

# Newspaper Clips

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Hindustan Times ND 12/19/2013 P-10

## IITs grappling with shortage of staff

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**NEW DELHI:** The Indian Institutes of Technologies (IITs) continue to grapple with faculty shortage and a high gap in student-faculty ratio, the latest figures provided in the Lok Sabha have revealed.

Of the nearly 6,591 sanctioned posts only 4,079 have been filled, which is just 62% of the total capacity. The filled posts include that of visiting/adjunct and on contract faculty. While IIT Kharagpur has a faculty shortage of 456, IIT Delhi has a shortage of 349 faculty members.

As per the OECD report 'Education at a glance' 2010, the faculty-student ratio in higher education institutions was 15.1:1 in US, 17.6:1 in the UK, 10.6:1 in Japan, 12.1:1 in Germany and 16.6:1 in France. In IITs, the



■ Students at one of the IITs.

ratio is 16:1.

For IITs, the formula that was devised was for every ten students there should be one faculty. But from 2006 as the number of students across different IITs almost doubled the faculty strength has grown at just around 10%.

While the faculty-student ratio in IIT BHU is 22:1, in IIT Delhi and IIT Roorkee it

is 19:1, in IIT Kharagpur it is 18:1, IIT Kanpur has a ratio of 16:1, in IIT Guwahati and IIT Madras it is 15:1, while in IIT Bombay it is 14:1. The new IITs have a relatively better faculty-student ratio — IIT Indore at 8:1, IIT Bhubaneswar and IIT Gandhinagar falling in the ratio of 9:1. IITs at Mandi, Patna and Ropar have a faculty student ratio of 10:1.

# HOW IITs GET IT RIGHT

**PIONEER** IITs provide subsidised infrastructure, funds, mentoring and funding to projects by students

Gauri Kohli

The incubation centres at the Indian Institutes of Technology (IITs) were set up for converting ideas to practical solutions. They are now churning out some real success stories.

**PATH-BREAKING WORK**

Take the case of IIT Bombay. It was among the first engineering institutions in the country to set up an incubation and innovation centre to support many bright sparks. "Incubation centres are a platform where ideas and crude prototypes can be turned into products that can be commercialised. We established the centre at our institute the year 2000 and have incubated 48 companies, of which about 20 have been funded," says Poyini Bhatt, chief administrative officer at IIT Bombay's Society for Incubation and Entrepreneurship (SINE).

Elaborating on how the projects are selected, Bhatt says, "During screening, we see whether the business plan can be incubated and its chance of reaching the market. The students working on the projects have to justify the need for it to be funded before we actually go ahead. Our budget is upto

₹20 lakh per company and we also get support from the Department of Science and Technology, the Technology Development Board and the Department of Information Technology," adds Bhatt.

Besides financial funding, the institute also provides subsidised infrastructure, mentoring and small seed funding.

