

Newspaper Clips

January 10, 2011

**Times of India
ND 10-Jan-11
p-13**

Meira wants a university for artisans

New Delhi: There may soon be a university for artisans and craftsmen where they get formal degrees — from bachelors to doctorate — to show for their skills.

Speaker Meira Kumar has pitched for a university for the “working class” to save traditional knowledge and skills which are facing extinction.

She has taken up with UPA government the idea of “labour university” catering to the class which is “repository of high skills” but does not have regular university degrees.

“It will be a university for the working class and artisans. I have taken it up with the government and am hoping for a positive response,” she said. Sources said a green signal to the proposal was likely.

The concept is to put traditional knowledge and craftsmanship in a structured and formal learning centre. It will be without the mandatory requirement of a degree for a teacher to teach there but will fetch the students degrees for what they have learnt. “We have a fabulous tradition of beautiful crafts — wood, leather, wool, silk — be it ancient India or medieval period or modern era. But a cloud hangs over their survival as everything has become degree-centric. There is knowledge beyond reading and writing. TNN

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SHORT CUTS

Now, a laser surgery that improves vision

British surgeons claim that they can now give people, who are shortsighted, better vision than they were born with, by using a pioneering laser technology. Experts estimate the human eye is potentially capable of 20-10 vision. But, the new treatment can give people up to 20-16 vision, thus enabling them to read a car number plate 80 yards away, almost four times better than the minimum standard required for driving, say the surgeons. In fact, the treatment is due to new cool laser that precisely cuts a flap in the cornea at the start. And a second laser then reshapes the cornea to correct short sight, say the surgeons. "The results being achieved with these new machines are simply amazing," lead surgeon David Allamby said.

Radiosurgery may help OCD patients:

Radiosurgery may help patients with severe obsessive-compulsive disorder, when other treatments have failed, according to a new study. Douglas Kondziolka and colleagues of University of Pittsburgh reported promising results of radiosurgery in three patients with very severe OCD. The procedure could provide a new treatment alternative for the most extreme and difficult cases of OCD. In this procedure, a 'gamma knife' is used to deliver a beam of radiation to the area of the brain (the anterior cingulate cortex) responsible for OCD.

Whale poo makes oceans productive:

A new study has revealed that iron-rich whale faeces make the oceans more productive. Scientists from the Australian Antarctic Division, based in Hobart, have been testing the hypothesis that enormous amounts of iron excreted by whales are similar to liquid manure, reports the Age. This fertiliser helps phytoplankton grow, which in turn helps support a wide number of marine species including those eaten by humans.

New fat-fighting drug shows promise:

Wouldn't it be great if you could just pop a pill to shed those extra pounds? Well, it may now be possible. Zafgen, a start-up drug company in Cambridge, has announced that its first human test of a drug named ZGN-433 caused 24 obese women to lose, on average, a kilogram a week for a month, reports New Scientist. What's more, the drug has no harmful side effects. This is a very good rate of weight loss, especially as the women ate normally and were not given exercise advice.

Using electricity to treat wastewater:

Scientists at the University of Utah have developed a new concept in water treatment. The researchers have made an electrobiochemical reactor in which a low electrical voltage is applied to microbes to help them quickly and efficiently remove pollutants from mining, industrial and agricultural wastewater. The patented electrobiochemical reactor (EBR) process replaces tons of chemicals with a small amount of electricity that feed microbes with electrons.

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Join in growth: Prez to diaspora

TIMES NEWS NETWORK

New Delhi: Joining the government in asking the diaspora to be part of India's growth story, President Pratibha Patil on Sunday said expertise and skills of overseas Indians will be a vital resource for India's efforts to forge inclusive growth.

Addressing the valedictory session of the Pravasi Bhartiya Divas, Patil asked the diaspora for a rapid increase in the "number, size and scope" of their involvement in the country's developmental process while underlining the strong fundamentals of the economy.

Seeking increased investment from the diaspora, Patil hoped that coming days will see more long-term projects involving the community that will have a significant positive impact on many lives. "We would like to measure such projects not in terms of the money spent on them, but in terms of the humans touched and improved by them," she said, noting that government was focusing on expanding coverage of quality education, health services and infrastructure.

Plan panel deputy chairman Montek Ahluwalia struck a different note asking those gathered to "discover, explore and connect" with the vibrant Indian economy. He highlighted the main objective of PBD was to engage NRIs with India's heritage, social and cultural changes and the growth story, adding that investments were individual choices.

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IT majors to post strong Q3 results

But Re Appreciation Will Hurt Growth | Inflation, Attrition To Hit Smaller Firms

Pranav Nambiar | TNN

Bangalore: The IT sector's financial results for October-December 2010 are predicted to reflect the general perception that the global economic recovery is sustainable and fears of a double-dip recession are receding. The first big company to announce results will be Infosys Technologies on January 13.

The consensus among industry analysts is that the revenues of the top six IT companies will grow at around 5-7% in terms of US dollars over the previous quarter, even on the base of high volume growth of 6.6-11.2% witnessed in the previous quarter. On the annualized basis, the average growth rate for top tier IT companies is expected to be around 28%.

However, the growth may not be broad-based, with mid- and small-sized IT generic companies not expected to do as well as the big ones. Companies like Patni Computers, Polaris and MindTree are estimated to grow at 2-7% in dollar terms from a much smaller base.

