Keeping under wrap!

The media had a hard time confirming the news of the unscheduled meeting of HRD Minister Smriti Irani with President Pranab Mukherjee. While official sources, both at the HRD Ministry and Rashtrapati Bhavan, earlier confirmed that Irani called on Mukherjee, by evening the Raisina Hill denied any such meeting took place at all. In the past, Rashtrapati Bhavan readily confirmed news of such formal meetings. What made the matter worse was disclosure by a top IIT official who claimed calling on the President, the Visitor of IIT, only to go in the denial mode by the evening. These two meetings acquired importance because they took place in the backdrop of the controversy involving the resignation of IIT Director. Obviously, the Rashtrapati Bhavan did not want to be dragged in the controversy.
Ministry of control

HRD ministry must explain why IIT Delhi director resigned. Its record so far invites suspicions of meddling.

The row that has erupted over the resignation of IIT Delhi director R.K. Shevgaonkar, two years before his term was due to expire, seems distressingly familiar. Officially, Shevgaonkar is said to have quit for “personal reasons”, and the human resource development ministry has vehemently denied that it brought pressure on him to resign. But the HRD ministry’s recent record invites suspicions of meddling. In this case, the ministry has instituted an inquiry into the allegation that the IIT Delhi director violated the IIT Act by helping to set up the International Institute of Technology Research Academy (IITRA) in Mauritius. But according to M. Balakrishnan, who was deputy director, faculty, when IITRA was initiated and who wrote in these columns last week, the ministry had earlier approved the final MoU. The ongoing conjecture and speculation hurts the reputation of one of India’s most valuable higher education brands. If it is to contain the damage, the HRD ministry must explain itself.

Questions of institutional autonomy, or lack thereof, have bedevilled India’s education system for long. They predate the present government’s tenure. Yet, under Smriti Irani, the HRD ministry is emerging again as a magnet for controversy. Irani took office just as the University Grants Commission’s squabble with Delhi University over the latter’s four-year undergraduate programme (FYUP) erupted into an all-out brawl. The UGC’s about-turn from its own tacit endorsement of the FYUP under the UPA seemed to confirm the suspicion that the HRD ministry was, in fact, pulling the strings. After emerging victorious in this face-off, an emboldened UGC rushed into another altercation, this time with the IITs, over whose degrees it now claims jurisdiction. Concerns over academic freedom have only been sharpened by reports that Irani has held consultations with Sangh Parivar leaders and its education wings.

There have been other missteps: the cavalier mid-term scrapping of German in Kendriya Vidyalaya schools, for instance, and the controversy around the resignation of National Council for Education Research and Training director Parvin Sinclair halfway into her five-year tenure. After years of neglect and inertia, there was hope that an energetic new government and minister might kickstart the process of education reform. Instead, this latest face-off between IIT and the HRD ministry seems emblematic of a seven-month tenure marked by unavoidable confrontations and questionable choices.
IIT-K opens doors to foreign faculty

KANPUR: IIT-Kanpur has decided to appoint foreign faculty to ensure higher academic standards from its next session. The institute has already begun scouting for qualified teachers from several countries to meet its objective. In the past, the institute had been against foreign faculty because it felt the new arrangement would create wage disparity. The plan to hire foreign teachers was approved by IIT-K’s board of governors and the ministry for human resource and development).
Govt to relax land norms for IITs, IIMs, central universities

Aditi Tandon
Tribune News Service

New Delhi, January 3

Faced with immense shortage of urban land to set up new central institutions including IITs, IIMs and central universities, the Narendra Modi-led BJP government is all set to relax land requirements for various categories of top central higher educational institutions.

The HRD Ministry has already set up a five-member committee comprising top administrators, educationists and bankers to recommend the plan of action for rationalisation of land requirements for educational institutions of which there is tremendous dearth in the country.

The committee chaired by Higher Education Secretary Satyanarayan Mohanty has among members KV Kamath, chairman, Board of Directors, ICICI Bank; former education secretary MK Kaw; Director, College of Engineering, Pune, Anil Sahasrabudhe; chairperson, Board of Governors of IIT Roorkee, Ashok Mishra; and Vice Chancellor of Central University of Gujarat Syed Bari.

A source familiar with developments on this front told The Tribune that land requirements for central institutions could be nearly halved to enable the establishment of new IITs, new IIMs, National Institutes of Technology, Indian Institutes of Science and Research and central universities.

The source added that vertical construction was likely to be made a part of land norms in place of horizontal spreads as is the current practice. According to prevailing norms, a state government must spare 100 acres for the establishment of an IIT; 200 acres for an IIM or IISER; 300 acres for an NIT and 500 acres for a central university.

The high-level committee appointed by the HRD Ministry to determine future land norms has meanwhile asked the government to appoint a renowned architect to help it objectively assess land availability, need and related norms.
दूर होंगी नए आईआईटी की बाधाएं

हर दिल्ली, 4 जनवरी (ब्यूरो): नए आईआईटी, आईआईएच के बिल्डिंग किराया से लेकर जमीनों के संदर्भ के लिए केंद्र सरकार शॉपिंग कंपनी ईपोसिस और वातावरण हाफिज कॉन्स्ट्रक्टर्स से सुझाव लेनी। इन शिक्षण संस्थाओं के बनने में आरएजी वन्दना अन्य रक्षाबंधनों के अध्ययन करने के लिए सरकार की ओर से बनाई गई एक कमेटी की बैठक में यह फैसला लिया गया।

केंद्रीय मानव संसाधन विकास मंत्रालय की ओर से फिलावक आईआईटी के लिए 100 एकड़, आईआईएच एवं आईआईएचआर के लिए 200 एकड़, युनाइटेड थे आईआईटी के लिए 300 एकड़ और वातावरण हाफिज कॉन्स्ट्रक्टर्स के लिए 500 एकड़ भूमि की बैठक का आयोजन किया गया है। ये उच्चतर शिक्षण संस्थान व्यापारवाण्यक शिक्षा मुहृद्यक कराया जाना चाहिए।

