# Newspaper Clips November 14, 2013

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# '47% engg grads unemployable

TIMESNEWSNETWORK

Mumbai: A degree never came with the promise of a job. Now a study shows that 47% of graduates are not employable in any sector. Their poor English and cognitive skills are to be blamed. While one of two pass-outs will easily show off their theoretical skills, the number falls to just a quarter when knowledgemust be applied.

In case of computer science/IT,30% engineers do not know basic theoretical concepts used in computer programming, according to the latest Computer Programming Learning Levels, Engineering Graduates, 2013 report. The pan-Indiastudy examines the capability of engineering students in computer programming at the end of their undergraduate education.

"Computer Programming skill is the key foundational skill required by the IT industry and also covered by academic curriculum. Yet, we find only 14.97% of IT specialization students can write a simple program, while 70% of them show theoretical understandIn case of computer science/IT, 30% engineers do not know basic theoretical concepts used in computer programming, according to the latest Computer Programming Learning Levels, Engineering Graduates, 2013 report. Moreover, 50% to 60% of CS/IT engineers do not understand subtleties of programming concepts

ing. Clearly, the problem is rote learning. This needs to be fixed," said Varun Aggarwal, co-Founder and CTO, of the company that carried out the study.

The Computer Programming Learning Levels, Engineering Graduates- Annual Report, 2013 draws inferencefrom data from more than 55000 engineering students across India from over 250 engineering colleges.

Since the advent of the software industry in India, there has been a constantrequirement of sector specific talent for the IT industry. Computer programming and algorithm design are the most common denominators required vitally amongst IT professionals. However, 50% to 60% of CS/IT engineers do not understand subtleties of programming concepts, while more than 80% are unable to apply them to real-world situations. Only 14.97% of the engineers are able to do application of programming constructs, which are of routine use in the industry, the study noted. "When we look at advanced areas of programming like algorithm design such as complexity theory, around 50% CS/IT engineering students do not know even the basic terminologies and definitions in these areas. In terms of complexity theory and application based knowledge of CS/IT engineering students, the percentage drops to a dismal 13.05," the report said.

The survey was carried out by a private employability solutions company, Aspiring Minds. Publication: The Times Of India Delhi; Date: Nov 14, 2013; Section: International; Page: 27;

# 'God particle discovery has made physics very boring'

London: Physics would have been more interesting if the elusive Higgs boson particle had not been discovered, famed UK physicist Stephen Hawking believes.

"Physics would be far more interesting if it had not been found," Hawking said in a speech at the Science Museum here.

Last year's breakthrough detection of the Higgs boson came as something of a letdown for the 71-year-old world-renowned cosmologist, 'Metro.co.uk' reported.

Hawking said that he had another reason to lament the discovery which brought a Nobel Prize for professor Peter Higgs, the man who first proposed the 'God particle' theory. "I had a bet with Gordon Kane of Michigan University that the Higgs particle wouldn't be found," Hawking said, adding "the Nobel Prize cost me \$100."

Stephen Hawking also said that he would have enjoyed trying to find a more exotic solution to the problem of what provides mass to the particles, had the Higgs boson not been found. PTI

### Findings from IIT in the Area of Aerospace Engineering Reported

November 20, 2013

By a News Reporter-Staff News Editor at Defense & Aerospace Week -- Investigators publish new report on Aerospace Engineering. According to news reporting from Gauhati, India, by VerticalNews journalists, research stated, "Implementation of the conjugate heat-transfer (CHT) analysis technique for hypersonic applications is the central theme of the present investigations. Understanding the applicability of the assumptions used in heat-transfer measurements and wall material-based flowfield analysis are the major objectives of the present

studies."

The news correspondents obtained a quote from the research from IIT, "In view of this, a special CHT solver is developed for these investigations. This 2D-solver is based on explicit finite-volume formulation for fluid domain and implicit finite volume formulation for solid domain computations. The present numerical explorations are carried out using this in-house solver for various wall materials, different freestream Mach numbers, and freestream stagnation enthalpies of hypersonic flows over a finite thickness flat plate. Encouraging match has been observed between the results obtained from the CHT solver for very high thermal conductivity wall case and present fluid flow solver for isothermal flat plate case. Viability of assumptions used for post-processing the experimental data has also been proved."

According to the news reporters, the research concluded: "These results provide the evidence of usefulness of CHT studies for hypersonic applications."

