

## Newspaper Clips

January 5, 2011

Times of India ND 05-Jan-11 p-7

# Alumnus gifts \$3m to IIT-B to set up convention centre

TIMES NEWS NETWORK

**Mumbai:** More than 30 years ago, a quiet Victor completed his electrical engineering from the Indian Institute of Technology, Bombay. In 2007, he gifted \$3 million to his alma mater for setting up a convention centre, a chic building that could house an auditorium, lecture halls, research labs and facilities where the best minds can sit, discuss and work on ideas.

Former senior vice-chairperson of Citigroup, Victor Menezes, said: "This is a small way to say thank you." The Vic-

**While Rs 13.5 crore has come as a gift from Menezes, the remaining amount has been pumped in by the institute**

tor Menezes Convention Centre has been constructed at a cost of Rs 40 crore. While Rs 13.5 crore has come as a gift from the former BTech graduate, the remaining amount has been pumped in by the institute. Union HRD minister Kapil Sibal will inaugurate the

centre on Saturday."

"I received priceless education from IIT-Bombay and this is a small way to say thank you," said Menezes. "I hope the convention centre will help support the exchange of ideas and intellectual advancement at IIT-B." The Victor Menezes Convention Centre has an auditorium that can hold an audience of 380, 16 lecture halls, a VIP lounge and a conference hall.

Apart from the inauguration of the centre, Saturday will also be the 40th reunion of the class of 1970.

Times of India ND 05-Jan-11 p-13

# Health ministry, MCI lock horns over notification for common med exam

Kounteya Sinha | TNN

**New Delhi:** The union health ministry and Medical Council of India (MCI) are now on a collision course over the proposed common entrance test for all MBBS and PG medicine courses in the country.

Two days after TOI reported on MCI's notification making the national eligibility-cum-entrance test (NEET) mandatory for admissions to all medical courses, the health ministry has directed MCI to withdraw the notification 'with immediate effect'. But MCI has decided not to recall the notification saying it was issued based on the apex court's nod on December 14 and the affidavit filed by the union health ministry in support of CET.

MCI published the notification on December 21 amending regulations on graduate and post-graduate medical education, and introducing NEET as the sole admission requirement. Besides prescribing a certain cut-off percentage of NEET marks for various sections of candidates,



CAUGHT IN CROSSFIRE

the notification said it would also consider marks in mathematics for MBBS admissions.

Though the notification claimed that it had the previous approval of the Centre, the health ministry in a letter to the MCI chairman dated January 3 said there was "no previous approval of the central government for amending the regulations." It had even termed the notification "invalid".

It had directed the board of members to withdraw the notification forthwith.

The All India Medical Association (AIMA) president TD

Naidu too demanded the withdrawal of the notification, and made it known that AIMA would take steps to get the notification scrapped.

The MCI has, however, reiterated its stand and said it issued the notification after a go-ahead from the Supreme Court. An SC bench comprising Justices R V Raveendran and A K Patnaik had on December 14 clarified that "pendency of petitions will not stand in the way of MCI notifying the new regulations (proposing single CET) and others from challenging the notification (subsequently)".

Though the MCI is yet to send a formal reply to the Centre, Dr Sita Naik, member of the governing council, told TOI: "We issued the notification after the SC gave us the go-ahead. The ministry has its own point of view." In reply, a ministry official said, "We are agreeable in principle to the idea of a CET but before a formal approval is given, we will have to have wider consultation with states and all other stakeholders. The MCI has been asked to withdraw the notification as it has not been approved by the ministry."

On his part, union HRD minister Kapil Sibal, speaking to reporters in Tiruchi in Tamil Nadu, said final decision would be taken only after considering views of states. "In the process of reforms in education sector, not a single step would be taken without consultation with states." MCI's notification would mean that a single entrance exam would be held for MBBS and MD courses offered by all 271 medical colleges — 138 run by governments and 133 under private management.

# When past adversity provides a map

## Mental Toughness Develops With Experience & Breaks Down When Overworked

Benedict Carey

Whatever else it holds, this new year is sure to produce a healthy serving of redemption stories, against-the-odds tales of people who bounced back from the layoffs, foreclosures and other wreckage of 2010. They landed better jobs. They started successful companies. They found time to write a book, to study animal husbandry, to learn a new trade: to generate just the sort of commentary about perseverance, self-respect and character that can tempt anyone who's still struggling to throw things at the TV.

Character is a fine thing to admire, all right — once the storm has passed and the rigging is repaired. But when people are truly sinking, because of job loss, illness, debt or some combination of ills, they have no idea what mix of character, connections and dumb luck will be enough to pull through. To use the psychologists' term, they don't know how "resilient" they are, or how much resilience even matters.

Do I have the right stuff? Or is this sinkhole simply too deep?

"As with so many of life's experiences, humans are simply not very good at predicting how they'll behave when hit by a real adversity," said Laura King, a psychologist at the University of Missouri.

Researchers aren't so good at it, either. It is clear that with time, most people can and do psychologically recover from even devastating losses, like the death of a spouse; but reactions to the same blow vary widely, and no one can reliably predict who will move on quickly and who will lapse into longer-term despair.



**THE TOUGH GET GOING:** New research suggests that resilience may have at least as much to do with how often people have faced adversity in the past as it does with who they are

The role of genes is likewise uncertain. In a paper published online in *The Archives of General Psychiatry*, researchers at the University of Michigan who analyzed more than 50 studies concluded that variations in a single gene determine people's susceptibility to depression following stressful events. But an earlier analysis, of fewer but similar studies, concluded that the evidence was not convincing.

New research suggests that resilience may have at least as much to do with how often people have faced adversity in past as it

does with who they are — their personality, their genes, for example — or what they're facing now. That is, the number of life blows a person has taken may affect his or her mental toughness more than any other factor.

"Frequency makes a difference: that is the message," said Roxane Cohen Silver, a psychologist at the University of California, Irvine. "Each negative event a person faces leads to an attempt to cope, which forces people to learn about their own capabilities, about their support networks — to learn who their real friends are.

That kind of learning, we think, is extremely valuable for subsequent coping," up to a point.

In a study appearing in the current issue of *The Journal of Personality and Social Psychology*, Cohen Silver, Alison Holman, also of University of California, Irvine, and Mark Seery, of State University at Buffalo, followed 2,000 adults for several years, monitoring their mental well-being with online surveys. The participants, a diverse cross section of Americans between the ages of 18 and 101, listed all of the upsetting life events they had experienced before entering the study and any new ones that hit along the way. These included divorce, the death of a friend or parent, a serious illness, and being in a natural disaster.

Or, none of the above: 194 participants reported they had experienced not one of the fairly comprehensive list of 37 events on the survey. "We wondered: Who are these people who have managed to go through life with nothing bad happening to them?" Cohen Silver said. "Are they hyper-conscientious? Socially isolated? Just young? Or otherwise unique?"

They weren't, the researchers found. Stranger still, they were not the most satisfied with their lives. Their sense of well-being was about the same, on average, as people who had suffered up to a dozen memorable blows.

