department of Computer Science and Engineering.

IIT Madras students go on hunger strike in support of protesting Tamil Nadu farmers

CHENNAI: A group of students from the Indian Institute of Technology (IIT) Madras have begun a two-day hunger strike expressing solidarity with the Tamil Nadu farmers who are currently staging protests in New Delhi.

The hunger strike began at 9 pm with about a dozen students on Saturday.

The protest is voluntary and several IITians are expected to take part in the event being organised inside the campus near Himalaya Lawn.

Sundar, a student leader, said the hunger strike is being carried out in support of Tamil Nadu farmers who have been protesting in the national capital for the past one-month demanding waiver of agricultural loans.

“Also, we are condemning the police crackdown on protesters who are opposing opening of TASMAC outlets in residential areas,” he said.
April 14

Innovative Human Behaviour & Immunity System Based Networking Solution Developed by IIT Researcher


Problem appearing in nature find solutions by their own are not only useful but also avoid their repetition.

Engineer and Scientist are looking forward at natural processes for inspiration and they will be used in future to solve other problem related to different filed. Encouraged by healing things model Udaipur based researcher developed solutions on cyber security and networking field problem.

Dr Heena Rathore, working in field of cyber security at IIT has developed a solution on cyber security based on biology. Her solution was inspired by two processes includes natural human behaviour and immunity system.

By Combining both the processes Rathore developed unique network security system to identify and eliminate unfavourable elements and treats in the network.

Security in WSN (Wireless Sensor Network) plays important role as it gives sustainability to the network. Security threats can be introduced in WSN through various factors, where ongoing data transmission can be interfered or a particular node can be altered.

The researcher incorporated all the factors into model, which work to establish trust among different component of the network.

The second phase of system works the same way as a human immune system work. System maintains the purity of the network while avoiding further damage caused by the attack.

April 13

Capitalize-Funding Conclave At IIT Delhi Saw Overwhelming Response From Startups

https://bizztor.com/capitalize-funding-conclave-at-iit-delhi/

Venture Garage organized “Capitalize-Funding conclave” at IIT Delhi which saw an overwhelming response with over 25 investors and 300 entrepreneurs attending the event. The event started with a panel discussion moderated by Rahul Narvekar,
The event started with a panel discussion moderated by Rahul Narvekar, ex CEO of NDTV Ethnic and now CEO, Scale Ventures. Rehan Yar Khan of Orios Ventures who is one of the first investors in OLA Cabs was special guest of honor. Other panel members included Ravi Kaushik, Partner at Water Bridge Ventures, Ojasvi Babber of Amity VC, Girish Shivani of Yournest Angel Fund and Tej Kapoor of Fosun Kinzon Capital. These investors together have over $1 Bil to be invested in startups.

The investors shared their views on the startup ecosystem and its outlook in the new financial year, why profitability is still a major issue in Indian startups, how to approach investors etc. Rehan recalled his experience how he met founders of OLA Cabs at one of the pitching events at IIT. “I was at IIT when 2 guys were pitching me a disrupting technology. It is the same nostalgia that brings me back to IIT Delhi for Capitalize.” Girish of Yournest said, “Our new fund of Rs 300 Crore will be deployed over 25-30 startups with preference on more tech oriented sectors such as Internet of Things, electronic system design, artificial intelligence, advanced robotics, enterprise software and mobile Internet.”

The panel discussion was followed by pitching by 8 startups which were shortlisted from over 300 startup entries. These startups pitched for seed investment to a panel of 25 investors including Advantedge, Indian Angel Network, Quarizon, Pravega VC, Yournest Angel Fund, Water Bridge Ventures, Fosun Kinzon Capital, Scale Ventures and many others.

The startups ranged from Healthcare solutions to AI to content and IOT. Sunny Arora of Fitzup (one of the startups that pitched) said, “It is rare to find such platforms where entrepreneurs get to pitch for investment to so many investors at one place. I am confident about my product and Capitalize gave me the perfect platform to raise money.”

**Vivek Kumar, CEO of Venture Garage said**, “We strive to find the best startups in India’s startup ecosystem and provide them access to investors. Capitalize is one such platform and a step in that direction”. Vineet Sagar, Managing Partner of Venture Garage added, “Most events that bring investors and startups together have heavily priced tickets and most entrepreneurs cannot afford multiple such events. Venture Garage is about handholding entrepreneurs and intends to keep its events free to enable seamless interactions between investors and startups.”

