

# Newspaper Clips

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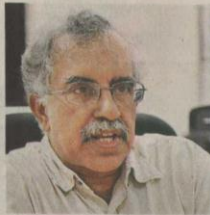
### This IIT-Delhi professor has blind people's problems in his gunsight

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New Delhi: What if a blind person tapping his way down the street prods a ferocious dog with his white cane?

The scenario came up in a conversation between Dipendra Manocha, then director of IT and services with National Association for the Blind, and M Balakrishnan, professor of computer science at IIT Delhi and an expert in assistive technologies, back in 2005. It opened Balakrishnan's eyes to the dangers the visually-challenged face and he has been trying to create smarter technologies for them ever since.

Two of Balakrishnan's innovations—SmartCane and OnBoard—are hits already and his research group, AssisTech, has recently created books that let blind students "feel" figures and diagrams. For his efforts to improve the lives of visually chal-



**Braille books in India didn't have diagrams and figures. Blind students learned Pythagoras' theorem by rote**

lenged people, the professor has received Accessibility Award 2015 in Category B for serving persons with disabilities.

Balakrishnan's first efforts



**EYEING A BETTER LIFE:** (L-R) Prof M Balakrishnan; blind commuters use OnBoard to hail a BEST bus; a man uses SmartCane

were directed at addressing the problem of mobility for which he started developing affordable devices that could detect obstacles without contact. "Mobility is a

vital aspect of access to education and work," he says.

While developing OnBoard, for instance, he tried to make buses easily and safely usable by the

visually impaired. The handheld radio frequency-based system announces bus route numbers and guides users to the bus door. The user presses one button to hear

the route number, and another to select it. The 'select' button activates a speaker fitted near the bus door that helps the user board by following a voice.

Balakrishnan's team tested OnBoard on IIT buses with schoolchildren from National Association for Blind and women from Centre for Blind Women before a trial run in Mumbai that involved 25 BEST buses. "About 90% of the users were able to board the first bus on the route," he says. The team is arranging funds to extend the trial to 1,000 more buses.

Equally innovative are the three tactile books AssisTech has produced for blind students. Until now, no Braille textbook in India had diagrams or figures. Blind students learned Pythagoras' theorem without ever feeling a triangle. "While there are Braille presses to print text, there are no printing processes to make diagrams and figures. Learning happens by rote,"

says Balakrishnan.

The Centre of Excellence in Tactile Graphics, set up as a part of AssisTech, has printed three books, one on physiology and anatomy, another on yoga, and a collection of Indian maps showing political boundaries and terrain for NCERT. The books are being tried out in some schools and if they are found useful, AssisTech will print more.

"In countries like Japan, the visually impaired are trained in physiotherapy because their tactile sensation is brilliant. The country taps into this potential, we don't," Balakrishnan says.

His most popular creation to date is SmartCane, a device that can be fitted to white canes to detect obstacles in a three-metre range. Released in 2013, it has about 5,000 visually-impaired users. All that Balakrishnan wants now is support from industry to scale up production to make life easier for the blind.

Hindustan ND 07/08/2015 P-14

ग्रामीण क्षेत्र और आरक्षित वर्ग के छात्र खुद को माहौल के अनुसार ढाल नहीं पाते, समाधान के लिए और कदम उठाने की जरूरत

# मनपसंद विषय न मिलने से पढ़ाई छोड़ रहे

**आईआईटी से मोहभंग**  
नई दिल्ली | विशेष संवाददाता

भारतीय प्रौद्योगिकी संस्थानों (आईआईटी) और राष्ट्रीय प्रौद्योगिकी संस्थानों (एनआईटी) में बीच में पढ़ाई छोड़ने की दो बड़ी वजहें हैं। एक, मनपसंद की इंजीनियरिंग स्टीम नहीं मिलना और दूसरे बड़े पैमाने पर ग्रामीण क्षेत्रों एवं आरक्षित वर्गों से आने वाले छात्र इन संस्थानों की जरूरत के हिसाब से खुद को ढाल नहीं पाते हैं। इन समस्याओं के निराकरण के लिए मंत्रालय ने कुछ कदम उठाए हैं, लेकिन विशेषज्ञ कुछ और कदमों की जरूरत बताते हैं।

आईआईटी कानपुर के पूर्व निदेशक डा. संजय धांडे ने गुरुवार को कहा कि मुख्य वजह बाजार की प्रतिस्पर्धा है। दरअसल, आज इंजीनियरिंग की पढ़ाई को बाजार चला रहा है। कुछ स्टीम ऐसी हैं, जिनमें रोजगार के ज्यादा अवसर होते हैं। लेकिन कई ऐसी हैं, जिनमें रोजगार के सीमित मौके होते हैं या सरकारी नौकरियों तक सीमित होते हैं। इसलिए हर छात्र की कोशिश होती है कि आईआईटी या एनआईटी में उसे एडमिशन के साथ अच्छी स्टीम भी मिले। एक बार एडमिशन लेने के बावजूद वह लगातार बेहतर स्टीम पाने के लिए अन्य संस्थानों में प्रयासरत रहता है। इसलिए एडमिशन लेने के

**अंग्रेजी का ज्ञान भी बड़ी बाधा**

ड्रॉपआउट की दूसरी बड़ी वजह ग्रामीण पृष्ठभूमि और आरक्षित श्रेणी के छात्रों का इन संस्थानों के माहौल में नहीं ढल पाना है। इसका सबसे बड़ा कारण अंग्रेजी का ज्ञान है। इनमें से ज्यादातर छात्र सरकारी स्कूलों से पढ़े होते हैं और उनका अंग्रेजी का ज्ञान बेहद कमजोर होता है। कई तो हिंदी माध्यम से परीक्षा पास करके आते हैं। लेकिन आईआईटी के प्रोफेसर उन्हें जरा भी राहत नहीं देते हैं। नतीजतन वे अन्य अंग्रेजी भाषी छात्रों की बराबरी नहीं कर पाते हैं। पहले सेमेस्टर से ही उनके क्रेडिट कम रहते हैं।

बावजूद ड्रॉपआउट बढ़ रहे हैं। मंत्रालय के एक अधिकारी के अनुसार कई स्टीम ऐसी हैं जिन्हें लेने से छात्र बचना चाहते हैं। मसलन, पल्प एंड पेपर इंजीनियरिंग, पेट्रोलियम इंजीनियरिंग, सेरेमिक इंजीनियरिंग, ओसियन इंजीनियर, भूकंप इंजीनियरिंग आदि। कंप्यूटर, इलेक्ट्रॉनिक्स, आईटी, सिविल, मैकेनिकल, इलेक्ट्रिकल, ऑटोमोबाइल जैसी प्रमुख स्टीमों के लिए ही मारामारी रहती है। आईआईटी में अंतिम काउंसलिंग तक ये सीटें मिलने का इंतजार करने के बाद छात्र अन्य प्रमुख संस्थानों जैसे एनआईटी, बिट्स पिलाना, वीआईटी, एसआरएम, डीटीयू जैसे संस्थानों की तरफ भागते हैं।

सबसे ज्यादा ड्रॉपआउट मुंबई, दिल्ली, खड़गपुर और रुड़की से

स्थिति	आईआईटी	2012-13	2013-14	2014-15
भुवनेश्वर	4	15	16	
बांबे	74	66	72	
मंडी	0	0	0	
दिल्ली	130	249	169	
इंदौर	4	0	3	
खड़गपुर	197	129	209	
हैदराबाद	32	15	39	
जोधपुर	0	0	0	
कानपुर	0	0	0	
मद्रास	0	8	0	
गांधीनगर	1	4	1	
पटना	1	12	10	
रुड़की	159	188	228	
रोपड़	1	0	0	
बीपचव्यू वाराणसी	3	2	2	
गुवाहाटी	0	9	8	
<b>योग</b>	<b>606</b>	<b>697</b>	<b>757</b>	