It was those in the middle, those reporting two to six stressful events, who scored highest on several measures of well-being, and who showed the most resilience in response to recent hits. In short, the findings suggest that mental toughness is something like the physical strength: It cannot develop with-

out exercise, and it breaks down when overworked. Some people in the study reported having had more than a dozen stressful events, and it showed.

"These people were truly suffering," Cohen Silver said, "and we do not minimize in any way the pain of such events when you're going through them. But it does appear that if you've had several such experiences but not too many, you learn something."

Other researchers who looked at the study were more cautious. George Bonanno, a psychologist at Columbia University, said that the results may partly reflect a trick of memory.

Experience may provide more than a sense of what to expect and who one's real friends are. In a recent study in the journal *Emotion*, researchers at the University of Denver and the University of Basel in Switzerland tested the ability of 78 women to reduce the amount of sadness they felt after watching an upsetting film clip, using a technique called reappraisal. The study found that the women who were adept at this sort of self-therapy were less susceptible to depressive symptoms after significant crises in their own lives.

It may be that experience with a few upsetting events refines these types of psychological skills, in a person's own thinking through of the problem or in discussion with friends. Either way, the lifetime resilience study suggests that the pain, the self-doubt, the disorientation and the anger that swarm the consciousness in the wake of a job loss, a foreclosure or a divorce can have some upside, even though it's not remotely visible at the time. **NYT NEWS SERVICE**

**Times of India**  
**ND 05-Jan-11**  
p-17  
**Cretan tools**  
**point to**  
**130000-yr-old**  
**sea travel**

**Athens:** Archaeologists on the island of Crete have discovered what may be evidence of one of the world's first sea voyages by human ancestors, the Greek culture ministry said.

A ministry statement said experts from Greece and the US have found rough axes and other tools thought to be between 130,000 and 700,000 years old close to shelters on the island's south coast. Crete has been separated from the mainland for about five million years, so whoever made the tools must have traveled there by sea (a distance of at least 40 miles). That would upset the current view that human ancestors migrated to Europe from Africa by land alone.

"The results of the survey not only provide evidence of sea voyages in the Mediterranean tens of thousands of years earlier than we were aware of so far, but also change our understanding of early hominids' cognitive abilities," the ministry statement said. The previous earliest evidence of open-sea travel in Greece dates back 11,000 years. The tools were found during a survey of caves and rock shelters near the village of Plakias by archaeologists from the American School of Classical Studies at Athens and the Culture Ministry.

Such rough stone implements are associated with Heidelberg Man and Homo Erectus, extinct precursors of humans, which evolved from Africa 200,000 years ago. AP

# In Arkansas, mystery over 3000 birds falling out of the sky

**Beebe (Arkansas):** Celebratory fireworks likely sent thousands of discombobulated blackbirds into such a tizzy that they crashed into homes, cars and each other before plummeting to their deaths in central Arkansas, scientists say. Still, officials acknowledge it's unlikely they'll ever pinpoint a cause with certainty.

So for the small town of Beebe, Arkansas, where New Year's revelers spent the holiday weekend cleaning up more than 3,000 dead red-winged black-

birds, The Mystery of Why the Birds Fell Out of the Sky remains unsolved.

Some speculated that a bout of bad weather was to blame. Others said one confused bird could have led the group in a fatal plunge. A few spooked schoolkids even guessed that the birds had committed mass suicide. "There was probably some physical reason, but I doubt anyone will ever know what it was," said Thurman Booth, the state's wildlife services director.

The birds were the second mass wildlife death in Arkansas in recent days.



**FIREWORKS TO BLAME?** A dead bird lies on the ground in Beebe, Arkansas

Last week, about 83,000 dead and dying drum fish washed up along a 20-mile stretch of the Arkansas River, about 100 miles west of Beebe. Wildlife officials say the fish deaths are not related to the dead birds, and that because mainly one species of fish was affected, it is likely they were stricken by an illness.

Officials are examining bird carcasses for signs of disease and labs test the contents of their stomachs for toxins.

There was little light across the countryside at the time, save for the glimmer

of fireworks and some lightning on the horizon. In the tumult, many birds probably lost their bearings. "The blackbirds were flying at rooftop level instead of treetop level" to avoid explosions above, said Karen Rowe, an ornithologist with Arkansas Game and Fish Commission. "Blackbirds have poor eyesight, and they started colliding with things."

Residents heard loud fireworks just before the birds started hitting the ground. "They started going crazy, flying into one another," Stephens said. AP

Financial Chronicle ND 5/01/2011

P-11

# Golden triangle of university R&D

**R**ECENTLY, the National Endowment for Science, Technology and the Arts (Nesta) in the UK published a report entitled *Measuring User Innovation in the UK: The Importance of Product Creation by Users*. Until now, there has been no comprehensive account of the importance of user innovation. This report sets out to address this important gap in the evidence base. It breaks new ground by exploring the innovative activities of UK consumers in an experimental survey that is a first-of-its-kind in the world. It also provides a set of indicators and metrics for user innovation at the firm level, drawing on the first survey of user innovation by UK firms.

Innovation activities have been traditionally considered the domain of specialist producers who design, develop and commercialise new technologies that are then passively adopted by users. This producer-centred model, inspired by the pioneering work of Austrian economist Joseph Schumpeter, is linked to a specific set of policies to encourage innovation through the use of intellectual property rights and government subsidies for these producers. However, there is a growing body of research showing that users — both firms and individual consumers — play a much more active role in processes of innovation than it had been generally believed. Users create and modify products and services to serve their own needs, and often make these innovations freely available to each other, as well as the producers. Many successful products in the market were initially developed by users, and eventually adopted and commercialised by producers. This suggests a shift,

Arun Nigavekar



**FOUND WANTING:** Indian universities are always caught between a rock and a hard place when it comes to research and development (R&D) and innovations. The main issue is how to motivate teachers to do more research

in the locus of innovation in advanced economies where technology and market trends are changing the way innovation gets done, and by whom. For example, as design and communication costs decline due to rapid improvements in computer-based design tools and internet technologies, user and open collaborative innovation models are beginning to complement, and in some cases supplant, traditional, producer-centred innovation processes over a steadily wider range of conditions. These findings and trends represent fundamental challenges to the producer-centred models of innovation,

and policies — including the present intellectual property rights framework, which are related to that model. To date, most studies of user innovation have focused on specific consumer and industrial categories. But cross-industry studies of the phenomenon are needed to build a robust evidence base for policy-making, and to support managerial decision-making.

