

Newspaper Clips

November 10, 2011

Statesman Kolkata 09.11.2011 P-7

From body shop to hi tech

The tendency of India's government and its industrial sector to play safe when it comes to technological invention will prove disastrous in the long run if more emphasis is not put on research and development, writes arunabha bagchi

A NEW controversy regarding IIT graduates made headlines recently in India. It was sparked off by comments made by Mr Narayan Murthy at the IIT 2011 Global Conference in New York while ruing the poor quality of recent IITs graduates. His contention was that the quality of students gaining admission to the IITs had deteriorated over the years owing to overemphasis on coaching classes. Chetan Bhagat, a well-known writer and an IIT graduate, hit back, wondering how could someone, who ran a 'body shop and calls it hi-tech', make such sweeping comments.

While Bhagat's observations about Infosys were just as candid as Mr Murthy's take on the quality of recent IIT graduates, the point worth exploring is whether the perception that IIT bellwethers such as Infosys are no more than mere body-shops and not really pioneering centres of technological excellence holds good or not. Newspaper articles and books churned out by American and Indian presses would give a layman the impression that Indians are giving a tough competition to Americans in the technology race with only the Chinese still in the reckoning. Japan and Europe already seem to have disappeared from the picture. A glance at an article titled *Special Report: Technology in India and China* that appeared in the 8 November, 2007 issue of *The Economist*, made it clear that outside of the pharmaceutical and software sectors, India finds hardly any mention. Our technology handicap in other sectors of the world economy cannot be more glaring. What is also surprising is that while the article lauded the remarkable success of the Indian pharmaceutical industry and had special words of praise for Biogen, to name a few, it pointed out: 'Few Indian firms are creating drugs, rather than recreating them'. Furthermore, according to *The Economist*, exports of indigenous software comprised a tiny fraction of the Indian IT industry's total service exports. Most telling was the comment of the then head of the National Association of Software and Services Companies (Nasscom), Mr. Bhanu Karrik: "...companies are either born as product companies or as service companies, not both. Scribes want to become better scribes. To be a poet, you probably need to be born as one". This is likely what Bhagat had in mind when he had reacted to Mr Murthy's comments. Why should we then bother about the deteriorating quality of IIT engineers? The truly bright among the IIT graduates should be busy inventing products for companies in the West. Perhaps the non-so-brilliant ones would serve India's interest better.

How does one then reconcile this scenario with the barrage of good press that the 'India story' seems to be enjoying? Well, it would seem that this had been made possible by a twist in the tale provided by *dest* and *phobos* business gurus. They put the thrust on "innovation" as opposed to "invention" to forecast India's continuing high growth in the foreseeable future. Roughly speaking, innovation has three levels: "know how", "know why" and "invention". "Know how" means learning and tweaking the production process, better quality control, making slight adjustments to the technology already in use and adopting other minor measures to improve business performance. "Know why" involves delving into the technology in use and improving the design by trial and error. This is commonly known as "reverse engineering". The third level, of course, is genuine technological invention. In fact, a subtitle in the 8 November, 2007 issue of *The Economist* suggests 'A new way of mixing existing technologies is

also innovation'. The argument often advanced is that India has unlimited potential in this broad area of technological innovation. A report put out by one such organisation argues that traditional companies in India are so inefficient that just improving the functioning of a vast majority of them in order to bring them to the level of the few well-run ones would increase India's production by five-fold. So, the World Bank and other moneybags of the world recommend that India remain in the "know how" stage and protect the impressive growth rate witnessed during the last decade without disturbing the status quo. But, given India's lack of 'inclusive innovation', this growth model is bound to hit a wall in the medium term. International experts do not advise India to even dabble in the "know why" stage of innovation. The argument is that the "know why" stage does not give much of an immediate return though it is, of course, an essential step to reach the invention stage that guarantees an enormous return — something enjoyed by the developed economies. India is warned again and again that any policy favouring investment in invention would be very expensive, highly uncertain and unnecessarily stressful.

