Newspaper Clips
October 31, 2013

5 years after launch, new IITs still floundering

Manish Kumar & Rahul Kumar Choudhary, TNN | Oct 30, 2013, 07.21 PM IST

PUNE/BHOPAL: All is not well with the eight new Indian Institutes of Technology (IITs) that were established after the Union government's decision in 2008 to increase the number of these premier education bodies. Almost five years after they were set up, the new IITs have been plagued with myriad problems — faculty crunch, lack of permanent campuses and not-so-impressive placements.

An RTI reply secured from the HRD ministry on October 24 reveals that almost half of the sanctioned posts for permanent faculty are still vacant at IIT-Jodhpur and IIT-Mandi. Of the 90 faculty posts in each of these two institutes, only 48 and 49 have been filled. Similarly, 38 posts are lying vacant in IIT-Ropar, 19 in IIT-Patna, 17 in IIT-Bhubaneshwar, 14 in IIT-Gandhinagar and 13 in IIT-Indore. Only IIT-Hyderabad has managed to fill 101 of the 105 faculty positions sanctioned.

Most faculty complain that the new IIT campuses are located in remote areas. "You cannot expect good quality teachers to work in remote, village-like areas for peanuts. It's difficult for the new IITs to attract and retain talent due to their poor infrastructure," a lecturer at IIT-Ropar said.

"With most campuses located in the outskirts, the education of the children of faculty members is also a major concern," an IIT-Mandi lecturer said.

As far as placements are concerned, several National Institutes of Technology (NITs) are doing far better than the new IITs. This, despite the number of students in the NITs being almost three times more than that in the new IITs.

A K Bakhtavatsalam, placement in-charge at NIT, Trichy, said, "Last year, 96% of our students in B Tech got placed and the minimum annual package a student got was Rs 4 lakh." In comparison, many students of the new IITs are forced to accept jobs of salary as low as Rs 3.5 lakh per annum.

Last year, IIT-Jodhpur saw 79.2% of its students placed, IIT-Hyderabad (85%), IIT-Indore (85%) IIT-Ropar (88%), IIT-Patna (86.75%) and IIT-Mandi (88%). Only at IIT-Gandhinagar (91%) and IIT-Bhubaneshwar (92%) were the placement figures above 90%.

"The salary packages being offered are not very encouraging but we managed to get 100 out of 118 students placed. Of the remaining 18, many preferred to go for higher studies and two chose to continue their studies at IIT-Indore itself," said Nirmala Menon, faculty and media coordinator at IIT-Indore.

For the students too, the new IITs are not exactly the ideal they had imagined them to be. "Many a times, we are being taught by PhD students. Often, a professor specializing in one subject is forced to teach multiple subjects of which he would have little knowledge. Our campus is defined only by a boundary wall. The placement is also not very appreciable," said a first-year student at IIT-Jodhpur.

The infrastructure at the new IITs is quite poor, students complain. "For all purposes, these are temporary campuses. Our institute lacks proper space for classrooms, labs, library, sporting facilities and even hostels," a student said.

Most of these IITs spend lakhs on rent even till date. As per sources, IIT-Indore would have paid no less than Rs 8 crore as rent to the ITI building, from where it has been running its temporary campus since inception.

When contacted, S Tripathy, deputy director at IIT-Bhubaneshwar, said, "Out of an approved area of 2,21,000 sq.m for a permanent campus, construction has commenced in 1,27,000 sq m. A boundary wall of 18 km and the internal roads are almost complete. We will move to the new campus in phases from July 2014."

IIT-Patna registrar Subhash Pandey, however, failed to say by when the branch would be shifted to a permanent campus in Bihta. "Work is going on," is all he would say.

Additional secretary (technical education) in the HRD ministry and other higher officials did not respond to TOI's repeated emails and phone calls.