Indian universities are always caught between two edges of rocks when it comes to research and development (R&D) and innovations. The university faculty is expected to spend a bulk of time on R&D activities. The ex-

perience of the majority of faculty in university departments or schools is far away from the expectations of leading researchers in different national laboratories and also of the industry. The faculty is blamed that they are neglecting application-oriented research. They also are not contributing, as the R&D funding agencies would say, in core basic research in their field of specialisation. Indeed, the main issue is how to motivate teachers in universities and colleges to do more research. It was expected that introduction of a good and very remunerative salary package would induce the teacher communi-

ty to do quality job, both in teaching and research. In fact, it is now well accepted that salary has no link with the amount and quality of work done by the faculty. However, the picture is not that gloomy. There are a certain percentage of teachers, albeit small, who enjoy doing research. They are more willing to take up application-oriented research and they have strong inclination to innovate. They, however, find that manufacturers or industries have their well-defined and focused priorities in development of particular products that may not necessarily excite researchers.

The researchers would like to work on products and processes that have a foundation on the core field of researchers' expertise and they have set ideas on how they would like to go about if the product or the process is to be accepted well by the consumers or users at large. It is here the conflict of ideas and expectations of the producers and industries and that of researchers start creeping in, which many times lead to detachment in the minds of the researchers.

The findings of the recent Nesta report are very useful to our universities, funding agencies and also industries. This is mainly because this report sets out to address this gap in the understanding of the role of users, including individual consumers and business firms, in processes of innovation across a range of sectors. Our universities, with such triangular linkages between researchers, consumers and manufacturers, would become productive R&D institutions.

(The writer is a former chairman of UGC and former VC of University of Pune)

**Times of India ND**  
**05-Jan-11 p17**

## **'Electric shock can stop your embarrassing leaks'**

**S**uffering from Incontinence? Stimulate your legs with an electric current, for a new study says that it can help stop the embarrassing leaks. Incontinence is the inability to control urination. It is caused by the bladder muscle contracting before the organ is full. It affects people of all ages and gender, but women are twice as likely as men to develop incontinence. Now, a team at North Middlesex University Hospital in Britain has found that the new technique can help 70% of women with an overactive bladder and more than halve the frequency of their symptoms, the Daily Mail reported.

## **US sees huge drop in bumble bees:**

Weakened by inbreeding and disease, bumble bees have died off at an astonishing rate over the past 20 years, with some US populations diving more than 90%, according to a new study. The findings are of concern because bees play a crucial role in pollinating crops such as tomatoes, peppers and berries, said the findings of a three-year study published in the Proceedings of the National Academy of Sciences (PNAS). Similar declines have also been seen in Europe and Asia.

## **'Will take 300 yrs to turn back deserts':**

At the current rate of progress it will take 300 years to turn back China's advancing deserts, a senior official said bemoaning the low level of investment in fighting a serious environmental problem. Over a quarter of China's land area is covered by desert, or land which is turning into desert in which soil loses its fertility, putting crops and water supplies at risk for the world's second-largest economy.

## **'Walking speed linked to longevity':**

Researchers at the University of Pittsburgh have found that people who walk faster are more likely to outlive their slow-walking counterparts in old ages. The scientists say that there are many reasons why gait speed may predict survival. Slowing gait may reflect both damaged systems and a high energy cost of walking, said the experts.

Financial Chronicle ND 5/01/2011 P-10

# DRDO plans commercial arm for spinoff tech

SANGEETHA G

Chennai

DEFENCE Research and Development Organisation (DRDO) will soon launch a commercial arm that will market spinoff technologies that can be of use for civilians. The organisation expects around Rs 70 crore annual sales from this move.

The arm will also be responsible in developing the market for technologies that are custom-made for the para military forces especially for combating terrorism.

DRDO has produced several products like swine flu detection kit, 'Attracticide' for the control of dengue and chikungunya

mosquitos, eco friendly disposal of human excreta named bio-digester, electrically heated gloves and socks and jatropa-based bio-fertilizers and soaps.

The arm will identify private companies for transferring the technology and collaborate on large scale production and marketing of products.

Federation of Indian Chambers of Commerce and Industry (FICCI) has been working as an interface between the organisation and private sector for some of its products and now the commercial wing will take it up in a big way, said Ravi Kumar Gupta, director, DRDO.

According to V K Sara-

**This will develop market for technologies that are custom-made for paramilitary**

swat, director general of DRDO, the annual sales from these spin off technologies is expected to be around Rs 70 crore after the initiation of the commercial arm in a couple of months' time.

The arm will also explore the market potential of custom-made technologies for the para military forces. "In the face of terrorism, there is an increased demand for lighter and affordable combat technologies from para military forces like passive night vision google, hand-held thermal imager, boot anti mini infantry," said Gupta.

DRDO will also start a collaborative research and development centre at IIT Madras. The centre will focus on material sciences, manufacturing industries, nano science and aero space engineering.

sangeethag@mydigitalfc.com

Indian Express ND 5/01/2011

P-5

## DRDO R&D centre at IIT-Madras

**CHENNAI:** The DRDO will set up a research and development unit in the new IIT-Madras Research Park, DRDO director general V K Saraswat said on Tuesday. Speaking on the expanding scope of industry-academia relations in the defence sector on the second day of the 98th Indian Science Congress in Chennai, he said the centre would function on the principle of "free flow" of talent between IIT and DRDO. Faculty at IIT will serve as adjunct faculty at the R&D centre and vice-versa, he told reporters.

ENS

# Laterally thinking

It has been a tradition to follow logical thinking when it comes to education. But lateral thinking is equally important when it comes to getting new ideas to go beyond the available information. Dr SHEENU JAIN tells you more about this uncommon discipline

The emphasis in education has always been on logical, sequential thinking. Creativity is vaguely encouraged as some mysterious talent. Lateral thinking is not a substitute for traditional logical thinking, but a necessary complement.

Lateral thinking makes a different use of information from logical thinking. The need to take the right step at every point is absolutely essential to logical thinking but it is not as important when it comes to lateral thinking. It may sometimes be necessary to be wrong in order to dislocate a pattern sufficiently for it to reform in a new way. With logical thinking, one makes immediate judgements, while with lateral thinking one may delay judgements in order to allow information to interact and generate new ideas.

The twin aspects of lateral thinking are:

- The provocative use of information
- The challenge in accepted concepts.

Underlying both these aspects is the main purpose of lateral thinking which provides a means to restructure patterns. This



restructuring of pattern is necessary to make better use of information that is already available. It is an insight restructuring.

The mind is a pattern-making system. The mind creates pattern out of the environment and then recognises and uses such patterns. This is the basis of its effectiveness. The sequence of arrival of information determines how it is to be arranged into a pattern. Such patterns are always less than the best possible arrangement of information. In order to make such patterns up-to-date and make better use of the contained information, one needs a mechanism for insight restructuring. This can never be provided by logical thinking which works to relate accepted concepts, not to restructure them.

Lateral thinking is demanded by the behaviour of this type

of information processing system in order to bring about insight restructuring. The provocative function of lateral thinking and the challenging function are both directed towards this end. In both the cases, information is used in a manner that goes beyond reason for lateral thinking which works outside of reason. Yet the need for it is based quite logically on the deficiencies of a self-maximising memory system which is a type of system which makes the mind capable of humour.