In rupee terms, the growth

FOREX SPOILER						
Revenue growth in ₹ cr						
Company	Q1 FY 11	Q1 growth	Q2 FY 11	Q2 growth	Q3 FY 11*	Q3 growth*
TCS	8,217	6.2%	9,286	13%	9,626	3.7%
Infosys	6,198	4.3%	6,947	12.1%	7,137	2.7%
Wipro	7,191	3.1%	7,772	8.1%	7,949	2.3%
HCL Tech	3,612	5.4%	3,875	7.3%	4,044	4.4%

(Growth quarter over quarter) *Estimate
Source: Motilal Oswal

rate of all companies will be far more modest. The rupee appreciated by 3.5% against the US dollar in the third quarter. So, the rupee revenues of top tier companies are expected to grow only 2.7-3.7% sequentially. EBITDA margins are expected to sequentially fall by 30-50 basis points across top-tier companies. Cross-currency movements, however, have been favourable for the export-oriented IT sector since the second quarter of the fiscal. The US dollar depreciation by 1.9%, 5.1% and 9.1% against the pound, euro and the Australian dollar, respectively, in the third quarter will boost dollar revenues for Inf

sys, TCS, Wipro and HCL Tech by 1.3%, 0.7%, 1.1% and 1.7%, respectively. A stronger pound or euro means more dollar earnings. However, these gains will be wiped out with the rupee appreciation.

In mid-sized and small companies, apart from currency headwinds, high wage inflation and attrition levels will make a big dent on profitability. Industry estimates suggest that the attrition levels in smaller IT companies average around 25-30%, compared to 14-17% for the bigger companies. This would also have put pressure on smaller companies to increase salaries significantly.

Srishti Anand, IT sector analyst at Angel Broking, said the increase in the volume of high-end work as opposed to low-margin application development management (ADM) is an indicator of the good health of the sector.

"The US continues to be the largest spender. European clients, particularly those from continental Europe, are opening up to outsourcing to drive cost efficiencies," he said. This is seen to be leading to the rise in transformational deals with a higher component of discretionary services such as research and development, consulting and engineering services.

According to a report by Motilal Oswal, Infosys is best suited to capitalize on discretionary spends owing to its better employee utilization and skew towards higher margin discretionary segments like package implementation. Ajay Parmar, head of institutional research at Emkay Global Financial Services, said that even Wipro, which has been underperforming its peers in recent times, will show healthy

growth. "Many contracts are coming in small sizes and are subsequently scaled up. Wipro, which was previously not taking up smaller contracts, has now begun taking these up. This will be reflected in its books," he added.

The major growth driver is the banking and financial services segment driven by business needs related to regulatory compliance, rationalization and consolidation and post-merger integration. In the retail segment, IT spend continues to grow in areas such as social media and multi-channel commerce.

Other segments like hi-tech and manufacturing are showing signs of growth, but spending in telecom continues to be a laggard as telecom service providers in the developed markets still remain cautious over their expansion and rollouts.

Analysts say that with the deal pipeline looking strong and with a moderate growth expected in the IT budgets of North American companies, upward revision of growth forecasts for the 2010-11 fiscal is on the cards.

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'Lunar water may have come from comets'

Paris: Water on the Moon came in large part from comets which bombarded the lunar surface in its infancy, a study published on Sunday suggests.

For decades, the Moon was thought to have been as dry as it was void of life and atmosphere. This assumption, though, has been revisited after findings by Nasa last year of significant traces of frozen water in a permanently shadowed crater.

Astrophysicists led by James Greenwood of Wesleyan University in Connecticut analysed rock samples collected during the Apollo expeditions, looking in particular at variations in hydrogen isotopes in a water-loving mineral called apatite.

The signature, they say, points to three potential sources: from the sub-surface lunar mantle, from protons brought by the "solar wind" of particles blasted from the Sun — and from comets.

The isotope measurements in the apatite were similar to those previously found in three well-known comets: Hale-Bopp, Hyakutake and Halley.

Comets have been described as frozen reservoirs of water orbiting the Sun, for they contain vast quantities of ice in their heads. AFP

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Stealth tanks to hit battlefield in 5 yrs

E-Camouflage: New Tech Deploys Electronic Ink To Render Vehicle Invisible

London: In what may transform the way future wars will be fought, British military scientists claim to be developing stealth tanks that would be ready for use on the battlefield within five years.

A team at defence company BAE Systems says that the tanks will use a new technology known as "e-camouflage" which deploys an "electronic ink" to render a vehicle "invisible".

Highly sophisticated electronic sensors attached to the tank's hull will project images of surrounding environment back onto the outside of the



ARMOUR OF GOD: Sophisticated sensors will enable the tanks to merge into the landscape

vehicle enabling it to merge into the landscape and evade attack, say the scientists.

The electronic camouflage will enable the vehicle to blend into the surrounding countryside in much the

same way that a squid uses ink to help as a disguise, The Sunday Telegraph reported.

Unlike conventional forms of camouflage, the images on the hull would change in concert with the changing envi-

ronment always insuring that the vehicle remains disguised, say the scientists involved in the Future Protected Vehicle project.

The scientists hope the new technology will be avail-

able to use with the British Army fighting in Afghanistan and in future conflicts. The programme is based around seven different military vehicles, both manned and unmanned. In fact, the unmanned vehicles or battlefield robots will be able to conduct dangerous missions in hostile areas, clear minefields and extract wounded troops under fire, say the scientists.

The stealth tanks will include Pointer — an agile robot which can take over dirty, dull or dangerous jobs, such as forward observation and mine clearance. PTI

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More than a bike but less than a car: A way to beat traffic jams?

London: Fed up with traffic jams and lack of parking space? Cheer up, for scientists claim to have designed an electric car which can beat traffic congestion and even capable of parking itself.

According to its developers, the two-seat Electric-Networked Vehicle (EN-V) is designed to alleviate those common driver concerns and also address environmental issues, energy consumption and affordability.