देय में आईआईटी	16	देय में एनआईटी	30
कुल सीटें (बीटेक प्रथम वर्ष)	9500	कुल सीटें (बीटेक प्रथम वर्ष)	25000
ड्रॉपआउट 3 साल में ड्रॉपआउट	757 (2014-15)	ड्रॉपआउट 3 साल में ड्रॉपआउट	727 (2014-15)
	2060		2352

- ड्रॉपआउट के कारण**
1. दूसरे कॉलेजों में शिफ्ट होना
  2. व्यक्तिगत कारण
  3. पोस्ट ग्रेजुएट कोर्स के दौरान नौकरी मिलना
  4. पढ़ाई के दौरान तनाव का सामना न कर पाना

**इसे रोकने के उपाय**

1. सलाहकार की नियुक्ति - इसका काम छात्रों को उनकी प्रगति के बारे में बताना है
2. कमजोर छात्रों की निगरानी क्लास टेस्ट, असाइनमेंट, मध्य सत्र और पूरक परीक्षाओं के जरिये करना
3. ग्रीष्मकालीन अवकाश के दौरान कमजोर छात्रों के लिए अतिरिक्त कक्षाओं का आयोजन करना
4. छात्र संरक्षण कार्यक्रम और मार्गदर्शन कार्यक्रम शुरू करना

**दखिले के संग ही दबाव**

● एक सर्वे के मुताबिक 65 फीसदी छात्र माता-पिता के दबाव और शैक्षिक शास्त्र-गणित जैसे जरूरी विषयों में कम अंक के बावजूद इंजीनियरिंग कॉलेजों में दखिला लेते हैं। इस तरह ये छात्र शुरू से ही तनाव में आ जाते हैं।

**हिंदी माध्यम छात्रों की स्थिति**

● आईआईटी रुड़की 72 छात्रों के निष्कासन के कारण सुर्खियों में है। इस संबंध में एक अंग्रेजी अखबार में छपी खबर के मुताबिक कुछ छात्रों का कहना है कि इस तरह के संस्थानों में आरक्षित वर्ग और हिन्दी माध्यम से पढ़े बच्चे नुकसान में रहते हैं।

**विश्व रैंकिंग में कहा है आईआईटी**

● अप्रैल 2015 में जारी क्यूएस विश्व यूनिवर्सिटी रैंकिंग में विश्व के मामले में शीर्ष 100 में कुछ भारतीय विश्वविद्यालयों ने अपनी मजबूत उपस्थिति दर्ज कराई। हालांकि भारतीय विश्वविद्यालय किसी भी तरह की विश्व रैंकिंग में टॉप 100 में जगह नहीं बना पाते हैं पर विश्वों के मामले में उन्होंने छाप छोड़ी है। ● क्यूएस रैंकिंग में आईआईटी मुंबई आठ विश्व और जेएनयू एक विश्व वर्ग में टॉप 100 में स्थान बनाने में सफल रहे।

## नाकामी की वजहें

सरकार ने संसद में बताया है कि देश के 16 आईआईटी में सन 2012 से 2015 के दौरान 2,060 छात्रों ने पढ़ाई बीच में ही छोड़ दी। पढ़ाई छोड़ने के कई कारण हो सकते हैं, लेकिन सबसे बड़ा कारण शायद यह है कि ये छात्र आईआईटी की भारी-भरकम पढ़ाई का बोझ नहीं बर्दाश्त कर पाए। इसी सिलसिले में एक खबर यह भी आई थी कि आईआईटी, रूड़की से 72 छात्रों को निकाल दिया गया था, क्योंकि पहले वर्ष में उनका प्रदर्शन बहुत खराब रहा था। ये छात्र उत्तराखंड हाईकोर्ट भी गए, जहां उन्होंने आईआईटी प्रशासन के फैसले को चुनौती दी, लेकिन हाईकोर्ट ने प्रशासन के फैसले को सही ठहराया। हालांकि अब आईआईटी ने इन छात्रों को एक मौका और देने का फैसला किया है। जिन 2,060 छात्रों ने पढ़ाई छोड़ी है, उनके बारे में तो नहीं पता, लेकिन जिन 72 छात्रों को आईआईटी, रूड़की से बाहर किया गया, उनमें से 90 प्रतिशत आरक्षित वर्गों यानी अनुसूचित जाति, अनुसूचित जनजाति और पिछड़े वर्गों के हैं। यह नहीं कहा जा सकता कि ये फिसड्डी छात्र हैं, क्योंकि स्पर्द्धा के बाद वहां पहुंचे हैं।

आईआईटी की पढ़ाई इस वक्त भारत में उजले भविष्य की सबसे ज्यादा विश्वसनीय चाबी है और इन संस्थानों में प्रवेश के लिए लाखों छात्र जी तोड़ मेहनत करते हैं। ऐसे में, कोई छात्र आईआईटी में दाखिल हो जाने के बाद पढ़ाई छोड़ दे या उसे निकाल दिया जाए, तो यह सचमुच बहुत दुखद है। इसकी कुछ वजहें तो समझ में आती हैं। सबसे बड़ी वजह अंग्रेजी का अच्छा ज्ञान न होना है। बहुत सारे छात्रों की स्कूली पढ़ाई हिंदी माध्यम से होती है और आईआईटी प्रवेश परीक्षा भी वे हिंदी माध्यम से देते हैं, लेकिन आईआईटी में सारी पढ़ाई अंग्रेजी में होती है। ऐसे में, छात्र न तो शिक्षकों की बात समझ पाते हैं, न ही किताबों से ठीक से पढ़ाई कर पाते हैं।

इससे बड़ी चुनौती अंग्रेजी में लिखना है। तमाम प्रोजेक्ट और कोर्स की अन्य सामग्री अंग्रेजी में तैयार करनी होती है, जिसके आधार पर आकलन किया जाता है। यह समस्या खासतौर पर ग्रामीण स्कूलों से पढ़े छात्रों के साथ ज्यादा होती है। दूसरी बड़ी समस्या यह है कि ग्रामीण या कस्बाई इलाकों से आए कई छात्र आईआईटी के माहौल से तालमेल नहीं बिठा पाते। यह सांस्कृतिक खाई भी उन्हें श्रेष्ठ प्रदर्शन नहीं करने देती। आईआईटी के शहरी और अंग्रेजीदां माहौल में उन्हें हीन भावना घेर लेती है और वे संकोच और हिचक की वजह से अपने जैसे लोगों के बीच सिमट जाते हैं। तीसरा कारण यह बताया जाता है कि ये छात्र प्रवेश के लिए जी-तोड़ मेहनत करके और बहुत कठिन प्रवेश परीक्षा पास करके यहां भर्ती होते हैं, लेकिन जब वे आईआईटी में प्रवेश पा लेते हैं, तो उन्हें लगता है कि जैसे उन्होंने मंजिल पाली है और वे कुछ लापरवाह हो जाते हैं।

मोटे तौर पर हम कह सकते हैं कि इन छात्रों की नाकामी की बड़ी वजह शायद प्रतिभा की कमी नहीं, बल्कि भाषा और संस्कृति का अजनबीपन है। आईआईटी में इन समस्याओं को दूर करने के लिए कोशिशें तो की जा रही हैं, लेकिन वे काफी नहीं हैं। शायद आईआईटी या ऐसे अन्य प्रतिष्ठित संस्थानों में सांस्कृतिक सामंजस्य के लिए ज्यादा कोशिशें की जानी चाहिए। एक अध्ययन यह भी बताता है कि इंजीनियरिंग कॉलेजों में प्रवेश लेने वाले 65 प्रतिशत छात्र अपनी इच्छा से नहीं, बल्कि माता-पिता के दबाव की वजह से इंजीनियरिंग की पढ़ाई चुनते हैं। हो सकता है कि बहुत से छात्रों का रुझान और प्रतिभा किसी और क्षेत्र में हो। बीच में ही पढ़ाई छोड़ने या पिछड़ जाने वाले छात्रों को समझने और मदद करने के लिए माता-पिता, संस्थान और समाज को ज्यादा गंभीर कोशिश करनी चाहिए।

**आईआईटी जैसे प्रतिष्ठित संस्थान से अगर बड़ी तादाद में छात्र पढ़ाई छोड़कर जा रहे हैं, तो संस्थान और समाज, दोनों को सोचने की जरूरत है।**

**FAILING IIT - PART III**

# They get leg-up at JEE but hard landing on campus

More and more students from disadvantaged groups; campus safety net riddled with holes

**UMA VISHNU**  
ROORKEE, NEW DELHI,  
AUGUST 6

SEVENTY TWO is a big number, painful," says IIT Roorkee Deputy Director Vinod Kumar. "But if you consider IITs to be institutes of national importance, there

have to be minimum standards." Standards that 72 first-year students failed to meet in their exams and were, therefore, expelled and then given a second chance when they were allowed to return to campus and repeat the year.

