Newspaper Clips
May 23-25, 2015

May 25

Times Of India ND 25/05/2015 (Education Times) P-8

BOARD IT

A bus identification system for the visually challenged has been developed by students and faculty in an institute in Delhi

Sarah.Zia@timesgroup.com

A student and faculty team from the Indian Institute of Technology (IIT) Delhi (IIT-D) has developed a bus identification system for the visually challenged. The user-controlled, radio-frequency-based device is being used for BEST buses plying in west Mumbai since April, after a trial run earlier this year.

Given that bus numbers were generally not announced and had to be read out, it was difficult for the visually challenged to board buses without seeking help from others at the bus stop. With OnBoard, once the user hears a vehicle approaching, s/he presses a query button which sends a radio frequency signal to all the approaching buses within a range of 15-20m. The corresponding system on the bus replies with the bus number delivered to the user's device via audio.

The user must select the desired route and press the trigger which will lead to an announcement at the entry gate of the chosen bus when it finally reaches the bus stop. This would be an audio cue which acts as a direction-based guidance for the person. "For instance, if multiple buses are approaching a stop at the same time, it will lead to multiple announcements on the user's device. Hence, one should instantly press the button when they hear the desired number to ensure that the corresponding announcement is played at the entrance of the bus gates," explains M Balakrishnan, principal investigator of the project and faculty member, IIT-D. "The purpose is to ensure unsupervised boarding for the visually challenged and facilitate self-navigation," he adds.

The team from the institute's computer science department worked on the project as part of a larger research group, Assistech, comprising students and faculty from IIT Delhi, focuses on creating applications using modern technology for people with disabilities. In 2007, another team under the Union department of science and technology (DST)-funded Assistech had started working on the smart cane, which reached the market in 2014.

Talking about the device, Balakrishnan says, "The system will reduce the persistent anxiety of boarding the right bus. It has three components — a user module, a bus module and a number-feeding unit." Currently, the model is being used for 24 BEST buses plying in west Mumbai, he says. "The next stage is to develop industry collaboration to facilitate its manufacture and use across the country." There are plans to increase the number of buses with the OnBoard system to 1,000. With DST funding, the Delhi Integrated Multi-Modal Transit System Ltd is facilitating city-wide trials in the Capital.

According to Balakrishnan, the two key parameters that developers kept in mind were affordability and ease of use. "As of now, a user would spend about Rs 500-700 on the device. The response we have received is mostly positive. Many can now board unsupervised though some design issues have been pointed out, which we are working on," he says. Further, installing the component on the bus costs roughly Rs 5,000 per vehicle.

What makes the project unique, according to him, is that there are no precedents to this model, globally. "Disability research across the world tends to focus on third-world situations because infrastructure in the first world is different, yet, this is a first-of-its-kind model."

INTERVIEW: CHRIS HOUGHTON

HEAD OF INDIA REGION, ERICSSON

IITs are a hotbed of innovation

ERICSSON Innovation Awards were initiated last year in association with the Foundation for Innovation and Technology Transfer (FITT) to recognise the spirit of innovation among students across seven IITs in Chennai, Delhi, Kanpur, Kharagpur, Mumbai, Roorkee and Banaras Hindu University (BHU) in Varanasi. Projects from IIT Delhi and IIT Roorkee were selected this year for the awards. "The rapidly rising ubiquity of mobile phones and broadband in India is fuelling innovation as never before," **Chris Houghton,** *head of India Region, Ericsson told* **Sudhir Chowdhary** *in a recent interaction. Excerpts:*

India's entrepreneurial environment is vastly different from the one that prevails in Europe and the Silicon Valley, with a lot of hurdles faced by start-ups here. Do you see it changing now?

Yes the change is quite dramatic. Just like Silicon Valley, India is starting to reap the benefits of concentrated pools of creativity, in which the physical proximity of a wide range of ideas helps individuals sharpen their own thinking. The rapidly rising ubiquity of mobile phones and broadband in India is fuelling innovation as never before.

I think the pace of innovation is going to grow dramatically going forward. What we are experiencing today is really the tip of the iceberg. Globally, and through society, new behaviours are being established and old trends are gaining scale and depth through ICT. The drivers of change can be grouped into people, business and society.

Business drivers such as a more mobile workforce are leading to radical advancements in efficiency, whether it's across the production line or in the back office.

At people level, we see how technology is enabling increased capability for collaboration, driving us towards highly engaged culture where we are empowered like never before.

Do you think start-ups from some of the leading technical institutes have that big, bright idea to make it big in the market place?

The IITs are a hotbed of talent and enjoy global repute. We received an overwhelming response from students across seven IITs for Ericsson Innovation Awards. A total of 67 projects were submitted. Healthcare, education and Green IT were key themes for these projects. Some examples of the projects include a human security device that can use any form of communication to alert your loved ones when in a distress situation; Location wise traffic analysis based on social network data.

What are the initiatives that Ericsson has put in place to spur tech entrepreneurship in India?

We initiated Ericsson Innovation Awards last year in association with the Foundation for Innovation and Technology Transfer (FITT) to recognise the spirit of innovation among IIT students across seven IITs in Chennai, Delhi, Kanpur, Kharagpur, Mumbai, Roorkee and Banaras Hindu University (BHU) in Varanasi. 10 proposals were shortlisted in the month of March 2015. Each shortlisted proposal was given an incentive by Ericsson to complete the initial prototype within two months. The two winning projects: Guardian and Smart Earphone will be supported by Ericsson India financially to the extent of ₹10 lakh each towards incubating the winning projects at any IIT approved technology business incubators.

What can be done to promote tech entrepreneurship in India?

India has all the key ingredients for becoming a technology and knowledge powerhouse. A strong entrepreneurial ecosystem that is conducive to innovation will provide a strong impetus. Public and private sectors needs to come together to help nurture talent and promote innovation in the country.

REFRESHING INNOVATORS

A student startup from IIT BHU has created an alcohol sniffer helmet; another team from IIT Delhi has developed a human security device which uses the Internet or SMS to alert your loved ones when in a distress situation—tech entrepreneurs from India's leading technical and research institutes are indeed an inspiring lot

Sudhir Chowdhary

JUST a few years ago, the tech entrepreneurship scenario that prevailed in India's leading technical and research institutes could easily be described in one word—stifling. Especially at Indian Institutes of Technology (IITs), where some of the startups by students did cutting-edge research across diverse industry segments—wireless technology, cloud computing, consumer electronics—and even came up with conclusive offerings. Yet, these promising student outfits soon faced the harsh market realities in terms of severe lack of financial resources in order to take their innovation from the lab to the market. Worse, the industry had an unexplained mental block on accepting a domestic company delivering a quality product. The net result: the starry dreams soon fizzled out.

That was then. Of late, winds of change are blowing across IITs in Chennai, Delhi, Kharagpur, Mumbai, Roorkee and Banaras Hindu University (BHU). With their next 'big idea', tech entrepreneurship among the student community seems to be hot these days, as evidenced by a unique initiative undertaken by Ericsson in partnership with IIT Delhi. Recently, the Swedish telecom equipment maker presented its Ericsson Innovation Awards to two innovative projects: Guardian from IIT Delhi and Smart Earphone from IIT Roorkee. Good news is that the winning teams will be supported by Ericsson India financially to the extent of ₹10 lakh each towards incubating their projects at any IIT approved technology business incubators.

"Ericsson has a strong history of innovation and these awards represent our endeavour to foster the spirit of innovation amongst students. The winning projects score high in terms of parameters like innovativeness, commercial feasibility, scalability and will be supported by Ericsson through the incubation period," said Chris Houghton, head of India Region, Ericsson. "Just like Silicon Valley, India is starting to reap the benefits of concentrated pools of creativity, in which the physical proximity of a wide range of ideas helps individuals sharpen their own thinking," he stressed (**see interview**).