**About Venture Garage:** To tap business opportunities in this new online environment Venture Garage makes available the large and diversified network of 100,000+ Decision makers, Business owners, Investors and Service Providers at VENTURE GARAGE, the domain expertise and knowledge of the management team, and access to events and social media...to build a successful venture.

**Gear up now for pollution-free winter in Delhi, say expert**


Vintage Car Rally in Delhi allowed by green panelStretch along Mehrauli-Badarpur NH not green belt: DDA to NGTDelhi panel to check unauthorised constructions Delhi garbage menace: NGT seeks account details of EDMC, Delhi Govt. and DDANo permission to DMRC for groundwater extraction: DJB tells NGT

Highlighting the absence of policy-level interventions to stop farmers from burning crop residue, air pollution experts on Wednesday said the union and state governments need to gear up now for a pollution-free national capital in winter.
They were speaking here at a workshop on air pollution, which saw participation from IIT-Delhi and IIT-Kanpur, Centre for Sustainable Agriculture, World Health Organisation, Delhi Pollution Control Board and the Central Pollution Control Board.

"It will take more than just imposing fines on farmers to eliminate the crop burning problem," Centre for Sustainable Agriculture Executive Director Ramanjaneyulu G.V. said.

"This is a policy-driven crisis. The problem of biomass burning is due to mechanisation and cropping patterns. Therefore, simply imposing a ban and a fine for not adhering to the ban does not work. It needs a very comprehensive approach and good support system at the grassroots to create financially viable solution for the farmers," he said.

The National Green Tribunal, in response to a plea by environmentalist Vikrant Tongad, passed a judgement penalising the farmers by imposing fines from Rs 2,500 to Rs 15,000 for burning the crop in open.

Delayed action on the issue of crop burning coupled with lack of enforcement of emission control norms for coal-fired power plants were increasing the number of air pollution-related deaths in Delhi, said an expert.

Many organisations, such as The Health Effects Institute, World Health Organisation, Greenpeace, Public Health Foundation of India and IIT-Delhi have repeatedly highlighted the impact poor air quality can have on human health.

"When it comes to air quality, experience from across the world tells us that a suite of mitigation measures coupled with modern technology, strict regulation with proper enforcement as per the local needs and adequate monitoring network can lead to improved air quality," Sachchida Nand Tripathi of IIT-Kanpur said.

Also participating in the workshop was First Secretary for Energy Affairs with US Embassy Ray Rudweeks, who highlighted that the challenge for India was to pioneer a new path to sustainable development.

Comparing regulations in the US, he said: "For more than 45 years, the clean air act has cut pollution as the US economy has grown. The US experience with the clean air act shows that protecting public health and building the economy can go hand in hand."

"Since 1970, the aggregate national emissions of six pollutants alone dropped by 70 per cent while the nation's GDP grew by 246 per cent," he added.

**IIT-KGP researchers develop solution to access encrypted data**

[http://indiatoday.intoday.in/story/iit-kgp-researchers-develop-solution-to-access-encrypted-data/1/928540.html](http://indiatoday.intoday.in/story/iit-kgp-researchers-develop-solution-to-access-encrypted-data/1/928540.html)

Kolkata, Apr 13 (PTI) Researchers at IIT Kharagpur have developed a technological solution to access encrypted data on cloud server with keywords without compromising the security of the system.

The solution has been developed by researchers at the Secured Embedded Architecture Lab (SEAL) of the institute, an IIT-Kharagpur release said.

The research has led to Controlled Access Searchable Encryption (CASE), a new public-key searchable encryption, which, the release said, allows a data owner to generate a controlled-search access that can restrict the search capabilities of a data user to a specific sub-set of documents in the collection. "This protects the vulnerability of the full data set."

"CASE also preserves the privacy of the underlying plain text data under well-known cryptographic assumptions," it said quoting Prod Debdeep Mukhopadhyay, the lead researcher of the project and director of incubation at Embedded Security
and Privacy Pvt Ltd (ESP), STEP (Science and Technology Entrepreneurs Park) of IIT Kharagpur.

Cryptography is the science or study of the techniques of secret writing, especially code and methods.

"CASE requires optimal network communication between the server and the data owners/data users. Additionally, CASE is ideal for use in cloud-based search applications," Mukhopadhyay said.

"We are expecting to have a full-fledged prototype implementation of our controlled-access searchable encryption set-up by the end of 2017.

"We hope to convert the present work from a prototype implementation to a usable system. We will then look to expand into potential technology transfer avenues," he said.

Cloud computing has introduced various solutions with efficient sharing and independent access to large volumes of data and these solutions are being used across corporations, governments and by people.