For more information on this research see: Conjugate Heat-Transfer Analysis for Hypersonic Flow over Finite Thickness Flat Plate. *Journal of Aerospace Engineering*, 2013;26(4):708-714. *Journal of Aerospace Engineering* can be contacted at: Asce-Amer Soc Civil Engineers, 1801 Alexander Bell Dr, Reston, VA 20191-4400, USA. (American Society of Civil Engineers - <a href="www.asce.org">www.asce.org</a>; Journal of Aerospace Engineering - <a href="ascelibrary.org/aso">ascelibrary.org/aso</a>)

(http://www.hispanicbusiness.com/2013/11/13/findings\_from\_iit\_in\_the\_area.htm)

#### The Hindu

### Do university rankings matter?

Ruma Dubey

Yes, but there's more to universities and education

Not a single Indian university in the top 200 global list screamed almost all the newspapers. But the question is — should it be a cause for concern? For us Indians, the IIMs and IITs are the irrefutable hallmarks of a superlative quality of education. When we look at colleges or universities, we look at the employment opportunities which can come by post graduation. If the IITs and IIMs did not have such fantastic success stories to tell, if huge pay packets ceased to make news, would we continue to rate these institutes so highly?

#### Practical concerns

Education, apart from a pursuit of knowledge is also about getting the right job with good pay. Do we look at faculty, infrastructure, campus life and clubs, food facilities with excessive interest while considering colleges? If your child gets admitted into an IIT, wouldn't you want them to jump into it? If tomorrow, there came a very mediocre college, with an unimpressive faculty, located in a Tier III town but guaranteed jobs in some of the best companies of India, would you need too much convincing?

As the world gets flatter, it does matter that products, which we consider the best in India, get recognised as reputed brands worldwide too. The quality of products made in the US are always considered superior, and experience has proven this fact. Ditto for education; if given a choice between an Ivy League university in the US and an IIT or IIM, the majority would opt for the Ivy League as it ensures a global education — its value recognised world over.

Yet some of the best brains world over come from Indian universities which do not figure in the top 200 list. Raghuram Rajan is a case in point — he is an IIT Delhi and IIM alumni, with a PhD from MIT. And world over, he has been recognised as India's brightest.

Studying in a reputed university is also about the experience of living away from home, studying on campus, learning from a diverse student body and being surrounded by a faculty to draw inspiration from. Another very important aspect is that these universities encourage research and publish papers, which adds to the knowledge pool.

Sadly in India, despite producing some of the brightest minds, the best always migrate to foreign lands; we then take pride by stating that 'Indian-born scientist/economist/author wins....' The question is not as much about rankings as it is about India's inability to nurture and retain some of the best brains in the country?

### Marketing tool?

The truth is that college rankings have become more of a marketing tool and less about quality of education. In the US itself there is a growing dissent against rating systems, which most of the time, concentrate on infrastructure, campus life, student retention, faculty resources, exclusivity, alumni donations etc. They leave out the most important and pertinent questions — job placement rates, loan repayment rates, etc. The current ranking, which did not include any Indian university in the top 200, rated colleges based on six criteria — academic reputation, employer reputation, faculty-student ratio, citations per faculty, international students and international faculty.

Thus rankings cannot tarnish the quality of some of the best institutions of India but at the same time, international recognition helps.

(The writer is a graduate of Podar College of Commerce and Economics, Mumbai, and an active blogger)

# Metro hires foreign consultants to check Phase 3 design proofs

### Subhendu Ray

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NEW DELHI: The Delhi Metro has for the first time roped in two foreign consultants to check all design proofs of civil constructions being carried out as part of the ongoing Phase 3 expansion. This has been done to ensure there are no shortcomings in the design of the Metro corridors.

The two consultants, Systra, a French company, and Ayesa, a Spanish firm, will check the technical aspects of the design proofs for the Delhi Metro's construction works under Phase 3, especially the two longest lines (Line 7 and 8) that are being built on Ring Road and Outer Ring Road.

Line 7 will follow the route of Delhi's inner Ring Road from Mukundpur to Shiv Vihar, tracing an almost complete circle around the eastern, southern and western edges of the city on a mostly elevated alignment. Line 8 will pass through Outer Ring Road and connect Janakpuri with Kalindi Kunj up to Botanical Garden in Noida Sector 32.

According to Delhi Metro Rail Corporation (DMRC) officials, construction of the two lines is extremely challenging as they



 Cracks in a pillar near the Ramakrishna Ashram Marg
 Metro station. SUNIL SAXENA/HT

will pass through heavy traffic zones, traffic signals, railway crossings and, at many points, will have sharp curves.