IITs have always been known for their engineering courses; the major focus now is on research, development and innovation. A look at some of the brains at work: Guardian is a complete stand-alone personalised human security device which can use any type of communication sys-
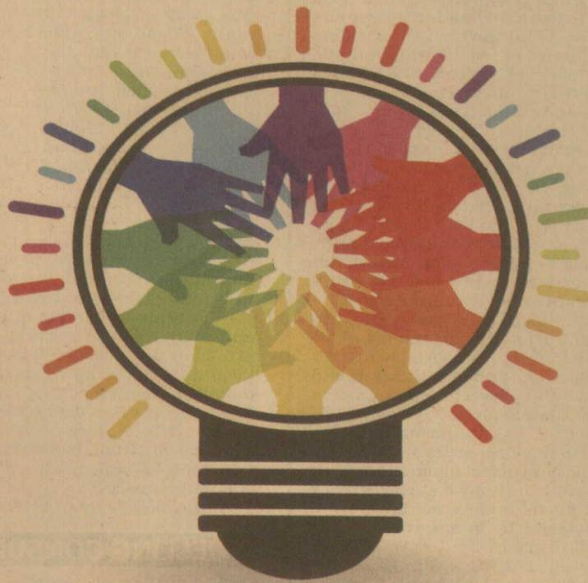
BRAINS @ WORK
Some of the interesting projects by IIT students

▶ **Guardian:** A complete stand-alone personalised human security device which can use any type of communication system such as Internet, SMS, or near field communication to alert your loved ones when in a distress situation

▶ **Smart Earphone:** A new wearable device for everyone that can amplify and attenuate selective sounds. The user can decide whom/what he/she wants to selectively hear and at what volume

▶ **iDitya Solar Assistant:** A complete

do-it-yourself solar power system that a user can buy off the shelf and install it completely on his own

▶ **Advanced breathanalyser helmet:** The helmet analyses the alcohol content in the driver's breath and directs the vehicle through a wireless signal to start or stop accordingly

▶ **Smart Ward:** A wearable device which will measure the vital parameters of each patient and send it to the computer, tablet or mobile phone screen of the nurse on duty

tem such as Internet, SMS, or near field communication (NFC) to alert your loved ones when in a distress situation. It also uses multiple cellular phone towers to transmit data and triangulate a victim's position.

"The registration for Ericsson Awards started long ago and the product was at conceptual stage back then and it was called Guardian. Now it is called SAFER," said Paras Batra, co-founder of Leaf Innovation. SAFER is a wearable safety jewellery by Leaf Innovation—a startup by 5 students from IIT Delhi and Delhi Technological University. "SAFER is in form of a pendant right now. With double click, it sends an alert with the precise location to our control room and from there it is further broadcast to the user's friends,

family and nearby SAFER users so all of them can come and live track the victim via the SAFER mobile application. The system works on both the Internet and SMS. It is now available on www.leafwearables.com for consumers to buy. "The crime rates are on an all-time high especially against women, thus SAFER is the need of the hour. I believe it can find applications in almost any situation where you feel unsafe. You do not think you are 100% safe? Use it. It is as simple as that," he said.

Smart Earphone, developed by IIT Roorkee students, is a new wearable device for everyone that can amplify and attenuate selective sounds. The user can decide whom/what he/she wants to selectively hear and at what volume. The device will be integrat-

ed to smartphone via an app. All the audio signal processing will be done by the app only. Then, there is a Web-application to provide real time traffic updates to users using post son social networks such as Facebook, Twitter etc. Each of these updates shall have information such as date, time, location of traffic jam, and cause of the same.

There is iDitya Solar Assistant, a complete do-it-yourself solar power system that a user can buy off the shelf and install it completely on his own. The idea is to develop a mobile app based on the Google Android platform that will make the installation process extremely intuitive and simple. Students from IIT (BHU) have created an advanced breath analyser helmet, which works on Bluetooth encryption technology and was designed keeping in mind increased incidents of drunk driving and bike thefts. The most useful feature of this helmet is that it lets bikers start their vehicles only after analysing the alcohol content of their breath.

The student innovations are impressive, but a key question arises: Do we have it in ourselves to come up with the next big tech start-ups, the kind of which emerge from the Silicon Valley? Paras Batra of Leaf Innovation, said, "I think there is a long way to go still and the journey has just started. I still see a majority of students living miles away from innovation at IIT Delhi. We (students) have it in us to come up with the next big tech start up but the institutes still need to support a lot. Some students want to innovate but they are forced to study the regular theory because if they don't then they will score low marks and will have to bear the consequences in future. Till the time the culture is to survive at our premier institutes, no innovation will happen. But then there are times when competitions like Ericsson Awards come and motivate you to swim against the flow. One should thrive not survive in the most well equipped institutes for innovation."

According to Batra, at IIT Delhi the focus is only on one thing and that is on getting good grades. "In my batch, I do not know a single person who has spent more than 50% of time in college in Labs. India needs innovation but people at IIT need better grades. There is a huge conflict of interest here. I won't deny the fact that research and innovation does not happen at IIT Delhi but that is done by very few people. There is an immediate need for some changes in the education system at our premier institutes because a majority of the nation's tax money is right now being spent in making average engineers and not entrepreneurs," he concluded.

INTERVIEW: **PROF PRADIPTA BANERJI**

DIRECTOR, IIT ROORKEE

IITs should focus on transferring technology to the industry

The history of Indian Institute of Technology Roorkee goes back to over a century and a half. Called Roorkee College then, it was set up in 1847 as the first engineering college in the British Empire by Lieutenant Governor Sir James Thomason. It was renamed as the Thomason College of Civil Engineering in 1854. It became an Indian Institute of Technology (IIT) in September 2001, the seventh IIT in India. Prof Pradipta Banerji, the director of IIT Roorkee since October 2011, says that since Roorkee became an IIT, it has attracted the crème de la crème of researchers from all over the globe. In an interaction with **Vikram Chaudhary** *of The Financial Express, he adds that IIT Roorkee, along with the other older IITs, can assist the newer IITs in recruiting faculty members who are among the best in their respective areas of research.*

In which all ways has Roorkee benefited since it became an IIT in 2001?

The entire framework of the institute has undergone a radical change. The institute has attracted the crème de la crème of young scientists and researchers from all over the globe. Apart from prospective faculty members, the institute also attracted a significant number of international students. Several important MoUs and collaborations have been signed; research funds from government agencies and industries have seen a surge; the quality of intake of students has had a radical change; the entire perspective of the institute has broadened manifold.

What is the kind of research work happening at IIT Roorkee?

First is the development of drugs. IIT Roorkee had been working on the development of plant-based medicines. Second is a creative cities network for Uttarakhand. Third is on Uttarakhand's cultural heritage. Fourth is on Uttarakhand's heritage tourism. Fifth is on providing affordable healthcare. Sixth is hybrid energy generation. Seventh is morphological study of Uttarakhand's rivers. Eighth is water quality assessment of the River Ganga. Ninth is disaster management. Tenth is hydrology and climate change. IIT Roorkee has experts on hydrology and climate change and this is a huge focus right now. We are working with various universities and have collaborated with the UK Imperial College. This collaboration is strategic rather than institutional.

What kind of international patents are being filed by faculty or students of IIT Roorkee?

No international patent has been filed in the recent past. However, many faculty members are in the process of developing sustainable and low-cost technologies that could pave the path for international patents in the future.

Over the last decade, many IITs were set up. Now, the government has announced five new IITs. How many years will it take for them to reach the academic level of older IITs?

> **Any world-class academic institute can mentor any new IIT within the purview of each IIT's rules and regulations. Apart from older IITs, even premier private technology institutions can play a role**

An IIT takes about 10-15 years to develop into a centre of excellence, both in terms of academics and research.

What are your views on the locations chosen for setting up these new IITs?

I do not have any comments on the locations for setting up new IITs, except that I feel that these locations should encompass maximum possible geographical coverage, enabling students from across the nation to benefit from them.

What are the immediate challenges these new IITs can face? How can older IITs such as IIT Roorkee help them in overcoming these?

The biggest challenge for the new IITs is recruiting faculty members who are among the best in their respective areas of research. IIT Roorkee, along with all the other older IITs, can assist the newer IITs in solving this problem by tapping potential faculty members from their own alumni database who have successfully carved a niche for themselves after pursuing either doctoral or post-doctoral studies from IITs.

Should these new IITs be mentored only by the older IITs or even the premier private technology institutions can play a role?

Why not? The options are limitless. We just have to be open to new ideas and new challenges. Any world-class academic institute can mentor any new IIT within the purview of each IIT's rules and regulations. Further, a consortium of universities that stands for excellence can mentor a new IIT.

What role can corporates play in grooming these IITs?

Corporates have a big role to play in encouraging young faculty members with their research activities. Industry-institute collaboration has paved way for successful conversion of research ideas into technologically-feasible and cost-effective commercial products. The objective of research is to be able to transfer technology for use by the common man, and industry plays an important role in this. Industries can help define the research agenda of an IIT, too.

Two years ago, as many as 769 students who got admission into the IITs refused to study in an IIT. Does that speak of falling confidence levels or was that a one-off instance?

This instance is being quoted by everybody and it continues even today. Rather than looking negatively towards the IITs, we should look at the possibility that Indian society has evolved to a higher plane where young men and women have a say in their own career choice rather than what their parents choose for them.

Do you think that the best brains in India still choose the top five IITs— Bombay, Delhi, Kanpur, Kharagpur and Madras?

One needs to see beyond the five older IITs, and there has been a perception that the best students only choose the older IITs. If the media spent a little bit of time going to some of the other IITs, they would realise that we may have better academic and research facilities than the five older IITs, and very good students, both at UG and PG levels, are choosing to be here.

Some critics say that IITs are affected by silo mentality, which they must shed. Rather they should readily embrace new disciplines, encourage lateral entry at senior levels, invite retired industry experts as faculty, and become more interdisciplinary in nature. What are your views?