Too early to be cynical

Former director of IIT-Kanpur, Sanjay Govind Dande, said it was still too early to criticize the new IITs. "Even the old IITs took almost five decades to prove their worth. Bringing a systematic change in the old IITs to tackle fresh challenges was a tough task. The new ones should deal with the problems with fresh ideas and initiatives," he said.

"The IITs at Kharagpur, Chennai, Mumbai, Kanpur and Delhi also started in a small way. For a population of 1.3 billion, we need 100 more such quality institutions. Job vacancies at new IITs are natural as India lacks quality human resources at all levels," said retired IIT-Delhi director V S Raju.

"There is the fear of Brand IIT getting affected if the new IITs do not meet the standards set by the established ones. Similar apprehensions were there when IIT-BHU and IIT Roorkee came into existence. But they have not affected the brand and I hope the new IITs will also not disappoint. They just need to get adequate high-quality members," said founding dean of the Indian School of Business (ISB) and IIT Kanpur alumnus Pramath Raj Sinha.

Name	Posts sanctioned for faculties	Posts vacant in the IITs	Placement last year	Lowest package received last year	Highest package received last year
IIT Bhubaneswar	90	17	92%	3.5 L	11.5 L
IIT Gandhinagar	90	14	91%	Didn't disclose	Didn't disclose
IIT Hyderabad	105	4	85 %	3.5 L	34 L
IIT Indore	90	13	85 %	4.5 L	17.58 L
IIT Jodhpur	90	42	79 %	3.75 L	17 L
IIT Mandi	90	41	88 %	4.75 L	18 L
IIT Patna	90	19	87 %	4.5 L	16.3 L
IIT Ropar	90	38	88 %	3.75 L	63 L

Universities being coached for securing global ranking

Smriti Kak Ramachandran

'Higher education institutes don't understand what needs to be highlighted'

Indian universities and institutes of higher education are now being coached on how to pitch for a place in the global top ranking lists. Following concerns expressed repeatedly by President Pranab Mukherjee over the conspicuous absence of India from the ranking lists, the Union Ministry of Human Resource Development has instructed universities and institutes of higher learning to seek expert advice in filling out details about their research and teaching achievements that are prerequisites for being ranked.

The HRD Ministry recently organised workshops to brainstorm on how India can secure a place in the ranking lists. "During the workshops we learnt that a lot of universities and higher education institutes are not aware of how to fill the forms listing out their achievements, some of them do not understand what needs to be highlighted. For instance the research work that is carried out at the Indian Institute of Technology is not reported well, so it has been decided that these universities can rely on the know-how of ranking majors like Times Higher Education and Quacquarelli Symonds (Q5)," said Ashok Thakur, Secretary, Department of Higher Education, HRD Ministry.

Citing the example of Panjab University, which highlighted its achievement and got placed between 226-250 ranks in the Times Higher Education's World University Rankings list 2013-14, Mr. Thakur said: "Indian universities are overall considered teaching universities and not research ones, but now it is imperative for the universities and institutes to present their data well so that they can improve their chances of making it to the global top ranking lists."

India's poor show in the global ranking lists has been flagged by President Mukherjee since assuming office.

In February this year, he became the first President to address the Vice-Chancellors of 40 Central Universities in his capacity as Visitor and in November he will meet the heads of NITs, again a first of its kind meeting, to discuss the overall pedagogy of these learning centres.

The President has asked the universities to establish at least one centre of excellence each and to enhance collaboration with specialists from India and abroad and compete to find a place in the global top 100.

"I must convey my sense of dismay on seeing a recent report that not a single Indian university, including the premier Indian Institutes of Technology (IITs), featuring in the 200 top-rated universities in the world", the President said in his address at the 58th convocation of IIT-Kharagpur in September last year.

"You may question the report but for me the important question is why are we—a rising economic superpower—not able to promote our standards to be rated indisputably among the top 10 or even top 50 or 100," he had questioned.