Lateral thinking works at an earlier stage than verbal thinking. It is used to restructure the perceptual pattern which is the way a situation is looked at. Verbal thinking then accepts the perceptual pattern and develops it. While lateral thinking is generative, verbal thinking is selective. Effectiveness is the aim of both.

In ordinary traditional thinking we develop no methods for going beyond the adequate. As soon as something is satisfactory, our thinking must stop. And yet there may be many better arrangements of information beyond the merely adequate. Once one has reached an adequate answer then it is difficult to proceed by logical thinking because the rejection mechanism, which is the basis of logical thinking can no longer function well. With lateral thinking one can easily proceed beyond the adequate by insight restructuring.

The need to change ideas is becoming more and more obvious as technology speeds up the rate of communication and progress. We have never developed satisfactory methods for changing ideas but always have relied on conflict. Lateral thinking is directed towards bringing about a change in ideas through insight restructuring.

The discipline is directly concerned with insight and creativity. But whereas both the processes are usually only recognised after they have happened, lateral thinking is a deliberate way of using information in order to put them into practical use. In practice lateral thinking and vertical thinking are so complementary that they are mixed together. Nevertheless, it is best to treat them as distinct in order to understand the basic nature of lateral thinking and acquire skill in its use. This also prevents confusion because the principles governing the use of information are quite different from the ones used in vertical thinking.

It is difficult to acquire any sort of skill in lateral thinking simply by reading about it. In order to develop such a skill, one must go on practicing. Exhortation and goodwill are not enough. There are specific techniques for application of lateral thinking. The purpose of such techniques is twofold. They can be used for their own sake but more importantly they can be used to develop the lateral habit of mind.

In order to use lateral thinking effectively one needs a practical language tool. Such a tool is necessary to allow one to use information in the special way required by lateral thinking and also to indicate to others what is being done.

It is not concerned with generating doubt for the sake of doubt or chaos for the sake of chaos. Lateral thinking acknowledges the extreme usefulness of order and pattern. But it emphasises the need for changing these to bring them up-to-date and make them even more useful. Lateral thinking, particularly, emphasises the danger of rigid patterns which the mind is so apt to construct because of the way it handles information.

(Dr Jain is a faculty member at Jaipuria Institute of Management, Jaipur)



Indian Express ND 5/01/2011

P-6

# MBBS: No common test for now

**ANURADHA MASCARENHAS**

PUNE, JANUARY 4

THE proposed common entrance test for admission to around 31,000 MBBS and 11,000 MD seats in all government and medical colleges across the country may not take off this year.

The Union Ministry of Health and Family Welfare has asked the Medical Council of India (MCI) to immediately withdraw its notification to hold a common test as prior approval had not been taken from the centre.

Deputy Secretary in the Health Ministry S Singh told *The Indian Express* that the ministry issued a letter to MCI on January 3. A meeting will now be held on January 12 with all state secretaries on the issue, Singh said.

In the letter to the chairman of the MCI's Board of Governors, Singh pointed out that while the body was empowered to make regulations, it was also required to get prior approval from the Central government.

According to Section 33 of the Indian Medical Council Act (1956), the MCI was empowered to make regulations with the Centre's approval.

"It has come to our notice that the Board of Governors has amended regulations on Graduate Medical Educa-

## AT STAKE

**271 MEDICAL** colleges — 138 government-run and 133 under private managements

**OVER 31,000** seats for MBBS courses and 11,000 for post-graduate courses.

**ADMISSIONS NOW** based on separate tests conducted by state boards, CBSE, armed forces and pvt managements.

tion-1997, Post Graduate Medical Education-2000 and notified common entrance test for admission to graduate and post-graduate courses. As required by rules, no previous approval of the central government has been taken for amending the regulations," Singh stated in the letter, directing the MCI to withdraw the notifications.

The MCI decision was important as from this year, there would have been just one entrance test each for MBBS and MD courses offered by 271 medical colleges — 138 government-run and 133 under private managements.

These colleges together offer over 31,000 seats for MBBS courses and another 11,000 for post-graduate courses.

Admissions to these colleges are now based on pre-medical entrance tests conducted by state boards, CBSE and the armed forces.

Indian Express ND 5/01/2011  
P-8

# New UGC rules to tighten control over pvt varsities

ANUBHUTI VISHNOI  
NEW DELHI, JANUARY 4

AFTER deemed universities, the government is set to tighten control over private universities, including ensuring (for the first time) that these follow the relevant reservation policies.

As per the proposed University Grants Commission regulations — accessed by *The Indian Express* through a Right to Information (RTI) application — all private universities may soon have to adhere to UGC regulations with regard to admissions, fees, service rules for teachers and reservation policies of the state or Centre. A final call on the UGC (Establishment and Maintenance of Standards in Private Universities) Regulations will be taken on January 6.

These will supersede the 2003 regulations that the Commission came out with after the sudden spurt in private universities in Chhattisgarh, and go beyond the older rules by specifying greater sway of UGC regulations on private varsities besides mandatory inspections by UGC expert committees. However, the new regulations also open the door to private universities to be established as national-level entities backed by Central Acts.

The regulations propose that the Centre/state government prescribe an appropriate minimum corpus fund, land and other infrastructural requirements for the establishment of a private university. A private university must also fulfill minimum criteria in terms of the programmes offered, faculty, infrastructural facilities, financial viability and other physical and infrastructural requirements, as outlined by the UGC and other statutory bodies like the AICTE (All India Council for Technical Education), Bar Council of India, Distance Education Council, Dental Council of India, Indian Nursing Council, National Council for Teacher Education and the Pharmacy Council of India.

## The proposals

- Fixed norms for setting up of varsities, from funds to faculty
- Adherence to UGC norms on standards, including nomenclature of degrees
- Implementation of reservation policy
- A thorough inspection and approval process

The regulations go ahead of the existing ones stipulating that a university must at least have five departments and each of these must have a minimum of six permanent faculty members (a professor, two associate professors and three assistant professors) holding prescribed qualifications, besides the necessary technical and ministerial staff as prescribed by respective statutory bodies.

Laying out a series of “To Do’s” under the head ‘Maintenance of Standards’, the regulations say private universities must meet the norms, notifications, regulations and guidelines as laid down by the UGC from time to time, offer all academic and non-formal courses as per the UGC guidelines on the same, adhere to the nomenclature of degrees and programmes as specified under the UGC Act, and set up statutes, regulations, rules and authorities like Board of Governors, Academic Council, Executive Council and Finance Committees to deal with governance, academic, administration and financial issues as per the Centre/state Acts.

On reservations, the new regulations say that “the university shall implement the reservation policy in admissions and recruitment in accordance with policy and/or provisions as contained in any Act of Central or state government”.

Centre/State rules will also apply to aspects like teaching, research, examination, admission, faculty, service conditions, remunerations, student discipline, fees, funds, scholarships and concessions.