What you have talked about is a popular perception rather than the hard reality. All the things that you have talked about are being done by all the IITs for the past decade or so.

How can we raise the standard of technology education in India?

The ideal way of raising the standard of technology education in the country is to develop, inculcate and incubate new ideas. Ideas which could be easily and economically converted into products that find direct application to improve the quality of life for the common man. We should focus on transferring technology to the industry through greater industry-academia collaboration and develop products that elevate the quality of life for all.

Recently IIT Roorkee organised the tech fest Cognizance? Is it a student-driven initiative?

Cognizance is Asia's largest technical festival; it started 13 years ago. This year saw over 2,500 participants from about 1,600 technical and management colleges from across the country, in addition to 10,000 students of IIT Roorkee. This year the theme was 'Photonizing I', celebrating the UN observance of 2015 as the International Year of Light & Light-based Technologies. The theme is chosen by students keeping the recent technological trends in mind. It is purely a student-driven initiative.

What is the aim behind organising such fests?

Tech fests add a third axis to technical education—the first two being theory courses and laboratory courses. The aim is to synthesise and design solutions for real problems. Such fests are also a platform for students to showcase their talent. A lot of knowledge sharing happens at such events.

Times Of India ND 25/05/2015 (Education Times) P-6

Spirit of Innovation

A government-supported challenge, managed by an institute with industry collaboration, aims to encourage people to come up with innovative solutions for the country

DEBJANI GHOSH
Vice President, sales and marketing & Managing Director, South Asia, Intel

Technology will play a key role in digitising India. We are talking about digitising India, the government is talking about digital India where every citizen will be connected with technology and, thereby, have access to education, healthcare and services which are the basics for development and growth in a country. One cannot bring about a transformation without technology because realistically speaking one cannot reach every village without technology.

At Intel, we are looking to contribute in two areas. One is in the area of development of digital literacy skills, which will be critical because the users need to know how to use technology. We are scaling our efforts in skilling more people on digital

THE COMPETITION WILL ENCOURAGE THE APPLICATION OF THE PRINCIPLES OF FRUGAL INNOVATION AND A STRONG UNDERSTANDING OF INDIAN LIFESTYLES

literacy. By the end of this year, we will train around five million citizens. The second part of our contribution is the 'Innovate for Digital India Challenge,' which is in collaboration with the department of science and technology (DST).

Jointly, we have launched the challenge, which is aimed at fostering the spirit of innovation among Indians. The innovators could be students, teachers, entrepreneurs, housewives, etc, anyone who has a curiosity and the will to look at a problem and find a different solution and turn that solution to a real product. This challenge is looking at inspiring people, encouraging people to come out with different solutions with respect to India and use of technology within India.

By doing this, we aim to create a sustainable ecosystem of innovators, who will continue to innovate for India and take the products to the market. Participants will be mentored by industry stalwarts and Intel experts. Besides, assistance in terms of technical know-how, access to product kits and infrastructure and commercialisation opportunities would be offered. They will also get access to market linkages and funds at various stages.

The challenge will encourage the application of the principles of frugal innovation and a strong understanding of Indian lifestyles. It will focus on innovation in two broad areas. The first is innovation to create the ideal citizen's device platform, including biometric sensing capabilities, peripherals using other sensors, intuitive user interface, gesture recognition, multilingual support and voice support. The second area is innovation to deliver eKranti/MyGov applications to accelerate delivery of e-governance services on a mobile platform.
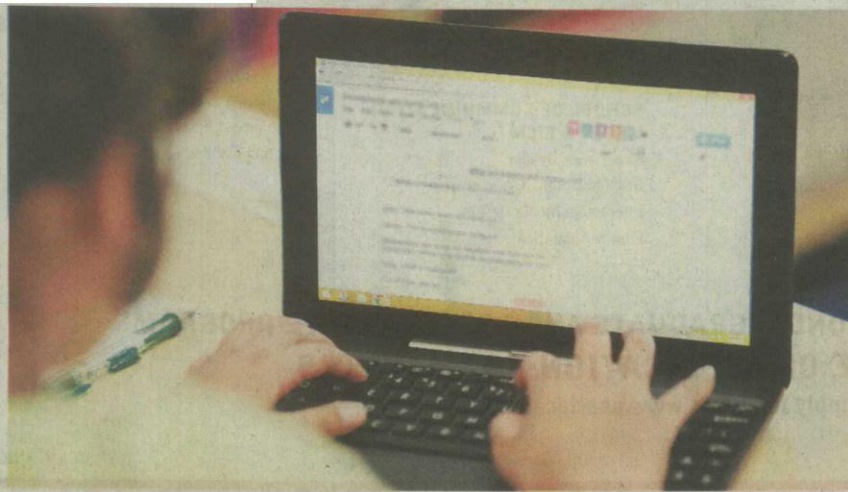
The challenge was designed in collaboration with the DST, with support from the department for electronics and information technology, *MyGov.in* and will be managed by IIM Ahmedabad's Centre for Innovation Incubation and Entrepreneurship (CIIE).

Asian Age ND 25/05/2015 P-5

New IIT-B code to curb pupil malpractice

AGE CORRESPONDENT
MUMBAI, MAY 24

The Indian Institute of Technology, Bombay (IIT-B) has decided to crack the whip and curb malpractices by students who bunk lectures, cheat on their assignments and resort to copying in exams. While in the past there were unsaid rules for the same, the absence of codified penalties resulted in errant students being let off. However, the code of ethics aims to address the issue and make students more disciplined.

According to the draft code of ethics, which was prepared last week, students bunking more than 80 per cent of lectures would be assigned a DX, which roughly implies failure. Penalties in the form of FR (failure rate) have also been assigned for students who mark the attendance of absent students. Stricter penalties like a semester failure, grade failure and zero marks have been assigned for cheating and copying in lab tests, assignments, projects and semester exams. The penalties for some other excesses by

● **While in the past there were unsaid disciplinary rules, the absence of codified penalties resulted in errant pupils being let of**

students involves community service that can range from 50-200 hours.

Speaking about the need for a code of ethics, Radhika Goel, an alumnus, said that it was a good move. "Students joining IITs are the smart ones but the freedom on the campus coupled with leniency shown by professors makes them resort to short cuts that harm them in the long run," she said.

Faculties on the campus, however, had a different view and said that leniency was not aimed at encouraging students to do wrong but to ensure that they do not resort to drastic measures in the event of strict disciplinary action for the mistakes they commit. "Students tend to lose focus and get disinterested in the subject of their choice. If failed, they will not improve hence such students are given pass grades, but in no way are they allowed to resort to malpractices," said a professor, who did not wish to be named. Techfest 2015 manager Anuraj Gupta said the code of ethics was needed. "Since last year, departments have started taking undertakings from students called code of honour so that they do not cross their limits in academic and social circles. As the undertaking is not binding and mandatory, students tend to become apathetic towards it as they progress," said Gupta.

Rajasthan Patrika ND 25/05/2015 P-8

आईआईटी खुलने के 7 साल बाद बिल्डिंग टेंडर

अभिषेक वर्मा . इंदौर @ पत्रिका

patrika.com/india

देश के शीर्ष शिक्षा संस्थान आईआईटी व आईआईएम दोनों हासिल करने वाले चुनिंदा शहरों में शामिल इंदौर के लिए राहत भरी खबर यह है कि स्थापना के बाद से ही किराए की बिल्डिंगों में चल रहे आईआईटी इंदौर के कैंपस निर्माण का पहला कदम आखिरकार उठा लिया है लेकिन इसमें हुई लेटलतीफी की हद से निर्माण की गति को लेकर चिंताएं भी उठ रही है।

आईआईटी प्रबंधन ने सिमरोल कैंपस की पहली बिल्डिंग के लिए टेंडर जारी किए हैं। इंडियन इंस्टिट्यूट ऑफ टेक्नोलॉजी (आईआईटी), इंदौर की शुरुआत 2009 में हुई थी। डीएवीवी के आईईटी में क्लास शुरू करने के साथ आईआईटी प्रबंधन ने दावा किया था कि तीन साल में सिमरोल कैंपस में बिल्डिंग निर्माण कर लिया जाएगा। सिमरोल कैंपस की बाउंड्रीवॉल निर्माण के बाद प्रबंधन ने अब बिल्डिंग बनाने की कवायद शुरू की है। आईआईटी की पहली बिल्डिंग छह करोड़ की लागत से बनाई जाएगी। तीन मंजिला बिल्डिंग के लिए हाल में टेंडर जारी किए हैं। दो मंजिला बिल्डिंग के लिए कंस्ट्रक्शन करने वाली एजेंसी को आठ महीने का समय दिया जाएगा।

मंत्रालय ने फटकारा

जुलाई 2014 में निदेशक प्रो. प्रदीप माथुर बिल्डिंग का भूमिपूजन कर चुके हैं। निर्माण में देरी को लेकर मानव संसाधन विकास मंत्रालय (एमएचआरडी) से कड़ी फटकार मिल चुकी है।

शुरुआती दिनों में अधिग्रहण और बाउंड्रीवॉल को लेकर दिक्कत आई थी, लेकिन अब सब ठीक है। सिमरोल कैंपस में आईआईटी की पहली बिल्डिंग आठ महीने में तैयार हो जाएगी। कोशिश है, साल के अंत तक सभी क्लासेस सिमरोल कैंपस में ही लगने लगेंगी।

- डॉ. निर्मला मेनन,
मीडिया प्रभारी, आईआईटी

HT.COM ND 25.05.2015 P-6

States should contribute to education

Asian News International

The University Grants Commission (UGC) has said that despite continuous increase in allocation of funds to promote the higher education in the country, more funds are still required for which even the states need to contribute.