That 72 created ripples but they are little more than a drop in the rapidly growing pool of

students flooding IITs in new campuses nationwide, many not even half-built and struggling with ad hoc or visiting faculty, adding to the strain in an already stretched and rigorous system.

"What IITs call minimum standards are, in fact, double standards," says a final year chemical engineering student at IIT Roorkee. "Just look at what

top US universities, like the Massachusetts Institute of Technology (MIT), are doing to handle diversity, how they go beyond affirmative action to help students from disadvantaged groups."

That remark assumes significance given that of the 72 who failed at Roorkee, an investigation by *The Indian Express* shows,

90 per cent were from reserved categories (SC, ST and OBC). They had scored average to high ranks in their respective categories in the joint entrance test (JEE) but then failed to keep up once they began their first IIT year.

For IIT campuses, MIT (Massachusetts Institute of Technology) is often seen as an

**CONTINUED ON PAGE 12**

**FROM THE FRONT PAGE**

# They get leg-up at JEE but it's a hard landing on campus

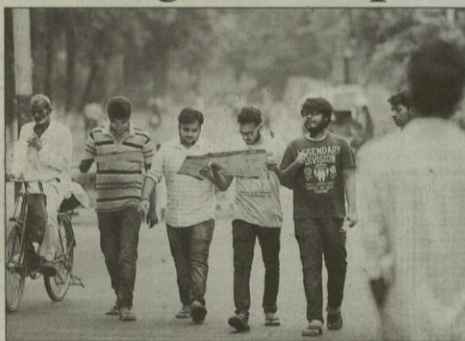
enviable role model. Two years ago, MIT appointed its head of the physics department, Edmund Bertschinger, as its 'Institute Community and Equity Officer'. In February this year, Bertschinger outlined a series of recommendations, among them educating everyone on campus "about unconscious bias", "increasing the percentage of under-represented minority groups" and calling for a review of existing recruitment policies. MIT has had a Black Student Union since 1968 and has conducted various studies on academic performance of Black students that have helped the campus community better understand the changing needs and aspirations of minority students.

In India, the expansion of the IIT system over the years has meant that campuses have thrown their doors open to more students and from varied backgrounds. Last year, as many as 6,375 students were from reserved categories — almost 68 per cent of the number admitted as General students — and many of them from non-English schools in rural or small-town areas. Their number unmistakably is rising every year.

IIT-Roorkee says it has "its own systems" to help these students cope. They are given a language proficiency test at the time of orientation and grouped according to their results for two English courses — "basic" for those who had fared poorly and "advanced" for those with high scores. Since September last year, the IIT said, it had introduced weekend classes for students who "lagged behind". "Here, senior students held tutorials for students who needed help. The idea behind this was that if students had issues of authority and couldn't express themselves with their professors, there would be no such trouble with their fellow-students," said IIT Roorkee Director Pradipto Banerji.

But unlike at many of the older IITs, these handholding systems are relatively new in Roorkee.

"On paper, most IITs say they have these systems — preparatory courses and so on. But like you see with the Roorkee expulsions, they clearly don't work on the ground. There is no specific mechanism on campuses for underprivileged or marginalised students to take up their issues," says Akhil Bharathan, a fifth-year student of Development Studies at IIT-Madras and a founder-member of the Ambedkar Periyar Study Circle, a student body that was derecognised — and later reinstated — for allegedly being critical of the government at the Centre.



Students on IIT-Roorkee campus in Uttarakhand. Tashi Tobgyal

"On campuses, there is silent stigma attached to reservations. But most students don't take it up because they think it's not IITian to talk politics. They are made to internalise the virtues of meritocracy," says a fifth-year student of computer science at IIT-Madras.

In 2012, *The Indian Express* obtained data through the Right to Information (RTI) Act on student expulsions in IITs for academic years 2006-12. The data revealed that scores were asked to leave the premier institutes due to "bad academic performance" — eight in Bombay (some were readmitted), 86 in Delhi, 403 in Kanpur, six in Kharagpur, six in Madras, 378 in Roorkee and 24 in Guwahati.

"Yes, I got in thanks to *aarakshan* (reservation). But I cleared the IIT entrance exam, and before that, my Class X and XII with good marks. *Bachpan se yahi ek wish thi*. After I came here, I heard my batchmates talking about things they wanted to do after IIT. I had nothing to say because I didn't know anything beyond IIT. And now, they tell me I am not good enough..." says one of the students on the list of 72.

He is a 17-year-old son of a policeman father and homemaker mother from Bhalgalpur in Bihar and on a rainy July morning, he and some of the other "expelled" students have come to meet IIT-R Dean of Students' Welfare DK Nauriyal, one of the many rounds he had made since the expulsions. They had been expelled for not meeting the required minimum passing grades: a Cumulative Grade Point Average (CGPA) of at least 5 and minimum credits of 22 (these students have since been taken back on probation, having got a second chance).

But these are students who have, after all, cracked the IIT-JEE (Advanced) exam. "First of all, I wouldn't use the word 'cracked'. I think we must stop celebrating JEE successes as the end of the story. Like all exams, the JEE isn't fool-proof. Both strong and weak students get in. These students are not Einsteins, they never were. They are just ordinary people who worked hard for their ex-

ams. You must remember, not all people who clear JEE are smart people. Conversely, it's not that all people who don't clear JEE are less smart," says a senior IIT professor who is an IIT graduate himself.

"Besides, once the students enter the campus, for us, they are all the same — irrespective of their backgrounds or whether you are from the reserved quota or not. The bar has been set (at CGPA 5 and minimum credits of 22) and that can't be lowered," says IIT-R Registrar Prashant Garg.

"That's cruel. Either consciously or otherwise, there has been a bias. When they prepared that list, they must have known all along that there was a certain section of society that was at a disadvantage. How could they have gone ahead without fixing their own systems?" says a fourth-year student at Roorkee.

A pertinent question but one that cannot be answered in a hurry. While a change in the "system" may take time, professors and administrators say there is a silver lining to the Roorkee failures. "On our side, this incident offers us a chance to review our own systems, see if what we have is enough, what more we need to do. The other good thing to have come out of this, first-year students are attending every class," says director Banerji.

But those who have been part of the IIT system know there are no easy solutions. "This is a problem that needs to be addressed not just at the level of IITs. We need to go back to the basics, see what schools are teaching, rethink our examination system, get in more ideas. At the end of the day, we have to balance excellence with equity," says Anil Kakodkar, former chairman of the Board of Governors of IIT-Bombay and chairman of the Standing Committee of the IIT Council (SCIC). As more and more young men and women, in numbers unprecedented, line up to knock on IIT doors, that balance at the end of the day will not only define Brand IIT — but also decide the future of India's talent in science and technology.

(Concluded)

Hindu ND 07/08/2015

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# Boosting digital footprint in rural areas

Manasi Deshpande

**MUMBAI:** A research group at the Indian Institute of Technology Bombay (IITB) has set up India's first pilot test-bed which uses unused TV spectrum to provide broadband Internet connectivity. It could be used by the NDA government's flagship Digital India programme to enhance broadband Internet connectivity to rural areas at a cheaper cost.