So, how does India fare by international standards in the matter of technological innovation? The *World Competitiveness Index 2011-2012* prepared by the World Economic Forum puts India in the 38th place in the field of "innovation" — way above Pakistan but nothing to write home about. A closer scrutiny makes it clear that India would have done far worse but for the economic meltdowns of the former USSR and some Soviet bloc countries during the 1990s. But India is advised to remain optimistic. For any country, optimism of such a nature is derived from its level of "technological readiness" or, the current state of human resources in a country deemed necessary for successful absorption of new technologies. Another glance at the *World Competitiveness Index 2011-2012* made it clear that India has very little to be optimistic about for the simple reason that it ranks 93rd under the head "Technological Readiness". In fact, in terms of both innovation and technological readiness, India is doing no better than Indonesia — a country that is rarely mentioned by business gurus.

India's poor performance in technological readiness is a very serious matter and needs a separate discussion. It will be appropriate at this stage to recount India's efforts to 'develop innovative

technology since Independence. Even before Independence, top Indian scientists had been making plans. The final strategy adopted was two-fold: to develop strategic technologies and to help foster indigenous technologies for both capital and consumer goods through import substitution. The first strategised to the birth of Bhabha Atomic Research Centre (BARC) and the Indian Space Research Organisation (ISRO). The success of both BARC and ISRO is now well known. The only pity is that the technology developed in these centres did not appear to have much of a spillover effect on the industry as it happens in developed countries. To implement the second strategy, diverse government-run research centres were set up under the aegis of the Council for Scientific and Industrial Research (CSIR). Research undertaken in these centres had only a marginal impact on the private sector. Big companies catering to sheltered markets were not particularly interested. And import substitution efforts resulted in horrible inefficiency, obsolete technology, shoddy products and the license raj.

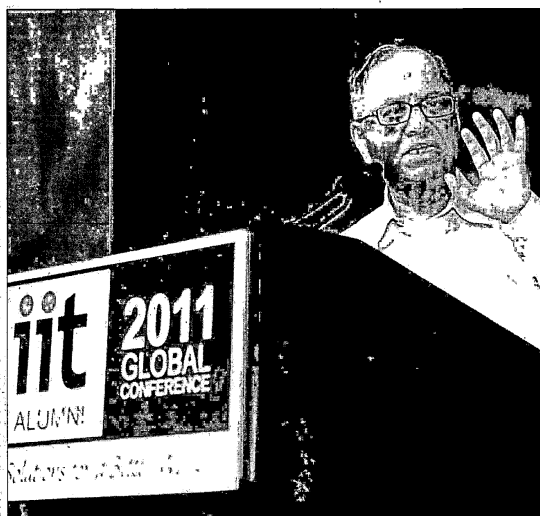
There was also a parallel effort by the government to create a technologically-trained workforce by setting up a number of IITs, complemented by National Institutes of Technology and other engineering colleges. India's best and the brightest were attracted to IITs because of their world-class facilities. Some of the IIT graduates went on to become highly successful engineers and scientists abroad, mostly in the USA. The opportunities for successful invention offered by the Indian industry were, however, limited. So, in effect, India eventually gave some very expensive gifts to the West. No wonder, IITs received universal acclaim and the attention of multinational corporations.

With economic liberalisation, efforts were undertaken by the government to provide fiscal incentives for research and development (R&D) in the private sector at the expense of R&D in government-run research institutions. As such, one would expect the private sector to invest more in R&D in the new economic climate. Expenditure on R&D as a share of the gross national product (GNP) is an important indicator of a country's level of innovation. In the case of India, this share steadily increased from 0.17 per cent in 1958-59 to 0.98 per cent in 1987-88 and thereafter started declining before settling around 0.8 per cent. This confirms the general perception that India's technology remains primarily in the "know how" stage, despite the fact that huge profits made after economic liberalisation by Indian companies have gone then the whereabouts to move into the "know why"

stage. We know that Japan, and later, South Korea and Taiwan, deployed the "know why" strategy extremely successfully in the years following World War II. It would seem that the only exception to the rule has been delivered by India's pharmaceutical industry that has clearly crossed over to the "know why" stage.