Speaking to the media at Phagwara near Jalandhar, UGC chairman Ved Parkash said that the state governments need to match the kind of grants being released by the Centre.

He also said the increasing number of students in higher education is leading to a crisis in the funds allocated to states.

The UGC chairman, who was here yesterday to inaugurate the 89th All India University Conference at Lovely Professional University, lauded the effective role being played by private universities in higher education in India and abroad. He encouraged the private and public sectors to join hands to promote higher education.

The Vice-Chancellors from top 200 international and national universities, officials from the HRD Ministry and heads of higher education apex bodies are participating in this three-day meet. Foreign delegates from UK, UAE, Germany, Australian High Commission and European Union are also participating in the meet.

■ According to UGC, increasing the number of educational institutions is leading to a crisis in the allocation of funds to states. FILE PHOTO

Asian Age ND 25/05/2015 P-4

Irani talks China edu consortium

K.J.M. VARMA
BEIJING, MAY 24

Human resource development minister Smriti Irani, on her maiden visit to China, broached the idea of establishing a consortium of higher educational institutions as part of greater collaboration between India and China besides mutual recognition of academic degrees.

Ms Irani, 39, arrived in the eastern Chinese city of Qingdao on May 22 to take part in the "International Conference on ICT and Post-2015 Education" organised by the Chinese government and Unesco on a four-day visit.

She held talks with top Chinese officials and discussed steps to follow up on agreements signed during Prime Minister

HRD minister Smriti Zubin Irani addresses a conference in Qingdao, China, on Sunday. — *PTI*

Narendra Modi's recent visit here.

The minister held talks with her Chinese counterpart Yang Guiren on mutual recognition of academic degrees, collaboration in teacher's training besides establishing a consortium of higher educational institutions, an Indian embassy press release here said.

The collaboration in teachers training helps both the countries to share their vast experiences in education, Ms Irani said.

The discussions focused on establishing a consortium of higher educational institutions, and sharing experiences on their respective systems for ranking universities, it said. Her talks have a significance as about 13,000 Indian students currently study in China, mostly medicine. Mutual recognition of universities were expected to pave the way for more educational exchanges. The Indian medical students have to pass Medical Council of India examination to qualify to practice in India. Besides Mr Yang, Ms Irani also held talks with Chinese vice education ministers Liu Limin and Du Zhanyuan.

Her talks focused on the implementation of the new educational exchange programme (EEP) signed during Mr Modi's visit during which the two sides also agreed to expand cooperation to newer areas.

One MoU dealt with bilateral cooperation in the field of vocational education and skill development between India and China. Under the framework of the MoU, India and China agreed to work towards capacity development. — *PTI*

**Millennium Post ND
25/05/2015 P-7**

Smriti Irani talks recognition of degree, consortium in China

BEIJING: Human Resource Development Minister Smriti Irani, on her maiden visit to China, broached the idea of establishing a consortium of higher educational institutions as part of greater collaboration between India and China besides mutual recognition of academic degrees. Irani, 39, arrived in the eastern Chinese city of Qingdao on May 22 to take part in the 'International Conference on ICT and Post-2015 Education' organised by the Chinese Government and UNESCO on a four-day visit.

She held talks with top Chinese officials and discussed steps to follow up on agreements signed during Prime Minister Narendra Modi's recent visit here. The Minister held talks with her Chinese counterpart Yang Guiren on mutual recognition of academic degrees, collaboration in teacher's training, an Indian Embassy press release here said.   **AGENCIES**

Smriti Irani discusses educational consortium, mutual recognition of degrees on maiden China visit

http://www.firstpost.com/india/smriti-irani-discusses-educational-consortium-mutual-recognition-of-degrees-on-maiden-china-visit-2260156.html

Beijing: Human Resource Development Minister Smriti Irani, on her maiden visit to China, broached the idea of establishing a consortium of higher educational institutions as part of greater collaboration between India and China besides mutual recognition of academic degrees.

Irani, 39, arrived in the eastern Chinese city of Qingdao on 22 May to take part in the 'International Conference on ICT and Post-2015 Education' organised by the Chinese Government and UNESCO on a four-day visit.

Smriti Irani. PTI

She held talks with top Chinese officials and discussed steps to follow up on agreements signed during Prime Minister Narendra Modi's recent visit.

The Minister held talks with her Chinese counterpart Yang Guiren on mutual recognition of academic degrees, collaboration in teacher's training besides establishing a consortium of higher educational institutions, an Indian Embassy press release here said.

The collaboration in teachers training helps both the countries to share their vast experiences in education, Irani told *PTI.*

The discussions focussed on establishing a consortium of higher educational institutions, and sharing experiences on their respective systems for ranking universities, it said.

Her talks have a significance as about 13,000 Indian students currently study in China, mostly medicine. Mutual recognition of universities were expected to pave the way for more educational exchanges.

The Indian medical students have to pass Medical Council of India examination to qualify to practice in India. Besides Yang, Irani also held talks with Chinese Vice Education Ministers Liu Limin and Du Zhanyuan.

Her talks focussed on the implementation of the new Educational Exchange Programme (EEP) signed during Modi's visiti during which the two sides also agreed to expand cooperation to newer areas.

One MoU dealt with bilateral cooperation in the field of Vocational Education and Skill Development between India and China. Under the framework of the MoU, India and China agreed to work towards capacity development.

China will be the key knowledge partner in the Mahatma Gandhi National Institute for Skill Development and Entrepreneurship being set up in Gujarat. Under the MoU, China will provide curriculum in various trade and industry sectors.

According to officials, China has trained over 13 million people in skill development in focussed areas for better employment against a million by India.

Under the documents signed during Modi's maiden visit to China between May 14 to 16, the two sides had also agreed to set up the Centre for Gandhian and Indian Studies in Fudan University and setting up of a Yoga College in Yunnan University for which India provided the faculty.

This is the first time China had a centre for Gandhian studies and the Yoga college will have trained teachers to bring a standard Yoga education.

She also invited high-level Chinese participation to an international gathering of educationists the HRD Ministry will be organising in India as part of the process of revising India's National Education Policy, the press release said.

At the UNESCO conference, Irani spoke at length on Information and Communication Technology's (ICT) application for grassroot education. Irani said her emphasis on national resource compatibility to recognise the diversity of different countries has been received well.

The Minister said India being an IT software giant is ready to share its fund of knowledge in ICT with various countries as she underlined its critical importance in strengthening education systems in the effort to make education more inclusive and equitable.

"India boasts a global reputation in ICT expertise... A National Mission on Education through ICT systematically provides connectivity to universities and colleges, linking them to the National Knowledge Network," she said.

"Our National Digital Library with IT broadband in schools, colleges and universities will ensure availability of free and world class educational resources to every learner in India.

"India has developed virtual laboratories; we have spoken tutorials, and a very comprehensive enabler for 'Design' under the e-Kalpa Project," she said. The project aims at creating and developing new learning environments related to skills and creativity in 'Design', including in arts, crafts, culture and environment fields.

"Likewise, a programme is underway to improve the skills of technical teachers under the T10KT project, where teachers are trained simultaneously in different parts of the country using ICT. This has met with resounding success, and is growing exponentially," she said.

Irani said application of ICT was an absolute pre-requisite, offering the chance to examine decades of knowledge and experience by providing the advantage of high-speed delivery, wide outreach, individualisation of learning and interactivity.

She also explained the various initiatives recently undertaken in the education sector, which she said have been gamechangers, as the government seeks to integrate technology and democratise education across sectors.