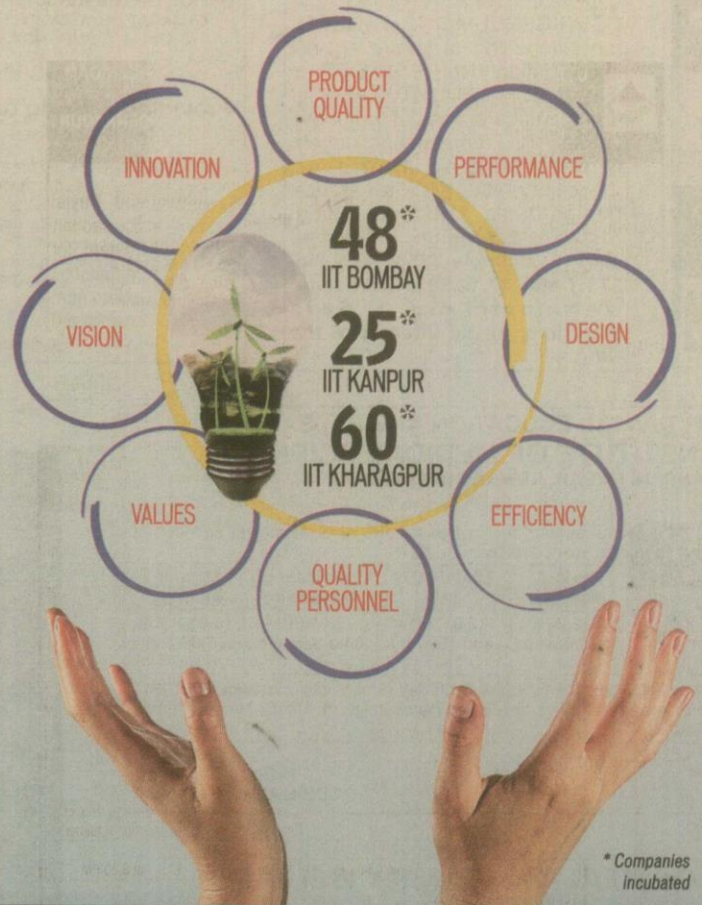
SINE's work includes incubating early stage entrepreneurial ventures based on technology and innovation, creating physical infrastructure, facilitating networking with experts and advisors for the incubatee companies and identifying innovations which have commercial potential.

According to BV Phani, coordinator at the SIDBI Innovation Incubation Centre (SIIC) of IIT Kanpur, "The first source of start-ups at IIT Kanpur were the students' research projects. Faculty mentoring is mandatory for companies incubating at our institute. The maximum fund allotted under any project is ₹25 lakh. The limit of funding is governed by the rules/policy of the funding agency. SIIC has availed funding from different government agencies, namely DST, DIT, Department of Scientific and Industrial Research, Ministry of Micro, Medium and Small Enterprises, and Biotechnology Industry Research Assistance Council-Department of Biotechnology."

"The incubation approval is given by a committee based on the principle of converting ideas into a commercial product. Currently, the centre is mentoring 25 projects/incubated companies," says Phani.

IIT Kharagpur also provides incubation space for R&D.

"We are arranging seed funds/grants through various projects sponsored by the Centre," says Indranil Sengupta, managing director, Science and Technology Entrepreneurs' Park, IIT Kharagpur.



THE IDEAS BRIGADE

# Incubators help IITs and IIMs work on pilot projects



■ Students of IIT-Kharagpur

HT PHOTO

Gauri Kohli

Many IIT and IIM alumni have successfully turned their blueprints into start-ups, thanks to the incubation centres there.

Vivek Pandey, an alumnus of IIT Kharagpur is one of them. Co-founder of Ecofrost Technologies, he started an agri-focused company engaged in creating solutions to bridge gaps in cold chain infrastructure and technology.

"The company envisions disrupting the current state of food supply chain in India by empowering farmers, mandis and mobile cold chain players with clean technology for a sustainable future," says Pandey.

The company, incubated at the Science and Technology Entrepreneurs' Park of IIT Kharagpur, is developing a small-scale solar-powered cold

## AN IIM ALUMNUS STARTED FINE FEATHER SCHOOL HEALTH PROGRAMME TO OFFER QUALITY HEALTH CHECKS FOR KIDS TO FIND HIDDEN AILMENTS

storage system.

He is happy that the centre provided them with an incubation facility that includes an office space, and necessary amenities like high voltage electricity supply, internet and more.

"It has also facilitated to us the funds necessary to develop the first working model which has been key to our business process. We were funded with ₹15 lakh for product development," he adds.

It's not just the engineering students who

have benefitted from these incubation centres. IIM alumni also have similar stories to share. One of them is Manish Jobanputra, an alumnus of IIM Ahmedabad, who started Fine Feather School Health Programme that aims to offer quality health checks for schoolchildren to find hidden ailments.

"We have done checks on more than 25,000 school kids. Our second venture is called Fine Feather Dental Clinics, for which we have six clinics in Ahmedabad. We aim to bring in the best practices in dental health in terms of hygiene, transparency and treatment," he says.