While writing this article, I turned in to the *BBC World Service* just when the presenter was announcing that Europe's first satellite-navigation (starlink) spacecraft, developed as part of its Galileo mission, had been launched into orbit. This starlink system is Europe's answer to the GPS system — developed originally for defense, and now used widely for civilian purposes all over the world — put into orbit earlier by the USA. I recalled that at the planning stage of the Galileo mission, the USA had put every conceivable pressure directly and indirectly through Great Britain, to dissuade the European Union from going ahead with the mission. The argument advanced was that the GPS system was available to everyone for free and to try to develop an alternative system would be very expensive, highly uncertain and unnecessarily stressful. Sounds familiar? The stance of European Commission's Vice-President Mr Antonio Tajani, as reported on the *BBC* website could not have been clearer: "Galileo is at the heart of our new industrial policy," Mr Tajani said once the separation of satellites from rockets confirmation had gone through. "We must commit very strongly to Galileo. It is not more our focus beyond the "know how" stage in order to play safe with economic growth will prove disastrous in the long run. Our nuclear and space research must find a resonance in the industrial sector. Even more important is to develop an indigenous defense industry with a strong research base. The civilian spillover of defense technology would give a big boost to new inventions and the private sector can play a major part in this endeavour. Indian business houses must spend far more on R&D than they do at the moment. The ultimate key is in forming a research triangle involving universities, government-run research institutions and the private industry so that India's "Innovation" racking climb steadily. Only then will India be able to shed its "body shop" sensibilities and put its economy on the "hi-tech" track.

The writer is ex-dean and professor of applied mathematics at University of Twente, The Netherlands



Hindustan Times, ND 10/11/2011 P-4

BTech course in Metro engineering from 2013

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NEW DELHI: The technology to start and run Metro services may soon become a specialised course in Indian universities.

The All India Council for Technical Education (AICTE) has approved the plan to allow universities to formulate BTech courses in Metro engineering, sources said.

The course will give students a four-year engineering degree and is aimed at training engineers to fuel the development in the transport system across the country.

“The idea actually came from the Delhi Metro administration. It had written to the minister of human resource development, asking him to allow universities to start a course that would provide personnel trained in the field of Metro rail transport systems,” said a senior AICTE official who did not want to be named.

Currently, IIT Delhi and Chennai conduct training programmes in Metro engineering. “The Metro rail system has seen huge success in foreign countries as well as in our own. It is the pride of Delhi. Also, it is a field that will see tremendous growth in the coming years as

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SENIOR OFFICIAL
AICTE

more and more cities are planning their Metro lines. We think it's important that specialised engineers are trained for this,” the official added.

While the Delhi Metro rail started in 2002, the first phase

of Bengaluru Metro started a month back.

Since the Metro has various specialisations in terms of technical expertise, the course is expected to give students an option of choosing for either electrical, mechanical or civil engineering for Metro in the last year. The course is expected to start in 2013 and the first batch of students will pass out in 2017.

Metro engineering is the 274th BTech course to be approved by the AICTE. The body has been favouring specialised courses such as petrochemical engineering in the last few years.

HindustanTimes

Title : TCS big bang: Record \$2.2-bn order from UK

Author :

Location : NEW DELHI: I

Article Date : 11/10/2011

TCS big bang: Record \$2.2-bn order from UK

HT Correspondent

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NEW DELHI: India's largest technology company, Tata Consultancy Services, has bagged a \$2.2-billion (₹11,037 crore) outsourcing contract — the biggest tech deal for an Indian firm — from the UK-based pension provider, Friends Life.

Under the deal, TCS and its UK arm, Diligenta, will provide technology infrastructure solutions to the clients of Friends Life. TCS said on Wednesday the 15-year deal also re-established India's position as a technology hotspot, offering state-of-the-art services.