However, security issues run high as well with possible leakages of sensitive data such as customer transactions, search histories, credit card numbers, corporation and government policies and personally identifiable information.

**Fire guts IIT-M sponsored research building**


The IC&SR building of IIT Madras on fire on Wednesday night

A fire broke out in the Industrial Consultancy and Sponsored Research (IC&SR) building of IIT Madras in Guindy on Wednesday evening. According to fire and rescue service personnel, the third floor of the building has been completely damaged. The third room reportedly consists of research halls, a couple of classrooms and a conference hall.

The fire service received the alert at around 8 50 pm. Four tenders from Raj Bhavan, Guindy, Teynampet and Ashok Nagar were dispatched to the IIT campus. It took about two hours to bring the fire under control.

According to students of the Institute, the third floor consists of NPTEL National Programme on Technology Enhanced Learning) which is an online program. The record for NPTEL has been damaged completely in the fire, a student told
Express. The programme is funded by the Ministry of Human Resource Development (MHRD) and provides e-learning through online courses in Engineering and other disciplines. It is a joint initiative by seven IITs and IISc Bangalore.

According to Krishnan Balasubramanian, Dean of IC & SR, “The fire broke out in a studio-cum-classroom. It had computers and other technical equipment like cameras. Two rooms have been affected. There was no other structure near the building. The fire did not spread to other floors. But the third floor has been completely damaged,” a fire personnel said. It is suspected that a short circuit might have caused the fire.

**IIT Madras Launches Deepak Parekh Institute Chair**
https://indiaeducationdiary.in/iit-madras-launches-deepak-parekh-institute-chair/

Chennai: The Indian Institute of Technology Madras (IIT-M) today (12th April 2017) announced the launch of the ‘Deepak Parekh Institute Chair’.

IIT Madras provides opportunities for people to endow Chairs with an initial corpus. The Institute Chair is intended to reward senior IIT Madras Professors for exceptional performance. The selected faculty for this Chair will be identified as ‘Deepak Parekh Institute Chair’ for a period of five years, an appointment that can be renewed subsequently until retirement. The Deepak Parekh Institute Chair has been endowed by an anonymous benefactor.

So far, 15 professors have been named as Institute Chairs, and 11 of these have been sponsored by donors. The Chairs are named by IIT Madras in consultation with donor. The first occupant of Deepak Parekh Institute Chair will be Prof. T. Pradeep, Department of Chemistry, IIT Madras.

Launching the Institute Chair, Mr. Deepak Parekh said that while IIT Madras had produced many outstanding scholars, what distinguished it was its strong research orientation, close collaboration with the industry and its start-up ecosystem. “One can only wish there were more such high calibre institutions in India.”

While an estimated 1.5 million engineers were released into the job market annually, he pointed that four-fifths of them are considered unemployable, despite having over 3,300 approved engineering colleges in the country.
“Education needs to be a dual balance of classroom instruction and practical or vocational training. Given our rapidly changing world, it is the teachers who first need ‘up skilling’ and training so they in turn can teach a curriculum that is relevant to the times,” he stated.

The Chair is named after Mr. Deepak Parekh who apart from being the Chairman of Housing Development Finance Corporate (HDFC) was also appointed by the Reserve Bank of India as the Chairman of the Advisory Group for Securities Market Regulation, which was tasked to compare the level of adherence to international standards in India with that in other countries. He is a recipient of Padma Bhushan, Businessman of the Year 1996 from Business India and JRD Tata Corporate Leadership Award by All India Management Association (AIMA). He was awarded with Lifetime Achievement Award by The Economic Times. Under the stewardship of Mr Parekh, HDFC Group took stake in CAMS, India’s premier Mutual Fund service provider, and helped in institutionalizing the brand.

Speaking on the occasion, Prof. Bhaskar Ramamurthi, Director, IIT Madras, said that all the faculty who have been chosen for the Institute Chairs have made outstanding contributions nationally and internationally. “They are the crown jewels of the Institute.”

Speaking on the occasion, Prof. R. Nagarajan, Dean, International and Alumni Relations, lauded the significant role played by donors in the development of the institute. “They are key partners in our successful execution of IIT Madras’ Strategic Plan 2020,” he stated. The Strategic Plan 2020 can downloaded from https://www.iitm.ac.in/sites/default/files/uploads/strategicplan2020.pdf

Introducing Prof. Pradeep, the Head of Department of Chemistry, Prof. Indrapal Singh Aidhen, said that the licensing fees and royalties from Prof. Pradeep’s works had brought the IIT Madras nearly Rs. 4 crore. “Prof. Pradeep has been a champion for nanoscience and nanotechnology, and his pursuits have enabled solutions to the important issue of water purification in several Indian states.”