Besides the credibility, the innovation centre at his alma mater also helped him with infrastructure.

"Institute-based incubation centres such as CIIE also play a major role in building a network of successful entrepreneurs. We got a seed fund of ₹25 lakh from CIIE," he says.

Dainik Bhaskar ND 12/19/2013 P-13

# 'ब्रिक्स' टॉप-20 यूनिवर्सिटीज में पांच आईआईटी

उपलब्धि

सूची में चीन की यूनिवर्सिटीज का दबदबा, टॉप-100 में 40 यूनिवर्सिटी शुमार

एजेंसी | नई दिल्ली

आईआईटी-दिल्ली समेत भारत के पांच आईआईटी ब्रिक्स देशों की शीर्ष 20 यूनिवर्सिटीज में जगह पाने में सफल हुए हैं। ब्रिक्स देशों की पहली बार की गई रेटिंग में यह बात सामने आई है। ब्रिक्स देशों में ब्राजील, रूस, भारत, चीन और दक्षिण अफ्रीका आते हैं। 'क्यूएस यूनिवर्सिटी रैंकिंग्स: ब्रिक्स' के मुताबिक आईआईटी-दिल्ली देश की सबसे बेहतरीन यूनिवर्सिटी है। दुनिया भर में इसका स्थान 13वां है। इसके बाद आईआईटी-मुंबई 15वें और आईआईटी-मद्रास 16वें, आईआईटी-कानपुर 17वें और आईआईटी-खड़गपुर 18वें नंबर पर हैं। जबकि आईआईटी-रूड़की 34वें और आईआईटी-गुवाहाटी 51वें स्थान पर हैं। इस सूची में चीन के यूनिवर्सिटी छत्र छत्र हुए हैं। टॉप-100 में उसके 40 और टॉप-5 में चार यूनिवर्सिटी हैं। सिंगुआ यूनिवर्सिटी को बेस्ट यूनिवर्सिटी का दर्जा मिला है। टॉप-100 में रूस के 19 और ब्राजील के 17 यूनिवर्सिटी हैं।

## ब्रिक्स की टॉप यूनिवर्सिटीज में ये

यूनिवर्सिटी	रैंक
यूनिवर्सिटी ऑफ कलकत्ता	52
यूनिवर्सिटी ऑफ मुंबई	62
यूनिवर्सिटी ऑफ हैदराबाद	64
मद्रास यूनिवर्सिटी	70
बनारस यूनिवर्सिटी	85
आईआईटी-इलाहाबाद	92
यूनिवर्सिटी ऑफ पुणे	94
मनिपाल यूनिवर्सिटी	100

## अंतरराष्ट्रीय फैकल्टी के मामले में हम फिसडडी

कॉलेजों में अंतरराष्ट्रीय फैकल्टी रखने के मामले में भारत फिसडडी है। उसे 2.4 अंक मिले हैं, जबकि ग्लोबल औसत 38.1 है। अंतरराष्ट्रीय छात्रों के मामले में भी भारत को काफी नीचा स्थान मिला है। उसे सिर्फ 3.1 अंक मिले हैं, जबकि ग्लोबल औसत 37.9 है। फैकल्टी-स्टूडेंट अनुपात के मामले में भी भारत बेहद पिछड़ा हुआ है। इसे 29.4 अंक मिले हैं, जबकि ग्लोबल औसत लगभग 45 है।

## टॉप 800 में भी भारत के 11 संस्थान शामिल

आईआईटी	रैंक
आईआईटी-दिल्ली	222
आईआईटी-मुंबई	233
आईआईटी-कानपुर	295
आईआईटी-मद्रास	313
आईआईटी-खड़गपुर	346

Deccan Herald ND 12/19/2013 P-5

## Rs 1 cr package for 12 IIT students

More than 12 students at the Indian Institute of Technology, Kanpur, have bagged a package of Rs 1 crore or more during an ongoing placement drive, reports PTI from Kanpur. There are dozens of students who have bagged a package between Rs 30 lakh to 75 lakh per annum, head of IIT placement centre Vimal Kumar said on Wednesday.