जहाँ व्यावसायिक एवं एक्सपर्ट बुलाए जाते हैं। इनका आना-जाना सहज से चुना हुआ है, जिस में ईपोसिस और हाफिज कॉन्स्ट्रक्टर्स के आसपास ही जमीन मुहृद्यक मुहृद्यक करने का दायित्व है।

इसके चलते अधिकांश राज्यों ने अब तक इन उच्चतर शिक्षण संस्थाओं के लिए केंद्र की प्रस्ताव तक नहीं भेजा है।

इन शिक्षण संस्थाओं की स्थापना के लिए जमीन रूपों को सुपर चुना में मुहृद्यक करनी है। ये उच्चतर शिक्षण संस्थान व्यावसायिक शिक्षा मुहृद्यक कराया जाना चाहिए।
IIT-M TO POWER IDEAS of entrepreneurial success

Centre for Innovation (CFI), a student-run innovation lab at IIT-Madras, is running an initiative called Nirmaan, a mock incubator to support students with entrepreneurial interests by providing them a risk-free environment to develop their ideas and shielding them from financial pressures through seed funding.

Mahesh Panchagnula, advisor of co-curricular at IIT Madras, said that though CFI’s motto is ‘Walk in with an idea, walk out with a product’, right now the students build a prototype and leave it at that. Through Nirmaan, they aim to make students work on improving their prototype so that at the end of their college stint they are ready with a marketable product.

Twenty-nine teams and projects are now part of Nirmaan, said the idea is to make it easier for student ventures to enter the startup ecosystem outside the college by reducing a few steps in the process. “With a relatively mature product and a network of mentors already with them, it is easier for the student entrepreneurs to approach investors,” Gole said. She added that almost six startup teams that were part of CFI were able to get incubation at IIT Madras’ incubation cell.

The 29 teams which are part of Nirmaan are working on a variety of innovative products ranging from a light-based wearable that is an alternative to alarm clocks to portable paper strip tests to detect milk adulteration. Student managers of CFI are also planning to approach the faculty and students of other colleges to explain the concept of Nirmaan and two institutions have already expressed interest in the idea.

IIT Madras started CFI in 2006 with funds donated by the 1961 batch during their silver jubilee reunion. While CFI’s clubs had around 500 student members in 2008, it now boasts of almost 1,300 student members showing the increase in a culture of innovation and entrepreneurship among the institute’s students.
MHRD panel to finalize IIT plot


KOCHI: An HRD ministry committee will visit Palakkad on January 17 to take a final decision regarding the plot to set up a permanent IIT. They will also finalise the temporary academic block and hostel to ensure that the classes commence next academic year.

State government has identified three places for setting up temporary classrooms with hostel facility for students and residential complex for faculty, on government land.

The three identified spots include - 35 acres of land available at Polytechnic College, 90 acres belonging to directorate of industries and commerce west Puduserry and land available with Fluid Control Research Institute at Kanjikode West.

"A five-member team headed by MHRD's higher education additional secretary Amarjeet Sinha will visit the place and finalise things. We expect to start classes from next academic year,” said higher education department additional secretary M Sherif, who is also the liaison officer from the state for observing land availability to set up an IIT.

IIT Chennai will mentor and manage the new institute till independent directors are appointed, a process that would take up to six months.

The mentor institutes will be asked to find out temporary facilities where the new ones would be housed till they get a permanent campus. If no temporary campus is available, the mentor institute will host the new IIT on its campus.

Railway Ministry seeks to rope in officials with IIM, IIT background to help for budget making


For the first time, the government is inviting suggestions from the public for formulating Railway Budget 2015-16. Railway minister Suresh Prabhu will present the second budget of the National Democratic Alliance (NDA) government in February. Among the other new and unique initiatives taken by Prabhu is creation of a database of the officials having IIT or IIM background.

Discussing the initiative taken by Prabhu, a source close to the development told dna, "The railway ministry has sought suggestions from the general public on the upcoming budget. Also, the minister has called for a list of officials who have degrees from the Indian Institute of Mass Communication and Indian Institute of Technology. This list has been compiled and has been handed over to the minister." Prabhu also desired to know the area of educational specialisation of the officials having IIM, IIT background.

According to sources, this database is being made to deploy the internal resources on specific subjects such as funding models, revenue sharing of infrastructure projects and model concession agreements so that the dependence on outside consultancies could be reduced.
The suggestions to the railway ministry for the budget could be provided on the website of the ministry. The suggestions could be made under 13 heads. These include computerisation, electrical, finance, foot over bridge, freight, infrastructure, land, railway lines and crime prevention.

There is also an innovative ideas head under which suggestions could be given to the railway ministry. The initiative was launched last week, but the sources did not disclose what suggestions have come till date. The suggestions are being collected at a place and will be forwarded to the concerned departments for evaluating whether it could be taken up for consideration in the budget.

Funding of the already announced railway projects, which will require Rs 4-6 lakh crore, is one of the key focus area in the budget. Already, two committees are working on the fundraising aspect of Railways, and will come out with reports soon.

**Ex-President Kalam ignites young minds at Techfest**


MUMBAI: The highlight of the last day of IIT-Bombay's Techfest was a speech by former President APJ Abdul Kalam. Organizers said over a lakh landed at the Powai campus on Sunday.

"I have brought along my entire family for the event," said Lalita Ravichandran, a Reserve Bank of India employee.

"It has been my dream to hear Dr Kalam speak, I have come all the way from Kharghar," said Aishwarya, a second-year engineering student.

Kalam delivered a talk on the various aspects of 'World Vision 2030-Empowering 30 billion'. "In two years, India should move away from consumption of costly fuel to providing solar energy. Youngsters will be the pioneers of India's future development. I am sharing this with you, so that you can become future ambassadors for solar power," he said.

The session ended with an interactive session where Kalam answered questions from young and old on topics ranging from motivation, language barrier in development and challenges to solar power. Several competitions like the robotics event drew crowds at the premier institute. "The competition of robots was appreciated by students and locals alike. Other exhibits like the flight simulator and the go-carting event attracted many," said a member of IIT-B's organizing committee. "The amount of research done by the festival's organizers was impressive. Each exhibit was well researched," said Mugdha, a student of St Xavier's College.