Speaking at the third convocation of Nagaland University in May this year, the President said: "As per an international survey, there is not a single Indian university amongst the top 200 universities in the world. There was a time when we had world class universities like Nalanda and Takshila which attracted scholars from all over the world. We can revive our lost glory. We have the capability to take at least a few of our academic institutions into the global top league."

Printable version | Oct 31, 2013 11:17:25 AM | http://www.thehindu.com/todays-paper/tp-national/tp-newdelhi/universities-being-coached-for-securing-global-ranking/article5298953.ece

HT New Delhi

World rankings: Poor research pushes India's grades down

They are elite institutions attracting the best of faculty and the crème de la crème of students from across the country.
But if one goes by the recent world university rankings, the Indian Institutes of Technology (IITs) have slipped from their positions in 2012. Students, teachers and experts have expressed concern over this and suggested ways for improvement.

"The parameters largely responsible for the drop in the rankings of the IITs include academic reputation, faculty-student ratio and research capacity. We also need more students who are keen on pursuing research. Industry participation should also be increased if we wish to improve," says Anup Raaj, an IIT Bombay student.

Recently, UK's Quacquarelli Symonds (QS), one of the major global education ranking organisations, released its list of the top 200 universities in the world for 2013. No Indian institute featured among the top 200. IIT Delhi was ranked 222, down from 212 in 2012, and IIT Bombay at 233, down from 227 in 2012. IIT Kanpur and IIT Madras were ranked 295 and 313, respectively.

The story was similar in the latest Times Higher Education (THE) World University Rankings with no Indian institution being ranked among the top 200.

Joy Deep Nath, an alumnus of IIT Kharagpur says, "Indian universities seldom produce impactful research projects which depend upon a lot of things like good and motivated faculty, infrastructure and industry-academia partnerships. The government could allocate more funds for research in pure sciences, provide incentives for quality faculty to stay in the universities."

Pushing for change
Positioning of the IITs globally has also been a point of discussion at the recent meeting of the IIT Council. Another important topic that was discussed was the existing potential for improving the composite indicator rankings, even though the undergraduate engineering programmes of the IITs are some of the best offered globally.

The focus is also on augmenting research. A number of measures have been approved to encourage students to enrol in PhD programmes in IITs. For instance, for students of CFTIs, with CGPA above 7.0, admission into IITs would be possible without the GATE.

Elaborating on the general opinion on global university rankings after THE's discussions with Indian

academia and Indian government officials and the Planning Commission, Phil Baty, editor, THE rankings, says, "There was a very strong sense coming from the government that India can no longer afford to ignore the world university rankings, and universities must stop pretending that the global rankings are not relevant to India. An official from the department of higher education at the HRD ministry said at the meeting that we must play the same game the rest of the world is playing. We need not be shy about it."

Baty believes that a country of India's rich intellectual history, vast size and growing economic power needs at least some world-class universities that can compete with the very best universities in the world. "We have seen a steady and encouraging increase in participation in the rankings process by Indian institutions. This year, 19 of India's leading institutions took part in the assessment process, and there was a healthy mix of public and private. But over time, we would like to see many more Indian institutions taking part in our exercise. The Planning Commission believes there are around 100 institutions which should consider themselves globally competitive and should look to the global rankings," adds Baty.

While rankings may not be the "be-all and end-all" factor, a section of experts says that it is more important that every Indian institution, whether it is an IIT or a non-technical university, delivers what it is supposed to. "We should not over-fixate ourselves with the ranking phenomenon. It is more important to create an excellent R&D environment," says Pradipta Banerjee, director, IIT Roorkee.

Where India lacks
According to Baty, the key issue for Indian universities, in terms of their global competitiveness in the rankings, is their research output. "We measure institutions across the full range of their activities – teaching, research, knowledge transfer and international outlook – but the main indicators look at research quality, the impact of each university's research in pushing forward the boundaries of our understanding. This is an area where India's institutions are lagging," explains Baty. The rankings are "absolutely relevant" to India, he says.