However, he refused to give details of the package.

In the last 15 days, 675 students have got job offer letters. The first phase of the placement drive would end on December 22 and the second

phase would start from January 5, he said.

About 200 companies have already participated in placement drive while 15 to 20 more companies are expected to come.

Multi-national companies that have participated in the placement procedure so far include Mitsubishi, Amazon, Citibank, Microsoft, Sony, Samsung, Airbus, HSBC Bank, Deutsche Bank, Credit Switch and others, Kumar said. Indian companies that participated in the placement drive include Tata motors, ITC, Flipkart, Infosys and Hero Motors.

Deccan Herald ND 12/19/2013 P-8

# UGC to withdraw grants to errant universities

**NEW DELHI:** The University Grants Commission (UGC) will discontinue financial assistance to universities from 2015 if they fail to get accredited by June 1 next year.

A decision to this effect was taken by the higher education regulator at its meeting held here recently. The Commission has toughened its stand as a large number of varsities have not yet taken any initiative to get accredited even after it was made mandatory earlier this year.

The UGC made assessment and accreditation of higher educational institutions mandatory by notifying it on March 4 this year as a Bill seeking to achieve this objective was pending in Parliament.

Out of a total 700 universities and 33,539 colleges across the country, only 179 universities and 2,224 colleges have so far got accreditation, complying with the UGC regulation.

As per the UGC regulation, all those higher educational institutions, other than medical colleges, which have been operating for six years or have sent out two batches of students trained under its various academic programmes will have to apply for accreditation within six months from the date of noti-

fication of the rules and procedures.

Sources in the Commission said that as many as 133 such varsities are yet to apply for accreditation. Out of these varsities, 88 are state universities, 22 deemed universities, 16 private universities and seven central universities.

This makes a clear case for discontinuation of financial assistance to these varsities. The commission, however, decided to give them a second chance and fixed June 1, 2014 as the fresh deadline for compliance.

"All these varsities are dependent on UGC funds for their day to day functioning, including payment of salary of their employees. They have been given a second chance to get accredited keeping in view the interest of students and employees. But, if they fail to meet this deadline too, the UGC will have no other option than to take action as per the regulation," sources in the Commission told *Deccan Herald*.

The centre had recently asked the state governments to impress upon all the higher educational institutions functioning under them to apply for accreditation as a majority of them were yet to comply with the UGC direction.

**DH News Service**

# Lead Angels: New kid on angel investor block

NEHA PANDEY DEORAS &  
M SARASWATHY

Mumbai, 18 December

Recently, this city got its newest angel network, Lead Angels. The network, led by Sushanto Mitra, ex-chief executive of Society for Innovation & Entrepreneurship, Indian Institute of Technology (IIT)-Bombay; C Amarnath, retired professor of mechanical engineering at IIT-Bombay; and IIT-Bombay alumnus Bipin Kumar, aims to break the disconnect between investors and investees.

Though Mitra wants this to be an avenue for funds to entrepreneurs of IIT-Bombay and other IITs, he says it won't be limited to IITs alone.

"In India, there is a gap between business ideation, the incubator stage and the funding or angel stage. Students have brilliant business ideas that are incubated at campuses, but they don't know how to take it forward due to monetary issues. We are here to bridge that gap," says Mitra, co-founder and chief executive of Lead Angels.

"Through us, angels will get an early access to the ideas floating around. As a network, we are looking to invest between ₹75 lakh and ₹1.5 crore a deal. We're a small network; so, we cannot afford huge investments. Therefore, we will look at companies that are either close to break-even or have achieved break-even," Mitra said.

The company may buy at least 10 per cent stake in the companies it

invests in.