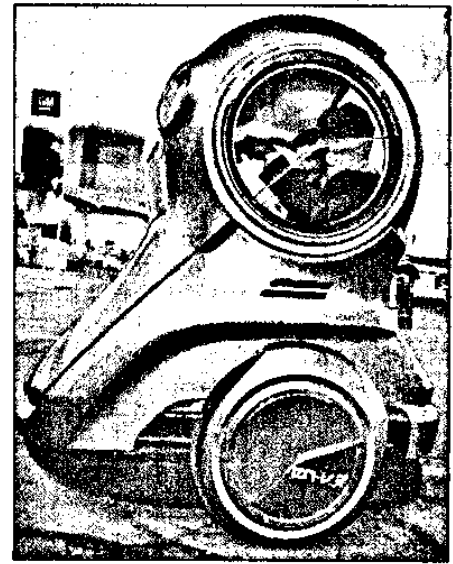
Amazingly one doesn't even need to be in the driving seat to achieve all this. The EN-V from General Motors can rotate 360 degrees and be driven in manual mode with a driver — or without, the Daily Mail reported.

The General Motors car, recently unveiled at the Las Vegas Convention Center, runs on battery power for 40km on a charge, with top speeds of 40kmph.

"This vehicle is going to be increasingly needed in the markets where we hope to grow our business. It's really a step up from a bike. We think it will be less expensive than a car but more practical to move around in," said Chris Borroni-Bird, GM's director of advance vehicle concepts. Electric cars are better for travelling short-distances and air quality in crowded cities, he said. GM has equipped the EN-V with specialised technology that allows it to talk to other cars, anticipate dangers and scan blocks for available parking spaces.

All this will help avoid congestion, Borroni-Bird said, because accidents and people circling for parking often cause major traffic holdups in big cities.

The only downside to this pint-sized vehicle is its inability to withstand a collusion with a full-sized vehicle, say its designers. PTI



(Left) A EN-V Jiao (Pride) and EN-V Xiao (Smile) at the Consumer Electronics Show in Las Vegas, Nevada

Drunk? Your car won't go along for the drive

Scientists who are developing sensory devices which they claim would keep a vehicle from starting if the driver has had too many drinks. The new technology would require either a passive set of sensors permanently installed in the vehicles or touch-sensitive contact points on a key fob or starter button that will immediately register the level of alcohol in bloodstream, The Washington Post said. The objective is to produce a device that will react in less than a second and function without maintenance for nearly 10 years or 157,000 miles. PTI

'Reading driver's mind to adjust car stability'

Ferrari is planning to introduce a new in-car technology that will monitor a driver's mental state and adjust the car's stability and traction systems. Biometric sensors may comprise a piezoelectric measuring device for measuring the driver's respiration, a device for measuring the driver's BP and heart rate, a TV camera for monitoring the driver's eyes (blink rate) to determine his alertness, a device for monitoring the electric activity of his brain, a device for recording the driver's surface temperature and a device for recording the conductivity of the driver's skin. ANI

Warming may wipe out Europe glaciers by 3000

Paris: Global warming may wipe out three-quarters of Europe's alpine glaciers by 2100 and hike sea levels by four metres by the year 3000 through melting the West Antarctic icesheet, two studies published on Sunday said.

The research places the spotlight on two of the least understood aspects of climate change: how, when and where warming will affect glaciers on which many millions depend for their water, and the problems faced by generations in the far distant future.

New Zealand could lose 72% of its glaciers, and Europe's Alps 75%. Meltwater will drive up world sea levels by an average of 12cm by 2100

The glacier study predicts that mountain glaciers and icecaps will shrink by 15-27% in volume terms on average by 2100.

"Ice loss on such a scale may have substantial impacts on regional hydrology and water availability," the study warns.

Some regions will be far worse hit than others because of the altitude of their glaciers, the nature of the terrain and their susceptibility to localised warming.

New Zealand could lose 72% (between 65 and 79%) of its glaciers, and Europe's Alps 75%, meaning a range of between 60 and 90%. At the other

end of the scale, glacial loss in Greenland is predicted at around 8% and at some 10% in high-mountain Asia.

Meltwater will drive up world sea levels by an average of 12cm by 2100, says the study.

This figure — which does not include expansion by the oceans as they warm — largely tallies with an estimate in the landmark Fourth Assessment Report by the UN's Intergovernmental Panel on Climate Change (IPCC) in 2007. AFP

Get ready for digital academic certificates

RAVI NANJAN PRASAD
Mumbai

FIRST there was the depository for securities, which completely erased fake share certificates. Now the government thinks it is time for a depository for another set of certificates — from universities and boards of education.

As per the plan, the ministry of human resource development is setting up a National Academic Depository, which will make it difficult to make fake certificates of education and awards.

This depository will enable online verification of all certificates and awards issued by universities and



Sushil Kumar

boards of education at the click of a button. The database will cover all people.

The project is still at the concept stage, and the ministry wants all certificates and awards online, said sources in the ministry.

"The ministry of HRD had issued a proposal for digitisation of educational qualification records of the

Central Board of Secondary Education in September 2010. Four companies, including National Securities Depository and Central Depository Services, have approached the ministry in response to the proposal," an HRD ministry official confirmed.

All CBSE certificates to be brought online soon

From PT

"It's a huge project. There are close to 500 universities and 37 boards in the country," Manoj Vaish, managing director and CEO of NSDL Database Management (NDML), said.

The project is likely to be executed in phases, starting with the process of bringing all CBSE certificates online.

"When operational, the depository will provide great value addition to the National Skills Registry (NSR) — a database of people em-

ployed in IT and IT-enabled services, a Nasscom initiative managed by NDML," Vaish said. Further, it can then be linked to the Unique Identification Authority of India to get a person's complete background.