The project taps unused frequencies allocated to broadcasting and exploits this "white space" spectrum to provide broadband Internet connectivity in rural areas.

The Department of Telecom (DoT) has also granted an experimental licence to IITB to conduct tests in TV's UHF band.

"The application to get licence had been submitted well before the announcement of Digital India Initia-



*Antennas set up in Palghar district of Maharashtra, where IIT Bombay is testing a pilot project that exploits unused TV spectrum to provide broadband Internet connectivity in rural areas.*

— PHOTO: BY SPECIAL ARRANGEMENT

tive. The new government had just taken over at that time," said Professor Abhay Karandikar, who is leading this project and who in 2010 co-authored a paper underlining the potential of shared use of India's TV "white space" spectrum.

The pilot test-bed has been

deployed by the IIT team in seven villages — Khamloli, Bahadoli, Dhuktan, Ganje, Pargaon, Haloli and Maswan — spread over 30 sqkm in coastal Palghar district about 80 km from Mumbai.

Under this project, the Wi-Fi hotspots for testing Internet connectivity have been

deployed at a few locations across the villages and these are connected to the Khamloli tower of Tata Teleservices using TV band radios.

To access the Internet, the villagers have been provided with low cost WiFi tablets by IITB and have received the help of an NGO (PUKAR) in educating the villagers about the use of Internet.

"There are clusters of villages which are administered by a gram panchayat. So there are around 6 lakh villages which come under the jurisdiction of these 2.5 lakh gram panchayats. It is very difficult and also expensive to connect these clusters of villages by optic fibre. Our project addresses this problem," Prof. Karandikar said.

This technology is capable of providing coverage within the radius of one to 10 km from the access network such as WiFi zones, access points and clusters to an optic fibre point of presence.

## IISc Bangalore to conduct GATE 2016; Online calculators allowed

<http://www.indiaedunews.net/engineering/iisc-bangalore-to-conduct-gate-2016-online-calculators-allowed.html>

Bengaluru: The Indian Institute of Science (IISc), Bangalore is the organizing institute for GATE 2016. The Graduate Aptitude Test in Engineering (GATE) will be conducted on **30 & 31 January, 2016 and 6 & 7 February, 2016** for admission to postgraduate programs in engineering (Masters degree program, both Master of Technology (M.Tech) and Master of Engineering (M.E.), technology, architecture, science and related disciplines at the national level.

### What's new in GATE this year?

- A new paper in Petroleum Engineering (PE) has been introduced, taking the total number of subject papers offered to 23.

- GATE exam takers can use an "online calculator"
- Answer keys will be made available shortly after the exam.
- The entire GATE 2016 syllabus can be accessed from the website: [gate.iisc.ernet.in](http://gate.iisc.ernet.in)

## IIM Amritsar inaugurated

<http://www.niticentral.com/2015/08/06/iim-amritsar-inaugurated-327838.html>

Amritsar, Aug 6 (PTI) The Indian Institute of Management (IIM), one of the six new such institution which the Modi government had proposed to be opened in the 2014-15 Budget, was inaugurated here today.

Punjab Minister for Higher Education and Languages Surjit Singh Rakhra inaugurated the first batch of Post Graduate Programme (PGP) of the institute, which is being mentored by IIM Kozhikode.

"I am happy to announce that out of the six new IIMs announced in India recently, IIM Amritsar is the second to be inaugurated," Rakhra said, addressing the first batch of students, their parents, dignitaries, guests and IIM community here.

Director of IIM Kozhikode and the mentor director of IIM Amritsar, Prof Kulbhushan Balooni, deans, faculties and senior administrative staff of IIM Kozhikode were also present at the programme.

The first batch of about 65 students will start classes this week from a temporary campus at the Punjab Institute of Technology here, the minister said.

"Punjab can become one of the leading states in education through IIM Amritsar.

We must institutionalise IIMs and produce the best of human resources.

"Today the students of IITs and IIMs have excelled in various fields.

IIMs play an important role in changing the image of India.

We also need to provide quality education to the poor, if we are to become a global superpower," Rakhra said.

He told the students to look for careers in agriculture and rural management, apart from looking forward to a career in the banking or the financial sector.

Prof.Balooni, Director of IIM Kozhikode "thanked" the Union Human Resource Ministry for "initiating the process of starting IIM Amritsar in October last year."

"The Commitment of Government of Punjab in setting up IIM Amritsar is admirable that sends a signal to other states who are vying for academic institutions of repute," he said.

## 325 IIT-Patna students get degrees at 3rd convocation

Vithika Salomi,TNN | Aug 7, 2015, 12.15 AM IST

<http://timesofindia.indiatimes.com/city/patna/325-IIT-Patna-students-get-degrees-at-3rd-convocation/articleshow/48382654.cms>

Bihta (Patna): Pride was writ large on the faces of 325-odd BTech, MTech and PhD students of Indian Institute of Technology (IIT)-Patna, who passed out of the premier tech cradle and stepped out into the professional world with degrees in hand.

The IIT-Patna's third convocation on Thursday was all the more special as it was the first convocation organised on its permanent campus at Bihta. The 502-acre campus on the outskirts of Bihar capital was inaugurated by PM Narendra Modi through a remote on July 25. The degrees were awarded to students of two batches; that is, those who passed final exams in 2014 and 2015.

Bihar's son of the soil and Boeing India president Pratyush Kumar was the chief guest on the occasion. He said learning does not end with graduation and gave the students the mantra of CEC - curiosity, excellence and commitment - to excel in life. "IITs are known for producing world-class engineers and technocrats. You are among the country's brightest young minds and should use your intellectual wealth for the advancement of the country," he told the students.

Lauding the campus, Kumar said, "Your very presence and the impressive campus are proofs that the land of Nalanda and Vikramshila is well on the path to regain its rightful place as a global centre of excellence in learning." The IIT-Delhi alumnus underlined the import of entrepreneurship and said IITians should create industrial foundation for Bihar in the 21st century.

Presenting the institute's annual report, IIT-Patna director Pushpak Bhattacharyya said the institute currently hosts 673 undergrad students, 170 PG students and 228 research scholars besides 70 faculty members in its 10 departments. "We have been collaborating with several national and international universities and at least 45 research projects worth Rs 68 crore have been completed at IIT-Patna," he said.

As for placement scenario, the 2008-established IIT-Patna boasts of being the leader among the new IITs with its students being offered the average pay package of Rs 9.12 lakh per annum. The highest package of Rs 25 lakh was offered by Amazon India.

IIT-Patna governing body chairman Ajai Chowdhry and registrar Subhash Pandey were also present at the convocation at which six gold medals, 14 silver medals, 15 institute proficiency prizes and a Kedar Nath Das Memorial Award were given away to the students. Proud parents and relatives were seen clicking photographs as their wards received the medals on the dais.

Thursday was also the IIT-Patna's seventh foundation day. IIT- Guwahati professor Gautam Barua told the budding engineers that IIT-Patna was now ready to take off without any constraints. Cultural coordinator Navin Kumar Nischal and gymkhana vice president Akhil Shukla also addressed the students. A short cultural programme was organised to mark the foundation day.