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**HRD Ministry Plans to Rope in States for Skilling Drive**

New Delhi: The HRD Ministry is set to seek state governments help to further Prime Minister Narendra Modi’s skilling mission in a meeting on January 6. The government had recently launched a credit framework aimed at promoting lateral and vertical mobility of students within the vocational education system.

The meeting of all state education ministers on January 6 has been called to urge their governments to adopt the framework and also encourage colleges and universities to start add-on courses to increase employability of students. At this meeting, the ministry will also launch the topic of initiating consultations for new education policies.

Under the new credit framework, students pursuing vocational education will have their learning and achievement mapped in terms of credits, which can then be used for transfer between institutions and programmes. The government is calling it the Skills Assessment Matrix for Vocational Advancement of Youth, or Samva.

Skill development is among the top priorities of the new Modi government, which has created a separate ministry for this purpose. BPL-led Rajiv Gagan Fund has been recently announced as the new minister for entrepreneurship and skill development.

The government has set a target of skilling 500 m youth by 2022, out of which 200 m will be HRD Ministry’s responsibility.
New norms to determine land requirement by varsities soon

PNS • NEW DELHI

The Centre has set up a panel to recommend fresh norms and criteria for determining land requirement for elite institutions like IITs and IIMs taking into account the topography and class of a city. According to a directive by the HRD Ministry, revising land requirement should be such that it is more “realistic” and takes into account technological development which allows for vertical expansion of buildings.

The panel headed by HRD Secretary SN Mohanty would also seek suggestions from leading architect of the country Hafeez Contractor to develop model architectural plan for setting up such institutes. The panel will also have software giant Infosys to resolve problems arising due to availability of land in setting up of new IITs, IIMs and central universities in cities and towns and thereafter suggest the Ministry on various aspects including determining land requirement for central higher educational institutions.

In a recent meeting of the panel it was suggested that these institutes be set up in areas which are accessible by air and in vicinity of business or industrial hubs to get quality faculty and opportunities for students to take up internships.

Mohanty was of the view that the central educational institutes should be set up in areas, which are accessible by air and in the vicinity of business or industrial hubs to get quality faculty and provide opportunities for students to take up internships. It should be no further than a 30-40 minute drive from the nearest airport.

Currently land requirement varies from around 100 acres for IITs to around 200 acres for IIMs and IISERs, and around 300 acres for NITs. Ministry sources said that the panel in its first meeting on December 8 had decided that its members Ashok Mishra (chairperson of IIT Roorkee’s Board of Governors) and Chairman of ICICI Bank KV Kamath “will interact with Hafeez Contractor and submit model architectural plans for various categories of the institutions in the next meeting.”
Govt to seek suggestions from Infosys, Hafeez for IITs & IIMs

The government has decided to seek suggestions from software giant Infosys and famed architect Mr Hafeez Contractor to develop a model architectural plan for setting up new IITs and IIMs.

At a recently chaired meeting of a panel to determine land requirement for central higher educational institutions, it was also suggested that these institutes be set up in areas which are accessible by air and in vicinity of business or industrial hubs to get quality faculty and opportunities for students to take up internships.

The panel was set up in November last year by the HRD Ministry with Higher Education Secretary Mr Satya N Mohanty as its chairperson to resolve problems arising due to availability of land in setting up of new IITs, IIMs and central universities in cities and towns.

Currently land requirement varies from around 100 acres for IITs to around 200 acres for IIMs and IISERs, and around 300 acres for NITs.

Rapid urbanisation and expanding cities have forced the Ministry to re-look into the land requirement.

At its first meeting held on December 8 last, the panel had decided that its members Mr Ashok Mishra (chairperson of IIT Roorkee's Board of Governors) and Chairman of ICICI Bank Mr. K V Kamath “will interact with Hafeez Contractor and submit model architectural plans for various categories of CE in the next meeting,” a ministry note said.

It also underlined that air connectivity should be a priority in location of land for the campuses. Ideally, it should be no further than a 30-40 minute drive from the nearest airport.

Mr Mohanty was of the view that the central educational institutes should be set up in areas, which are accessible by air and in the vicinity of business or industrial hubs to get quality faculty and provide opportunities for students to take up internships.

One of the mandates of the committee is to recommend fresh norms and criteria for determining land requirement in different locations taking into account the topography and the class of a city.

According to the ministry's order, revising land requirement should be such that it is more "realistic" and takes into account technological development which allows for vertical expansion of buildings.
Central educational institutes may have to share resources

BY PRASHANT K. NANDA
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NEW DELHI

Upcoming central educational institutions (CEIs) may be located in clusters close to cities and share resources, as scarcity of land and talent hobble expansion of these premier institutions.

While setting up new CEIs, the “endeavour should be to establish education hubs wherein an IIT and IIM, for example, can share some resources and have academic collaboration,” according to a human resources development (HRD) ministry note on the meeting of a committee on CEIs appointed by the ministry. Two officials confirmed the note.

Top institutions such as the Indian Institutes of Technology (IITs), Indian Institutes of Management (IIMs), National Institutes of Technology (NITs), Indian Institutes of Information Technology (IIITs), Indian Institutes of Science Education and Research (IISERs) and central universities have vast land requirements. Several recently opened ones are working from makeshift campuses in the absence of adequate land and infrastructure.

Land requirements range from around 100 acres for IITs, 200 acres for IIMs and IISERs, 300 acres for NITs and 500 acres for IIITs and central universities. Some committee members felt these requirements can be rationalized and an IIM can be built over just 100 acres, or half of the current requirement, the first government official said, requesting anonymity.

The committee, led by higher education secretary Satyaranjan Mohanty, includes leading academics and industry experts. The ministry note says the committee has pointed to the urgency “to re-assess the requirement of land for setting up new central educational institutions (CEI) in view of the fact that land is very scarce in the country”.

A template for common facilities such as libraries, gyms, auditoriums and academic resources may be designed between CEIs, the note said. The area for these institutes should be determined keeping in view current enrolment and prospects of future growth.

“There is no other option than sharing resources and going for vertical build space instead of horizontal growth. This can help cut down land requirements,” said the second official, who also requested anonymity.

The committee is of the opinion that CEIs should be opened only in places which are accessible by air and in the vicinity of business or industrial hubs to fuel their growth.