Amar Ujala ND 25/05/2015   P-16

माइनिंग इंजीनियरिंग पढ़ेंगे ट्रांसजेंडर

कानपुर (ब्यूरो)। यह पहला मौका है कि माइनिंग इंजीनियरिंग और माइनिंग मशीनरी 2015-16 में मंगलामुखियों (ट्रांसजेंडर) को भी एडमिशन मिल सकेगा। इसका सर्कुलर आईआईटी मुंबई ने दो मई को जारी कर दिया है। सुप्रीमकोर्ट के आदेश के बाद मंगलामुखियों को ज्यादातर यूनिवर्सिटी, डिग्री कॉलेज, तकनीकी, प्रौद्योगिकी और चिकित्सा संस्थान की एडमिशन प्रक्रिया में शामिल कर लिया गया है।

सुप्रीमकोर्ट के आदेश पर महिला और पुरुष के बाद मंगलामुखी को थर्ड जेंडर में शामिल कर लिया गया है। अब इन्हें एडमिशन का मौका दिया जा रहा है। सबसे पहले ज्वाइंट एंट्रेंस टेस्ट (जेईई) मेन और एडवांस 2015 के फार्म भरवाकर आईआईटी, एनआईटी और ट्रिपल आईटी में एडमिशन का विकल्प दिया गया। अब माइनिंग कोर्स में एडमिशन का मौका मिला है। यह ऐसा कोर्स है, जिसमें सिर्फ पुरुष अभ्यर्थियों को एडमिशन मिलता रहा है। महिलाओं

आईआईटी मुंबई ने एडमिशन देने का सर्कुलर जारी किया

माइनिंग में अभी तक सिर्फ पुरुषों को ही मिलता है एडमिशन

के एडमिशन पर रोक है। इसलिए मंगलामुखियों के एडमिशन को खास माना जा रहा है। आईआईटी कानपुर परिक्षेत्र के जेईई चेयरमैन प्रो. टी. सनमुग राज ने बताया कि सेक्शन 46(1) ऑफ द माइंस एक्ट 1952 में प्रावधान है कि माइनिंग इंजीनियरिंग में महिलाओं को एडमिशन नहीं दिया जाएगा। इस कोर्स में जमीन के नीचे (सुरंग की मदद से) जाकर खनन की जानकारी दी जाती है। छह से 19 घंटे तक जमीन के अंदर रहना पड़ता है। महिला अभ्यर्थियों के लिए यह काम खतरनाक हो सकता है। यही वजह है कि माइनिंग और माइनिंग मशीनरी सरीखे कोर्स में महिलाओं के एडमिशन पर रोक है। अब माइनिंग में पुरुषों के साथ मंगलामुखियों को एडमिशन का विकल्प मिला है।

Mail Today ND 25/05/2015 P-5

PICTURE FOR REPRESENTATION

Delhi University aspirants on the North Campus in New Delhi.

By **Mail Today Bureau**
in New Delhi

Varsity waits for UGC order on credit system

MAINTAINING that it is awaiting instructions from the UGC, Delhi University is yet to direct its colleges to implement the Choice Based Credit System (CBCS) from the upcoming academic session even as UGC has already asked all central universities to implement CBCS.

"We are waiting for a direction from the University Grants Commission (UGC) after which we will take a decision regarding the implementation of CBCS," a senior university official said.

Even as the university is all set to begin the admission process to its undergraduate courses for the 2015-2016 session, the colleges are in a state of confusion about whether they make arrangements according to requirements of CBCS or continue with the earlier system.

"There has been no communication from the varsity regarding CBCS. What are the colleges supposed to do? We have to make syllabus, timetables, appoint ad-hocs if required, do workload calculation and much more? With barely few days remaining for the admission process to begin, we are in a fix," a college principal said.

However, university officials maintained that they are ready for the transition. "Meanwhile, we are preparing for the same and are ready for the transition. Once we get to hear from UGC, we will follow the due process and take approval from varsity's statutory bodies and implement the same," he added.

The official, however, did not elaborate further on what instructions DU is awaiting from the UGC after it had already conveyed to the varsities to implement CBCS from the upcoming session.

Last month, DU had asked faculty heads to start preparation for the rollout of CBCS and had directed them to finalise the syllabi, triggering a backlash from some members of the varsity's Executive Council (EC) who alleged that the university is violating statutory norms as the issue was never placed before the EC.

However, DU officials said that due process would be followed and CBCS will be implemented after passing it through statutory bodies like Academic Council and Executive Council.

The university is a divided house on CBCS with Delhi University Teacher's Association opposing the new system despite university administration's willingness to adopt CBCS.

The UGC had in September last year asked all central universities to implement CBCS from the 2015-16 academic session following a meeting of the vice-chancellors of all varsities.

Colleges don't know whether they should make arrangements according to CBCS or the existing system

"

There has been no communication from the varsity regarding CBCS. What are the colleges supposed to do? With barely few days remaining for the admission process to begin, we are in a fix.

A COLLEGE PRINCIPAL

JEE Advanced: Tougher paper, new marking scheme stump students

The results of the JEE Advanced exam will be declared on June 18.

http://indianexpress.com/article/cities/mumbai/jee-advanced-tougher-paper-new-marking-scheme-stump-students/

While initial responses of students to this year's IIT-Joint Entrance Examination or JEE-Advanced 2015 were mixed, many city students said that the change in the marking scheme of the paper came as a shock to them. The exam, held on Sunday, saw approximately 1.22 lakh candidates from over 350 centers across India appearing for papers 1 and 2.

This year, the second and the third section of both papers included negative marking for incorrect answers. Experts said that the negative marking scheme was increased this year.

"We have always carried negative marking in the JEE-Advanced exam, but the only major change we made this year was to increase the weightage of the paper," said organising chairman, JEE-Advanced 2015, IIT Bombay.

The exam, which usually consists of 350 marks, carried a weightage of 504.

Candidates are competing for 10,000 seats across IITs and ISM Dhanbad. The papers, which were of three hours each, consisted of three separate sections on Chemistry, Physics and Mathematics.

"The paper pattern was unexpected and I was quite shocked even though I had practiced a lot of paper styles. This was very different and difficult," said Aditi Garg, a student. The questions, which were multiple-choice, had negative marking and several had more than one correct option. "With so much negative marking, it was difficult to decide whether to answer a question you were unsure about," she added.

"Due to the new negative marking in paper I, in the multiple choice and match-the-following questions, students found the paper lengthy," said Ramesh Batlish, an official from a coaching centre.

Kshitiz Goel, another student, however, called it a "good and balanced paper". "It was not very easy but not too lengthy either," he said.
Praveen Tyagi, managing director of a Mumbai-based coaching centre, said, "The paper required students to make use of smart techniques which would help them save time. This is a positive step for JEE-Advanced.

The results of the JEE Advanced exam will be declared on June 18.

JEE Main 2015 Topper prefers IISc over IITs: What makes IISc so special

http://www.prepsure.com/news/jee-main-2015-topper-prefers-iisc-over-iits-what-makes-iisc-so-special/

2015 JEE Main topper Sankalp Gaur is appearing for JEE Advanced 2015 to be held on May 24, 2015. He is more interested in Nuclear Physics and Astrophysics and hence, hopes to get admission in the prestigious Indian Institute of Science (IISc), Bangalore instead of any of the Indian Institutes of Technology (IITs).

Here is a quick comparison between the IISc and the IITs:

Faculty Research Competence

IISc Bangalore is way ahead of any IIT in terms of quantity and quality of research papers or citations. It is amazing to see how Nobel laureates or those nominated for the Nobel Prize work in the IISc labs.

According to A Zinnov report titled 'Top Research Faculty in Tier-1 Engineering Institutions in India', IISc faculty has topped the list for having highest number of research grants (industry and government), journal references (national and international), conference publications and patents filed in their name.

IISc is followed by IIT Kanpur, Delhi, Madras, Bombay, Kharagpur, Roorkee, BHU and Guwahati and BITS Pilani in the list in the same order.

Highlights:

- IISc Bangalore is way ahead of any IIT in terms of number of research papers or citations by the faculty.
- IISc and IITs both have great labs and infrastructure but IISc has adequate manpower to use its resources better.
- For Electrical & Electronics Engineering and Aerospace Engineering, IISc is better. For CSE, IIT-D is the best institute. For Mechanical stream, IIT Kanpur is better.

The Top 10 institutes mentioned in the A Zinnov report have all PhD faculty members with an average experience of 20 years. The exposure and knowledge faculty brings to the table significantly affects the graduates of the institutions.

Research Collaborations

Since IISc hosts several faculty members who have been fathers of their respective fields in their own right, their contacts extend worldwide. IISc labs have global recognition and it has research collaborations with both the foreign universities and the industry.

IITs are also collaborating with more and more foreign universities now and are offering twin programmes but they still have to do much more in terms of building their 'research' network.

Infrastructure & Application

IITs and IISc both have great infrastructure but IISc has more manpower to actually use its lab and resources to its full potential. IITs generally don't have a determined group working in a particular area for the purpose of scientific development but they do have a reputation for keeping their students abreast about existing technology and encourage them to find its applications.

Department-wise Ranking

IISc is believed to have best Aerospace Engineering, and Electrical & Electronics Engineering departments. IIT Delhi excelled in Computer Science Engineering while IIT Kanpur was ranked best for Mechanical Engineering stream.