Database management is going to be the next big area of development with government keen on such projects of national interest. NDML, a full subsidiary of NSDL, is executing some big projects like the NSR and the automation of special economic zones (SEZ) under the

ministry of commerce.

"The NSR system is working beautifully for the IT industry, with 7.98 lakh registered IT professionals and 97 IT companies as subscribers," Vaish said.

People employed with IT and ITES companies can register their educational and professional qualifications with the NSR and prospective employers can access the database. The NSR is adding biometric details of the person by taking prints of all 10 fingers to ensure uniqueness of profile. So

far close to 5.06 lakh people have submitted their biometric details to NDML.

"Recently, Delhi Police approached us to make a similar registry of the support staff of IT and BPO industry like drivers and security personnel, mainly to check the rising crime rate," Vaish said. "Even if you run away, change your name or identity, you won't get a job in future as the database will provide a strong deterrent," he said.

"The NSR should be extended to all professionals. Now IT industry clients are

insisting on NSR registry of employees as part of vendor assessment process," Vaish said.

The service could be extended to other sectors. The recent Citibank fraud may be big, but there are several smaller, less known incidences that could be recorded in databases like NSR.

"NDML has also started similar work for BFSI (banking, financial services and insurance) professionals," he said.

NDML's big SEZ project aims to automate all processes between the

ministry, developers, units, the SEZ administration and customs.

The government is keen on these projects because they bring in efficiency, speed and savings. Automation is being taken up as part of the Centre's e-governance initiative. The biggest advantage of automation is that on the one hand it reduces interaction with government officials and on the other it can help authorities control corruption.

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Designer of first pen drive gives up on virus fight

PRESS TRUST OF INDIA

Mumbai

THE designer of the world's first single-chip universal serial bus (USB) flash pen-drive has expressed his helplessness in developing mechanism to control quick virus spread through the flash drives.

It is beyond my control... I cannot do anything about it, said K S Pua, CEO, Phison Electronics Corporation, a Taiwan-based chip design house.

He was replying to a question on how to stop the quick virus spread through flash drives, at Techfest-2011, organised at Indian Institute of Technology (IIT) on Saturday.

Speaking at the event, Pua traced the history of highly successful company Phison, set up by him and his four friends in 2000.

We did not have enough funds and so we started off with a capital of \$1 million which was borrowed from relatives and friends.

They came out with a single chip universal serial bus (USB) flash driver controller in May 2001.

Two months later, they came out with the pen-drive, which was of 128 mb and cost \$150, Pua said.

Their flash memory is used in all kinds of gadgets, right from smart phones to television sets, he said.

Huma Siddiqui

SPACE rocket technology is hardly new stuff, and yet satellite launches are seen as fairly risky ventures with expensive satellite rockets often failing to deliver their expensive cargo by going off course or blowing up, or failing to reach the proper orbital height. The failure of two consecutive geosynchronous satellite launch vehicle (GSLV) missions of Indian space agency, Indian Space Research Organisation (ISRO), is a case in point. Fact is, rocket science, is well, rocket science, after all. While the technology in general may be decades old, key components of it are still evolving.

Undeterred by the debacles in recent months, ISRO is going ahead with a positive attitude. To make up to the loss of two communication satellites last year and some going out of service, ISRO has planned some quick launches to augment its transponder capacity. In March-April, it will launch communication satellites GSAT-8 from French Guyana using Ariane rocket. Later this year or early 2012, GSAT-10 will be launched again by Ariane.

TK Alex, director of the ISRO Satellite Centre, says, "We are going to launch GSAT-8 and GSAT-10 this year. These two satellites will reduce the scarcity of transponders and help us reduce the backlog." ISRO has also been hiring transponders on other satellites as a temporary solution to clear the backlog.

In the realm of remote sensing, ISRO plans to launch not less than 30 earth observation satellites in the next 10 years, informs V Jayaraman, director of the National Remote Sensing Centre (NRSC). NRSC is responsible for remote sensing, satellite data acquisition and processing, data dissemination, aerial remote sensing and decision support for disaster management. In a plan already drawn up for the next decade, ISRO would launch a series of Resourcesat, Cartosat, ocean and atmospheric satellites. This would include Cartosat-3 with 30 cm resolution. "We will launch Resourcesat-2 in early February or ending January. It will be a replacement satellite for Resourcesat-1 which was launched in October 2003 and gives us 5.8 metres, 70 km multi-spectral data for the first time," he says.

Besides Resourcesat-2, ISRO plans to launch the RISAT, Meghtripliques and Youthsat satellites this year. Another communication satellite GSAT-12 will also be launched using a polar satellite launch vehicle (PSLV) sometime in the middle of the year. The country launched its first civilian remote sensing satellite—IRS-1A in 1988. It was followed by IRS-1B in 1991, IRS-1C in 1995 and IRS-1D in 1997. Data from these satellites helped in resources survey and management, urban planning, forest studies, disaster monitoring and environmental studies. Another IRS series, IRS-P3 and IRS-P4, assisted space science and study of ocean respectively



The IRS-P4 launched in 1999 opened new vistas in ocean studies.

Last year, ISRO lost two communication satellites as its rocket—GSLV—failed. On December 25, a GSLV rocket carrying advanced communications satellite GSAT-5P disintegrated within 50 seconds after lift off. This was the second consecutive failure of a GSLV mission in nine months. Tragedy had

struck ISRO in April last year when the GSLV launched using an indigenously developed cryogenic engine failed to put the GSAT-4 in orbit. Out of the seven flights till date, only two were successful and one a partial success. Three GSLV rockets along with their satellites failed, costing the nation around Rs 920 crore.