Business Line ND 05/01/2011 P-4

# Sibal favours entrance-based admission for MBA courses

## Foundation stone for IIM-Tiruchi laid; uniformity in standards stressed

R. Krishnamoorthy

Tiruchi, Jan. 4

Advocating common entrance tests for admitting candidates to management programmes offered by the over 3,000 private institutions in the country, the Union Minister for Human Resource Development, Mr Kapil Sibal, emphasised on Tuesday that quality in higher education was impossible without uniformity in standards.

"I am not sure about the quality of curriculum in these institutions," Mr Sibal said after laying the foundation stone for the Indian Institute of Management - Tiruchi (IIM-T) on Tuesday.

Citing the revised norms of AICTE on FSI (Floor Space Index) and FAR (Floor Area Ratio) in order to offer scope for institutions to expand vertically, he predicted enormous scope for private sector to start management institutions in large numbers.

### LOOK FOR JOBS HERE

Mr Sibal dissuaded management students from opting for lucrative jobs in the West, say-



Mr Kapil Sibal, Human Resource Development Minister, addressing the gathering after laying the foundation stone for the Indian Institute of Management Tiruchi on Tuesday. - M. Moorthy

ing that much of the activities of the world were centred in the region encompassing India and China.

For a better understanding of opportunities and challenges, Mr Sibal urged MBA students to come out with management solutions to the various challenges that the country faces on education, health, agriculture and other sectors.

With India poised to become the largest populated country with 1.7 billion people

by 2050, management solutions must factor in technology and be suitably routed to address sector and region-specific complexities with a sense of urgency.

Terming the occasion a historic moment, Mr Sibal hoped that girls who have been creating a revolution in India by outshining boys in many spheres will constitute at least half of the entrants to the IIM-T. The HRD Minister complimented the Tamil Nadu Chief Minister, Mr M. Ka-

runanidhi, and the State Higher Education Minister, Mr K. Ponnudiy, for carrying out educational reforms.

### EDUCATIONAL HUB

The Minister of State in the Ministry of HRD, Ms D. Purandeswari, said Tiruchi, known as an educational hub for decades, will now be identified nationally and internationally with the IIM-T. By virtue of liberalisation that started two decades ago, India could register significant economic progress even surmounting global recession.

As India gains an important role in the global scenario, the future challenge was in developing leadership at various levels. The dichotomy reflecting in islands of excellence in a sea of underdevelopment warrants handling with management expertise for converting the social advantage accruing from demographic dividend into economic prosperity, she said.

### RESEARCH ORIENTATION

Thanking the Centre for sanctioning in its present term

three central institutions (Central University of Tamil Nadu, Tiruvarur; IIM-T and the proposed institution of international standards in Coimbatore), Mr Ponnudiy wanted higher educational institutions to nurture independent thinking by learners and prepare them for global competition.

Be it management, technical subjects or basic sciences, there must be a research orientation in the learning process, he stressed, acknowledging that the existing teaching methods, which foster rote learning, need to be changed.

The State Minister for Forests, Mr N. Selvaraj; the Chairman of the Board of Governors, IIM-T, Mr M. Damodaran; and the Director of IIM Bangalore, Mr Pankaj Chandra, offered felicitations. The Additional Secretary in the Ministry of HRD, Mr Ashok Thakur; the Principal Secretary of Higher Education, Government of Tamil Nadu, Mr K. Ganesan; and the Director of IIM-T, Mr Prafulla Agnihotri, also took part.

## CAT on a hot tin roof yet again

**Divya Trivedi**

*New Delhi, Jan. 4*

The CAT seems to have been let out of the bag before it was time. Ten days before the scheduled announcement, the Common Admission Test (CAT) 2010 results were visible through the URL <http://scorecard.catiim.in/>, claim students.

Although the CAT 2010 Convenor brushed aside the incident, close to 50 students were able to see the results, according to MBA students' forum Pagalguy.com

The link was also uploaded on Pagalguy.com from where it spread like wildfire. Subsequently it was removed by the site moderator. Mr Hitesh Devalia, who runs the Endeavor coaching classes in Ahmedabad, was one of those who entered his roll numbers and was able to see the scorecard. The link said 2009 results, but when the roll numbers were entered, it showed the 2010 results.

"It was a complete scorecard. There was a section-wise break-up, marks, and the photograph. Around nine of my students were also able to see their results," he told *Business Line*. His theory is that it could have been hacked by somebody, as it happened once before in 2004. The other possibility is that there was an internal link-testing going on and



A file photo of students appearing for the CAT exams in Bangalore.

somebody from the organisation could have put it out in the public domain.

"In all probability, the administrators of the 'catiim.in' Web site were testing the results system when the URL became publicly known. This is a strange and clumsy testing practice; the release candidate of any web-based application should be password protected and revealed only to a select test group. Certainly not be publicly accessible until launched," according to a write-up on Pagalguy.com.

### PSYCHOLOGICAL REPERCUSSIONS

While such incidents might not affect the admissions process, they might result in students' erosion of faith from the system, said Mr Devalia.

"There were technical glitches even when the CAT went online for the

first time. There has been a 15-20 per cent drop in CAT aspirants. Such incidents may psychologically affect those aspiring to enter the IIMs," he said.

The 2010 CAT Convenor, Mr Himanshu Rai, from Indian Institute of Management - Lucknow, told *Business Line* that the incident will not be investigated.

"I have no clue what happened. Servers were being taken down by us and we will be uploading the results. Meanwhile, whatever happens, it is not our concern. The results will be officially available on January 12," he said.

### TESTING AGENCY

Prometric, the testing and assessment agency which partners the IIMs to conduct the online CAT, has also denied having a hand in the premature results leakage. "Prometric is not a part of this at all," said a Prometric spokesperson. In this case, there was a separate web consultant to help the IIMs with the results, said Mr Rai. He refused to divulge the name of the partner saying it was confidential and would be revealed only after the announcement of results.

Mr Devalia's scorecard showed a percentile of 99.87. One would have to wait till January 12 to find out if he has indeed scored as much or not.

## Business Line ND 05/01/2011 P-4

### TECH LEADERSHIP INITIATIVE

# Financing, marketing hold the key to public-private tie-ups' success

**Vinson Kurian**

Chennai, Jan. 4

Anybody would agree that the Nano car is a great invention, but most tended to write off the 'Rs 1-lakh' model when the sales numbers began to careen down from a peak of 25,000 to touch a lowly 500 just a month ago.

But this was just a blip on the radar, as was proved when sales bounced back to 5,000-odd in December. What seems to have done the trick is a new marketing and financial strategy engineered by the manufacturers.

#### OBJECT LESSON

This holds an object lesson for the Government, according to Dr S.K. Brahmachari, Director-General, Council for Scientific and Research (CSIR).

It would be ideal for the Government to facilitate similar strategies for the many projects in the public-private participation (PPP) mode and get out of the way, he said while making a presentation on 'The NIMTLI (New Millennium Indian Technology Leadership Initiative) programme' at the Indian Science Congress here on Tuesday.