Employability of Graduates

According to the prestigious Times Higher Education (THE) BRICS & Emerging Economies Rankings 2015, IISc Bangalore has been ranked highest among Indian institutes at #25. IIT Bombay ranked at #37 while IIT Roorkee ranked at #38. IIT Kharagpur ranked at #43, IIT Madras ranked at #44, IIT Delhi ranked at #56, IIT Kanpur at #74, and IIT Guwahati at #98.

IISc Bangalore emerged as the top Indian instituion on the basis of employability of its graduates. It ranked at #22 in the global league table for it. Based on the employability of graduates, IIT Bombay ranked at #120 worldwide, IIT Kanpur at #145 and IIT Delhi at #149.

Social Recognition

It is obvious that IITs are a more popular name in India. IITs are known for producing more entrepreneurs while IISc is known for producing more research fellows. Prof. CNR Rao, former President of India Abdul Kalam, and Satish Dhawan are all from IISc.

The tag of being an 'IITian' is more highlighted in Indian media too.

Campus Life

IITs are better known for its undergraduate studies. They are also known for larger-than-life tech and cultural fests. While life at IIT is more fun, campus life at IISc is more peaceful and academics-oriented.

Placements

IIT placements get media highlights every year but IISc students also get adequate chances to be placed at better positions in the industry. However, most IISc students are known to opt for higher studies and research careers.

What suits you better: IISc or IIT?

One of the biggest education myths is that IISc Bangalore is good only for Pure Sciences. The truth is that IISc is almost as good in engineering as IITs and has some of the brightest engineering researchers and teachers in its kitty. Its focus is on interdisciplinary engineering research.

Here are some of the points that may help you peg down which institute would be better for you:

- If you want to join a job quickly and dream to be associated with a reputed 'brand', IIT might be a better option for you. For those interested in research careers, IISc might be the institute for you.

- If you are planning to bunk lectures and indulge in sports, extra-curricular activities, and chalk out new ventures (business, political or social), IITs may be the way to go.
- Find out about your interests and then, go through the faculty profiles of various IITs and IISc. Find faculty members who have done work similar to what you aspire to do. You may also contact institute's students or alumni in the areas you are interested in and ask about their experience and guidance.

Per capita spend on higher education declining: UGC chairman

http://timesofindia.indiatimes.com/city/ludhiana/Per-capita-spend-on-higher-education-declining-UGC-chairman/articleshow/47401438.cms

JALANDHAR: University Grants Commission chairman Ved Prakash has said that per capita expenditure on higher education is sliding and public funding in higher education is not keeping pace with the growing enrollment. He said the state governments were not matching up the funds being provided by the Union government for higher education.

"State governments are not spending on higher education as much as the Union government. Even as the Centre is coming up with bigger resources for higher education that resources are not matched by the state governments. Much of the higher education rests with the state system and needs to be its priority, but that is not happening," said Prakash. He was speaking to mediapersons on the side lines of the annual general meeting of Association of Indian Universities (AIU), which started at Lovely Professional University on Saturday.

Citing figures of budgetary allocations in 11th and 12th five year plans, he said though there was definite increase in the budget, that was not in proportion to the increase in enrolment.

Earlier, while addressing the vice-chancellors of various universities from across the country, he pointed out that the role of private sector had increased very significantly in higher education. "Left to me, I would want the state to take the responsibility of imparting education to one and all, but we know the limitations of the state. The private sector has to come forward and play a very significant role. The share of private sector has increased enormously in higher education. It is 42% in terms of universities and 58% in terms of students enrolment," said the UGC chairman.

Striking a note of caution, he said, "Finances are very important, but I'll like to request private providers not to give business orientation to higher education. The private and public sector together can fill up the gap. We should look at each other as companions and not as adversaries and not consider regulations as obstacles, but must use them for improving the quality of education."

Financial Express ND 24/05/2015 p-12

11-year-old Indian-American graduates

Los Angeles, May 23: An Indian-American home-schooled boy has surprised one and all by graduating from a US college at the age of 11 with three associate degrees in maths, science and foreign language studies.

Tanishq Abraham, a native of Sacramento, California,graduated from American River College in Sacramento (ARC), California, alongside 1,800 students.

Abraham is the youngest person to graduate from

Tanishq Abraham

American River College this year. "The assumption is that he's the all-time youngest," American River College spokesman. Abraham last year became one of the youngest ever in the US to graduate high school.

Home-schooled since the age of 7 years, Abraham passed a state exam in March last year that certified he had met the appropriate academic standards to receive his high school diploma. His achievement last year had earned the attention of President Barack Obama—who had sent Tanishq a congratulatory letter.

Abraham joined MENSA, the prominent high IQ society,when he was only four-years-old. *PTI*

May 23

Economic Times ND 23/05/2015   P-3

IIT Delhi Director Quit After He Was Insulted: Kakodkar

Our Political Bureau

New Delhi: Nuclear scientist Anil Kakodkar has come out in support of IIT Delhi director saying that RK Shevgaonkar resigned because he felt humiliated and his self-respect was "severely hurt". "I feel very sorry for him. I know him personally. He is a well-respected academician and all his students and faculty will vouch for him. I have spoken to him. All of us have some minimum self-respect. In his case it was severely hurt," Kakodkar, who completed his term as IIT Bombay chairman this month, told NDTV in an interview on Friday.

Shevgaonkar had resigned on December 22 last year citing personal reasons.

Media reports, however, suggested that he was reportedly unhappy as he was under pressure from the government to release salary dues to former faculty member and now BJP leader Subramanian Swamy.

Although Kakodkar refused to elaborate the circumstances under which Shevgaonkar had to quit the post, he shot down HRD ministry's allegations regarding the legality of IIT Delhi's Mauritius campus. "The dirt thrown at him over the Mauritius campus was wrong and unfair. Everything was above board. In fact IIT councils had decided to go international, to take the brand overseas and to attract foreign students," he said.

Kakodkar himself had resigned as IIT Bombay chairman in March over differences with the HRD ministry regarding selection of
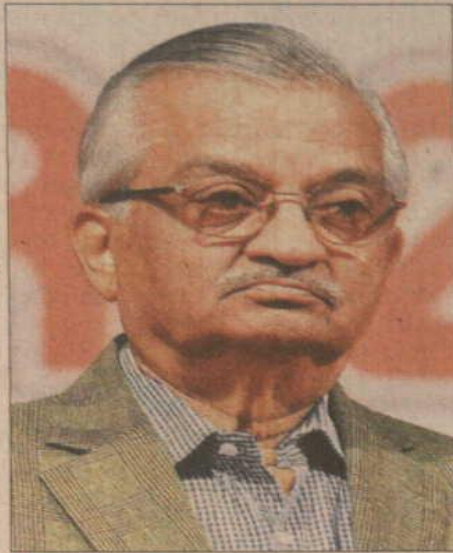
> **IN SUPPORT**
>
> The dirt thrown at him over the Mauritius campus was wrong and unfair. Everything was above board
>
> **ANIL KAKODKAR**
> Nuclear Scientist

IIT directors. "My unease was to do with the fact that the earlier processes were set aside," he said. "But I cannot be party to a wrong doing. Contrary to what has been said, I never accepted this process. I stayed out."

"Dirt was thrown at him (Shevgaonkar) unfairly, as at me too... when it was suggested that I had accepted the new selection process for IIT directors," he said.

Indian Express ND 23/05/2015   P-1

CHOOSING IIT DIRECTORS

Kakodkar rebuts Irani: I am out of the process

EXPRESS NEWS SERVICE
NEW DELHI, MAY 22

IN A scathing criticism of the process adopted by the Human Resource Development Ministry for the recent selection of directors of three Indian Institutes of Technology, nuclear scientist and chairman of the Board of Governors of IIT-Bombay Anil Kakodkar said he quit the board as he could not be party to

"wrongdoing".

Speaking to Shekhar Gupta on *Walk the Talk* on NDTV 24x7, Kakodkar alleged the ministry adopted "too casual a process for such an important activity". He also, for the first time, publicly rebutted the ministry's claim that he had re-joined the selection process.

A member of the selection committee and chairman of the Standing Committee of the IIT Council, Kakodkar had resigned

> This is too casual a process for such an important activity and I can't be a party to this.
>
> **ANIL KAKODKAR**
> CHAIRMAN, BOARD OF
> GOVERNORS OF IIT-BOMBAY

Kakodkar: I am out of the process

on March 12 following a "disagreement" over the choice of an IIT director. The ministry, however, did not accept his resignation, with HRD Minister Smriti Irani requesting him to withdraw it.

Speaking at Express Adda last month, HRD Minister Smriti Irani had dismissed a report, first published in *The Indian Express*, about Kakodkar's resignation.