"India still enjoys the cheaper-better-faster advantage compared to other emerging outsourcing hubs, such as the Philippines. We are cost-competitive, and the quality and speed of our delivery is far better," Kiran Karnik, information technology veteran and former president of National Association of Software and Service Companies (Nasscom), told HT.

TCS, which clocked a Rs 29,275-crore revenue in 2010-11, won a \$2.5-billion (about Rs 12,500 crore) contract in 2008 from Citigroup Inc. It was part of TCS' acquisition of Citigroup's India-based back-office division.

CONTINUED ON PAGE 6

HindustanTimes

Title : TCS dispels slowdown fears...

Author :

Location :

Article Date : 11/10/2011

TCS dispels slowdown fears...

CONTINUED FROM PAGE 1

Expectedly, investors, anxious about India's software industry's ability to bag global deals during the slowdown, cheered the move. TCS shares closed 1.8% up at R1,123 , on a day when the 30-share benchmark Sensex closed 1.2%, down at 17,362.10.

Signs of a slowdown, at least in the technology sector - one of the factors that drove millions of middle class Indians' aspirations - are not yet visible. "We are by far the most premier technology off-shoring destination, there is no doubt about that and this deal only reinforces this view," said Karnik.

HEAD START ON THE LEARNING CURVE

Universities in India and abroad are reaching out to young talent

M SARASWATHY &
KALPANA PATHAK
Mumbai

Indian B-schools and international universities are now traversing the extra mile to catch potential students at a young age.

The Indian Institute of Management Indore, Hyderabad-based Indian School of Business (ISB), Harvard University and University of California, Irvine, are some of the prominent institutes that are approaching prospective students at the undergraduate level through various initiatives.

While ISB connects with young students through its Young Leaders Programme (YLP), Harvard University's Secondary School Programme (SSP), a high school summer programme, allows them to explore subjects which are not available in high school and earn college credit in Harvard courses.

Last week, the University of California (UC), Irvine, launched its International Undergraduate Preparation Program (IUPP) which will prepare qualified students for undergraduate admission and academic success at the university. Within the IUPP, UC has launched two new tracks — engineering track and biological sciences track — for Indian students. Each track has a special curriculum of essential freshmen courses that is designed and overseen by the respective school of engineering or biological sciences. UC officials believe that this initiative will help prepare participants to score higher in the Scholastic Aptitude Test (SAT) and gives them an opportunity to take American and academic culture courses to better assimilate with the local culture.

Angelika P Volkman, director of International Pro-



grams at the University of California, Irvine, says, "Students are enrolled in three quarters' worth of freshmen courses alongside matriculated students, the credits from which can be applied to UC Irvine or other university undergraduate studies. This means that Indian students still graduate within four years' time."

ISB's YLP on the other hand aims to identify young achievers from across the world. The talent of these undergraduate students may be reflected in their outstanding academic records and/or extra-curricular achievements. YLP provides guaranteed admission to one-year Post Graduate Programme (PGP) at ISB, after one year and nine months of work experience.

Deepak Chandra, dean of

Indian School of Business, says, "It is important to get in good students to your school. Plus, developmental efforts should start at an early age. We have tried to identify the right people at an early stage. Our Young Leaders Programme is an initiative in this direction." The response to the programme, he says, is quite good but since ISB is selective, only about 50 students made it this year. The programme also accelerates career growth during the two pre-PGP years through structured learning and mentorship programmes and concludes with admission to post graduate programme in management.

To get selected, apart from having an outstanding record in academics and extra-curricular activities, candidates have to submit GMAT scores

and go through an on-campus selection process. Each selected candidate is given a YLP scholarship of ₹1 lakh, in addition to their existing need, merit and corporate scholarships.

Harvard University's SSP, the university's website says, is open to all high school students who will graduate in 2012, 2013 or 2014, and meet the application and admission criteria. An email sent to Professor Venkatesh N Murthy for Harvard Summer Programme in India remained unanswered.

IIM Indore has also launched a five-year integrated programme in management that will provide both undergraduate and post graduate education. The institute will begin the programme on November 14.