TOPPERS' CLUB: IIT-Patna's 230 BTech students, 77 MTech students and 18 PhD students, who passed exams in 2014 and 2015, were awarded degrees on Thursday. In BTech, the President of India gold medal was received by Sachin Basil

John (2014) and Prabhakaran S (2015) while the Director's Gold Medal was given to Chaitanya Kansal (2014) and Venkatesh Chaturvedi (2015). In MTech, Govind received the Chairman's Gold Medal for 2014 while Deepak Kumar Gupta got it for 2015. Kedar Nath Das Memorial Award went to Manish Garg (2015). Distinguished academician awards were given to scientist G Madhavan Nair, Prof M M Sharma and technocrat Rajendra Prasad Singh

## Rajasthan Patrika ND 07/08/2015 P-3

### शासन बदलते ही स्थानांतरित हुआ आईआईटी

#### संसद में राजस्थान

नई दिल्ली @ पत्रिका . राजस्थान के जोधपुर आईआईटी को स्थापित हुए भले ही सात वर्ष बीत चुके हों, लेकिन इसे लेकर राजनीति अब तक जारी है। लोकसभा में गुरुवार को शून्यकाल के दौरान यह मामला उठा। सांसद ओम बिरला ने कोटा में प्रस्तावित ट्रिपल आईटी के बारे में मांग रखते हुए कहा कि वर्ष 2006 में केन्द्र सरकार ने राजस्थान में

आईआईटी की स्थापना के लिए प्रस्ताव मांगे थे। शुरुआत में राज्य ने कोटा का नाम प्रस्तावित किया था। लेकिन बाद में प्रदेश में सत्ता बदलते ही कोटा के हक के संस्थान को जोधपुर में स्थानांतरित कर दिया।

सदन में बिरला ने कहा कि पांच वर्ष बाद भी इसके भवन का निर्माण शुरू नहीं हो पाया है। संस्थान को कोटा के बजाय जयपुर में संचालित करना पड़ रहा है। बिड़ला ने मांग की कि भविष्य में यदि राज्य में किसी

राष्ट्रीय संस्थान को स्थापित करने की योजना हो तो उसमें कोटा को शामिल किया जाए।

## IIT brand getting diluted as more are opened without infrastructure

By Yashwardhan Joshi

<http://www.kashmirtimes.com/newsdet.aspx?q=43701>

IIT was one word we thought would never go stale. It inspired awe and admiration from one and all. The engineers who graduated from the Indian Institutes of Technology (IITs) were worth their price in gold. They were selected through a joint entrance examination (JEE) considered to be the toughest in the world, which only a handful could crack. We felt proud to see our childhood friends enter the haloed portals of an IIT, and they became the boast of the town.

Stifled by the socialist regime at home, most of these graduates, however, migrated to the US in waves in the 70's and 80's to fire 'the American Dream' of entrepreneurship. It is said that between 1980 and 2007, the IITans founded 13.4 per cent of the startups in the Silicon Valley of America and 6.5 per cent in the entire US. And then came a time when

every Indian wanted to chase the American Dream. Demand created its own supply. Coaching centres started coming up to fulfill the Indian Dream, but with substantial cost.

All-round academic performance turned secondary; getting into an IIT became the primary aim of life. Then out of the blue a story came about a coaching centre in Kota, an industrial town in Rajasthan famous for its tiles, which have groomed students from small towns who have cracked the IIT entrance exams. The American Dream merged with the dream of every Indian parent to see his child in an IIT, whatever the cost. Floodgates opened up. Students from different social backgrounds and far off places such as Bihar, Jharkhand, Punjab, Odisha and even Sikkim flocked to Kota in hordes, along with their parents, to fulfill their lifelong ambition. One coaching centre gave way to another, triggering a mass movement of students into the town.

Soon coaching centres became coaching factories, and a new assembly line of robot students started turning up that mastered shortcuts to solve questions, a 21st century representation of Charlie Chaplin's 1936 silent film 'Modern Times' which would surely have given the great comedian enough material for a sequel. Kota became a one-of-a-kind hub churning out test-taking machines. By today's account, there are more than 150 coaching factories, big and small, concentrated in Kota and nearly 120,000 students from all parts of India descend on the city every year.

Consequently, the number of students taking IIT-JEE also increased exponentially. From tens of thousands, the number rose to hundreds of thousands, and by the latest count more than 1.4 million appear for that prestigious exam every year. With IIT preparations taking at least two years, students were forced to stay away from their hometowns and schools for long. To fill that gap, CBSE-affiliated schools started springing up in Kota. But these were merely dummy schools as students spent most of their time in coaching centres.

Despite the negative publicity, Kota did remain true to its fame, sending a big chunk of students into IITs, but IIT as a brand built over the past 50 years went for a toss.

Many IIT professors find the current crop of students lacking in creativity and the spirit of innovation and enquiry. Things have come to such a pass that many 'brilliant' IIT students are finding it difficult to get a job.

Tata Steel MD B Muthuraman, himself an IIT Kanpur graduate, has expressed his displeasure over the quality of students passing out of IITs. He said IITs were thriving on their "past reputation" and that Tisco was not likely to recruit IIT engineers any longer. The previous government also did its two bits. The UPA government started eight new IITs between 2008 and 2011, but for several years these remained only on paper even as students kept on clearing their entrance exams for admission into them. After so many years, these IITs are still grappling with faculty shortage and operating from the makeshift campuses in the absence of proper funds allocation.

The same mistake, it seems, is being repeated by the Modi government, which has announced setting up of five more IITs. But the moot question is: Who killed our famous brand?

Is it the coaching factories that are churning out mechanical robots? Or is the government of the day that sets up new IITs without proper infrastructure and faculty? Or is it the inefficient school educational system of the country that is not in sync with competitive exams and forces students to go for coaching classes? Just opening an institute and calling it an IIT is a wrong way of tackling the problem. Merit suffers. You may get engineering graduates with .IIT welted on their foreheads, but where will be the student with an enquiring mind.

What is needed is the reform of our school education system, so that students are not forced to join coaching factories



that produce mindless robots. We could also do away with reservation which kills merit. It's a long haul. But the time is now. In the meantime, JEE should be overhauled to counter the cramming skills taught at coaching centres.

## **IIT alumnus pledges to fund overseas internships**

**KOLKATA:** The alumni of IIT Kharagpur have pledged to sponsor overseas internships for students of the institute.

Hindustan Times (Kolkata)

*RAMKRISHNA SAMANTA* DYFY organised a peace rally on the 70th anniversary of Hiroshima Day in Kolkata on Thursday.

Taking the initiative a step forward, Vinod Gupta, a distinguished alumnus and Life Fellow of IIT Kharagpur, has pledged \$250,000 for the next five years for exchange of 8-10 students along with a faculty member between GWU and IIT Kharagpur.

A recent visiting delegation from The Rajiv Gandhi School of Intellectual Property Law (RGSOIPL) at IIT Kharagpur signed an MoU (Memorandum of Understanding) for professional collaboration with the Law School of George Washington University (GWU), Washington DC, for exchange of students and faculty.

At the meeting in July at GW Law, Gupta announced he would provide additional support for the institutions' joint relationship, particularly to support student exchanges. His previous support has already allowed for such exchanges and for a variety of other activities, such as lectures by GW Law faculty, members at IIT Kharagpur and scholarships for Rajiv Gandhi Law graduates to attend GW Law's LL.M. programme.

As per the initiative taken by the alumni of the institute, seniors would be helping students find overseas internships in various ways - helping the students bag training at the company founded by them, or help them get an opportunity at the organisation they are working in or sponsor some overseas training initiatives.

The Law School at IIT Kharagpur, which has inked the MoU was recently ranked among the top three law schools in India. IIT Kharagpur is the only IIT to have such a school among its several branches of expansion beyond the domain of engineering and technology. The school was ranked on the basis of student quality, faculty quality and engagement, process (teaching quality and learning), and research output (publications and citations received, and alumni goodwill).

Prof Souvik Bhattacharyya, deputy director; Prof Sidhartha Mukhopadhyay, dean, alumni affairs and international relations; and Chinna Boddipalli, MD institutional development (AA&IR) attended on behalf of IIT Kharagpur.

Bhattacharyya stressed the desire of IIT Kharagpur to enhance the cooperation with GWU in different fields.

With intellectual property and technology law education emerging as an urgent requirement to protect and service intellectual property which is being generated in India and elsewhere in the world, Gupta in 2005 felt a large number of lawyers would be required in India to protect the intellectual property and he donated \$2 million for setting up the School of Intellectual Property Law at IIT Kharagpur.