"The design proof checks by the agencies will ensure foolproof designing of the civil structure," said Jitendra Tyagi, director, works. He said both agencies would check the design proofs of special spans (extralong slabs placed on the piers at traffic intersections or railway crossings) and sub-structures submitted by contractors.

A senior DMRC official said construction could only begin after go-ahead from the agencies. "A team from IIT Delhi has also been engaged to proof-read the designs of special spans and structures," he added.

### HRD Ministry now forms over-arching body

Anita Joshua

Its mandate will be to resolve issues arising out of provisions mandated by regulatory bodies

After lack of consensus stymied its efforts to create a single regulator through an Act of Parliament for all streams of higher education, the Human Resource Development Ministry has now set up an over-arching body though an administrative order.

The essential mandate of the Higher Education Apex Coordination Committee (HEACC) will be to resolve issues arising out of "varying and sometimes conflicting regulatory provisions" mandated by regulatory bodies and professional councils that have come up to maintain standards in specialised areas.

The HEACC will be unlike the National Council for Higher Education and Research (NCHER) — which was envisaged as a super-regulator by dismantling the University Grants Commission (UGC) — or the All-India Council for Technical Education (AICTE) or the National Council for Teacher Education (NCTE). The office order makes it clear that it will not impinge on the authority or functioning of statutory regulatory bodies or professional councils.

The six-member body will be headed by the HRD Minister and will include the UGC and the AICTE chairpersons, besides the president of the Council of Architecture. It will be serviced by the UGC and will meet once every three months.

#### Watered down version

That the HEACC is a watered down version of the NCHER is evident from the fact that the order borrows heavily from the Statement of Objects and Reasons of The Higher Education and Research Bill, 2011. The Bill was introduced in Parliament and referred to the Parliamentary Standing Committee, which raised questions about some of its provisions, especially the States' concerns at their autonomy and jurisdiction in higher education and the practicality of an over-centralised jumbo body.

As the Health Ministry opposed the HRD Ministry's bid to extend its mandate to health education and the Bar Council of India was worried that the NCHER would encroach on its control over legal education, the attempt to set up the super-regulator was given up earlier this year.

Since then, the HRD Ministry has been working on a coordination mechanism for the regulators within its purview.

Keywords: HRD Ministry, HEACC, regulatory bodies, NCHER, single body regulation

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#### HT New Delhi

#### SEARCH FOR EXCELLENCE

## 'Real linkages happening only in engg institutes'

Working on the AICTE-CII Survey of Industry-linked Technical Institutes 2013 has been quite an experience for people like Shalini S Sharma, head-higher education, CII: Lucia Real-Martin. director, emerging markets Asia and Aziz Tayyebi, head of international development, both from the Association of Chartered Certified Accountants (ACCA) and Manoj Kulkarni, vice president human resources, Pennar Industries

What has been disap-

pointing for Sharma is the fact that the real linkages are happening in engineer ing, where actual projects are coming in and research happening. Management remains confined only to the human resource part, she is another problem area for both students and faculty. She believes that the onus is on the academia to rope in industries, as industries would only like to be associated with those institutes that are enthusiastic about the effort

A positive outcome was that the information received this year from the academic institutes was largely valid this year. Last year's inputs were so "exaggerated" that institutes were warned they would be named on the AICTE site, Sharma reveals.

Real-Martin and Tayyebi feel the exercise has been "a big experience on practical experience and ethics." ACCA was the professional body working with CII to produce the report, conduct workshops all around the country, making stakeholders aware of what was required for the survey and help with the data analysis. .

After the institutes were shortlisted, the jury, which included Dr YS Rajan, Dr Vikram Sarabhai distinguished professor, Indian Space Research Organisation, among others, studied the papers sent by the institutes. They had to look at the courses, streams and papers. Then a further 39 institutions were shortlisted and site visits were made.

Institutes now have also

started recognising the importance of documentation, keeping records of interactions with industries, internship programmes or visits and lectures by industry experts, says Sharma.

says Sharma.
Kulkarni of Pennar, who
made several site visits and
had interesting interactions
with colleges, however, has a
word of advice. "The skills
development programmes of
the institutes are not done in
a structured manner. They
don't have a very clear idea
of what they are looking

for. They should understand what is needed and mould their students accordingly. My onboarding is a lengthy process and I would be happy to get industry-ready professionals for my company he adds. It's about building capability; it's not an easy task but it is possible if there is a healthy level of interaction between academia and industry, as everyone - students, faculty, the institute and industry - stands to benefit from such an exercise, he says