Indian Express, ND 10/11/2011

P-12

The education wars

IN country after country, the consensus over the importance of education is matched by angst over how to reform it. These debates have two dimensions. There is the increasingly murky relationship between education and employment. Unemployment is being attributed not merely to a business cycle downturn, but a mismatch between education and employment. In advanced countries, college graduates are less likely to be unemployed than their less educated counterparts. The technology revolution and globalisation produced a pitiless combination. On the one hand, you must have higher skills to have a shot at a job. On the other hand, there is global competition for those jobs. The answer to both these challenges, so the story goes, is education reform: education that allows you to participate in the economy, and education that allows you to compete. Both propositions seem intuitively obvious. But whether education will continue to be enough to give access to jobs, if the competition becomes genuinely global, is an open question. Education will be central to the arsenal of competition between nations. War metaphors are not alien to education. After all, the famous American Report, "A Nation at Risk", had as far back as 1983 warned that the nation "has been committing an act of unthinking, unilateral educational disarmament".

In countries like India, there is another version of the education-economy mismatch. There is a disjuncture between the demands of the economy and what education produces. Part of this may be simply a matching problem: there is a supply out there, but individuals cannot be matched with the right kind of jobs. Part of it is a genuine shortage, exacerbated by the fact that schooling is not the same thing as education, just as having a degree is not the same thing as having actual skills. Low (albeit growing) rates of educated female participation in the labour force means some of India's significant human capital is simply not com-



We haven't even begun to address the key questions on schooling

PRATAP BHANU MEHTA

ing on the job market. India is also going to increase its retention rate in secondary schools and higher education. In the short run, this helps mitigate the employment challenge: it may be that the upward pressure on wages is due in part to the fact that the supply of labour is shrinking because more people are staying longer in school. States with higher education achievement like Kerala tend to have higher unemployment. So while education is intrinsically important, the relationship between education and employment in the long run is no less uncertain. The framework for calibrating education to the job market remains a leap of faith.

But if the top end of education is marred by uncertainty, so is the

Our curriculum debates have oscillated between ossified, bureaucratic imaginations, taking perverse pride in an endless amount of material formally covered, and the romantic fantasy of an oxymoron called free, unstructured education.

lower base. With the Right to Education Bill, the milestone of near total enrolment and access to adequate infrastructure will have been achieved. The demand for schooling has exploded. But the key issues in school reform — quality and accountability — are still open questions. It is, in retrospect, amazing that so much ideological energy has been expended on the issues of public versus private schooling. Part of this was understandable: there was a deep consternation at the failures of the public system; and now there are questions about the RTE's possible effect on low-cost private schools that have been as much part of the education revolution as any. The comparative evidence on

what systems work is mixed at best: there are successful and unsuccessful models of all systems, public, private or public-private partnerships. But the focus of debate largely remains the somewhat unresolvable and abstract issue of systems.

The real tricky questions come in the realm of teaching, testing and curriculum, no matter what the system. But these three issues are harder to resolve because they involve difficult choices. They are also not the sort of issues that lend themselves to neat legislative or bureaucratic solutions. There is a consensus in most studies that exposure to good teachers is the surest guarantee of improved learning achievement; equally there is a consensus that good

teachers are not easy to identify before the fact. The quality variance of teachers, even in India's so-called top schools, gives one a reason to pause. Some have proposed that teachers be appointed only after long internships and evaluations. But there is no framework in which to think of our recruitment practices.

At one level, testing is a no brainer: an essential ingredient of accountability is being able to measure. Organisations like Pratham revolutionised our discourse on education by simply measuring what children know. It is a mark of some progress that there is now at least beginning to be a debate over what we should measure: at higher levels, what is the trade-off

between "aptitude"—based testing, and content-driven exams? At the lower level, there is a need to at least track basic achievement in mathematics and literacy. But while some measure of testing is essential for any accountability, preventing an education system from being distorted by the superficial certainties of testing is a different challenge. An equally deeper challenge will be responding to results of such tests. At one level, these can be a tool for teachers to identify where to begin their teaching: teaching must talk to a child, not talk at them. On the other hand, what we do know from comparative evidence is this: given flexibility and a culture that makes students the centre of education, not abstract objectives, teachers can improve outcomes. Yet, it takes enormous resources and the best teachers to compensate for the complex background inequalities that result in unequal educational performance. Testing allows for a perverse kind of sorting: where society stops investing in weaker children. These are not insurmountable challenges. But they will get exacerbated in times to come.