Bhaskar Ramamurthy, director of IIT Madras, said there is always a challenge to convince faculty members to move to a place which is less developed. Though new institutes are improving their facilities, geography has its own benefit and helps attract quality faculty and even companies for placement. “In the last eight-nine years, the number of IITs, IIMs and central universities has doubled. Many of these top institutions have come up in less developed places, posing challenges to develop them both in terms of physical and intellectual infrastructure. Procuring huge land patches is always tough, leading to delays in construction and cost escalation,” the second official said.

Since 2007-08, the number of IIMs has gone up from six to 13 and the number of IITs has more than doubled from seven to 16, the second official explained. The National Democratic Alliance government has also promised to open five more IITs, six more IIMs and several other top institutes.

The first official said the committee will submit its report after a few more meetings, in which it will deliberate the issues in detail, take examples from foreign educational institutes and vertical educational designs.

“There are challenges and this committee was set up to find solutions. Getting large patches of land takes time, and it has led to huge cost escalation for IITs which were set up in last six years,” the official said.

In May, the HRD ministry had proposed to raise the cost of setting up eight IITs from ₹6,080 crore to ₹15,664 crore—an increase of more than 150% over the initial project cost—the Comptroller and Auditor General of India said in December.
Sense On Science

PM’s call to put science and research at forefront welcome, now government must act on it

Speaking at the Indian Science Congress, Prime Minister Narendra Modi hit all the right buttons by declaring that he will pay as much attention to ease of doing research and development in India as to ease of doing business, that China’s emergence as the world’s second biggest economy paralleled its rise to second place in science and technology and that India needs to focus on science and innovation as a top priority. At a time when he is also putting research-led initiatives at the centre of his foreign policy, the PM’s call for greater flexibility in science funding and freeing the university system from excessive regulation and cumbersome procedures is welcome. Now his government must act on it.

Unfortunately India’s education sector remains an exemplar of exactly the reverse maxim of what Modi wishes to promote: maximum government, minimum governance. India’s overly regulated education sector means that not one Indian university is currently ranked among the world’s top 200. India is also the only Brics country with no representation among the top 100 global universities. With only 0.88% of Indian GDP going to research and development investments, India also spends much less on science and technology than US (2.74%), South Korea (4.04%) or China (about 2%). With government aiming to increase R&D expenditure to 2% in the current Plan period (2012-17), India needs a drastic overhaul of how it manages higher education.

Instead of focussing on greater autonomy and flexibility to universities, the HRD ministry has so far aimed for even greater centralisation. Delhi University was forced to scrap its experiment with four-year undergraduate degrees, Kendriya Vidyalaya students were put in an impossible situation with the row over German and Sanskrit, IIT Delhi’s director resigned reportedly over an educational tie-up with Mauritius and a draft Bill has been circulated proposing greater uniformity in governance structures at central universities.

Universities need functional and financial autonomy for achieving excellence, not greater control from Delhi. We have seen great innovations in several Indian sectors after the state withdrew stifling controls. The time has come for government to get out of the way in higher education too. Government must provide only a broad framework, an enabling environment for innovation as it opens up the sector. The rest should be left to competition and a transparent performance-based system of funding without fear or favour.
New addition at ISC: ancient Indian science

Change may draw criticism, especially in wake of initiatives to tweak school syllabi to promote Sanskrit

BY NIKITA MEHTA

Mumbai

In a departure from the past, this year’s Indian Science Congress had a new addition: the importance of ancient Indian science in a modern world. The change could potentially expose the government to criticism, especially in the context of the recent initiatives to tweak school syllabi to promote Sanskrit.

On the second day of the five-day Congress hosted by the University of Mumbai, speakers focused on why Indians must study ancient Indian sciences. Invitees spoke of origins of mathematical theorems and surgical methods in Sanskrit, as well as how Indians flew planes before the Wright brothers did. There was a session titled “Ancient Sciences through Sanskrit.”

“Ancient Indian scientific theories with those machines and tools are based on experience, wisdom and minute observation and logic. Those must be recognized and it has relevance today. If scientists from other countries can produce new science based on our ancient sciences, why can’t we?” asked Prakash Javadekar, minister of state for information and broadcasting.

Speakers talked about peer review systems in ancient Indian science, weather forecasting through blooming of certain flowers, methods to conduct autopsies and Gaianta Kaumudi by Narayana Pandita which has a reference to the mathematical constant, Pi. One speaker dwelt on physician Sushruta and compared ancient surgical instruments with modern ones.

In a session, Anand Jayaram Bodas and Ameya Jadhav explained aviation technologies in Maharshi Bharadvaja’s Vaimanika Shastra.

Bodas also spoke of radars described in ancient Sanskrit literature which can show the shape of planes and fighter planes that could fly forward and backward. Pamphlets on Shivkar Bapuji Talpade, touted as the first man to fly a modern aircraft, were distributed at the session. Talpade, it is claimed, flew an unmanned plane in December 1895 at Mumbai’s Chowpatty beach.

“Our sages have given many sutras on war technology, vimaanashastra, surgery, botany and described technology in detail. It is important for the youth of our country to be aware of this literature and not neglect it any more; instead of only looking at advances in science in western society,” said Jadhav, a lecturer at Swami Vivekanand International School and Junior College.

According to Hem Pandey, additional secretary at the ministry of environment, forests and climate change, the session’s idea was to establish where Indian research started. “One must read the original text, instead of its translations, and understand it,” he said.

The sessions, though, have faced criticism, with an Indian scientist with the National Aeronautical Space Administration floating an online petition against peddling what he called pseudo-science as modern science. However, there are defenders, too. Congress member of Parliament Shashi Tharoor tweeted that “to mock the credulous exaggerations of the Hindutva brigade, you don’t need to debunk the genuine accomplishments of ancient Indian science!”
Interview Wilfred H Muskens

‘Indian students are smart, intelligent and motivated’

Dimple Bhavsar

In an effort to encourage students to pursue higher studies in Pennsylvania, USA, the Pennsylvania Department of Community & Economic Development Hub has collaborated with a group of Indian institutes on December 5. Hyderabad (Sind) National Collegiate Board (HSNCC) that runs 17 educational institutes such as KC College, Churchgate, RD National College, Bandra (W), apart from Ramnarain Ruia College, Matunga, Symbiosis Institute of Business Management, Pune among others. The programme aims at providing undergraduate courses at eight foreign universities affiliated with the programme.