AYESHA BANERJEE

### 'Research in India happens in a few elite institutions'

Vasudevan Mukunth

Interview with Professor Shiraz Naval Minwalla

Shiraz Naval Minwalla, a professor of theoretical physics at the Tata Institute of Fundamental Research (TIFR), Mumbai, won the New Horizons in Physics Prize for 2013 on November 5. The \$100,000 prize, which recognises "promising researchers," is awarded by the Fundamental Physics Prize Foundation, which was set up by Russian billionaire Yuri Milner in 2012. Dr. Minwalla has been cited for his contributions to the study of string theory and quantum field theory, especially in improving our understanding of the equations governing fluid dynamics, and using them to verify the predictions of all quantum field theories as opposed to a limited class of theories before. On November 12, he was also awarded the Infosys Foundation Prize in the physical sciences category. Here are excerpts from an interview done on Tuesday with Vasudevan Mukunth, through Skype.

## Why do you work with string theory and quantum field theory? Why are you interested in these subjects?

Because it seems like one of the roads to completing one element of the unfinished task of physics. In the last century, there have been two big developments in physic. The quantum revolution, which established the language of quantum mechanics for dealing with physical systems, and the general theory of relativity, which established the dynamic nature of spacetime as reality in the world and realized it was responsible for gravity. These two paradigms have been incredibly successful in their domains of applicability. Quantum theory is ubiquitous in physics, and is also the basis for theories of elementary particle physics. The general relativity way of thinking has been successful with astrophysics and cosmology, i.e. successful at larger scales.

These paradigms have been individually confirmed and individually very successful, yet we have no way of putting them together, no single mathematically consistent framework. This is why I work with string theory and quantum field theory because I think it is the correct path to realize a unified theory quantum of gravity.

## What's the nature of your work that has snagged the New Horizons Prize? Could you describe it in simpler terms?

The context for this discussion is the AdS/CFT correspondence of string theory. AdS/CFT asserts that certain conformal quantum field theories admit a reformulation as higher dimensional theories of gravity under appropriate circumstances. Now it has long been expected that the dynamics of any quantum field theory reduces, under appropriate circumstances, to the equations of hydrodynamics. If you put these two statements together it should follow that Einstein's equations of gravity reduce, under appropriate circumstances, to the equations of hydrodynamics.

My collaborators and I were able to directly verify this expectation. The equations of hydrodynamics that Einstein's equations reduce have particular values of transport coefficients. And there was a surprise here. It turns out that the equations charged relativistic hydrodynamics that came out of this procedure were slightly different in form from those listed in textbooks on the subject, like the text of (Lev) Landau and (Evgeny) Lifshitz. The resolution of this apparent paradox was obtained by (Dam) Son and (Piotr) Surowka and in subsequent work, where it was demonstrated that the textbook expectations for the equations of hydrodynamics are incomplete. The correct equations sometimes have more terms, in agreement with our constructions.

The improved understanding of the equations of hydrodynamics is general in nature; it applies to all quantum field theories, including those like quantum chromodynamics that are of interest to real world experiments. I think this is a good (though minor) example of the impact of string theory on experiments. At our current stage of understanding of string theory, we can effectively do calculations only in particularly simple - particularly symmetric - theories. But we are able to analyse these theories very completely; do the calculations completely correctly. We can then use these calculations to test various general predictions about the behaviour of all quantum field theories. These expectations sometimes turn out to be incorrect. With the string calculations to guide you can then correct these predictions. The corrected general expectations then apply to all quantum field theories, not just those very symmetric ones that string theory is able to analyse in detail.

## How do you see the Prize helping your research work? Does this make it easier for you to secure grants, etc.?

It pads up my CV. (Laughs) So... anything I apply for henceforth becomes a little more likely to work out, but it won't have a transformative impact on my career nor influence it in any way, frankly. It's a great honour, of course. It makes me happy, it's an encouragement. But I'm quite motivated without that. (After being asked about winning the Infosys Foundation Prize) I'm thrilled, but I'm also a little overwhelmed. I hope I live up to all the expectations. About being young — I hope this means that my best work is ahead of me.

## What do you think about the Fundamental Physics Prize in general? About what Yuri Milner has done for the world of physics research?

Until last week, I hadn't thought about it very much at all. The first thing to say is when Milner explained to me his motivations in constituting this prize, I understood it. Let me explain. As you know, Milner was a PhD student in physics before he left the field to invest in the Internet, etc. He said he left because he felt he wasn't good enough to do important work.