Other reasons for the paucity of Indian higher education institutions in the world rankings are lack of resources and a profession of higher education, say experts.

"Building world-class universities requires abundance of resources, including, capital, time, effort and talent. Given the priority of expansion in Indian higher education, these resources could not have been concentrated in a handful of universities to help them achieve world-class standards," says Rahul Choudaha, a New-York based higher education expert and director of research at World Education Services.

How we can go up the ladder

The government could allocate more funds for research in pure sciences, provide incentives for quality faculty to stay in the universities, say students

Experts say that the existing potential for improving the composite indicator rankings could be looked at

Given the priority of expansion in Indian higher education, resources such as capital and talent should not be concentrated in a handful of universities to help them achieve world-class standards

More students should take up research. Industry participation should be increased too

2013 World ranking for indian institutes

Quacquarelli Symonds

IIT Delhi 222

IIT Bombay 233

IIT kanpur 295

Times higher education

Panjab university 226 -250

IIT Delhi 351 - 400

IIT Bombay 351 - 400

http://www.hindustantimes.com/StoryPage/Print/1145210.aspx

HT New Delhi

UGC to correct NET answer sheets manually

RED-FACED About 25,000 students were wrongly disqualified for using whitener

Shaswati Das
and Chetan Chauhan
▪ letters@hindustantimes.com

NEW DELHI: Admitting its gaffe, the University Grants Commission (UGC) will check the National Eligibility Test (NET) answer sheets manually after the computer disqualified thousands of students across India for scratch marks or use of whitener on the answer sheets.

This had resulted in about 25,000 students getting the dubious tag of using unfair means in the national examination to select students for post graduate scholarship and appointment in higher education institutions.

After HT pointed out the gaffe, the commission has decided to manually check all the answer sheets of students whose final UGC-NET result showed the code — 666 — meaning that they were disqualified on the ground of using unfair means.

THE UGC HAS DECIDED TO TAKE A LENIENT VIEW AS A LARGE NUMBER OF STUDENTS COME UNDER THIS CATEGORY

UGC chairperson Ved Prakash told HT that they have decided to take a lenient view as a large number of students come under this category. "All these answer sheets would be manually checked and results would be corrected accordingly," he added.

Two days after UGC declared students' individual results on October 22, it was found that several students had been disqualified for "use of unfair means".

An examinee Sunaina Sehgal said their invigilator asked them to change the centre code on the admit card as it was incorrect. "We were asked to use the white fluid in the OMR sheet. Though we communicated our apprehension for using fluid in the OMR sheet, he claimed that the UGC will handle it," she said.

The UGC officials claimed that despite instructions, the students had scratched or use whitener on wrong answers marked on the Optically Marked Readable (OMR) answer sheet.

Many students have been protesting outside the UGC-NET centres in different parts of the country accusing the commission of finding a novel way to keep the number of NET qualifiers to the bare minimum.

HT Kolkata

Post Beighton, IIT team eyes league debut

Dhiman Sarkar
■ dhiman@hindustantimes.com

KOLKATA: Hockey wouldn't be the first or the next 1000 things normally associated with the Indian Institute of Technology (IIT), Kharagpur. And it would perhaps have stayed that way had coach Gyan Singh's wish to take his boys to see the artificial turf here been okayed.

"Permission to see the astro-turf was denied but I was told things could be different if IIT, Kharagpur, were to play in a tournament. That was around two months back and I started the process of playing in the Beighton Cup," said Gyan.

The IIT team debuted in the 118th Beighton Cup with a 2-0 win. That, Gyan said, was their first match ever on synthetic turf. They returned to the eastern India complex of the Sports Authority of India on Wednesday busing it from campus and were walloped 8-0 by the more experienced Xaverians.