Mitra says though angel investors have been around in India for about 10 years, awareness about them is low. Given the US had 700 angels and a country such as Finland had 500, India had the potential to have 100,000 angel investors, he added.

**Though the venture is an avenue for funds to entrepreneurs of IIT-B and other IITs, it won't be limited only to IITs**

Mitra says between him and the angel firm's board of directors, a pool of about ₹50 lakh is available for co-investment, with an angel for every deal. Lead Angels is considering opening chapters in other cities from January. It is expected Delhi will be the first on the list.

Lead Angels has already received about 45 requests from entrepreneurs. Of these, two start-ups have made it to the due diligence stage. Through the next year, Lead Angels hopes to invest in one start-up a month; Mitra feels for the entire year, the number will stand at six-seven.

Companies looking for funds won't be the only ones allowed to pitch. The angel firm may also pick a start-up, ask it to pitch and help it find a mentor. Mitra said if such a company was chosen for an investment, there would be a tripartite agreement between the mentor, Lead Angels and the company, and the mentor would be entitled to the payment.

Lead Angels won't restrict itself to any sector.

For full reports, visit  
[www.business-standard.com](http://www.business-standard.com)

HT Delhi

## Harvard student made bomb threats 'to avoid exam'

**BOSTON:** Bomb threats that led to the evacuations of four Harvard University campus buildings this week were made by a student trying to get out of taking a final exam, federal prosecutors have said.

The student, 20-year-old Eldo Kim, sent emails saying bombs had been placed around campus to Harvard police, two university officials and the president of the Harvard Crimson newspaper, according to a criminal complaint filed by the US attorney's office.

The messages said shrapnel bombs would go off in two of four buildings, including one where prosecutors say Kim was supposed to take an exam at 9am on Monday. The buildings, on Harvard's campus in Cambridge, just outside Boston, were shut down for hours before investigators determined there were no explosives.

Kim, who lives in Cambridge, is to make an initial court appearance on Wednesday.

Investigators from several agencies searched the campus buildings for hours before determining there were no explosives. One of the buildings was a freshman dormitory; classes are held in the other three.

Harvard said in a statement it was "saddened" by the allegations in the federal complaint but would have no further comment on the criminal investigation.

The maximum penalties for a bomb hoax are five years in prison and a \$250,000 fine, prosecutors said.

## SCIENTIST TO TEST EINSTEIN'S GENERAL THEORY OF RELATIVITY

**PARIS:** The European Research Council (ERC) has awarded 14 million euros to a team of European astrophysicists to construct the first accurate image of a black hole, and to test the predictions of current theories of gravity, including Einstein's general theory of relativity. The team will combine several telescopes around the globe to peer into the heart of our own galaxy, which hosts a mysterious radio source called Sagittarius A\* which is considered to be the central supermassive black hole.

Researchers say that while most astrophysicists believe black holes exist, nobody has actually ever seen one, asserting that the technology is now advanced enough to see if they truly exist as predicted: If there is no event horizon, there are no black holes.

**ANI****GNS**

## Engineering colleges set to come out of AICTE shadow

TNN Dec 18, 2013, 05.18AM IST

HYDERABAD: State professional colleges would soon be under the purview of respective universities and not answerable to All India Council for Technical Education, if a recent University Grants Commission directive comes into effect. This would mean, universities in the state could decide on reducing the number of seats left vacant in engineering colleges in the state, once the new Act is implemented in 2014.

The UGC has already drafted a handbook for affiliation and put it up on its website for comments from various stakeholders. As per the new rules proposed by the UGC, all functions of AICTE will now rest with affiliating universities in the state. The functions include approval for setting up of new colleges, change in site or location of an existing college, extension of approval of existing college and conversion of women's college into co-ed college. Increase or reduction in number of seats allotted to a college, closure of institutions or courses and all matters related to supernumerary or NRI seats, are the other issues to be decided by the affiliated universities.