He said one motivation was that people who are doing well needn't found Internet companies. This is his personal opinion, one should respect that. Second: He felt that 70 or 80 years ago, physicists were celebrities who played a large role in motivating some young people to do science. Nowadays, there are no such people. I think I agree. Milner wants to do what he can to push the clock back on that. Third: Milner is uniquely well-positioned because he understands physics research because of his own background and he understands the world of business. So, he wanted to bridge these worlds. All these are reasonable ways of looking at the world.

If I had a lot of money, this isn't the way I would have gone about it. There are many more efficient ways. For instance, more smaller prizes for younger people makes more sense than few big prizes for well established people. Some of the money could have gone as grants. I haven't seriously thought about this, though. The fact is Milner didn't have to do this but he did. It's a good thing. This is his gesture, and I'm glad.

### Are the Fundamental Physics Prizes in any way bringing "validity" to your areas of research? Are they bringing more favourable attention you wouldn't have been able to get otherwise?

Well, of late, it has become fashionable sometimes to attack string theory in certain parts of the world of physics. In such an environment, it is nice to see there are other people who think differently.

What are your thoughts on the quality of physics research stemming from India? Are there enough opportunities for researchers at all levels of their careers?

Let me start with string theoretic work, which I'm aware of, and then extrapolate. String theory work done in India is pretty good. If you compared the output from India to the US, the work emerging from the US is way ahead qualitatively. But if you compared it to Japan's output, I would say it's clear that India does better. Japan has a large string theory community supported by American-style salaries whereas India runs on a shoestring. Given that and the fact that India is a very poor country, that's quite remarkable. There's no other country with a GDP per capita comparable to India's whose string theoretic output is anywhere as good. In fact, the output is better than any country in the European Union, but at the same time not comparable to the EU's as a whole. So you get an idea of the scale: reasonably good, not fantastic.

The striking weakness of research in India is that research happens by and large only in a few elite institutions. But in the last five years, it has been broadening out a bit. TIFR and the Harish-Chandra Research Institute (HRI) have good research groups; there are some reasonably good young groups in Indian Institute of Science (IIS), Bengaluru; Institute of Mathematical Sciences, Chennai; some small groups in the Chennai Mathematical Institute, IIT-Madras, IIT-Bombay, IIT-Kanpur, all growing in strength, The Indian Institute of Science Education and Research (IISER), Pune, has also made good hires in string theory.

So, it's spreading out. The good thing is young people are being hired in many good places. What is striking is we don't yet have participation from universities; there are no string theorists in non-elite institutions. Delhi University has a few, very few. This is in striking contrast with the US, where there are many groups in many universities, which gives the community great depth of research.

If I were to give Indian research a grade sheet, I'd say not bad but could do much better. There are 1.2 billion people in the country, so we should be producing commensurate output in research. We shouldn't content ourselves by thinking we're doing better than (South) Korea. Of course it is an unfair thing to ask for, but that should be the aim. For example, at TIFR, when we interview students for admission, we find that we usually have very few really good candidates. It's not that they aren't smart; people are smart everywhere. It's just one reason: that the elementary school system in the country is abysmal. Most Indians come out of school unable to contribute meaningfully to any intellectual

activity. Even Indian colleges have the same quality of output. The obvious thing is to make every school in India a reasonable school (*laughs*). Such an obvious thing but we don't do it.

#### Is there sufficient institutional and governmental support for researchers?

At the top levels, yes. I feel that places with the kind of rock-solid support that TIFR gives its faculty are few and far between. In the US many such places exist. But if you went to the UK, the only comparable places are perhaps Cambridge and Oxford. Whereas if you went to the second tier Durham University, you'll see it's not as good a place to be as TIFR. In fact, this is true for most universities around the world.

Institutions like TIFR, IIS, HRI and the National Centre for the Biological Sciences give good support and scientists should recognise this. There are few comparable places in the Third World. What we're missing however is the depth. The U.S. research community has got so good because of its depth. Genuine, exciting research is not done just in the Ivy League institutions. Even small places have a Nobel Laureate teaching there. So, India may have lots of universities but they are somehow not able to produce good work.

We've had a couple Indians already in what's going to be three years of the Fundamental Physics Prizes — before you, there was Ashoke Sen. But in the Nobel Prizes in physics, we've had a stubborn no-show since Subramanyan Chandrasekhar won it in 1983. Why do you think that is?

There are two immediate responses. First is that, as I mentioned, India has an anomalously strong string theory presence. Why? I don't know. India is especially strong with string theory. And the Fundamental Physics Prize Foundation has so far had some focus on this. The Nobel Prizes on the other hand require experimental verification of hypotheses. So, for as long as the Foundation has focused on the mathematics in physics, India has done well.

### What are you going to do with your \$100,000?

I haven't seriously thought about it.