Nevertheless, ISRO is developing its own cryogenic engine and ground tests

for the same have been planned for this year. The space agency is also helping universities develop smaller satellites—nano satellites—which also could be used to demonstrate nascent technologies. Five institutes—IIT Kanpur, IIT-Mumbai, Indian Institute of Space Technology, Sathyabama Institute and Vellore Institute of Technology—have been building nano satellites.

Apart from this, ISRO is also expected to make the long-delayed launch of Singapore's first satellite into orbit next month, using its old workhorse, the PSLV. The satellite, called X-Sat, was originally intended for launch in 2007 and its cost has overrun several fold since then. The satellite is now estimated to cost over \$940 million against its original cost of \$310 million. The X-Sat would be ride on PSLV, which has made 17 launches since its maiden flight in 1993, and has successfully put 38 satellites into the space out of the 40. The X-Sat would be in orbit for three years at a height of 800 km. It would take photographs to measure soil erosion and environmental changes on Earth, then relay them to a ground station at Singapore's Nanyang Technological University (NTU).

That's not all. If all goes well, this year, India will shortly join a select group of nations having its own satellite navigation system called Indian Regional Navigation Satellite System (IRNSS) offering position, navigation and timing (PNT) services. The IRNSS is a constellation of seven satellites—to be increased to 11 later—to offer PNT services that could be used by various organisations globally or regionally. The PNT services find application in mobile phones, vehicles, aviation, maritime, emergency services, survey and others including military. In the next 10 years, the number of navigation satellites is expected to be around 100.

Financial Express ND
10/01/2011 p-6

Infosys Science also collaborating with schools for research

Rachana Khanzode

Mumbai, Jan 9: The Infosys Science Foundation, which has raised a corpus of Rs 100 crore to facilitate science and research work in five major areas like physical sciences, mathematical sciences, engineering and computer science, life sciences and social sciences, is also collaborating with rural and urban schools to build an aspiration towards research.

The Infosys promoters and three other board members, along with Nandan Nilekani, have invested close to Rs 46 crore in their personal capacity to this, while the rest has been funded by Infosys Technologies.

K Dinesh, who set up Patni Computer Systems and then went on to start Infosys Technologies along with NR Narayana Murthy, says the approach towards research has changed from the way it was perceived earlier. "The perception towards research is changing and now it is coming to the forefront. The government's interest is clearly visible, with the increasing allocation of funds in this area."

Ashutosh Sharma, Institute Chair Professor and Principal Investigator of the Center of Nanosciences at the Indian Institute of Technology, Kanpur, who bagged an Infosys Prize 2010 for Engineering and Computer Science, said: "The country needs to have more PhDs. The Indian culture works on a bottom up strategy, unlike other Asian countries like China, Korea and Taiwan. They set a target and work towards achieving it. However, in India it is very difficult to motivate one to take up research,"

Cloud could cut IT spend for SMEs: Experts

S Saroj Kumar

Chennai, Jan 9: Small and medium enterprise's (SME) adoption of cloud computing could slash IT spend cost and leave a lot of cash in hand for core operations of SMEs, says industry experts.

There around 25 million micro and small- and medium-enterprises and the cost of IT spend by the SMEs is close to \$10 billion a year. Cloud computing for SMEs, in other words, 'pay as you use' model of IT infrastructure, could drastically reduce hidden cost on IT spend of SMEs as enterprises running on conventional IT delivery model incur about 60% to 75% of their IT spend on IT infrastructure maintenance.

'Pay as you use' model could save cost on hidden expenditure on IT infrastructure maintenance and mitigate the IT spend of enterprises, they said.



EXPERTS SAY 'PAY AS YOU USE' MODEL COULD WELL SAVE COST ON HIDDEN EXPENDITURE ON IT INFRA-STRUCTURE MAINTENANCE AND MITIGATE THE IT SPEND OF ENTERPRISES

Pooventhan, regional head of Tata Consulting, said the present 'pay first, use later model' of IT adoption is leading to cost overheads in terms of maintenance. In the 'pay first use, later model' or the 'on-premise' model, customers are forced to pay for the cost of failed ICT deployment due to plethora of factors like lengthy implementation cycle, lack of integration

across ICT system, lack of single accountable partners for ICT, lack of credible ICT solution increasing the risk of non-compliance, etc." The cloud model for SMEs move the risk from consumer to producer," he said.

Venky Srinivasan, executive vice president at Take Solutions said SMEs' cloud adoption in a way is a kind of 'Blue Ocean' strategy for

SME clients in leveraging advantage potential of ICT for the greater success of their business. Listing out the various costs of on-premise IT, he said it includes development, licence cost, maintenance upgrade, patch fixing, quality analysis test cycles, tedious documentation in data backups, etc.

"Whereas in cloud, the service provider takes care of

the entire IT process providing the right IT infrastructure suiting the SME consumer needs. Small business houses could focus on their core businesses processes rather than worrying about the challenges of managing the IT," he said.

Mani Doraiswami, CTO at Orangescape said cloud computing has democratised application development

process. "Distributor proprietary software model is no more valid in the transition from conventional to cloud-based delivery. Cloud ecosystem offers abundant opportunities to develop many user specific applications," he said.

On the question of data security on cloud, Pooventhan said 80% of the data compromise happen within the organisation than at the cloud managed data centres.

"One should view cloud as a business model rather than a pure technology model. It is a 'fit for purpose' solution supporting the constantly evolving business process. There are various pricing models available to SME consumers depending upon the quantum and level of usage. It is possible follow-user based pricing, transaction-based pricing and concurrent-based pricing in SME adoption of cloud."