NIMTLI is the country's largest PPP effort within the research and development domain. It looks beyond today's technology and thus seeks to build, capture and retain for India a leadership position by synergising the best competencies of publicly funded R&D institutions, academia and private industry.

#### CATALYTIC ROLE

Government finances play a catalytic role. It is based on the premise of consciously and deliberately identifying, selecting and supporting potential winners. NMITLI has carved out a unique niche in the innovation space and enjoys an excellent reputation.

The initiative has evolved a number of largely networked projects in diverse areas ranging from agriculture and plant biotechnology, general biotechnology, bioinformatics, drugs and pharmaceuticals,



Dr S.K. Brahmachari, Director-General, CSIR.

chemicals, materials, information and communication technology and energy.

These projects involve more than industry partners and 270 R&D groups from different institutions. At least 1,700 researchers are engaged in these projects that envisage an outlay of upwards of Rs 500 crore.

#### SHIFT IN FOCUS

The focus of CSIR has since shifted from incremental innovation to disruptive innovation, Dr Brahmachari said.

In this context, he referred to the licensing of the immuno-suppressive Caerulomycin A and its proprietary derivatives and analogues by the Institute of Microbial Technology (Imtech), a CSIR affiliate, to US-based Nostrum Pharmaceuticals.

This has been the highest ever licensing deal entered into by the CSIR with \$150 million in milestone payments and royalty.

According to him, open source drug discovery (OSDD) and 'crowd sourcing' are the way to go in as much as the pharmaceutical sector is concerned.

It is widely perceived that the Patents Act, 1970, killed any incentive for being inventive. But, according to Dr Brahmachari, India excelled in coming up with inventions in new processes to become a generic super power.

In the process, the country became fourth in terms of volumes and 13th in terms of value of production.

Business Line ND 05/01/2011 P-7

# IIT-Madras plans centre to design, make microchip

## Intel, Magma will be involved in setting up the centre

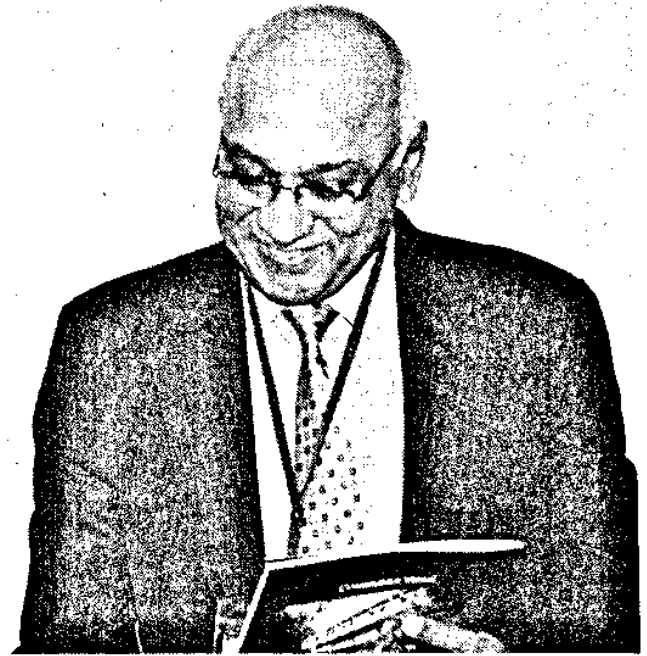
### Our Bureau

Chennai, Jan. 4

IIT-Madras is planning to set up a centre of excellence for VLSI (very-large-scale integration) design and microchip making. A blue print on this will be ready in the next six months, according to Prof Kamakoti Veezhinathan, Professor, Department of Computer Science and Engineering, IIT-Madras. Global companies such as Magma and Intel will be involved in setting up the centre, he told newsmen.

The centre will not only create ideas in VLSI design but also pick up ideas from other departments in the institute to solve an industry problem. It could also collaborate with the private sector in solving the problem. "There are many killer applications being developed in the institute that can be used by the industry," he said without going into details at the sidelines of the 24<sup>th</sup> International Conference on VLSI Design and the 10<sup>th</sup> international conference on Embedded Systems.

IIT-Madras is hosting the conference on VLSI design from January 2- 7. The event for the VLSI/semiconductor



Mr V.G. Idichandy (left), IIT-Madras Deputy Director, with Mr Viswani Agarwal, Auburn University, at the inauguration of 24th international conference on 'VLSI Design and 10th on Embedded Systems' in Chennai on Tuesday. — K.V. Srinivasan

industry returns to Chennai after a decade. VLSI is the process of creating integrated circuits by combining thousands of transistors into a single chip.

According to Mr Alok Mehrotra, Managing Director, Magma India, a subsidiary of the US-based Magma Design Automation Inc., the size and complexity of design being implemented in India has dramatically changed, catalysed

by the success of 'ambitious' design projects at leading semiconductor companies' India centres.

The \$130-million Magma is also taking advantage of the key technical strengths in India. Out of the company's 667 employees, 30 per cent are working in India. The company's software enables global chip companies to create integrated circuits for mobile phones, electronic games, Wi-

Fi, MP3 players, digital video, networking and other electronic applications, he said.

The conference is deliberating on the trends and the road ahead as VLSI design and embedded systems are the core technologies behind all electronics used widely today in these and more domains. These three verticals are also the ones with the highest growth rates projected for India over the years ahead.

Economic Times ND 05/01/2011 P21

# An educated population is the nation's greatest asset: Sibal

**I**F THERE'S one sector that's at the cusp of massive growth, it's education. According to an Ernst & Young study on the higher education sector in India, spends on higher education stand at ₹46,200 crore. The growth rate for this segment is projected at 12.8% and is expected to touch nearly ₹150,000 crore in the coming decade, the report says. Right from kindergarten to PG, there is an influx of players who are looking to create a niche through various marketing and branding initiatives. In an exclusive with Amit Bapna, Union minister for human resource development, Kapil Sibal, dwells on the role of private sector in the education space and how an education brand should be marketed as 'a social or a public good'.

**What role can private sector play in enhancing quality in education? What according to you is the best example of public-private sector cooperation you have seen in the education sector?**

Let me at the outset place a few facts for you to clarify the issues involved. We all recognise that an educated population is the nation's greatest asset. The government has accordingly set the goal to achieve near universalisation (100% enrolment and attendance) for primary education, enhance the gross enrolment ratio in secondary education from 50% to 75% and in higher education from 13% to 30% within this decade. The task is unprecedented in the annals of human history and beyond the capacity of either the government or private sector alone.

We thus need both government and private players to work with each other in a synergistic and symbiotic relationship rather than in an antagonistic mode. The government has the advantage of existing infrastructure, credibility and scale, whereas private sector is innovative, dynamic and has a strong management culture. Private sector can thus help to bring in competitive merit and to force periodical changes in curriculum, pedagogy, delivery mechanisms, examination system remuneration and governance across the entire educational sector.

One measure to harness the strengths of both is through government-owned private managed educational institution albeit with pre-specified conditionalities, including

outcomes and performance. Several successful examples of such co-operation are there in the vocational education sector.