Our curriculum debates have oscillated between ossified, bureaucratic imaginations, taking perverse pride in an endless amount of material formally covered, and the romantic fantasy of an oxymoron called free, unstructured education. This is now being replaced by equally false dichotomies between skill-based and general education, and near total neglect of the basics like writing, logical reasoning and mathematical skills. That we need the educational arsenal is clear. But post-RTE, the oldest questions need to take centre stage. What should we be teaching? How should we be teaching? Why should we be teaching? And how do we know that we have in fact managed to teach? Or else, to use the other war metaphor, will our education be arming without aiming?

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Business Line ND 10-Nov-11

P-18

Scope for greater private role in higher education: E&Y

Our Bureau

New Delhi, Nov. 9

There is scope for greater private sector participation in higher education, says a recent Ernst & Young report.

The report, brought out in collaboration with industry chamber, Federation of Indian Chambers of Commerce and Industry, presents a case for loosening regulatory framework.

Private educational institutions have been mushrooming in the past few years. The percentage of students enrolled in unaided private institutions has also been growing, according to the report.

Education is a lucrative business currently as India

► *With the implementation of the Right to Education Act, a surge in enrolment at the primary and middle levels is expected.*

figures at the top of the most-sought after markets in the world with a population of 234 million in the 15 to 24 years age group, says the report.

With the implementation of the Right to Education Act, a surge in enrolment at the primary and middle levels is expected, which would create a huge eligible pool for enrolment in higher education in the long term, it says.

State governments are fo-

cussed on capacity creation and a bulk of the expenditure is unplanned, directed toward maintenance and administration of existing institutions, claims the report.

The Gross Enrolment Ratio (GER) of India is rising but is not as yet on par with international GERs. The Government has set a target of achieving 30 per cent GER by 2020, which means about 40 million students enrol-

ments. At present, there are 14.6 million students in higher education sector. The private sector wants to target this additional capacity of 25 million seats over the next decade.

E&Y estimates an investment of Rs 1 million crore, an average of Rs 0.4 million per seat. Of this, the private sector would be required to contribute Rs 50,000 crore (assuming that private sector accounts for 52 per cent of total enrolment).

The report lists the corporate and academic collaborations private players must make and the marketing and brand building initiatives required to keep the business of education going good.

Times of India Hyderabad 09.11.2011

P-7

IIT staff to boycott duties from today for pay hike

TIMES NEWS NETWORK

Basar (Adilabad): Teaching and non-teaching staff working in three Indian Institutes of Information Technology (IIITs) at Basar, Nuzvid and Idupulapaya have decided to boycott duties from Wednesday in protest against the state government's indifferent attitude towards solving their long-pending problems.

Mentors, who have been staging relay hunger strikes in the last 18 days, have de-

ecided to boycott duties to bring pressure on the government to solve their problems. There are 524 mentors working in three IIITs. Sources said the students would be hit hard with software and hardware teachers, technicians and home room teachers (HRTs) deciding to stay away from duties from Wednesday.

The agitating mentors accused the government of paying salary only for six hours despite utilizing their services for 18 hours a day.

Though it was mandatory to appoint 426 mentors for 12,000 students in three IIITs, the government has appointed only 281 mentors in 2009. In 2010 and only 243 mentors were recruited as against the required staff of 426 for 9,000 students last year, they said.

They wanted the government to enhance their salary from Rs 15,000 to Rs 30,000 and HRTs' salaries from Rs 10,000 to Rs 20,000. They are also demanding provident fund and eight-hour shift.