The selection committee, chaired by Irani, was reaching a consensus on the choice of directors for IIT-Patna and IIT-Bhubaneswar, but there was no agreement on IIT-Ropar, and the process involving 12 candidates was later cancelled. All 37 candidates in the original shortlist were called for a fresh round of interviews on March 22, which was not attended by Kakodkar.

Directors for all three IITs have now been appointed.

Asked if the earlier selection process had been set aside without discussion, Kakodkar said, "It looks like that."

"The point is you can't be deciding that choice of IIT director or three IIT directors among 36 in a six or seven hour process. If you set aside everything and then you decide like that, then you are running a lottery," Kakodkar said.

Asked if he had tried to reason with

Irani, Kakodkar said, "Actually when the process began, I argued this at length and actually we had this process of group discussion and shortlist, but then something happened and the whole thing was set aside."

"So I had to remain aside. There are good bureaucrats, not so good bureaucrats, good political leaders. There are not so good political leaders. So the important thing is the system. After all, these are all public funded institutions and I think we should respect it. But there is also a huge importance to autonomy and so the external environment should become more a facilitator rather than a controller...," he said.

Asked whether the pressure had come from civil servants or the minister, Kakodkar said, "Well, you know it, why you are asking me?"

However, he later said he thinks "it's not as if there was pressure" but "the question was a particular process was set aside and then you look at all of them".

"This is too casual a process for such an important activity and at least I can't be a party to this," he said.

Asked if he was back in the committee, Kakodkar said, "I haven't joined that process back, but certainly I still continue

to be a responsible person. If I am a chairman of IIT Board till May, by virtue of that if I have to do other things, I will do."

He added that following his resignation in March, "the minister, as she was good enough, so she called back and said no, no, I don't accept your resignation".

He added, "So I am continuing till May and by virtue of that there are other IIT processes, I will carry on, but I cannot be a party (to) wrongdoing."

Kakodkar also came out in support of IIT-Delhi director R Shevgaonkar, who resigned last December amid reports of pressure from the ministry. "I feel very sorry for him... He is a well-respected academic. I think students, faculty colleagues, his peers, they will all vouch for him," he said.

"Obviously his self-respect is severely hurt, undeservingly so, and I understand he wanted to go and I think he should be given an honourable way. So although it would be a loss to IIT-Delhi and I know IIT-Delhi, all colleagues there are strongly behind him, so that's it. I think it's very sad."

Asked if Shevgaonkar was willing to change his mind, Kakodkar said, "The question is, I think, all of us have some minimum self-respect and in his case it was severely hurt."

Selection process of IIT directors like `operating lottery`: Kakodkar

http://bharatpress.com/2015/05/23/selection-process-of-iit-directors-like-running-lottery-kakodkar/

New Delhi: Breaking his silence, Chairman of IIT Bombay's Board of Governors Anil Kakodkar on Friday stated he had resigned as a result of he didn't need to be half of the choice process of IIT directors which was "too informal" and "operating a lottery".

The famous nuclear scientist additionally made clear his discomfort with the HRD Ministry over the resignation of IIT Delhi Director Raghunath N Shevgaonkar, saying he was a revered educational whose self-respect was "severely harm" and that he must be allowed to exit honourably.

In an interview to NDTV, he additionally shared his anguish with what he described as "throwing muck" at him over studies that he was half of the IIT directors choice process.

"I haven't joined again. I am not again on committee. That half is over," he stated, including that HRD Minister Smriti Irani was ok to name him after he resigned to say she was not accepting it.

He stated his time period because the chairman of IIT's Board of Governors was anyway ending on this month and he was related with different affairs of his job however not choice process.

"The level is you'll be able to't be deciding on the selection of 3 IIT directors amongst 36 in a six or seven hour process. My unease was that the sooner process, every part was put aside. If you put aside all the things and also you determine like that then you're operating a lottery.

"When the process started I had argued however then one thing occurred and every part was put aside. So I needed to stay apart. It was too informal a process for such an essential exercise and I can't be a party to it," he stated.

Kakodkar, nevertheless, declined to reply a query on who was in charge for it, saying "Why are you asking me? You know every little thing… There are good political leaders and there are not any-so-dangerous political leaders."

Noting that autonomy loved by IITs have "large significance", he stated the exterior surroundings ought to turn into a "facilitator".

"This tendency that I am a controller shouldn't be proper."

Deccan Herald ND 23/05/2015 P-6

Mumbai-Ahmedabad high speed rail viable, says IIM-A study

NEW DELHI, DHNS: Resting fears that the Mumbai-Ahmedabad bullet train would not make financial sense, a study by IIM-Ahmedabad has said the large number of potential passengers makes a compelling case for its viability.

IIM-A scholar TS Ramakrishnan, who conducted the study with guidance from the institute's rail expert G Raghuram, said demand for reserved tickets in the corridor is far beyond the amount of seats in the 50 existing trains.

"In spite of 50 trains in the corridor, passengers fail to get reserved tickets," the scholar, who made a presentation at the Rail Bhavan before senior officials, said. Focusing more on the passenger traction for the bullet train project, the IIM expert considered passengers in the corridor in four major cities and their surroundings – Ahmedabad, Vadodara, Surat and Mumbai.

He concluded that the bullet train would attract one out of two passengers travelling in the 534-long Ahmedabad-Mumbai corridor by 2035.

"By introducing High Speed Rail (HSR), the huge shortage prevailing for train tickets can be reversed," Ramakrishnan said. The study contrasts gloomy conclusions by the French National Rail Company that dismissed Mumbai-Ahmedabad bullet train project as financially unviable.

It also trashes doubts in some quarters that the bullet train would be an overreach for the Indian economy which is just stuttering back to growth.

The project, estimated to cost a whopping Rs 63,000 crores, awaits feasibility study by the Japan International Cooperation Agency (JICA).

"HSR also provides a time-saving, oil-independent, energy efficient, less polluting and comfortable passenger travel mode for the busy Ahmedabad - Mumbai corridor," Ramakrishnan said, calling on the government to begin the project by 2018. By his estimation, the project could become operational by 2025 should the government chooses to begin work by 2018, since it would take seven years to build a single railway line.

To make it more viable, the study recommended building broad-gauge tracks and allow "seamless" operation of the bullet train and conventional train system on the same lines.

Nai Duniya ND 23.05.2015 P-7

एक रुपए की बिजली से तीन घंटे दौड़ती है ई-साइकिल

विकास पांडेय >> कोरबा (छग)

आईटी कॉलेज में इलेक्ट्रिकल एंड इलेक्ट्रॉनिक्स इंजीनियरिंग के 6 छात्रों ने बैटरी से चलने वाली एक ऐसी साइकिल बनाई है, जिसे एक बार चार्ज करने के बाद तीन घंटे तक चलाया जा सकता है। घर पर साधारण बिजली से रिचार्ज हो जाने वाली इस वीकल को इंजीनियरिंग छात्रों ने ई-साइकिल का नाम दिया है। इसे यहां पढ़ रहे ट्रिपल-ई ब्रांच के अंतिम वर्ष के छात्रों ने डिजाइन किया है। साइकिल के इस्तेमाल पर प्रति किलोमीटर 5 पैसे की बिजली खपत होती है।

विभिन्न ब्रांचों में इंजीनियरिंग की पढ़ाई कर रहे छात्र-छात्राओं को अंतिम वर्ष में इंडिविजुअल प्रोजेक्ट कार्य दिया जाता है। कम से कम विश्वविद्यालय स्तर पर चुने गए इस एक यूनीक प्रोजेक्ट में इंजीनियरिंग के सिद्धांतों का इस्तेमाल कर ऐसे चलित मॉडल बनाने होते हैं। जिस कांसेप्ट पर कोई दूसरा कार्य न करे। इसका उद्देश्य तकनीकी शिक्षा के क्षेत्र में भविष्य बनाने इंजीनियरिंग की पढ़ाई कर रहे छात्र-छात्राओं को प्रायोगिक ज्ञान से रूबरू कराते हुए उनके व्यावहारिक इस्तेमाल की चीजें अविष्कृत करने को प्रेरित करना है। आईटी कॉलेज में इलेक्ट्रिकल एंड इलेक्ट्रॉनिक्स इंजीनियरिंग (ईईई) ब्रांच में अध्ययनरत बीई अंतिम वर्ष व अंतिम सेमेस्टर के छात्रों ने

ई-साइकिल तैयार करने वाली टीम।

ई-साइकिल तैयार की है। उन्हें यह साइकिल बनाने में 3 माह का वक्त लगा है तथा साइकिल सहित 6 से 7 हजार की लागत आई है।

ये है खासियत

- प्रदूषण रहित व बैटरी चलित ई-साइकिल।
- अधिकतम 35 किलोमीटर प्रति घंटे की रफ्तार पकड़ सकती है।
- इसमें पंखा चलाने को इस्तेमाल किया गया ब्लॉक मोटर लगाई गई है।
- प्रति किलोमीटर 5 पैसे का बिजली खर्च होता है।
- एक बार फुल चार्ज बैटरी से 30 किलोमीटर दौड़ लगाई जा सकती है।
- इसे तीन मोड मैनुअल, पैडल व पावर ऑन डिमांड मोड पर चलाया जा सकता है।
- 12 वोल्ट की तीन बैटरी से 436 वाट की डीसी पावर प्राप्त होती है।
- गति का नियंत्रण इलेक्टिक ट्रोटल से किया जाता है।
- ई-साइकिल में चाबी से इलेक्ट्रिक लॉक सिस्टम, हॉर्न, हेडलाइट, एक्सीलरेटर की सुविधा।
- बिना चाबी से ऑन किए साइकिल किसी भी मोड में नहीं चलाई जा सकती।

Times Of India ND 23/05/2015 P-21

Self-destructing devices to help reduce e-waste

Washington: Scientists have developed electronic devices that can self-destruct on demand when heated, a step towards reducing electronic waste and boosting sustainability in device manufacturing.