## IIT-P adopts 2 villages near Bihta campus

Hindustan Times (Patna)

The Indian Institute of Technology, Patna (IIT-P) has adopted two villages, Amhara and Dilawarpur, near its campus at Bihta to develop them as model villages. The adoption has been done under the Unnat Bharat Abhiyan (UBA) of the government of India.

Union human resources development minister Smriti Zubin Irani would visit Indian Institute of Technology, Patna (IIT-P) to formally launch the initiative on August 9, said IIT-P registrar Subhash Pandey.

The UBA is aimed at ushering in transformational change in rural development processes by leveraging knowledge institutions to help build the architecture of an Inclusive India. Almost all IITs and other technical institutes of higher education have adopted villages under the UBA.

Professor of social sciences in IIT-P Aditya Raj is the UBA coordinator for the institute.

“Under the UBA, we will develop the two villages as model villages by working to improve the quality of education, health, sanitation and other social factors there. IIT-P students and faculty members will collaborate for this,” said Raj.

He said mapping of the villages was being done to identify the areas where IIT-P’s intervention would be needed.

“Dilawarpur, which is situated just behind our campus, is less developed than Amhara, which is situated in front of our gate. The IIT-P will work to make the two villages self-dependent and also improve their social status,” he added.

Through the UBA, Raj added, the IIT-P would also achieve its aim of developing its nearby communities.

“Our director and we want that as we grow, villages and communities around us should grow, too,” he said, adding, “We are starting with two villages. There are plans to adopt more villages with time.”



The IIT-Delhi is the national coordinator for the UBA. As many as 132 villages have been adopted by various institutes.

# Indian researchers win Google Pitch Fest

**The technology is developed by Sanjiv Sambandan of the Flexible Electronics Lab, Department of Instrumentation and Applied Physics and his team at the Indian Institute of Science.**

<http://indiatoday.intoday.in/story/indian-waste-water-purification-tech-wins-google-pitch-fest/1/456676.html>

A hand-held waste-water filtration technology that promises zero wastage, developed by researchers at the IISc in Bengaluru, has won the Google startup festival at Zurich, Switzerland, a scientist said on Wednesday.

The filtration technique can transform highly contaminated water into very clean water, with no water wastage. The technology is developed by Sanjiv Sambandan of the Flexible Electronics Lab, Department of Instrumentation and Applied Physics and his team at the Indian Institute of Science. It won the Pitch Fest at Google Zurich, he said.

The system is membrane-less, chemical-free and scalable. It can be upgraded from a hand-held water bottle to large community based system. It can also be used as a pre-filter for membrane based purifiers thereby improving the lifetime of the membranes, according to Sambandan. The technology uses an electric field to polarise tiny impurities and cluster them into larger chunks that can then be removed by low cost meshes and if needed, these meshes can be cleaned and re-used.

With just 100 MW of power needed for purifying one litre of very poor quality water, the system is highly efficient. "This implies that the hand-held bottle purifier can be powered by a hand-crank, battery or solar cell. This can be useful for people living in remote areas, people stuck in disaster hit areas, and the army," he said.

Now, the researchers are planning field tests for a community based water purification system with the required automation in place.

Hindustan ND 07/08/2015 P-5

# विश्वविद्यालय नैक की मान्यता ले

नई दिल्ली | मदन जैड़ा

केंद्र सरकार ने सभी विश्वविद्यालयों एवं उनसे संबद्ध कॉलेजों के लिए नेशनल एसेसमेंट एंड एक््रीडिटेशन काउंसिल (नैक) की ग्रेडिंग हासिल करना अनिवार्य कर दिया है।

सभी निजी एवं सरकारी विश्वविद्यालयों को कहा गया है कि वे हर हाल में 31 दिसंबर से पहले एक््रीडिटेशन के लिए आवेदन करें। विश्वविद्यालय अनुदान आयोग (यूजीसी) के एक शीर्ष अधिकारी के

## अंतिम तिथि 31 दिसंबर

यूजीसी अधिकारी के अनुसार यदि कोई विश्वविद्यालय 31 दिसंबर तक नैक की मान्यता के लिए आवेदन नहीं करता है तो उसे अमान्य घोषित किया जा सकता है। केंद्र सरकार इस बारे में 31 दिसंबर के बाद सार्वजनिक सूचना जारी करने का फैसला लेगी।

अनुसार 31 दिसंबर की तिथि को आगे बढ़ाने की मांग हो रही है। लेकिन इसमें कोई बदलाव नहीं किया जाएगा। इस

बीच, नैक ने एक््रीडिटेशन की प्रक्रिया को फास्ट ट्रैक बनाने के उपाय शुरू कर दिए हैं। नैक ने एक ताजा आदेश में कहा कि विश्वविद्यालय अपने बारे में सेल्फ स्टडी रिपोर्ट (एसएसआर) भेजें तथा रिपोर्ट मिलने के एक महीने के भीतर ही नैक की टीम विश्वविद्यालय का दौरा करेगी।

देश में साढ़े छह सौ में से करीब 20-25 फीसदी विश्वविद्यालयों को ही अब तक नैक की मान्यता मिल पाई है। नैक विश्वविद्यालयों में मौजूद सुविधाओं की जांच के बाद उन्हें ए, बी या सी ग्रेड भी देता है।

**August 8**

Statesman ND 08/08/2015 P-1

SMRITI IRANI HOLDS TALKS WITH CHAIRPERSON OF IIM-B BOARD OF GOVERNORS

## Govt hints at review of IIM Bill

PRESS TRUST OF INDIA  
New Delhi, 7 August

In a bid to assure IIMs their autonomy, the government today hinted at "reviewing" and "correcting any inconsistencies" in the controversial draft IIM Bill as it sought to reach out to the premier B-schools following heavy criticism over the proposed legislation.

The softening of the government's stand came on a day when HRD Minister Smriti Irani held an hour-long discussion with the chairperson of IIM-Bangalore's board of governors, Kiran Mazumdar Shaw.

Describing as a "fallacy" the criticism surrounding the Bill, she said

the draft Bill was prepared by the IIMs themselves and that the apprehensions needed to be "dispelled".

She also said it was put in the public domain to seek the views of the stakeholders.

The government has also been accused of having intentions of gaining some kind of control through the Bill in almost every decision that the institutes take.

"The IIMs have also pointed to provisions that allegedly infringe on the autonomy of the business schools.

"We will review the Bill. If there is any inconsistency, typographical error, we will correct it," higher education secretary VS Oberoi told reporters here,



flanked by both Irani and Shaw, in an apparent indication vis-a-vis ensuring the autonomous status enjoyed by the B-schools.

He said the aim through the legislation was to model the IIMs on the lines of other institutes of national importance, like the IITs.

Stating that a lot of concerns regarding the Bill were "clarified" and that she was "satisfied" following her hour-long meeting

with the minister, Shaw said she would be talking to other IIM directors and "explain" the provisions to them.

She said that some of the concerns were "baseless" and needed to be "dispelled".

"We certainly want autonomy and hand-in-hand accountability. I think the Bill has that considered.

"Government is trying to ensure that we have an

accountable structure without affecting autonomy," she said, adding that "some kind of rephrasing" could address their concerns.

The Bill seeks to give the IIMs degree-granting powers and convert them into institutes of national importance.

In a written reply in Parliament last week, Irani had said the Bill "intends to ensure greater synergy and financial autonomy along with commensurate accountability in academic and financial matters of the IIMs".

The draft Bill had come under a lot of flak from the heads of the IIMs ever since it was placed in the public domain with IIM Ahmedabad being the first

to come out in open against it.

"We are deeply concerned that some provisions of the Bill would seriously compromise the autonomy of the institute. We believe that this is an important bill for the future of management education and therefore requires critical review to ensure an optimal balance between autonomy and accountability of the institution," IIM-Ahmedabad chairperson A M Naik had said in a letter to Irani last month.