Publication: The Times Of India Delhi; Date: Nov 10, 2011; Section: Times Global; Page: 24;

UK students protest fee hike

London: Students marched through London on Wednesday to protest cuts to public spending and a big increase in tuition fees. Police said more than 2,000 people were taking part as the march set off with chants of "No ifs, no buts, no education cuts".

Some 4,000 police officers were deployed along the route, which wound from the University of London to the city's financial district. At Trafalgar Square, a group of



Demonstrators march through London on Wednesday

protesters erected more than 20 tents at the foot of Nelson's Column in the latest spinoff of the Occupy Wall Street protest camp movement.

Annette Webb, an international development student at Portsmouth University, said tripling tuition fees to £9,000 from next year "will price out most students". "It will mean that education is only for the rich and I believe it should be for everyone," she said. **AP**

रुड़की आईआईटीक का 11वां वार्षिक दीक्षांत समारोह 12 नवंबर से

रुड़की (सं.)। 12 नवंबर को संस्थान का 11वां वार्षिक दीक्षांत समारोह आयोजित होने जा रहा है। यह आईआईटी के रूप में 11वां दीक्षांत समारोह है, परंतु वह संस्थान के सबसे पुराने इंजीनियरिंग संस्थानों में से एक है और रुड़की के लिए यह गौरव की बात है। कि यहां पर दुनिया का एक प्राचीन और साथ ही सबसे प्रतिष्ठितों में से एक इंजिनियरिंग संस्थान मौजूद है।

इस वर्ष भारत के योजना आयोग के उपाध्यक्ष माननीय श्री मंटेक अहलुवालिया जी ने दीक्षांत समारोह के मुख्य अतिथि के रूप में यहां आना स्वीकार किया है। संस्थान द्वारा उन्हें उनके कार्यों के लिए डॉक्टर ऑफ साइंस की मानद उपाधि से सम्मानित किया जाएगा। इस दीक्षांत समारोह की अध्यक्षता बोर्ड ऑफ गवर्नेर्स के अध्यक्ष श्री अनल जीत सिंह जी करेंगे।

इस वर्ष भी संस्थान अपने चार वर्ष पूर्व छात्रों को सम्मानित करने जा रहा है। डॉ. श्याम सुन्दर राव, राष्ट्रीय भूगोलिकीय शोध संस्थान, हैदराबाद में जेसीबोस राष्ट्रीय अध्येता तथा वैज्ञानिक-जी है। आपने 1977 में रुड़की विश्वविद्यालय से एम.टेक में उत्तीर्ण किया तथा उच्च विभेदन भूकंपीय प्रयोगों का विकास करके भारतीय महादेश की गम्भीर भू-डीप

अर्थ डबियां सृजित करने में अत्यधिक महत्वपूर्ण योगदान किया है। शैक्षणिक तथा शोध गतिविधियों में आपके योगदान के लिए आपको शैक्षणिक शोध की नामांकन श्रेणी में पुरस्कार हेतु चुना गया है। श्री जिय प्रकाश अग्रवाल ने 1976 तथा 1978 में रुड़की विश्वविद्यालय से क्रमशः बीई तथा एमई उत्तीर्ण किया तथा नागरिक उड्डयन के क्षेत्र में महत्वपूर्ण योगदान दिया है। आप भारतीय विमानपत्तन प्राधिकरण के अध्यक्ष हैं, तथा

विशेष योगिता के साथ देश के 125 विमानपत्तनों का प्रबंधन कर रहे हैं। आपको निगमित विकास, प्रसाशन तथा उद्यमिता की नामांकन श्रेणी में

विशिष्ट एलुमनस पुरस्कार हेतु चुना गया है। श्री बीके. अग्निहोत्री ने, जिन्होंने 1969 तथा 1962 में रुड़की विश्वविद्यालय से क्रमशः बीई तथा एमई उत्तीर्ण किया तथा अपनी रेलवे बोर्ड की सेवा के दौरान महत्वपूर्ण योगदान दिया है। 38 वर्ष की अपनी विशिष्ट सेवा में आप रेलवे के सदस्य इंजिनियरिंग तक बनें।