They also developed a radio-controlled trigger that could remotely activate self-destruction.

"We have demonstrated electronics that are there when you need them and gone when you don't anymore," said professor Scott R White from the University of Illinois.

"This is a way of creating sustainability in the materials that are used in modern-day electronics. This was our first attempt to use an environmental stimulus to trigger destruction," said White.

White's group teamed up with John A Rogers, director of the Frederick Seitz Materials Laboratory at Illinois. Rogers' group has pioneered transient devices that dissolve in water, with applications for biomedical implants.

Together, the two groups have tackled the problem of using other triggers to break down devices, like ultraviolet light, heat and mechanical stress.

The goal is to find ways to disintegrate the devices so that manufacturers can recycle the costly materials used or so that the devices could break down in a landfill, researchers said.

The heat-triggered devices use magnesium circuits printed on very thin, flexible materials. The researchers trap microscopic droplets of a weak acid in wax, and coat the devices with the wax.

When the devices are heated, the wax melts, releasing the acid, which dissolves it quickly and completely. The speed of degradation is controlled by tuning the thickness of the wax, the concentration of the acid, and the temperature. PTI

USE AND THROW

Times Of India ND 23/05/2015   P-21

Scientists turn blood cells into neurons

It Paves Way For Pain Drugs Sans Numbness

Toronto: In a breakthrough, scientists, led by an Indian-origin researcher, have successfully converted adult human blood cells into neurons. Researchers can now directly convert adult human blood cells to both central nervous system (brain and spinal cord) neurons as well as neurons in the peripheral nervous system (rest of the body) that are responsible for pain, temperature and itch perception.

This means that how a person's nervous system cells react and respond to stimuli can be determined from his blood, researchers said. The researchers have essentially transformed blood to feeling, and thus can more easily study how a person's nervous system cells react and respond to various stimuli.

The peripheral nervous system is made up of different types of nerves — some are mechanical (feel pressure) and others detect temperature (heat). In extreme conditions, pain or numbness is perceived by the brain using signals sent by these peripheral nerves.

"The problem is that un-

© Glowimages/Corbis

BREAKTHROUGH

like blood, a skin sample or even a tissue biopsy, you can't take a piece of a patient's neural system. It runs like complex wiring throughout the body and portions cannot be sampled for study," said Mick Bhatia, director of the Stem Cell and Cancer Research Institute at McMaster University, who led the research.

"Through this approach we can produce one million sensory neurons using a patient's blood sample, that make up the peripheral nerves in short order, besides central nervous system cells, as the blood to neural conversion technology we developed creates neural stem cells during the process of conversion," said Bhatia. The process also paves the way for the discovery of new pain drugs that don't just numb the perception of pain. PTI

Technology Is Power, Says President

The President, Mr. Pranab Mukherjee with the second batch of NITs scholars attending In-Residence programme, at Rashtrapati Bhavan, in New Delhi on May 21, 2015.

'Expansion Is Life, Contraction Is Death'

http://groundreport.com/technology-is-power-says-president/

New Delhi (PIB-GR-TYP-BIN): The second batch of 19 NIT scholars from across the country participating in an 'In-Residence' programme of Rashtrapati Bhavan called on the President of India, Mr. Pranab Mukherjee on May 21, at Rashtrapati Bhavan.

Speaking on the occasion, the President quoted Swami Vivekananda and said that Expansion is life, Contraction is death. He urged the young NIT scholars to never stop and constantly move forward. He said that the common thread he noticed among the NIT scholars was that they want to be agents of change in whatever capacity they were placed in to serve the country. He said that Technology is power. He wished them a happy and prosperous career ahead.

The President said that NITs are front-ranking institutions in our country for imparting quality scientific and technical education. The growth of NITs, as a class of institution, is diverse. There are old NITs with whose origins one can draw a parallel with the genesis of modern industrial India. The fact that the growth of NITs since their inception is primarily the result of indigenous efforts, without help from foreign institutions, is truly commendable.

The President said that talking of diversity, the NIT system is marked by a unique student mix. Each NIT portrays a national character by design, making its campus a 'mini-India'. Inter-mingling of students from different parts of India in one institute has many positive spin-offs, including the development of a pan-India vision in each one of them.

The President said that they, the students of NIT are an asset to this nation. There will therefore be hopes and expectations from them. They must understand and appreciate their responsibilities. He said that because of their education, they not only had the capacity to dream big but also to implement that vision. He urged them to go ahead and make a difference to the society in which they lived in. In whatever they did, they should always perform with the singular motivation of doing good for the society.

The NIT scholars were unanimous in saying that they would always cherish the memories of the lifetime opportunity they had received to be participants of the 'In Residence' Programme at Rashtrapati Bhavan. They also said that this invaluable experience had given them great confidence and reinvigorated a deep sense of patriotism in them and a feeling of optimism in the system of governance in the country.

The In-Residence programme for NITs was announced by the President of India at the annual Conference of Directors of NITs held in October 2014. First batch of seventeen NIT scholars took part in a similar 'In Residence' programme from April 11 to April 17, 2015. The second batch of NIT scholars are part of the 'In-Residence' programme at Rashtrapati Bhavan from May 16 to 22, 2015. Similar programmes already exist for writers, artists and grass root innovators. The same will be extended to Inspired teachers from Central Universities in the next month.

IIT-GN Palaj campus to have 10-storey 'landmark tower'

http://indianexpress.com/article/cities/ahmedabad/iit-gn-palaj-campus-to-have-10-storey-landmark-tower/

https://twitter.com/ndtv/statuses/601700974487412736

A "landmark tower", 30 meters in height, made of red pigmented concrete akin to a ten-storey building, is going to be a unique feature at the new permanent riverfront campus of the Indian Institute of Technology, Gandhinagar. The institute which was functioning from a temporary facility at Vishwakarma Engineering College (VEC) on the outskirts of Ahmedabad, is expected to make a move with around 1,000 students and close to 100 faculty to its permanent 400 acres residential campus at Palaj in Gandhinagar by mid-July.

Six architectural firms, including two from the city, have participated in the design of the permanent campus which is located on the banks of the Sabarmati at Palaj. While the masterplan was drawn up by Delhi-based Green campus development consortium, the student hostels were designed by HCP Design Planning and Management Pvt. Ltd, faculty and staff housing have been done by Vastu Shilpa Consultants and the academic areas have been designed by Pune based Mitimitra Consultants Pvt. Ltd(MCPL).

"The 'Landmark tower', which will measure 30 meters, is built in such a way that it is visible from the other side of the river Sabarmati. The building will be as tall as ten floors and will have observation decks for students and will be their activity area. There will be student canteen and cafeterias in the first and second floor canteen of the tower. A large green belt stretching across campus, terrace gardens and two natural lakes which we will be supplementing and sustaining will provide cooling. We are looking to develop the 400-acre campus with long-term plan as the strength of students is growing in numbers. In the next few months, other amenities like more formal sports facilities like a stadium, additional housing for students and faculty will be built to cater to increased strength in coming years," said Harish Palanthandalam-Madapusi, an IITGN faculty from the mechanical engineering department, who is involved with the campus work at Palaj.

While the initial project cost of construction was estimated at Rs 1,200 crore, sources claimed that IIT-GN has till now spent Rs 400 crore till now. Looking to grow in student and faculty numbers, a 600-seater auditorium, a sports stadium, shopping arcades, and a library building are next in line at the new campus.

Harish added, "In the first phase, around 1,200 students will be able to move into the new Palaj campus by mid July. We have completed a major part of construction in the first phase including basic amenities like hostels, labs, classrooms, library, playground and more amenities are on way. In the second phase, Pune-based MCPL is set to complete the ongoing work and for finalising smaller projects within the campus, while the next phase of student hostels will be designed by Neeraj Manchanda Architects, Delhi. " IIT-GN students and faculty also came up with innovative engineering solutions like ventilation strategies, use of structural methods.