Keywords: <u>Shiraz Naval Minwalla</u>, <u>Tata Institute of Fundamental Research</u>, <u>New Horizons in Physics</u> Prize, Fundamental Physics Prize Foundation, Yuri Milner, Infosys Foundation Prize

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# 'We want to attract best, brightest to UK'

Indrani Bagchi & Kounte va Sinha | TNN

British Prime Minister David Cameron comes to Indiaat a time when there appears to be more than a few wrinkles in the relationship. In an exclusive conversation with TOI on the eve of his visit, Cameron makes a determined pitch for more Indian students and businesses to make the UK as their destination of choice.

What do you hope to achieve during your current visit to India?

This is my second visit to Indiathis year, my third as PM, and I'm delighted to be coming back. Especially on such a historic day, as Sachin Tendulkar plays his last ever Test match. I'm a huge fan and I would have loved to make it to Mumbai to watch the Little Master, but there sjust too much else to do.

I'll be meeting Prime Minister Manmohan Singh to talk abouthow we can further strengthen our trade relationship and I'm excited we're launching the Bangalore-Mumbai economic corridor.

The UK strongly supports In-



Indian companies are putting more investment into the UK than into the whole of the rest of the EU. We can still do more. Britain and India are competing in a tough global economic race but we can achieve a lot more together

DAVID CAMERON British Prime Minister

dia's bidforpermanent membership of the UN Security Council and, of course, as Commonwealth members we'll want to discuss how we can support a democratic process in the Maldives and improve humanrights

in Sri Lanka.

India is going to be one of the great success stories of this century, and I want Britain to be your partner as you grow and succeed.

There's been a 25% fall in the number of Indian students at post graduate levels. What would you say to Indians that sense they're not welcome any more?

We want to attract the brightest and the best to Britain. If you are a genuine student studying at a genuine institution, you will get your visa. There are no limits on the numbers. I shall discuss ensuring the recognition of UK Masters degrees in India. Strengthening our education ties is a win-win for both of us.

India is one of the larger investing countries in the UK. But there's a perception that the UK is freezing out Indians when others are welcoming them?

Britain is open for business and we want to attract tourist, students, and businessmen. We have our largest visa operation in the world in India, 12 centres processing 420,000 applications, nine out of 10 applicants getting their visa and now we've also introduced a same day visa service in Mumbai, Delhi and Chennai.

Our people-to-people ties are

at the very heart of the UK-India relationship. That's why I've asked MP Priti Patel, who is accompanying me on the trip, to take on a new role as our Indian Diaspora Champion.

Indians account for one in every five Asian prisoners being held presently in high security jails across England and Wales. Do you planto send them back to India and have you raised this issue with the Indian government?

When foreigners are sentenced to prison in the UK, its right to do everything we can to ensure that they serve their sentence in their own country not at the cost of the British taxpaver.

We have a voluntary prisoner transfer agreement in place with India to return criminals there and our officials have been working with their Indian counterparts to identify ways to improve the system.

Chinese investment in the UK has increased recently while India was the third largest investor in the UK in 2011. How does the UK plan to attract more Indian investments?

I've been determined to un-

leash the untapped potential of our relationship which was quite frankly neglected during the first decade of this century.

We are on course to double bilateral trade to £23bn by 2015 and UKexportsto Indiaare up 25% in 2013. There are already over 900 Indian companies in the UK and in 2012, the UK attracted 89 new projects from India generating over 4,100 new jobs, from Piramal in Northumberland and Scotland to Kumar Organics in Luton. Indian companies are putting more investment into the UK than into the whole of the rest of the EU. We can still do more. Britain and India are competing in a tough global economic race but we can achieve a lot more together than we can apart.

Vodafone tax issue remains a thorn. Will you raise with PM Singh and how can it be resolved?

Vodafone is working with the Indian government to resolve this dispute and I am hopeful that a solution can be found soon. It's worth highlighting that Vodafone's investment in India has made a significant contribution to the economy, creating valuable new jobs.

# All India Council for Technical Education caught in a cleft

### Adverse Supreme Court has cancelled its monitoring role, leaving the sector's oversight in ambiguity



Every year on August 1, the All India Council for Technical Education (AICTE), the country's technical education regulator, gets busy sorting applications and granting approvals to edu-preneuers to set up new institutions. This year, however, a Supreme Court verdict has left the AICTE wondering if it can begin the process at all.

AICTE's confusion is only adding to the woes of India's technical education sector. Technical education, a segment which has one-fourth all Indian students enrolled and contributes five points to the 19 per central education.

gross enrolment ratio, does not currently know the direction it is headed.