According to IIM-A director Ashish Nanda, the government, through the Bill, has proposed some kind of control in almost every decision that the institutes take.

Pioneer ND 08/08/2015 P-4

## HRD softens stand on IIM Bill

PNS ■ NEW DELHI

The HRD Ministry has succumbed to the pressures of the elite IIMs over the draft IIM Bill and on Friday indicated at "reviewing" and "correcting any inconsistencies" in the present legislation, which has been dragged into controversy, particularly, over the autonomy of the institutes.

Union HRD Minister Smriti Irani held an hour-long discussion with chairperson of IIM Bangalore's Board of Governors Kiran Mazumdar Shaw. Facing the allegation of diluting IIMs' autonomy through the draft legislation, Irani said the "fallacy" surrounding the Bill needed to be "dispelled" and that they have put it in public domain for views. The Government has also been accused of having some kind of control in almost every decision that the institutes take.

**Hints at 'reviewing',  
'correcting any  
inconsistencies' in the  
present legislation**

"We will review the Bill. If there is any inconsistency, typographical error, we will correct it," Higher Education Secretary VS Oberoi said in the presence of Irani and Shaw. Oberoi added the aim is to follow the other institutes of national importance like the IITs which are "tried and tested" models.

Holding that a lot of issues concerning the Bill was "clarified" and that she was "satisfied" following the hour-long meeting with the Minister, Shaw said she would be talking to other IIM directors and "explaining" the provisions. She said some of the concerns were "baseless" which needs to

be "dispelled".

"Some kind of rephrasing could address their concerns. We certainly want autonomy and hand in hand accountability. I think the Bill has that considered. Government is trying to ensure we have an accountable structure without affecting autonomy," Shaw said.

The present Bill seeks to give the IIMs the degree granting powers and convert them into institute of national importance. In a written reply in Parliament last week, Irani had said the bill "intends to ensure greater synergy and financial autonomy along with commensurate accountability in academic and financial matters of the IIMs".

The draft Bill had come under a lot of flak from the heads of the IIMs ever since it was placed in public domain with IIM Ahmedabad being the first to come out in open against it.

## Indian Express ND 08/08/2015 P-14

# SECRET OF SUCCESS

The failure rate among backward community students at the IITs can be reduced by institutional support

**M**ERIT IS NOT unrelated to caste, an *Indian Express* investigation into the recent expulsions at IIT Roorkee has found, reaffirming an old truth. Ninety per cent of the 72 first-year students who were expelled by the institution for failing to secure the minimum acceptable grade were from reserved categories. The IIT has relented and given them a second chance, but there is no certainty that they will fare any better, because the social, cultural and educational factors that caused them to falter remain in force. That leaves the institution facing a strange conundrum: Why are some students who have weathered the joint entrance examination, one of the world's toughest tests of academic and intellectual ability, unable to cope with the curriculum? At a time when the IIT network wants to ramp up and attract more students and teaching staff, a high failure rate creates a serious perception problem.

Social disadvantage and language barriers prevent students from disempowered backgrounds, especially those educated in Indian languages, from keeping pace with their lessons. Indeed, where the medium of instruction is English, students schooled in the sciences in an Indian language are automatically disadvantaged, and there is a limit to which they can use mathematics and symbolic logic to communicate. Switching the medium of instruction to Hindi would not erase inequity, since only about a quarter of Indians speak it natively. The logical alternative, to provide supportive education in English, is practised at some IITs, but not in Roorkee. A system of mentoring by senior students has been put in place recently, but such non-formal support is never failsafe. Besides, inequalities are not merely academic, but cultural. A student who likes Muddy Waters generally fares better socially than one who likes Bollywood music. And the recent controversy in IIT Madras over the Ambedkar Periyar Study Circle suggests that administrations are not wholly unmindful of caste.

Unfortunately, reservation is all too frequently seen as a binary opposed to merit. In technical education, dire consequences are predicted: surgeons who remove the wrong organ and civil engineers who cannot build in right angles, simply because they were cut too much slack on account of their background. But this either/or logic is crude and there is no real bar to reservation producing merit through extended support systems. Reservations give disadvantaged students an edge at the level of the entrance examination, but once students are in the IIT system, they are treated at par. However, while continuing to treat students equally, the administration may wish to bolster the self-esteem of those who fail to communicate effectively by extending cultural and language support.

## IISc. professor gets Germany's highest honour

<http://www.thehindu.com/news/cities/bangalore/iisc-professor-gets-germanys-highest-honour/article7514280.ece>

A behaviour ecologist from the Indian Institute of Science (IISc.) on Friday received Germany's highest civilian honour, the Cross of the Order of the Merit.

Raghavendra Gadagkar, a professor at the Centre for Ecological Sciences at IISc. as well as president of the Indian National Science Academy, was presented the honour at the German consulate in Bengaluru.

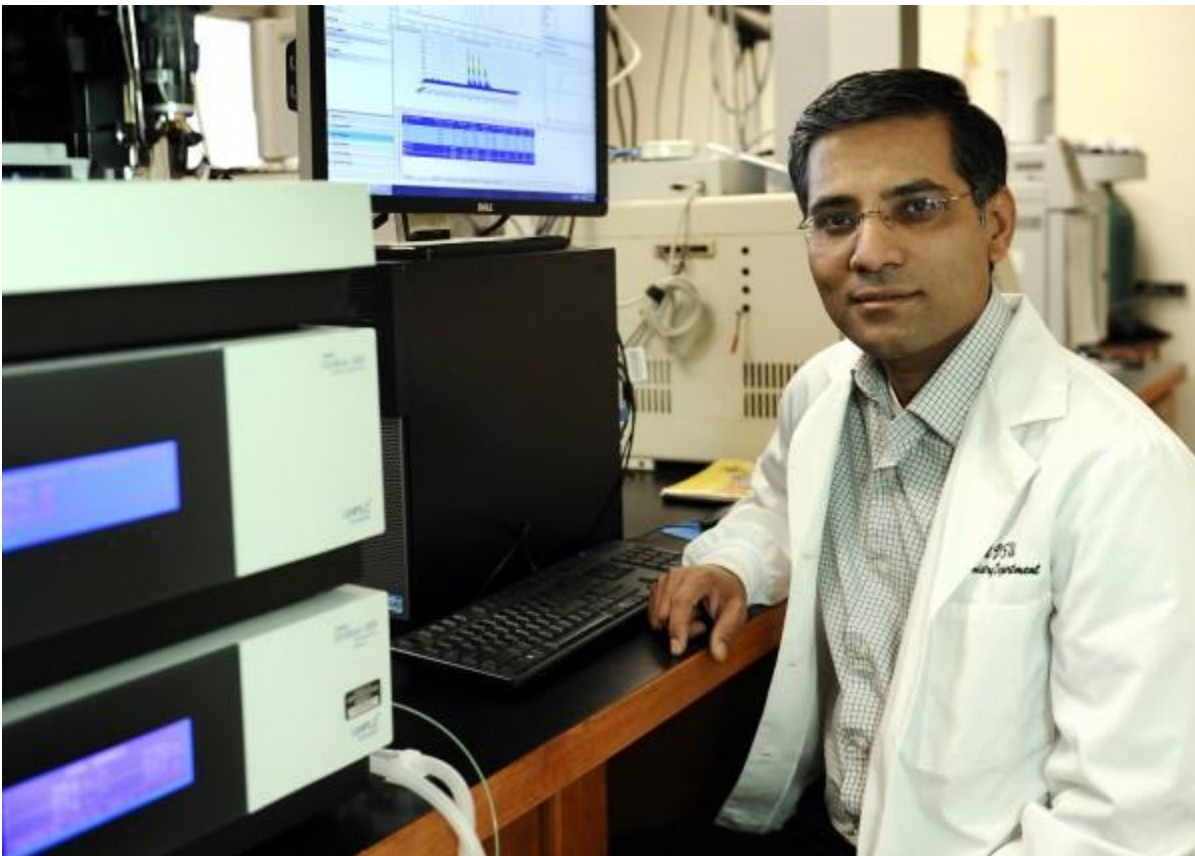
“It is a tribute to the substantial contribution by Prof. Gadagkar in the field of behavioural ecology and socio-biology. He has worked tirelessly towards strengthening the Indo-German research cooperation,” said Joern Rohde, Consul General of Germany.