Wilfred H Muskens, deputy secretary for International Business Development, Pennsylvania Department of Community & Economic Development (DCED) spoke to HT Education about the functioning and the benefits of the programme for Indian students who wish to study abroad. What is the Global Pathways Institute - Pennsylvania Hub?

Global Pathways Institute is an initiative of the Commonwealth of Pennsylvania State along with educationist, Sujay Jaisra, trustee of Narayan Monjee Educational Trust. It is a Middle States Association (MSA) accredited institution with a unique programme that allows students to complete two years of the four-year undergraduate degree course in India, and the second two years at any Arcadia university.

What brings Penn hub to India?

We believe India is one of the most important markets in the world with regards to higher education. Pennsylvania and India have a long shared history – 13 years ago, we were the first US state to open a trade office in India. It is a marriage of equals, where Pennsylvania is extending its hands to India and vice versa. We think it would be a win-win situation for both.

Which educational programmes will be offered to the students at Penn Hub?

Various inbound and outbound international educational programs have been designed for the students at Penn Hub such as Summer Abroad Programmes that are popular amongst the students in India which help benefit them from a broader socio-economic spectrum. Other programmes such as Internship Abroad programmes, Skill-Based Programmes, Global Studies, Dual Degree Programmes have also been designed.

What do the Global Studies and Dual Degree programmes include?

Global studies are programmes in which classes for a particular semester are conducted abroad and students reside in the destination city for the entire semester. The Dual Degree programme allows a foreign partner institution to offer the first half of their university degree programme by replicating segments of the curriculum. Courses offered in India will be the clones of the model on campus. This programme involves a student studying for two different university degrees in parallel, either at the same institution or at different institutions. The two degrees might be in the same area or two different subjects as per the choice of the student and the applications that are submitted.

How do you think Penn Hub will benefit Indian students?

The Penn Hub is a two-way street where the Indian students will benefit in various ways. The US culture will flow to India and the Indian students will take their culture and experiences to universities in USA. Students from both the countries get a chance to study abroad. Various programmes implemented for the students will help them grow globally. It also gives the Indian students an opportunity to study abroad for a few semesters, instead of pursuing an entire degree out.

The Pennsylvania Hub has collaborated with which College across India?

Hyderabad (Sind) National Collegiate Board (HSNCC) which shelters around 27 educational institutions across India is one of the boards that Penn has collaborated with. Other institutes include Ramnarain Ruia College, Matunga and Symbiosis Institute of Business Management, Pune.
फीस बढ़ाने की तैयारी में टॉप बिजनेस स्कूल

IIM-A ने PGP प्रोग्राम के लिए फीस 16.60 रुपये लाख की जगह ₹18.50 लाख लेने का ऐलान किया है

[ श्रीराम की बसु & देविना सेनमुख | मुंबई ]

इस साल शुरू होने वाले सेंसेशन से देश में छह नए इंडियन स्टार्टअप ऑफ़ मैनेजमेंट (आईआईएम) में पदार्थ शुरू होगा। जहां पहुँचने आईआईएम देश और विदेश में अपनी ब्रांड इमेज श्रमिकों में जुटे हैं, वहीं नए-नवेले संस्थान अपनी जगह बनाना को दर्शाते हैं। इस साल जहां हर संस्थानों का ज्यादा फीसकर रिसर्च और अंतर्राष्ट्रीय उपयोग पर होगा, वहीं स्कूल और उनके पैदाले का प्रभाव फीस उधारकों पर पड़ सकती है।

हायरिंग के मॉडल पर तरीकों बेहद दिखाई और फ्रैंक चॉर्च में लाभ देने के कुछ टॉप बिजनेस स्कूल फीस बढ़ाने की तैयारी में हैं। आईआईएम-अंडरग्राउंड ने अपने जाने-पहचाने पीजीएच प्रोग्राम के लिए फीस 2015-17 सेंसेशन से 16.60 लाख रुपये के बजाय 18.50 लाख रुपये करने का ऐलान कर भी दिया है। पीजीएच कोर्स की फीस भी 2.15 लाख रुपये से बढ़कर 24 लाख रुपये की जा रही है।

इस राह पर आईआईएम-बंगलुरु भी जल सकता है। इसने फीस से 1.50 लाख रुपये बढ़ाया है। इंडियन स्कूल एजुकेशन सर्वेक्षण ने कहा कि इस संस्थान में जनवरी में शुरू हुए बोर्ड मीटिंग में फीसकारी किया जा रहा।

सूची ने बताया कि फीस बढ़ाने पर विचार कर सकने वाले पूरे संस्थान में आईआईएम-ईंडिया, आईआईएम-लखनऊ और आईआईएम-नागालंड में जमील है। आईआईएम ट्राइबल के डायरेक्टर अर्नोप फैनीवर्न ने कहा, ‘हमने यह संस्थान खुश होने से अब तक फीस नहीं बढ़ाया है। हमें होने वाली बोर्ड मीटिंग के बाद ही कोई फीसकारी किया जाएगी।’ उन्होंने कहा, ‘अभी हम अपने कार्यक्रम का आकार ले रहे हैं।’

आईआईएम-कोलकाता ने 2014-16 सेंसेशन के लिए फीस बढ़ाई थी और अब नए सेंसेशन से इसके फीस बढ़ने की आशंका नहीं है।

रिसर्च पर फोकस
dेश के टॉप बिजनेस स्कूल को अपने रिसर्च पर फोकस करना होगा और टॉप जनरल में पेशेवर प्रतिफल करने के लिए ज्यादा से ज्यादा प्रशंसकों को प्रोत्साहित करना होगा। इन रिसर्च पेशेवरों की संख्या और इसकी गुणवत्ता से ग्लोबल बिजनेस स्कूल के बीच इसकी रेखांकन सुधरेगी। इस साल आईआईएम और ग्लोबल बिजनेस स्कूल के बीच ज्यादा तालमेल होना दिखाया जा रहा है। वहीं, कॉर्पोरेट चर्चाओं के साथ मिलकर रिसर्च करने पर फोकस करें।