According to AICTE officials, the genesis of today's situation dates back to 2004, when some arts and science colleges in Tamil Nadu were running a Master of Computer Applications (MCA) programme.

AICTE objected to this. Subsequently, many colleges affiliated to Bharathidasan University and Manonmaniam Sundaranar University moved court, questioning AICTE's role and to find if colleges affiliated to universities were obliged to take separate permission from it to run technical courses.

Nine years later, the Supreme Court's answer was "... that colleges who have opened the courses in question are affiliated to the universities. They are the controlling authorities with regard to their intake capacity for each course, the standards to be followed for each course, the syllabus of the course, the examination proces etc.... Thus, for all intents and purposes the courses are being run by the Universities... Therefore, the controupon the affiliated colleges of the University is vested with the University itself and it cannot be said that for certain type of courses, the control will be with the AICTE."

The court ruled that "an MBA (Master of Business Administration) course is not a technical course within the definition of the AICTE Act", and "an approval from the AICTE is not required for obtaining permission and running an MBA course by the appellant colleges."

It further said AICTE's role is advisory, implying it can prescribe uniform standards of education in affiliate members of a university, by sending a note to the University Grants Commission (UGC).

While this has brought cheer to many institutions, it's a matter of concern for some.

"We are an autonomous institution, providing a postgraduate diploma in management. We don't know who is our regulatory body now. We had applied to the AICTE for approval to add seats to our existing programmes. Now, that is stuck. We don't know if for 2014-15 we would be able to add seats," says the director of a Mumbai-based management institute.

For management education, AICTE has created two separate segments - masters and diploma. The masters degree is awarded by universities or institutes affiliated to universities, while an AICTE-recognised institute awards a Post Graduate Diploma in Management (PGDM).

Thus, institutes not affiliated to universities are autonomous and need AICTE's permission for expansion. As PGDM institutes do not fall under the state's purview and now not even under AICTE's purview, the institutes say they don't know who will set the standards for them.

Referring to the apex court order that AICTE's role is advisory, AICTE chairman S S Mantha quips: "But advisor to whom? We are clueless."

According to Rahul Choudaha, director, World Education Services, New York, business education in India is already in a state of crisis. A regulatory vacuum will only aggravate the situation.

"With UGC itself struggling in enforcing quality standards, the case of IIPM (Indian Institute of Planning and Management) has been constantly embarrassing the powers and purview of UGC. Giving regulatory powers to UGC and expecting universities to assure quality of technical colleges for a highly fragmented system in terms of quality will make things worse," adds Choudaha.

However, AICTE can take heart from the fact that many B-schools which have been opposing many of its moves in the past still want it at the helm.

"The Supreme Court's verdict may look logical but UGC currently lacks capabilities, wherewithal and expertise to deal with the 11,800 technical education institutions. AICTE evolved during the last 20 years and, in spite of all failures, did reasonably well," says Harivansh Chaturvedi, director, Birla Institute of Management Technology and alternate president, Education Promotion Society of India.

According to Chaturvedi, with the public universities currently in a bad shape, and under corrupt influences, the technical education players have serious doubts if UGC will be able to deliver.

To add to AICTE's woes, the Delhi High Court said last month that Common Management Aptitude Test administered by AICTE cannot be considered compulsory to seek admissions in B-schools.

In AICTE's defence, Mantha says: "AICTE has delivered in the past few years and the nation should be defending us. Which other regulator has brought about this kind of transparency? We need to preserve this transparency."

He claims AICTE has brought about a lot of difference in technical education over the past five years. "We have done a good job. But no one seems to notice that."

Another AICTE official adds: "In medical education, one PG (post graduate) seat entails Rs 2-4 crore in capitation fee. Where do you find such examples in technical education? Students and parents call AICTE directly and seek help. We have helped them get reimbursement from colleges. Which regulatory body works

in this manner?"

AICTE, which had once been synonymous with corruption, has of late been advocating transparency and accountability.

Set up in 1945 as a national-level advisory body, AICTE was given statutory status in 1987 by an Act of Parliament for regulating and developing technical education.

Mantha, who took over the reins at AICTE in January 2012, has been a professor of robotics for 16 years and is credited with bringing e-governance at AICTE.

The HRD ministry is dragging its feet on an ordinance to amend the AICTE Act, to undo the Supreme Court judgment. AICTE plans to fight for its own existence by filing a curative petition in the court shortly. Its review petition on the SC verdict was rejected this July.