**With the huge demand for education across levels—from pre-primary to post-graduate—education is being marketed aggressively. What do you think of this trend?**

Today most private sector players treat education as any other product to be packaged and marketed as a 'private good', however I would like to consider it to be a 'social or a public good' and thus to be marketed appropriately and responsibly.

**What according to you constitutes an education brand?**

An education brand arises from five attributes: quality, value for money, USP, social recognition and acceptability.

**What are some dos and don'ts that education institutes should keep in mind while they embark on marketing themselves?**

**Dos:** observe complete truthfulness, transparency and clarity in regard to infrastructure, faculty, financial integrity, fees/ charges, accreditation/ recognition, performance and placement.

**How can quality be maintained even while the quantity i.e. the numbers of education brands are increasing?**

Evidently different measures will need to be adopted to ensure quality of education at different levels and sectors of education. At the primary school level under the RTE Act, we have made provisions for a local school management committee, comprising a majority of stakeholders that has been assigned the role inter alia of monitoring school performance. At the secondary level, we are making a beginning by bringing about uniform curriculum for board exams on pan-India basis. At the higher education level, we seek to ensure quality through two overarching bodies: The National Commission for Higher Education and Research (NCHER) to regulate (all) higher education and research and the National Accreditation Regulatory Authority for Higher Educational Institutions are being set up with the objective for regulating the



**“**  
We need both government and private players to work with each other in a synergistic and symbiotic relationship rather than in an antagonistic mode

**KAPIL SIBAL**  
HRD MINISTER

higher education space and mandatory assessment and accreditation in higher education. However, the philosophy for regulation is to move from an in-

spection-approval process to a verification-authentication mechanism. For vocational education, we are putting in place a National Vocational Education Qualifications Framework in collaboration with the National Council for Vocational Training and State Boards of Vocational Education and Training which would interlink academia with the skills councils to prescribe the academic curricula, structure of delivery of vocational education and an accredited system acknowledged by academic institutions and industry.

**Which are some of the most successful education brands that have**

**been created—in India and globally?**

Globally, the IITs and IIMs whose alumni occupy the highest positions internationally in R&D, business, industry and even government are a respected 'brand'. On the research education front, IISc is well known globally. At the school level, the Kendriya and the Navodaya Vidyalayas have over the years carved out a name for themselves in the field of quality education, accessible and affordable to diverse sections of our society and not merely to the privileged, the affluent and the urban children. There are many other educational brands that are well respected amongst their potential audience-base.

Hindu ND 05/01/2011 p-18

# IIT-Madras plans centre for VLSI design, microchip making

Special Correspondent

**CHENNAI:** IIT-Madras plans to set up a centre of excellence for VLSI (very-large-scale integration) design and microchip making. A blue print on this will be ready in the next six months, according to Kamakoti Veezhinathan, Professor at Department of Computer Science and Engineering, IIT-Madras.

On the 24th international conference on VLSI design and the 10th international conference on Embedded Systems, Mr. Veezhinathan said at a press conference here on Tuesday that global companies such as Magma and Intel will be involved in setting up the centre.

The centre would not only create ideas in VLSI design but also pick up ideas from other departments in the institute to solve an industry problem. The centre could al-

so seek help of the private sector.

According to Alok Mehrotra, Managing Director, Magma India, a subsidiary of the U.S.-based Magma Design Automation, the size and complexity of design being implemented in India had dramatically changed, catalysed by the success of ambitious design projects at leading semiconductor companies India centres.

Magma was also taking advantage of the key technical strengths in India. Out of the company's 667 employees, 30 people were working in India. The company's software enabled global chip companies to create integrated circuits for mobile phones, electronic

games, Wi-Fi, MP3 players, digital video, networking and other electronic applications, he said.

The conference was deliberating on the trends and the road ahead as VLSI design and embedded systems are the core technologies behind all electronics used widely today in these and more domains. These three verticals are also the ones with the highest growth rates projected for India in the years ahead. The 22 regular paper sessions will contain presentations on the latest research on a range of topics, including analogue, mixed-signal, nano electronics, design tools and methodology from physical design to system-level design.

---

• **Blue print will be ready in six months**

---

• **Private sector help will also be sought**

---



# “We are all born scientists”

Special Correspondent

**CHENNAI:** S. Mayuri had a fall by the green well near her home in a small town in Mah-

arashtra. She wondered why. The idea led her to work on extracting bio-fuels from algae, both bio-diesel and bio-ethanol that could power die-

sel and petrol engines in future.

— Inaugurating the Children's Science Congress, Nobel laureate Venkatraman

Ramakrishnan said: “We are all born scientists and we stop being scientists as we grow up. Children are curious about plants, insects, blue sky, red sun. The parents, not knowing the answers, just say: Go away.”

“As we grow old, we just take the blue sky for granted, and we stop questioning,” he said.

Children like Mayuri, with their exhibits at the Congress, enthusiastically answered queries of every visitor.

M. Ajith, from a government school in Wayanad district, had come up with a wireless and remote operated device, which could be attached to elephants that turn violent and kill people during festivities.

It is a trapping system to control elephants in musth. Through remote, he said, it was possible to even tranquilise the elephant. Ajith wants to be an electrical engineer.

C. Karthik and his team



*Nobel laureate Venkatraman Ramakrishnan interacting with students after inaugurating the Children's Science Congress at SRM University near Chennai on Tuesday. — PHOTO: K.V. SRINIVASAN*

## We are not movie stars: 'Venky' Ramakrishnan

B. Aravind Kumar

**CHENNAI:** Mobbed everywhere for photographs and autographs on the first two days of the 98<sup>th</sup> Indian Science Congress, Nobel laureate Venkatraman Ramakrishnan asked Indians not to confuse scientists with movie and cricket stars.

Inaugurating the Children's Science Congress-2011 on Tuesday, he said science had no place for ceremonies.

“Scientists are not movie stars or politicians who will feel insulted if they are not

showered with accolades,” he said.

When Mr. Ramakrishnan escorted Nobel laureate Thomas Steitz — who arrived on his invitation to the Pride of India exhibition at the Science Congress — Mr. Ramakrishnan said they were mobbed and that the tour lasted 15 minutes.

“I could not explain to him the advances in Indian science. We are not cricket or movie stars,” Mr. Ramakrishnan said.

Similarly, at every meeting, he said, he only spoke for 15 minutes and that the rest was pure

ceremony. “Science is curiosity, testing and experimenting,” he said, adding that as a scientist, he was accumulating human knowledge and not playing cricket for India.

“Science is an international enterprise where discoveries in one part of the world are useful in other parts. The traffic should be both ways, and at present the flow from the West to India is more,” he noted. Concluding his remarks, Mr. Ramakrishnan said, “I've been honest with you. You are free to disagree. That's science.”

from the Forbes Academy in Belgaum have combined science and spiritualism for rejuvenation of soil. Using a square pyramid, they made 'agnihotra ash' out of cow dung cakes with unbroken

rice and ghee by performing yagna. The ash thus obtained was beneficial to soil flora.