Regional caFE

Glory days

Lessons from the 98th Indian Science Congress



TAMIL NADU
Area: 1,30,058 sq km
Population: 6,63,96,000
Language: Tamil

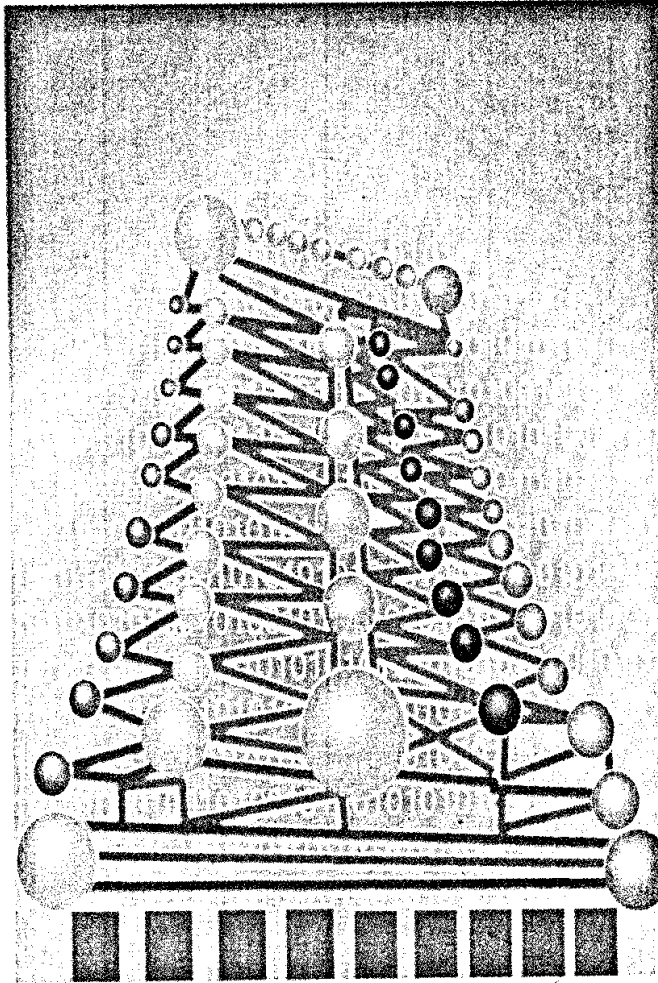
Sajan C Kumar

At a time when the Margazhi season's musical wave literally casts a magical spell on the city, a well-attended science gathering has given the state more moments of glory. The latest edition of the Indian Science Congress in Chennai witnessed scientists belonging to Tamil Nadu getting heaps of praise and honours from dignitaries, experts and academicians.

"Tamil Nadu has a unique place in the world of Indian science. India's first Nobel laureate in the sciences, Dr CV Raman, was a proud student of Presidency College, Chennai. So was Professor S Chandrasekhar. The state has also produced one of India's greatest mathematicians, Srinivasa Ramanujan," said Prime Minister Manmohan Singh while inaugurating the 98th Indian Science Congress on January 3 at the sprawling SRM University campus in the city suburbs. Close to 7,000 scientists and 5,000 young delegates were part of the science conclave, which concluded on January 7.

True to the Prime Minister's observations, Tamil Nadu hosted moments of glory in science and technology, with six Nobel laureates, including its own Venkatraman Ramakrishnan, taking part in the deliberations. Ramakrishnan, who won the Chemistry Nobel in 2009, made it clear that scientists were not movie stars or politicians and science had no space for celebrities. "Science is about curiosity, and icons and celebrities have no space in science," he told a gathering of enthusiastic students and scientists who had come to hear the Tamil Nadu-born laureate. Amartya Sen, Timothy Hunt, Ada Yonath, Martin Chalfie and Thomas Steitz were the other Nobel winners participating in the event.

Ramakrishnan, the seventh Indian



to win the Nobel, has done pioneering work on the ribosome, a cellular machine that makes proteins. "Scientists should not work in order to grab any honour or recognition. All their research activities should be channelised towards enhancing the knowledge base," he opined. Ramakrishnan, who was born in 1952 in the temple town of Chidambaram in Tamil Nadu, earned his BSc (Physics) from Maharaaja Sayajirao University, Baroda, in 1971, and PhD in Physics from Ohio University, US. As a post-doctoral fellow, he worked at Yale University. He was awarded the Nobel Prize for Chemistry along with Thomas Steitz and Ada Yonath in 2009.

Recalling the immediate impact of his being selected for the Nobel, Ramakrishnan said his e-mail box was clogged by congratulatory messages

from India. "Science developed in one place is useful in another. Science has always been international and not national," he said. Speaking at the inaugural event, the Tamil Nadu deputy chief minister MK Stalin said, "I am very happy to attend the Indian Science Congress, held in Tamil Nadu, a land which has produced three of the four Nobel laureates of Indian origin in science." Taking a serious view of the current scenario in the country, he said it was necessary that there must be a close collaboration between society and industry on the one hand, and research organisations, colleges and universities on the other. It was only when they work in unison that socially and economically relevant technologies can be developed.

He said that, today Indian scientists are the brains behind almost all the

leading research and development projects in the world. It is a matter of pride that more than 100 *Fortune 500* companies have established their research and development facilities in India. In a knowledge-driven world, the demand for Indian scientists will continue to grow. India and the Indian universities must seize this opportunity.

Presenting his paper on 'Nalanda and the pursuit of science', Amartya Sen said that Nalanda was violently destroyed in an Afghan attack led by the ruthless conqueror Bakhtiyar Khilji in 1193, soon after the foundation of the Oxford University and shortly before the initiation of Cambridge. Nalanda University, an internationally renowned centre of higher education in India, which was established in early fifth century, was ending its existence of more than 700 years even as Oxford and Cambridge were being established. "Had it not been destroyed and had it managed to survive to our time, Nalanda would have been, by a long margin, the oldest university in the world," he pointed out.