The Department of Chemistry at IIT Madras is very active in research and in development of good human resources, with 35 faculty and 270 Ph.D. scholars and 108 M.Sc. students on its ranks, said Prof. Aidhen.

In a video message, Prof. Pradeep said that matter behaved differently at the nanoscale level and some of those properties were useful for every applications of relevance to society. “I focused on water and in the course of that exploration, several new things came out. Some of those were taken to the people in the form of products.”

While people in several parts of the country had benefitted, he said that “much much more work is needed to take the benefits of nanoscale materials to other aspects of water and environment in general.” He also thanked the donor and Mr. Deepak Parekh, and said that he was pleased to be associated with this Chair.

This is why India started its own university ranking system
http://economictimes.indiatimes.com/industry/services/education/this-is-why-india-started-its-own-university-ranking-system/articleshow/58155300.cms

About a decade and a half ago, Chinese policy-makers were miffed that too few of their universities made it to the top hundreds in the world. They responded in inimitable Chinese style — starting a university rankings system of their own.

The product, now known popularly as the Shanghai Ranking, uses public information to rank the world’s best
universities. Over the years, it has developed into a ranking system widely noticed, discussed and sometimes criticized.

When Shanghai Jiao Tong University published its ranking in 2003, nine Chinese universities made it to the top 500. Three Indian institutions too figured in it — Indian Institute of Science (IISc), IIT Kharagpur and IIT Delhi. Last year, the Shanghai Rankings featured 54 Chinese universities in the top 500, while India had one in IISc. The IITs had dropped out.

At least on one set of parameters, Indian institutions were slipping. Now India has started emulating the Chinese, in principle if not in method. Last week, the ministry of human resource development (MHRD) announced its list of top Indian universities, based on its own ranking methodology. It was the second year in succession, but the first thorough job, as its debut had been hurried.

Unlike the Chinese system, the ministry has stuck to Indian universities, though its unstated aim is to benchmark Indian institutions against the best in the world sometime in the future. "We want to improve our institutions," says Surendra Prasad, former IIT Delhi director, who is chairman of the National Board of Accreditation, and a core member of the National Institutional Ranking Framework.

IISc led the MHRD rankings, followed by the older IITs (see graphic: Cream of the Crop), Jawaharlal Nehru University and some of the newer IITs.

In an unusual exercise, President Pranab Mukherjee on Monday gave away awards to the heads of the top 10 institutions and the top institution in subject categories. In another unusual statement, HRD minister Prakash Javadekar suggested that the top institutions might get more funding.

Heads of state usually do not bother tracking news of academic rankings but Mukherjee is an exception. He has been speaking about India’s poor performance in international rankings whenever the opportunity has arisen.
He even organised a retreat for some heads of IITs in 2014 and got Phil Baty, editor of Times Higher Education World University Rankings, to speak to them about ranking systems.

This annual meeting has now been enlarged in scope and institutional participation. Just before he left office, former Prime Minister Manmohan Singh had also expressed disappointment that India did not have even one institution in the top 200 QS World University Rankings, an annual publication. Soon other politicians caught on to the President’s interest.

Smriti Irani became interested in university rankings when she became the HRD minister. With such interest at the highest level, it was only a matter of time before India developed its own ranking system. The IIT Council, governing body of all IITs, made the first move two years ago when IIT Kharagpur director Partha Chakrabarti made a presentation to it on why rankings are important.

Some of Chakrabarti’s suggestions became the foundation for current MHRD rankings. Chakrabarti had argued that India could not ignore international rankings, but institutions also could not be diverted from the mandates given in the country.

Indian institutions operate under circumstances not captured in international rankings and these have to be captured in a different set of parameters. He recommended that, like the Chinese, India should develop its own ranking system. And once the methodology stabilised, it could be used to compare Indian institutions fairly with the best in the world. Most of the heads of Indian institutions and senior faculty had always looked at international rankings with suspicion.

The QS and Times Higher Education World University rankings had subjective criteria and some data from them was not public. Reputation surveys were generally skewed towards US and European universities, as Asian universities were not well known around the world.

Shanghai Rankings emphasised Nobel Prize winners excessively, it was felt, as most universities had no Nobel Prize winners and thus got no points. Many questioned the concept of rankings itself, as universities are so varied around the world. How can you capture such diverse entities in one number?