The Beighton Cup's over but tomorrow's engineers, physicists and mathematicians --- some of them wearing glasses --- seem to have smelt blood. Chetan Singh Netam, a fifth year mining engineering student from Raipur, said the calves hurt, the ball

■ **The IIT Kharagpur hockey team at the Sports Authority of India's eastern centre on Wednesday.** SATYABRATA DAS/HT PHOTO

travelled faster and you cramped sooner on synthetic turf but it was fun. Their coach said IIT, Kharagpur could play the Bengal Hockey Association league this season. "We have requested for matches to be slotted on weekends." That has to happen otherwise it could clash with the boys' laboratory sessions and missing which is a no-no.

TIME MANAGEMENT

Gyan said there are some 80 boys training at hockey and they have sessions twice daily. "We start from 5.30 and continue till 7.30 in the morning. From 7.45, the boys attend classes till 5.30pm and then they report for training at 5.45. The evening session under lights continues till 7.30."

Asked whether it doesn't get a bit too much, Lokeshwar Singh, an aspiring mechanical engineer from Bilaspur, the birthplace of hockey legend Leslie Claudius, said, "We study for three hours after that. It's all about time management." As if on cue, Netam said, "Sport refreshes the mind too."

Claudius, who learnt hockey in Kharagpur and who was a Beighton Cup regular till death last year, would have been happy hearing that.

The Hindu

Mars mission: charting a course

N. Gopal Raj

HIGH FLYER: The Orbiter will become the first Indian spacecraft to cross Earth's escape velocity of 11.2 km per second. *Special Arrangement*

Two spacecraft will set out shortly from opposite sides of the globe to study Mars and its atmosphere. India's Mars Orbiter Mission is scheduled to leave next Tuesday (Nov. 5) aboard a Polar Satellite Launch Vehicle (PSLV) from Sriharikota. America's MAVEN — an acronym for 'Mars Atmosphere and Volatile Evolution' mission — will follow about a fortnight later.

They will, however, follow different paths to their destination. MAVEN will be making the first leg of its journey on an Atlas V, a rocket considerably more powerful than the PSLV. It will be able to put the spacecraft on a direct course for the Red Planet, a luxury the Indian probe will not enjoy.

The PSLV will leave the spacecraft in an elliptical orbit 250 km at its closest to Earth and 23,500 km at its farthest. To get to Mars, the orbiter must repeatedly fire its own liquid propellant engine. In doing so, it will become the first Indian spacecraft to cross Earth's escape velocity of 11.2 km per second, the threshold beyond which Earth's gravity can no longer pull it back.

As the amount of propellant remaining at the end of the journey will be an important factor in determining the spacecraft's life, scientists and engineers of the Indian Space Research Organisation (ISRO) have done their best to hold down its consumption during these manoeuvres.

The onboard engine will be fired five times, each time lengthening the spacecraft's elliptical course around Earth. With multiple burns, the engine's performance and the velocity imparted to the spacecraft on each occasion can be taken into account in planning the next firing.

Thus the necessary velocity can be added more accurately, reducing need for corrections later. This strategy was successfully used when India sent the Chandrayaan-1 probe to the Moon in 2008.

The sixth firing of the engine, scheduled for November 30, will push the probe beyond escape velocity and put it on a carefully chosen propellant-saving trajectory for Mars. The probe will take nearly 300 days to traverse some 400 million km.

As the spacecraft gets close to Mars, its engine must again fire, this time to reduce velocity and put it into orbit around that planet.

Charting the spacecraft's course accurately requires elaborate modelling, according to the ISRO chairman, K. Radhakrishnan. The effect of Earth's gravity as well as that of the Sun, Moon, Mars, the two Martian moons and the other planets are among the many factors that needed to be incorporated in the calculations.

"When the probe leaves Earth's orbit on November 30, the position of its arrival near Mars on September 21, 2014 has

to be estimated with a precision of 50 km," Dr. Radhakrishnan told this correspondent.

The results from ISRO's models had been benchmarked against computations carried out by Jet Propulsion Laboratory in the U.S., which has overseen many interplanetary missions.