पिछले साल सिंघापुर में आईआईएम-आरमगुड़ ने ऐलान किया था कि उन्हें कॉर्पोरेट ग्रुप बनाने से 20 करोड़ रुपये लुपटे हैं और यह रकम फाइनाण्सियल मार्केटिंग, इंफ्रास्ट्रक्चर और अंतर्राष्ट्रीय रिसर्च पर खर्च की जाएगी। नए संस्थानों के बीच आईआईएम ट्राइबल ने यह सुनिश्चित किया है कि इसके ज्यादातर प्रशंसकों को टॉप रेखा वाले जनरल में अपने पेशेवर प्रवर्तक कराएं।

पिछले साल अक्टूबर में आईआईएम-बंगलुरु ने ऐसा कार्यक्रम शुरू किया था, जिसमें फोकलटी एडवांस को अपने ज्यादा से ज्यादा संस्थान बनाने के लिए अपनी पैसे के देश में संस्थान फैलाया और प्रशंसकों को पक्का दिखाया गया था और आईआईएम-बी को फैलेंगी इस संबंध में इन देशों की यात्रा कर चुका है। आईआईएम-बंगलुरु के दीन (एडवांसिक) दूरदर्शन तिरंगे के कहा, ‘संस्थान ने रिसर्च और प्रशंसकों पर फोकस करने के लिए ईंटरनेशनलजे और इंटरनेशनल फोर में देशों की रणनीति पर लेखन कर चुका है। ग्लोबल लेवल पर इसकी पहचान मजबूत हो सकेगी।’

Economic Times ND 05/01/2015
P-8
Ancient Indian sciences had mastered aviation to an extent that it had aeroplanes that could facilitate inter-planetary travel and the same has been mentioned in the Rigvedas, claimed Captain Anand Bodas, the retired principal of a pilot training facility, on the second day of the 102nd Indian Science Congress. Captain Bodas was speaking during a symposium on “Ancient Sciences through Sanskrit” at the university sports complex at Kalina on Sunday.

Referring to the Vedas texts to support his claim, Captain Bodas said that Maharishi Bharadwaj spoke of the existence of aeroplanes 7,000 years ago. He said that Maharishi Bharadwaj mentioned that these aeroplanes could travel from one country to another and also from earth to other planets and back. “The Wright Brothers are given credit for developing flying technologies in 1904 but the same was existent in ancient India,” said Captain Bodas.

Elaborating on Maharishi Bharadwaj’s work, Captain Bodas said that youngsters should read his book Vimana Samhita wherein Maharishi Bharadwaj has mentioned about metal alloys that were used to make aeroplanes and try to make those alloys which India currently needs to import from foreign countries.

The retired captain further said that ancient Indian scientists had also developed a radar system that was named the rooparkanrahasya that would display the actual shape of the flying object rather than just a blimp that the modern-day radar systems show.

He added that ancient India had jumbo planes that measured around 60 feet by 60 feet and 200 feet in length. The planes flew on 40 small engines that had a flexible exhaust system which the modern aviation is yet to discover.

Captain Bodas has been in the eye of a controversy recently after the scientific community criticised his comments saying that it undermined the very basis on which the Indian Science Congress was started.

A young scientist shows her project to former President A.P.J. Abdul Kalam during an exhibition at the 102nd Indian Science Congress in Mumbai on Sunday. — PTI

Anaemic speakers at the 102nd Indian Science Congress highlighted the fact that while ancient India was way ahead in medicine and other sciences, it had taken the congress 100 years to discuss the same. Referring to the advancements in ancient Indian surgery, Dr Ashwin Sawant, one of the speakers, said that the same was now being recognised by the world and some of it was still being researched by the global medical fraternity.

Union minister Prakash Javadekar, who was also a speaker, said that the centuries old theories of ancient India were still relevant and are being exploited by European countries.

Noted computer scientist Vijay Bhatkar said, “We observe that it is for the very first time in 102 years at the Indian Science Congress, that we have discussed ancient science. Why did it take 100 years for us to realise that this is a very important issue of science?”

Stressing on the need to adopt Sanskrit for solving computational problems involving mathematics and algorithms, Mr Bhatkar said that computer scientists should study Sanskrit as the language has many solutions.
Nasa explores inflatable spacecraft for Mars trip

Tech Could Aid Entry To Remote Areas Of Planet

Norfolk (US): Devising a way to one day land astronauts on Mars is a complex problem but Nasa scientists think something as simple as a child’s toy design may help solve the problem. Safely landing a large spacecraft on the Red Planet is just one of many engineering challenges the agency faces as it eyes an ambitious goal of sending humans into deep space later this century.

At Nasa’s Langley Research Center in Hampton, Virginia, engineers have been working to develop an inflatable heat shield that looks a lot like a super-sized version of a stacking ring of doughnuts that infants play with. The engineers believe a lightweight, inflatable heat shield could be deployed to slow the craft to enter a Martian atmosphere much thinner than Earth’s.

Such an inflatable heat shield could help a spacecraft reach the high-altitude southern plains of Mars and other areas that would otherwise be inaccessible under existing technology. The experts note that rockets alone can’t be used to land a large craft on Mars as can be done on the atmosphereless moon. Parachutes also won’t work for a large spacecraft needed to send humans to Mars, they add.

Hence the inflatable rings. The rings would be filled with nitrogen and covered with a thermal blanket. Once deployed for landing, the rings would sit atop the spacecraft, somewhat resembling a giant mushroom.

“We try to not use propulsion if we don’t have to,” said Neil Cheatum, the senior engineer at Langley for advanced entry, descent and landing systems. “We make use of that atmosphere as much as we can, because it means we don’t have to carry all that fuel with us.” Nasa’s leaders acknowledge that getting humans safely to and from Mars as early as the 2030s will pose extreme challenges.