Nalanda was an ancient centre of learning that attracted students from many countries in the world, particularly China, Tibet, Korea, Japan and the rest of Asia. Nalanda, a residential university, had at its peak 10,000 students, studying various subjects. "It is also important to recognise that while Nalanda was very special, it was still a part of a larger tradition of organised higher education that developed in India—in Bihar particular," Sen said.

In recent years, Martin Chalfie in his paper said that government officials, university administrators and clinical researchers have called for a greater emphasis on translation research over basic research. Translational research underlines studies that apply or translate findings in the laboratory into new treatments for medical conditions.

In his presidential address, Professor KC Pandey, general president of the Indian Science Congress Association, said that there was a growing realisation today among scholars, policymakers and other observers that India is lagging behind other key countries and some of its BRIC partners in research investment and output. Consequently, considerable efforts are being made by the government to invest in education by creating facilities such as Indian Institutes of Science Education and Research, dedicated to the highest international standards of research and science education, he said on a hopeful note.

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17/12/11 Get science priorities right

Sessions of the Indian Science Congress have provided forums for the nation's executive to announce new policy initiatives in science and technology. The recently concluded 98th session at the SRM University in Chennai, with its focal theme of 'Quality Education and Excellence in Scientific Research in Indian Universities,' was no exception. When it comes to a skilled workforce India, as Minister for S&T Kapil Sibal noted in his keynote address, faces a huge supply-demand gap. A major reason is young people moving away from science at the tertiary level. The mushrooming of private and foreign players in an unregulated environment to impart education, much of it of poor quality, puts pressure on the government to step in and provide quality higher S&T education that is affordable. This calls for measures to widen the human resource base and increase the average proficiency levels at the universities. While it is nobody's case that we do not need more universities, the chief thrust should be towards strengthening the existing ones, both Central and State, in terms of infrastructure, finance, and autonomy so that the research and teaching environment gets invigorated to produce quality output. Modest external support for research in universities has already shown positive results: in the last three years, while India's research publications have grown annually at 12 per cent, university output has grown at 30 per cent. Unfortunately, the policy pronouncements of the Prime Minister as well as the S&T Minister seemed to miss the point by addressing the peaks in scientific research rather than improving the average.

Innovation is the new buzzword among Indian policymakers and scientists. Innovation cannot be bought or implanted. It will happen on its own once you have provided the right environment for research and education in institutions of higher learning. Name-plating organisations cannot produce innovation. Mr. Sibal announced that the government was working on the concept of creating 'Navratna' universities along the lines of Ivy League institutions. He also spoke of plans to set up 14 'Innovation' universities that would "set benchmarks in academics and ... compete with the best in the world in the context of problems of hunger, water, poverty, and diseases through cutting-edge science and technology." Rising India can certainly ivy-coat university buildings but that will not guarantee academic excellence and creativity. The Navratna public sector enterprises won that label in consequence of their hard work, solid achievement, and sustained growth; they were not labelled beforehand. Another dubious official project is the Academy of Scientific and Innovative Research to be established in association with the Council of Scientific and Industrial Research. This is basically conceived as a shortcut to produce hundreds of PhDs and post-doctoral fellows to meet the CSIR's needs. The real challenge is to initiate measures that will produce science and technology excellence in the university system. Diverting the CSIR from its mission of technology development into human resource development is likely to be to the detriment of universities.

PERSPECTIVES

Unfulfilled education aspiration



Rajesh Shukla

TODAY'S youngsters are better educated than their parents. They are generally economically better off, enjoy more freedom, are ambitious, and have more choice and opportunities. Most importantly, they are also more materialistic than their forebears. Surveys by the US National Center for Education Statistics (NCES) show that the percentage of young people who, two years after high school, deemed having lots of money as very important increased from 10% in 1974 to 35% in 1994 (Larson presentation, 4th Committee Meeting-Irvine, December 2000).

What are the problems faced by the youth of the country as far as education is concerned? National Youth Readership Survey (NYRS), 2009, put some questions to literate youth respondents to ascertain their views.

NYRS 2009 found that at the all-India level, 30% of the literate youth have only up to primary-level education and about 10% are graduate and above. The remaining 60% youth have qualifications varying between Classes VI and XII. It is also evident that about 76% of the targeted youth have not studied beyond Class X.

The persistent and serious problems that hamstring universalisation of primary education in the country is the heavy dropout rates. NYRS 2009 has revealed that nearly 88 million (26%) of the literate youth had stopped their studies at different levels, though they had aspired to go further. Of these youth, 64% (56 million) live in rural and the rest in urban areas. About 55% (48 million) of the dropouts are male.

About 62% of these unlucky youth had stopped their studies before completing Class X with dismal level of education. About 18% had stopped after completing Class X and 12% after higher second-

ary. It can be observed that 29% of the primary passouts, 25% of the 'matric' passouts and 22% of the graduates had stopped their studies although they had aspired to study further.

Of the youth who are primary passouts, 45% had the aspiration to pass 'matric', 24% higher secondary and 13% graduation and 12% post-graduation. Among the matriculates, 27% had aspired to complete higher secondary, 53% graduation and 18% post-graduation, while among higher sec-

ondary passouts, 64% had aspired to become graduates and 30% post-graduates.

In the case of graduates, 79% had aspired to complete post-graduation and 21% had wanted to get professional degrees.

Financial difficulties seem to be the paramount reason for not pursuing higher education. About 58% gave this as the first reason and 21% as the second reason. However, household responsibilities also turned out to be a major factor with 12% citing it as the first reason, 33% as the second and 26% as the third reason.

In 10% of the cases, parents or husband not allowing further studies was cited as the first reason, with 18% citing it as the second and 15% as the third reason. A few youth also cited non-availability of good schools and colleges in the locality as the reason for not pursuing higher education.