- \* AICTE had 11,800 technical education institutions under its purview
- \* It oversaw investments worth Rs 6 lakh crore in tech education in the past decade
- \* Technical education generates revenues of Rs 1 lakh crore per year
- \* AICTE's yearly income is Rs 200 crore which it earns through services rendered to tech institutions and processing fee
- \* While 40% of the revenue is used in grant allocation, 60% goes as corpus, used for introducing new schemes

### IIT experts list pollutants affecting Golden Temple

By TNN | 13 Nov, 2013, 05.56AM IST Post a Comment

CHANDIGARH: Main building of the Golden Temple in Amritsar is adversely affected due to pollution caused by industries, vehicles, generators, 'tandoors' (clay ovens) of restaurants around the shrine and burning of crop stubble by farmers. This was stated by experts from the Indian Institute of Technology (IIT), Delhi in their interim report submitted on Tuesday to the Punjab and Haryana high court.

IIT, Delhi was assigned to carry out a study on the effect of environmental pollution on marble metal used in the structure of the holy Sikh shrine. Experts had focused on a 10-km radius around the Golden Temple to collect data about pollutants affecting sheen of the structure.

Taking up the interim report, a division bench of the high court headed by Chief Justice Sanjay Kishan Kaul has asked Punjab government to take action as per recommendations of the experts and file a status report before it.

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The state government informed the bench on Tuesday that Shiromani Gurdwara

Parbandhak Committee (SGPC) had voluntarily paid Rs 4 lakh towards expenses of the study carried out by IIT and remaining Rs 2 lakh had been given by the Amritsar municipal corporation (MC).

The issue had reached the court after a letter in that regard was written by Gursewak Singh. In the letter, Gursewak had informed that industry in and around the area was causing pollution to the gold plates fixed on the domes of the gurdwara. Taking suo motu cognizance of the letter, the high court had issued a notice to the Punjab government seeking its response on the issue.

After hearing the stand of the Punjab government and other agencies, the court had asked the state to conduct a study on pollution in and around the Golden Temple by a body of experts.

Thereafter, Punjab Pollution Control Board (PPCB) tied up with IIT, Delhi for the study. PPCB has already set up an air ambient plant at the Golden Temple to measure air pollution and a rainwater sampling plant to check water pollution in and around the complex.

#### The Hindu

### NASA releases stunning new image of Saturn and Earth

PTI



An annotated version of the July 19, 2013 natural-colour portrait taken by NASA's Cassini spacecraft. The image is the first to show Saturn, its moons and rings, plus Earth, Venus and Mars, all together. Courtesy: NASA/JPL-Caltech/SSI

The new panoramic mosaic of the majestic Saturn system taken by NASA's Cassini spacecraft shows the view as it would be seen by human eyes.

NASA has released the first-ever natural-colour portrait of Saturn, in which the planet, its seven moons and rings, and Earth, Venus and Mars, all are visible.

The new panoramic mosaic of the majestic Saturn system taken by NASA's Cassini spacecraft, which shows the view as it would be seen by human eyes, was unveiled at the Newseum in Washington on Tuesday.

Cassini's imaging team processed 141 wide-angle images to create the panorama. The image sweeps 6,51,591 km across Saturn and its inner ring system, including all of Saturn's rings out to the E ring, which is Saturn's second outermost ring.

For perspective, the distance between Earth and our Moon would fit comfortably inside the span of the E ring.

"In this one magnificent view, Cassini has delivered to us a universe of marvels," said Carolyn Porco, Cassini's imaging team lead at the Space Science Institute in Boulder.

"And it did so on a day people all over the world, in unison, smiled in celebration at the sheer joy of being alive on a pale blue dot," said Ms. Porco.

The mosaic is part of Cassini's "Wave at Saturn" campaign, where on July 19, 2013 people for the first time had advance notice a spacecraft was taking their picture from planetary distances.

NASA invited the public to celebrate by finding Saturn in their part of the sky, waving at the ringed planet and sharing pictures over the Internet.

An annotated version of the Saturn system mosaic labels points of interest. Earth is a bright blue dot to the lower right of Saturn.

Venus is a bright dot to Saturn's upper left. Mars also appears, as a faint red dot, above and to the left of Venus.

Seven Saturnian moons are visible, including Enceladus on the left side of the image.

Zooming into the image reveals the moon and the icy plume emanating from its south pole, supplying fine, powder-sized icy particles that make up the E ring.

The E ring shines like a halo around Saturn and the inner rings. Because it is so tenuous, it is best seen with light shining from behind it, when the tiny particles are outlined with light because of the phenomenon of diffraction.