The agency’s scientists acknowledge they also must design new in-space propulsion systems, advanced spacesuits, long-term living habitats aboard spacecraft, even communication systems for deep space.
Continued impetus on education reforms needed

Laws to protect original and authentic content in the larger interest of students and the education fraternity; digitisation in schools; and clarity in tax regime for e-books needed

Last year was about the monumental changes in the Indian polity. People will expect the positive sentiment to translate into action and impact on the ground, and that, we believe, will be the real test of the incumbent government. For obvious reasons, the education sector has been a priority area for successive years; however, the sector is in need of policy reforms, increased outlays, stringent implementation of existing schemes and, most importantly, measurement of the efficacy of the work undertaken.

We think that while the Union Budget of 2014 was promising in parts for the education sector, in many ways it was not hugely dissimilar to the earlier Budgets with no significant increases in outlays. However, it did strike the right notes with the priority accorded to skill development, teacher training (launch of the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching), and digitisation and innovation in schools. We believe each of these is a critical block in improving learning outcomes in Indian classrooms and contributing to the development of the learner.

Some of the other announcements through 2014, too, seem like steps in the right direction, such as plans to increase IITs and IIMs, review of the role of key regulators such as UGC and AICTE, and introduction of credit transfer system in Indian universities. The underlying philosophy behind each of these initiatives seems to be that quality education should be made accessible and affordable for learners of all ages. To make this happen, the government will need to ensure that quality standards of content and delivery are improved.

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In 2015 we look forward to a continued impetus on education and sector-specific reforms. Some of the measures that the education industry will welcome include:

- **Laws to protect original and authentic content in the larger interest of students and the education fraternity:** Copyright infringement, piracy and plagiarism of content should be dealt with seriously so that authors and publishers are incentivised to produce high-quality and original work for learners.
- **Digitisation in schools:** The last few years have been marked by increased digitisation of education, mainly in elite private schools. Across the world, governments have supported digitisation of education which has led to better learning outcomes. There should be allocation for digitisation in both government and government-aided schools, as also in private schools. Private publishers can then be encouraged to provide interactive digital content to such schools.

**Clarity in tax regime for e-books:** The current tax structure for publishers is unclear. It is a long-pending demand of publishers to bring about a simplified tax structure around both print and electronic content (e-books). Currently, in some cases, service tax is levied on e-books, a holding tax on foreign published journals and no tax is levied on books printed in India. With increased usage of e-books, taxation of e-books and other forms of electronic content should be reviewed earnestly. Learning either in print or through the electronic medium should not be differentiated.

**Duty on paper:** A longstanding issue has been duty on paper which results in publishers increasing price of books on a frequent basis, leading to cost burden on parents of school-going children. A reduction in VAT/custom duty on paper shall certainly be a welcome step in 2015.

The author is managing director, Oxford University Press India.
Gearing up for the new generation of IT skills

The focus of educational institutions has to shift from mass output of potential coders to niche programming talent with the new skills in demand. Through computer science and engineering programmes, there is a huge opportunity for creating interest among the youth in new subjects such as multimedia, analytics, econometrics and commerce as there would be an enormous demand for what is known as virtualisation, visualisation and projections based on modelling and simulations of data very specifically to domains and businesses. Thus, this will be particularly true for the IT industry and in this regard, the presentation of this concept and its potential will be made to the students, teachers and parents in the right way and in the right manner.

The demand for skills from computer science graduates is on the rise, and there is a growing demand for programming talent. The market is quite competitive, and there are many students who want to make it big in the industry. The key is to have a good understanding of the market and the kind of skills that are in demand. The institutions need to have a good understanding of the market and the kind of skills that are in demand.

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Indian IT landscape to see bright future

N V Vilaykumar

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asking on a sustained focus on customers, with add-on services, using innovative technologies, the $20 billion Indian IT industry saw a turnaround of fortune in 2014, with top line companies registering double digit growth. But if we look around and look at other global peers, can we say that Indian IT companies succeeded in bringing out products and services which are disruptive in nature, and with a true Indian stamp of frugal innovation? This where the malice of inheritance comes to picture, as we have the notion of calling ourselves the second best and imitate what others do. Even though mergers and acquisitions did not make that much impact during the period, leading IT bellwether Infosys made changes in its higher echelons with Vishal Sikka becoming the CEO, and startup companies earned huge fortunes in the industry.

Technologies in cloud, big data, analytics, mobility, social media and the Internet of Things (IoT) have become the order of the day. Indian companies are keeping track of these trends and gearing up to change their products and services to accommodate these areas where they are looking for more innovations to enhance delivery.

The industry also had to face the headwinds of the economic slump globally in the first half of the year and the country witnessed the cut in capital expenditure in India. The Narendra Modi government provided a positive momentum to industrial and investment activities with a new policy push. His revised National e-Governance Plan (NeGP), Digital India and Smart Cities have also added impetus, but Indian companies are realizing the other government-initiated economic measures in European and the US economies.

The Indian IT industry comprises small, medium and large firms, including global services majors like TCS, Infosys, Wipro and HCL Technologies, and companies captive units and sectors providing software, hardware, process management, engineering, research and development and innovative products. This also includes ever growing startups using hard to receive global attention with their so-called innovative products and bringing with high valuation expectations.

Churning in the country’s IT industry is very much linked to global trends. As automation makes inroads globally, Infosys and US-headquartered Cognizant have partnered with automation specialists such as PSoft and Tata Consulting Services and HCL Technologies have built automation tools in-house. One important fact to be noted is that the sector has highly depended on the American and European markets. The former still accounts for 60 per cent of India’s software exports. As per Nasscom estimates, the industry is projected to register 15 per cent export growth for this fiscal (2014-15) as against 15 per cent last fiscal (2013-14).

"We expect the industry to add overall revenues of $13-14 billion this fiscal compared to $11 billion achieved in last fiscal, with software exports touching $100 billion, and domestic sales reaching Rs 1,28,000 crore ($20 billion)," says Nasscom President R Chandrashekhar.

In a scathing attack on the trends in the industry, Infosys CEO Vishal Sikka said that the industry is moving in the wrong direction. "All of us in the industry find ourselves in a downward spiral, it is like a treadmill of increasingly lower cost, hiring people faster and faster from more and more mediocre places, training people less and less, putting them into jobs faster and faster," he said in a pre-recorded keynote delivered through a video link at the recent CeBIT India in Bengaluru.