India trails most countries, including those in the developing block, in the crucial area of spreading education. In 1960, South Korea, Hong Kong and Thailand had literacy rates hovering in the 70% region, while India lagged behind with 28%. By 1990, the East Asian 'tigers' had crossed the 90% mark, but India barely covered 50% of its population. In 1990 and 1999, China's literacy rates were higher than India's by 28% and 27% respectively (Dreze and Sen, 2002).

There are several issues that are peculiar to the education scenario of India. There is a serious paucity of quality schools, proper infrastructure and facilities, and well-trained teachers. There are also political externalities like the volatile issue of caste-based reservation in higher education. There are serious disputes over the appropriate medium of instruction. Should education be imparted in English, which is supposed to be the world's business language, or in the regional language?

The country has also been grappling with the problem of a high dropout rate. Recent thoughts on restructuring the education system have thrown up new issues like need for introducing sex education in the academic curriculum. While it is true that India has a long way to go before reaping the demographic dividend in all its glory, the flow of trends is positive.

(The author is director of NCAER-CMCR)

Financial difficulties, household responsibilities, guardians' disinterest and non-availability of good institutions are the main reasons for the youth not pursuing higher education





Mumbai-based NMIMS received an A*** grading from Crisil last month

NOW, RATING FOR B-SCHOOLS

As credit rating agencies get ready to grade business schools, the jury is out on whether the process will be of much use

KALPANA PATHAK &
RAJESH BHAYANI
Mumbai

In December 2010, Mumbai-based Narsee Institute of Management Studies (NMIMS) received an A*** grading by credit rating agency Crisil. The institute is now all set to adorn it. "We will tell the world about it. Its already on our website and now all our advertisements would carry this. We have already communicated it to all our stakeholders. It has reassured that we are on the right track," said Rajan Saxena, Vice Chancellor, NMIMS University.

Ditto with S P Jain Institute of Management and Research (SPJIMR) which has also received A*** grading from Crisil. SP Jain's Dean M L Shrikant, says it was expected and the institute will post the grading on its website for visitors to see and know of its credibility.

As Crisil, the Indian arm of global ratings major Stan-

dard & Poor's, gears up for a formal launch of its B-school Grading this week, many management institutes are in the wait and watch mode. Credit Analysis and Research (Care Ratings), another rating agency will also formally launch its services soon.

The gradings, which B-schools have to volunteer for, will be valid for a year. The B-schools will be evaluated on an eight point scale including factors like faculty, infrastructure, curriculum, research standards, curriculum and interaction with the industry. The grading, says Care, would be at the national and state levels, with A*** being the highest, B*** being average and B being the lowest grade.

These agencies have well known academicians and scientists on board to advise them on the grading mechanism. Care says engineering institutions would be rated for their various degrees or courses. For instance, an institute may get an A*** for its course in chemical engi-

neering but a B*** in mechanical engineering.

At a later stage medical, law and agriculture institutions may also be included. The Indian Institutes of Management (IIMs) however, are not enthused. "IIMs are a brand which no credit rating agency can promote. We were approached by these agencies but we do not think we need a rating," said director from one of the IIMs who did not wish to be quoted.

Rating of B-schools is a unique phenomenon in India. Internationally, B-schools go for accreditations, a trend that is catching up in India too. Accreditation in India, like the world over, is voluntary.

"Even though international accreditations are a time consuming and costly affair, Indian B-schools, including the IIMs prefer to go for it as it puts them among the international B-schools," said the director of a Mumbai-based B-school who has applied for an Association to Advance Collegiate Schools of Business (AACSB)

accreditation.

Internationally, there are five recognized accrediting bodies. These include: US-based, Association to Advance Collegiate Schools of Business International; European Foundation for Management Development; Association of Management Development Institutions in South Asia (AMDISA) and Association of MBAs. AMDISA has formulated the South Asian Quality Accreditation System, Asia's first global accreditation system. However, getting accreditation from AMBA, EQUIS and AACSB is considered the ultimate goal.

"The present ranking system does not give information on B-schools beyond the top 20. Ratings will make that possible"

M L SHRIKANT,
Dean, SPJIMR, Mumbai

Global accreditation helps B-schools notch up global placements; tie-up with international management schools; get potential international recruiters; student exchange programmes and recruit internationally qualified faculty.

In India, at present, there are two government-run accreditation bodies - the National Board of Accreditation (NBA), constituted by the All India Council for Technical Education and National Assessment and Accreditation Council (NAAC), an autonomous institution established by the University Grants Commission.

Crisil will also shortly begin the grading process for Great Lakes. When contacted, Crisil however, could not share the number of B-schools it has approached so far.

"Ratings from such independent bodies will strengthen our credentials. It will help in popular perception. Other rankings merely confuse you," said Professor S Sriram, executive director, Great Lakes Institute of Management, Chennai.

The process of grading will involve the officials of rating agencies spending time on the campus and interacting with faculty, students, alumni and recruiters before coming out with a grade.

"Ratings will provide parents and students value added information to zero in on good institutes on specific course basis. Care ratings will offer ratings to an entire gamut of education institutions," said Rajesh Mokashi, Deputy Managing Director, Care Ratings. Care has been rating maritime training institution for the past five years. Crisil and Care would be charging anywhere between ₹5-10 lakh to these management institutions for the grading process. The agencies however, say management institutes, are providing discounts at present.

"The charge quoted to us was around ₹8-10 lakh. But we had to bargain hard with the agency that approached us. We finally managed it all in ₹3 lakh," said the director of an institute who did not wish to be quoted. Cost aside, experts say pitfall of this process is its voluntary nature. "Since its not mandatory, it may end up as another NBA or NAAC," said a Delhi-based education analyst.