आपने रेल मार्ग हेतु उच्च कलात्मक स्तर की माइक्रोकंप्यूटर आधारित अनुशरक्षण रणनीति विकसित करने में महत्वपूर्ण योगदान

किया। जिनका उपयोग आज पूरे देश में किया जा रहा है। आपको इंजीनियरिंग व सेवाएं/लोक प्रशासन की नामांकन श्रेणी में विशिष्ट एलुमनस पुरस्कार हेतु चुना गया है तथा हरीश कुमार, जिन्होंने 1978 में रुड़की विवि से इंस्ट्रुटयल इंजीनियरिंग में बी.ई. किया है, संयुक्त राज्य आधारित एक सीरियल उद्यमी तथा शिक्षक हैं।

ग्राम्य क्षेत्रों के वंचित लोगों के कल्याण हेतु संयुक्त राज्य तथा भारत में आपके द्वारा संचालित किए जा रहे अनेक लाभ रहित दान संगठनों के द्वारा समाज में महत्वपूर्ण योगदान दिया है। इसी के तहत श्री कुमार को समाज

सेवा की श्रेणी के अंतर्गत पुरस्कृत किया जा रहा है। इस वर्ष दीक्षांत समारोह में बी.टेक, बी. आर्क व इंटीग्रेटेड डुअल डिग्री के 531, एम.टेक, एम.आर्क, एमयूआरपी, एमएससी, एमसीए, एमबीए, इंटीग्रेटेड एमएससी व एम.टेक (ईएस) के 714 तथा पीएचडी के 114 को मिलाकर कुल 1336 छात्रों को डिग्रीयों प्रदान की जाएगी। इस संस्थान के धातुकर्म एवं पदार्थ इंजीनियरिंग विभाग को भाभा परमाणु अनुसंधान संस्थान

केन्द्र मुंबई द्वारा एक परियोजना सौंपी गई है जिसका कुल परिव्यय 52 लाख रुपये है। लोक सभा की ऊर्जा स्थाई समिति -2010-11 की सोलहवीं रिपोर्ट में वैकल्पिक जल ऊर्जा केन्द्र-भारतीय प्रौद्योगिकी संस्थान में किए जा रहे कार्य की प्रशंसा की गई है। संस्थान द्वारा दीक्षांत समारोह का अवसर पर कुछ महत्वपूर्ण राष्ट्रीय स्तर के पुरस्कार प्रदान किए जाएंगे। इस वर्ष डॉ.इन्द्र वीर सिंह पास्सी (आईआईएसआर, मोहाली) को मैथमैटिकल सांसेज में लाइफ टाइम एचिवमेंट्स के लिए खोसला राष्ट्रीय पुरस्कार, डॉ. पी धनिकईवेलन (केन्द्रीय चर्म शोध संस्थान) को भारत में उनके अपेक्षाकृत स्वच्छ चर्म प्रोसेसिंग प्रौद्योगिकियों में किए गए मौलिक तथा रचनात्मक कार्य के लिए वीएनएमएम अवार्ड, डॉ. पिजूश सुमई (वीआईटी विवि) को जिद्योटेक्निकल इंजीनियरिंग में विगत 5वर्ष में किए गए शोध कार्य के लिए शमशेर प्रकाश शोध पुरस्कार तथा डॉ. सुशील गुप्ता (रिस्क मॉडलिंग तथा इश्योरेंस इंडिया) को भारत में डिजास्टर रिस्क मैनेजमेंट में किए गए कार्य के लिए एएस आर्य-भा.प्री.सं.रु आपदा निवारण पुरस्कार दिया जा रहा है। संस्थान द्वारा छह विषयों में 129 वैब पाठ्यक्रम तथा 110 वीडियो पाठ्यक्रम तैयार किए जा चुके हैं।

**योजना आयोग के
उपाध्यक्ष मंटेक सिंह
अहलुवालिया होंगे
समारोह के मुख्य अतिथि**