He also opined that a better idea for the companies will be to innovate, move towards automation and artificial intelligence (AI), "That is the future that our clients are looking for, that is what they are looking to India for," he said. "We are great at following orders from our clients, but we are not great at raising issues and we are not great at gaining opportunities that we see for our clients. That change in mindset is what we (Infosys) fundamentally go after. I think the way to get there is to rely on our greatest strength, education," he said.

Indian companies should be very careful and not give the domestic market to foreign companies. "We have new initiatives of the government in sectors like education, healthcare, agriculture, financial services, logistics, infrastructure and manufacturing to implement various programmes with other stakeholders. Here the digitisation campaign, Aadhaar, smart cities and industrial corridors will have its impact with the help of IT hardware and software support," says PWC analyst Pallavi Singhal.

IT spend to surge

As per a study by research firm Gartner, Indian IT spending will reach $73.3 billion in 2015, up 9.4 per cent from $67.1 billion in 2014. The pace of IT spending in India may make it the third largest IT market in the Asia-Pacific by 2016 and second largest by 2018, after China.

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As per a study by research firm Gartner, Indian IT spending will reach $73.3 billion in 2015, up 9.4 per cent from $67.1 billion in 2014. The pace of IT spending in India may make it the third largest IT market in the Asia-Pacific by 2016 and second largest by 2018, after China.

Opportunity in connected life

The IT industry is going through changes of technological advancement. Here the question is how they can recognize themselves to take on these challenges. Prospects of the IT industry gearing up to tackle interoperability issues and the idea of using software to control hardware. As per rough estimates, up to 50 million things will be connected on the Internet by 2020 bringing together sensors and smartwatches, smart meters and smartphones, washing machines, fridges, wearable devices, and much more. The Internet of Things, Industrial Internet and Internet of Everything in 2015 will morph into the Internet of Anything. Here companies will have to take head on the challenges of making a common software ecosystem capable of accommodating any and all sensor inputs, system states, operating conditions, and data contexts, an overarching "Internet of Things Operating System."

Besides, the prospects in predictive analytics used by a variety of businesses to identify risks and opportunities, the augmented reality applications pave the way for a very large mobile augmented reality app downloads per year by 2017. Rather than squaring in the shallow waters of second rate IT products and services, it is high time that IT companies should come up with world-class products and services following the footsteps of the impact of Indians, who are donning the mantle of top-line tech companies and part of startups in the Silicon Valley.

DH News Service
Premji again tops India philanthropy list

FOR A CAUSE
Top 10 contributors to charity in April '13-Oct '14, according to the Hurun Report

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<tr>
<th>Name</th>
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</table>

Azim Premji

The page from the Business Standard ND 05/01/2015 does not have any additional context or images to include in the natural text representation.
All under 25, entrepreneurs talk change

AMRUTA LAKHE
DEORIA(UP), JANUARY 4

WHEN he was 19, Nikhil Gampa attended an entrepreneurship workshop where he met young people bursting with exciting and innovative business ideas. Gampa, 24, is one among the 450 budding entrepreneurs aboard the Jagriti Yatra. An alumnus of NIT Durgapur, he spends many late hours in his laboratory at the Tata Institute of Social Sciences in Mumbai where he is studying for an MA in social entrepreneurship. A biotechnologist, his forte is waste management. He has devised a technique by which he cultivates a particular kind of mushroom on waste and then creates paper pulp. “I’m in the prototype stage. This year, I hope to launch the paper from waste,” says Gampa. Over the last 11 days, the specially commissioned Jagriti Yatra train carrying young entrepreneurs has travelled from Mumbai to Hubli, Bangalore, Madurai, Chennai, Visakhapatnam and Deoria, to meet potential clients in rural India.

On the last leg of their journey to Delhi, three such Mumbai-based entrepreneurs spoke about the impact that they hope to create. Megha Nikam, wishes to focus on water scarcity. “In my village in Phaltan, children skip school and stand in queues every day for hours. Through my work, I want to bring innovations to the ‘save water, collect water’ concept,” says Nikam, a civil engineer, pursuing an MTech in Water Management from IIT Bombay.

Sunita Mekale, pursuing a master’s in Mass Communication wants to challenge caste discrimination through entrepreneurship. “People think casteism doesn’t exist, but it is rampant in villages. I feel responsible to bring about a change,” says Mekale.

But as entrepreneurs all three agree resources are not hard to come by. “Today if you want to become an entrepreneur, you are not handicapped. We are told it wasn’t so a few years ago. I feel confident that I can actually change things today,” says Mekale who is following the footsteps of her three brothers, all social entrepreneurs.
JUST LIKE HOME

Paul Cahill, PhD student, School of Engineering, University College Cork, Ireland on his study experience in India

I am pursuing a PhD in civil engineering at University College Cork (UCC), Ireland. The main research area I am investigating is the integration of smart materials with large-scale structures. Such smart materials can use the movement of structures, such as that caused in bridges by passing traffic, to generate electricity and can potentially power small-scale wireless devices. These smart materials can be also used to detect damage in the structure and alert authorities to the need for immediate action for public safety.

As part of this research, I have been engaging with other researchers based in Ireland, Sweden, America and India. I have had the opportunity to conduct research in Texas in collaboration with leading experts in the field of damage detection and I recently concluded a month-long visit to the Indian Institute of Technology (IIT) Madras.

While attending IIT Madras, I found that all departments appear to have a close working relationship that allows for excellent interdisciplinary work, which, in my opinion, is the future of engineering research. The experience of living in a hostel on campus was new to me. I met many interesting people whose ideas and opinions complemented my thoughts on many areas. I was especially grateful for conversations on Indian culture and history, from which I have gained a deep appreciation and affection for India and its people.

While on the surface, it would seem that Ireland and India are different, within the first few days of my arrival, I began to learn that both possess close social and cultural ties. Although there are certainly some differences, I felt at home soon into my trip.

I was fortunate to visit Madurai, Bangalore, Mysore, Kochi and Kozhikode during my stay. My trip to India has been a defining experience for me, at a personal as well as professional level. I look forward to returning in the near future.

— As told to Sarah Zia