Despite these objections, many faculty members, policy-makers and even politicians kept an eye on the rankings. International institutions that do the rankings started engaging more and more with Indian institutions. Although Indian institutions — except IISc — dropped out of the Shanghai Rankings list, they were somewhat stable in the QS rankings. A close look shows their methodologies reveal why Indian institutions do not do well.

QS rankings use five criteria — academic reputation (40%), employer reputation (10%), student-faculty ratio (20%), citations per faculty (20%), internationalisation (5% each) for faculty and students. Other than citations per faculty, Indian institutions would falter in them.

Academic reputation and employer reputation are assessed with the help of surveys. The Scopus database, a large research database, provides citations data. Indian institutions have limited reputation abroad and thus cannot be expected to score highly in surveys. "The IITs have good reputation abroad," says Bhaskar Ramamurti, IIT Madras director, "but I don't think many can distinguish between each IIT separately."

Indian institutions do not have many international faculty or students. In the QS rankings last year, the top Indian institution, IISc, had no scores for employer reputation, international faculty or international students. Institutions in
India are at a disadvantage here, as the domestic demand is high. China has high demand too, but there is a difference.

"In India demand is an increasing problem," says Ben Sowter, QS director, "but in China it is a decreasing problem."

Indian institutions, under pressure to admit more students, are not likely to go international in the near future. QS stands for Quacquarelli Symonds, a British company that specialises in education and overseas studies.

Indian institutions are at a disadvantage even in the Shanghai rankings system, which has a stable methodology and thus relatively stable rankings. No Indian researcher working in India has won a Nobel Prize since CV Raman but 30% of the weight for the rankings is for Nobel Prizes. So India competes only in the rest of the parameters.

This should not take them totally out of contention. China has had only one Nobel Prize winner working in the country but it has 54 universities in the top 500. The difference is in the research output of Indian and Chinese universities. By intent, the Shanghai rankings are skewed towards superstar professors and elite institutions. India does not have them in large numbers, but things seem to be improving.

"Some Indian institutions are fast approaching the top 500," says Xuejen Wang, rankings manager of ShanghaiRanking Consultancy. These are some of the IITs, JNU, University of Calcutta and University of Delhi. The Shanghai Jiao Tong University does not make public the list of institutions ranked below rank 500.

MHRD rankings were created to remove disadvantages of Indian institutions in international rankings, by developing a set of parameters that were relevant to the Indian situation. It was also an exercise to force the Indian institutions to collect and document data on themselves. Since this data were to be made public, the objectivity of the exercise was not to be in doubt.
"We found the data collection to be a useful exercise," says TA Abinandan, chairman of the materials science engineering department at IISc. "We didn't know many things about ourselves."

When the first committee began debating the creation of the National Institutional Ranking Framework (NIRF), Smriti Irani made it clear that students were the most important stakeholders in this exercise. The committee recommended a set of parameters to be judged, most of which were to be based on objective criteria. Since colleges were an important part of the Indian education system, NIRF created a separate ranking system for colleges.

The NIRF looks for a good learning environment, a good research culture, impact of graduates, social inclusivity and, finally, reputation among the public, peers and employers. The last criteria were not supposed to get too much weight.

Three sources were used for research impact: the Web of Science database, the Scopus database, and the Indian Citation Index. The first two are international databases, while the third is an Indian database. Universities and colleges responded well, as NIRF got 3,139 applications. Only a few medical, law and architecture institutions participated.

The data were substantially richer this year than in the first, thereby allowing policy-makers - or the public - to draw some conclusions, especially when compared to international rankings. In this year's ranking, the smaller institutions lost out as NIRF introduced points for an institution's size. There was little dispute about India's best institutions.

The order changed a bit, but the top ten Indian institutions were largely the same in the QS and Indian rankings (see graphic: Cream of the Crop). Faculty student ratio was poor in many institutions, with some working with one teacher for more than 50 students. The top 100 institutions accounted for 89% of the research output. Research culture was not very deep-rooted, but things were improving here.

"Research is more widespread than we thought," says Prasad. This was especially true of engineering research, with significant contributions coming from the National Institutes of Technology (NIT) and state universities. The rankings show private universities have also been improving standards, especially in research.

Amrita Vishwa Vidyapeetham, based in Coimbatore, is ranked 16 among all institutions, ahead of IIM Ahmedabad, Pune University and Aligarh Muslim University. Private universities have starting taking the rankings seriously, and have been engaging with the international ranking agencies in recent times. Over the next decade, they could provide serious competition to India's best public institutions.