Mr. Gadagkar has published more than 270 research papers and two books.

He was instrumental in the establishment of a MoU between IISc. and the University of Würzburg in 2012. He is active in the Indo-German scientific cooperation with the Max-Planck-Institute for Chemical Ecology in Jena, the German Zoological Society in Halle and the universities of Freiburg and Offenburg.

*Raghavendra Gadagkar works at the Centre for Ecological Sciences*

## Science Foundation's \$500,000 Grant To IIT-trained Professor in North Dakota



<http://www.newsindiatimes.com/science-foundations-500000-grant-to-iit-trained-professor-in-north-dakota>

An IIT Madras alumni, who is a chemistry professor at North Dakota State, was granted nearly a half a million dollar grant last week by the National Science Foundation to develop environmentally benign, green strategies for performing chemical reactions with light.

Jayaraman Sivaguru (Siva) who is James A. Meier Jr. Professor of chemistry and biochemistry at North Dakota State University, Fargo, was given the NSF award to evaluate the use of “visible and UV light to synthesize complex molecules that are enantiomerically pure.”

One of the research goals is to gain a fundamental understanding of interaction of light with atropisomeric photoreactive substrates.

The three-year-\$440,000 award also provides research opportunities to graduate and undergraduate students.

Based on the funding from NSF, his research group will evaluate the use of visible and UV light to synthesize complex molecules that are enantiomerically pure.

One of the research goals is to gain a fundamental understanding of interaction of light with atropisomeric photoreactive substrates.

“Harnessing the power of light to synthesize chiral compounds with high stereoselectivity during light-induced transformations is very challenging. Our proposed methodology has the ability to provide an opportunity to develop sustainable strategies with minimal impact on the environment,” Sivaguru said, according to an university press statement July 31.

“The project also provides students an opportunity to learn modern chemical methods that are utilized for synthesizing compounds with minimal environmental impact,” added Sivaguru.

Through the research, area high school students receive opportunities in PICNICS (Parents Involvement with Children, Nurturing Intellectual Curiosity in Science). Top area high school students conduct research each summer alongside graduate students and postdoctoral fellows at NDSU.

Sivaguru developed the PICNICS program as an outreach component in an earlier NSF CAREER award. PICNICS engages high school students and their parents to learn more about recent science and technology advancements and to encourage high school students to consider science as a career path. The program has trained 42 high school students since 2007.

At NDSU, Sivaguru has received the Excellence in Research Award, Excellence in Teaching award and Peltier Award for Innovation in Teaching. He completed a post-doctoral fellowship at Columbia University, New York, after receiving his Ph.D. from Tulane University, New Orleans, Louisiana.

## **Stricter UGC Norms for Deemed-to-be Varsities**

<http://www.newindianexpress.com/cities/chennai/Stricter-UGC-Norms-for-Deemed-to-be-Varsities/2015/08/08/article2962715.ece>

CHENNAI: The University Grants Commission (UGC) through a recent amendment to its Regulations has banned all Deemed-to-be universities from transferring profits, and has instructed them to be registered only as a not-for-profit trust or society or company.



UGC Vice-Chairman H Devaraj said that many deemed universities diverted profits to other companies under their trusts and societies and these recent amendments were aimed at using the income generated, solely for the purpose of education.

Presently, all Deemed-to-be universities across the country are established either by trusts or societies. As per the revised requirements under UGC regulations, a separate dedicated non-profitable society or trust or company is required to run the universities and UGC is entitled to review the functioning of these trusts after a period of five years or earlier, if necessary. Educational activist Sundararajan, who is also an auditor said that certain foreign universities which tried to open centres here in India refused to register under trusts or societies, instead persuading deemed universities to form local companies so that they can take the profit.

There has also been a modification in the fee regulations such that all deemed to be universities should declare each component of fee, deposits and other charges in their prospectus and website. A proper receipt should be issued for all payments in writing. Also, the universities are told to collect a 'reasonable' fee for admission test based on the cost incurred on conducting such test.

In addition to this the universities will not be allowed to maintain accounts in the name of the sponsoring institutions and transfer their income or property by way of profit. Rather they shall have accounts maintained under the name of the university which is open for examination by UGC and Comptroller and Auditor General (CAG) and use them solely for educational purposes. No time limit was specified for implementing these recommendations

## Here's why 97% Indian engineers don't get dream jobs

Prachi Verma & Saumya Bhattacharya, ET Bureau | Aug 8, 2015, 12.10 PM IST

<http://timesofindia.indiatimes.com/tech/jobs/Heres-why-97-Indian-engineers-dont-get-dream-jobs/articleshow/48400957.cms>

NEW DELHI: Poor spoken English may be keeping a large number of India's engineers from landing some of the best paid jobs in the country. A study has found that an overwhelming 97% of engineers in the country cannot speak English, required for high-end jobs in corporate sales and business consulting. Moreover, as per the report based on the study, about 67% of engineers graduating from India's colleges do not possess spoken English skills required for any job in knowledge economy.

The study, 'The National Spoken English Skills of Engineers Report', conducted by Aspiring Minds, surveyed English skills study of 30,000 engineers across 500 engineering colleges.

Although the problem is far more pronounced in tier 2 and tier 3 colleges, instilling spoken English skills is a big challenge in Indian Institutes of Technology and National Institutes of Technology as well. About 600,000 engineers graduate annually in India.

"We get students from different backgrounds and regions, and they are mostly not comfortable with English," said Gautam Biswas, director, IIT Guwahati. "Quite a few students appear for the joint entrance examination in their mother tongue. It becomes very difficult for them to follow the curriculum."

UB Desai, director of IIT Hyderabad, said the problem of students not being able to speak English is not restricted to IITs, but is prevalent across the country, and even in China and a few European nations.

"Over the years, the focus in the education system has shifted to chemistry, maths, physics. Focus on soft skills has reduced. Students may lose out on good job prospects as many companies come to campuses for global positions as well," he said.

Engineering students in the metros do much better in spoken English skills than those in the non-metros, according to the study. Kushal Sen, dean — faculty at IIT Delhi, affirms this. "A majority of our students may not have the problem of speaking in English but about 30% need to be groomed when it comes to soft skills," he said. IIT Delhi offers its students courses in soft skills.

Tier-1 colleges fare better in spoken English skills than their peers down the line. "As expected the spoken English ability of candidates becomes worse, on average, in campuses in lower-tier cities," said Varun Aggarwal, co-founder and chief technology officer, Aspiring Minds.

Recruiters and HR managers around the world report that candidates with English skills above the local average stand out from the crowd and garner 30-50% higher salaries than similarly qualified candidates without English skills, according to Aggarwal. "The trends in India are no different, with English fluency being one of the key qualities recruiters look for during the interview," he said.

IIT Madras's dean (planning) R David Koilpillai said, "Students must be able to communicate technical ideas clearly in interviews. Proficiency in spoken English gives confidence."

In the past two-three years, NIT Trichy has taken corrective measures in this regard. "Students not able to speak or even understand lectures in English is a major problem," said Srinivasan Sundarrajan, director. The institute organizes bridge courses, workshops and orientations for the students. "The seniors at our institute too help out juniors," said Sundarrajan.

The key problem faced by engineers is pronunciation, followed by fluency skills, grammar and sentence construction. Engineers show a larger gap in elements of spoken English, pronunciation and fluency, followed by grammar, though they do relatively better in vocabulary and understanding English. As per the report, only 6.8% engineers show the ability to speak or respond spontaneously.