Affiliating universities will also be responsible for change in the college name, adding dual degree and integrated courses or second shift and part-time programmes in the existing colleges. The universities will in turn be answerable to UGC on all these matters. The draft could be finalised in a few weeks.

The move is in accordance with a Supreme Court judgment on April 25, 2013 which states that colleges affiliated to universities do not come under the purview of the definition 'technical institution' under section 2(h) of AICTE Act, 1987.

In addition to approval, the universities will also be affiliating bodies of colleges. The new move could prove to be very important to the state as it has the highest number of technical institutions in the country. According to college managements, the uneven growth of number of seats in the state will be brought under control if the approval process is taken over by affiliating universities.

While the state has over 3.60 lakh engineering seats, just 1.5 lakh students are interested in taking up courses, leaving a large majority of classrooms empty.

The unprecedented growth was the result of a massive increase in seats initiated by AICTE from 2011 to 14. "The huge increase in number of seats in the past few years resulted in uneven distribution of students across the state. Many colleges which got approval in the past are facing closure at present. The growth initiated by AICTE in fact killed colleges," said Ramesh Nimmatoori, president, Consortium of Professional College Managements Association.

Across the country, AICTE had allowed an increase in seats by 32% in 2011-12, 37% in 2012-13 and 35% in 2013-14 academic years.

Even as the approval function will be taken away from AICTE, the council will still be the apex policy making body for technical education in the country, officials said. College managements expect affiliating universities to cut down seats for the academic year 2015-16. "If the seat share reduces, courses in the state would stabilise. The AICTE has not agreed to cutting down of seats citing certain rules. But universities could be more flexible," a source said.

This would mean, in the coming years, Jawaharlal Nehru Technological University, which has the highest number of affiliated colleges, could decide the future of technical education in the state.



# THE HINDU Business Line

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## **IIT Bombay named CUDA centre of excellence**

Our Bureau

Mumbai, Dec 18:

Graphic chip and visual computing technology firm NVIDIA has named the Indian Institute of Technology (IIT) Bombay as the first Compute Unified Device Architecture (CUDA) centre of excellence in the country.

CUDA is a parallel computing platform and programming model that enables dramatic increases in computing performance. IIT Bombay has been recognised for game changing innovation and scientific discovery using graphics processing unit (GPU) accelerators.

The company said the new designation is given to institutions for ground breaking educational programmes and research using NVIDIA GPU accelerators and the NVIDIA CUDA parallel programming environment.

Researchers at the Indian Institute of Technology (IIT) Bombay have been consistently working on parallel computation. In particular, researchers at the vision, graphics, and imaging lab have been leveraging on the power of the graphics processing unit (GPU) for advanced rendering, image processing, and performance driven data structures. The goal is to broaden GPU computing, and also bring parallel programming into the education mainstream.

Recognised around the world as a leader in engineering education and research, IIT Bombay joins 21 elite institutions globally that have demonstrated a vision for advancing the use of accelerated computing, which empowers academics, engineers and scientists to drive innovation and breakthrough scientific discovery.

"Being associated with the world's foremost academic institutions bears testimony to IIT Bombay's continuous efforts in championing new approaches to computing with India's academic, scientific and engineering communities," said Professor PSV Nataraj, Systems and Control Engineering Group, IIT Bombay.

Vishal Dhupar, Managing Director of NVIDIA South Asia, said, "Our collaboration with IIT Bombay and over a dozen institutions across India will advance the country's research across a range of scientific and engineering fields."

IIT Bombay is to utilise equipment, grants and resources provided by NVIDIA to support research projects in a variety of fields, including climate and ocean modeling, bioinformatics, circuit simulation, computer/GPU architecture, computer graphics and vision, and molecular fluid dynamics.

Work in these areas spans several engineering and science departments at IIT Bombay, including, aerospace, bio science, chemistry, chemical, climate studies, computer science, mechanical engineering, among others.

IIT Bombay is to leverage its status to advance the state of parallel computing education in India, and to prepare the next generation of researchers for the expanding world of accelerated computing, according to the company.