Once the spacecraft successfully enters Martian orbit, its scientific instruments can be switched on. Given the high failure rate of missions to Mars, ISRO will be keeping its collective fingers crossed.
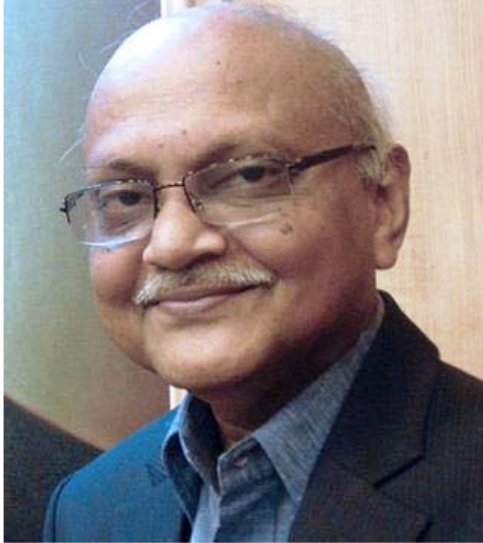
Keywords: India Mars mission, Mars Orbiter Mission, PSLV

Printable version | Oct 31, 2013 11:03:44 AM | http://www.thehindu.com/sci-tech/science/mars-mission-charting-a-course/article5290812.ece

'India will not halt nuclear programme'

Staff Reporter

Atomic Energy Chairman, R.K Sinha. Photo: Vivek Bendre

India will continue its nuclear programme without any interruption, irrespective of decisions taken by other countries, said R.K. Sinha, Chairman, Atomic Energy Commission and Secretary, Department of Atomic Energy on Wednesday.

Referring to Germany and Japan, which plan to end their dependence on nuclear energy, Dr. Sinha said India had no reason to follow these countries.

"We have been pursuing our nuclear programme on our own. We are in the process of establishing new nuclear power plants across India, without being dependent on any foreign country. There is no question of following them and halting our nuclear programme," he told *The Hindu*. He said the Japanese government may decide to return to nuclear power in future, after completing security inspections.

On the proposed 9900 MW Jaitapur Nuclear Power Plant to be set up in Ratnagiri district of Maharashtra, Dr. Sinha said the techno-commercial agreement with the French company Areva was yet to be signed and negotiations had not been concluded.

Areva will be providing six European Pressurised Reactors to this project, the work on which is expected to begin by October 2015.

"The issues such as deciding the cost of electricity and the liability are pending. But we are confident that the issues will be resolved and we will not miss the deadline," he said.

Earlier, Dr. Sinha delivered an address at the Bhabha Atomic Research Centre here on the occasion of the birth anniversary of the late Homi Jahangir Bhabha.

He said improved uranium supply from domestic and international sources had led to the growth of nuclear power generation.

"As a result of using advanced techniques, we have been able to identify new resources of uranium. In the last year our reserves have registered an increase of about 5 per cent," he said.

On the Kudankulam Nuclear Power Project, he said commercial operations of one unit would start by December 2013.

Keywords: Atomic Energy Commission, R.K. Sinha, nuclear energy, nuclear power, Jaitapur Nuclear Power Plant, Kudankulam Nuclear Power Project

Printable version | Oct 31, 2013 10:52:40 AM | http://www.thehindu.com/news/national/india-will-not-halt-nuclear-programme/article5297807.ece

HT Mumbai

US SCIENTISTS REVEAL CHEMISTRY OF FEAR IN A VIDEO

WASHINGTON: A science organization has put up a video to explain why we react to fear as we do. Researchers at Georgetown University said fear is the expectation or the anticipation of possible harm and that people know that their body is highly sensitive to possibility of threat, so there are

multiple pathways that bring that fear data into the brain. Nerves in ears that transduce that sound are first part of nervous system. The signal is relayed to the thalamus, a telephone switching station in brain.

ANI