Another team of young minds have chronicled how the groundwater table has gone down after farmers

shifted from agriculture to clay and sand mining in a river basin near Thiruvananthapuram. “The river course has changed and is mostly dry,” says S. Abhishek, a team member.

Hindu ND 05/01/2011 p-15

# DRDO will set up research centre at IIT-Madras: Saraswat

T. Ramakrishnan

**CHENNAI:** The Defence Research and Development Organisation (DRDO) has decided to set up a research and innovation centre in the Research Park of the Indian Institute of Technology (IIT)-Madras, V.K. Saraswat, DRDO Director-General and Defence Research and Development Department Secretary, said on Tuesday.

After delivering a talk on the second day of the 98<sup>th</sup> Indian Science Congress at SRM University in Kattankulathur near here, Dr. Saraswat told journalists that the proposed centre would focus on materials manufacturing, aerospace, software development and nano materials.

Pointing out that there would be a "free flow" of scientists, academicians and students in the project, he said: "My scientists will work in IIT as adjunct professors. Similarly, IIT professors and students will work as scientists in my centre."

The DRDO recently signed a contract with the IIT to implement the research and innovation centre project. It had taken one floor of the Research Park building, measuring nearly 30,000 sq. ft. The proposed centre is expected to be ready in eight

months.

Dr. Saraswat admitted that in the past, some collaborative research projects had gone for a toss as they were dependent on particular faculties which were available for specific periods. To correct this, the DRDO wanted to ensure that the projects had continuity.

"Through collaborative efforts, we are binding the institution. The binding force is not at the level of one faculty but with respect to the entire community of academicians including students," he said.

## Commercial arm

Indicating the DRDO's plans to launch a commercial arm, Dr. Saraswat said that through a Rs. 20-crore programme involving the Federation of Indian Chambers of Commerce and Industry, the DRDO had transferred to more than 15 industrial units defence technologies for civilian purposes. The units belonged to the public and private sectors. He denied any delay in setting up the commercial arm. As the mechanism had only existed to meet the requirements of the armed forces through the Department of Defence Production, the commercial arm was not originally envisaged.

Hindu ND 05/01/2011

p-11

# Health threat to mobile users: JNU study

Sandeep Joshi

**NEW DELHI:** An ongoing study on radiation from mobile towers and mobile phones at the Jawaharlal Nehru University (JNU) has found that the exposure to radiation from mobile towers and mobile phones could have an adverse impact on male fertility and also pose health hazards by depleting the defence mechanism of cells.

Though these findings are based on experiments on male rats, Jitendra Behari, a professor in JNU's School of Environmental Sciences and lead researcher for the government-funded project, told *The Hindu* that the health implications were directly relevant to human beings too.

Prof. Behari and his team have been conducting tests on Wistar rats or lab rats, mainly focusing on two aspects of radiation — its effect on the reproductive system and on general health, particularly tumour promotion and genotoxic effects (causing damage to DNA). "We kept these rats in a simulated environment, creating similar levels of radiation as emit-

ted by mobile towers and while using a mobile phone...and the results were alarming," he disclosed.

"Chronic exposure to radiofrequency electromagnetic radiation [RF-EMW] caused double-strand DNA breaks in sperm cells. The tests showed that mobile radiation exposure can cause a statistically significant decrease in the sperm count and testes weight," Prof. Behari explained.

Pointing towards similar tests by leading institutions in the West which showed almost identical results, Prof. Behari said the reports have concluded that RF-EMW from commercially available cell phones might affect the fertilising potential of sperms. "Other studies too have shown that use of cell phones adversely affects the quality of semen by decreasing sperm count, motility, viability and morphology, which might contribute to male infertility," he added.

Similarly, talking about the impact of radiation exposure tests on general health, Prof. Behari said: "Human cells have their own

set of antioxidant defence mechanisms to fight with free radical formation and to overcome the limit of damaging effects. Our studies have shown that microwave radiation may alter the level of antioxidant due to free radical formations."

"Tests have shown significant increase in ROS [reactive oxygen species — a kind of free radical] level in radiation exposed rats...an increased ROS production can damage macromolecules [lipid, protein, DNA], thus causing threat of heart disease, cancer, arthritis, Alzheimer's disease and accelerate ageing. Electromagnetic field increases the concentration of free radicals which may enhance the probability of damage to the biological system," he said.

Prof. Behari, who has been regularly submitting reports to the project sponsors — Indian Council of Medical Research (ICMR) and Council of Scientific and Industrial Research (CSIR) — and also apprising Department of Telecommunications (DoT) officials about his findings, is partic-

ularly concerned over the excessive and prolonged use of cellular phones as radiation levels from handsets could affect the brain. More usage of cellular phones means greater threat.

"Formation of free radicals in the brain is a matter of concern because of their potential toxic effects at high levels of brain function and its physiology and command on several other organs. It is well established that when there is an imbalance between free radicals and its neutralisation, it leads to oxidative stress. Such conditions can lead to tumour promotion," he pointed out.

Present concern about mobile phone exposure to human beings is focused on brain. The effects of EMFs emitted by mobile phones on the central nervous system have become a particular focus of concern as mobile phones are kept near the head in talking mode and are in close proximity to the brain. During these operations, the antenna of a cellular phone emits radio frequency electromagnetic fields that can

penetrate 4-6 cm into the human brain, he added.

Prof. Behari has further said that when a human body, which consists of 90 per cent water, is exposed to the electromagnetic field, it absorbs radiation. When food is cooked in a microwave oven, water in the food content is heated first. Similar is the case with human body. Microwave absorption effect is much more significant in body parts which contain more fluid-like blood or the brain.

Explaining how health could be affected as a result of radio frequency field exposure, Prof. Behari said there could be thermal effects caused by holding mobile phones close to the body and extended conversations over a long period of time. There could be possibly non-thermal effects from both phones and base stations whereby the effects could also be cumulative. Some people may be adversely affected by the environmental impact of mobile phone base stations situated near their homes, schools or any other place.

# Financial Express ND 5/01/2011

P-8

## Our very own Ivy League

Comparison with navratna PSUs is unfortunate

**E**ducation minister Kapil Sibal's proposal to work on setting up India's very own Ivy League universities is more than welcome, given not just the low numbers of graduates in the country, but in terms of making graduates more employable, of getting more PhD scholars, of getting better research papers, more patents, of getting more Indian universities among the top 500 globally (just two Indian universities figure in the list versus 154 from the US and 34 from China). The problem with what Sibal said, for now, is more in the imagery he drew. "We are working on the concept of Navratna universities, or an Indian Ivy League," he said. Anyone who has seen how Navratna PSUs function—the concept of Navratnas comes from PSUs—will shudder at the fate that awaits universities. Top navratna PSUs like ONGC and Indian Oil have been so burdened with meeting the government's subsidy obligations, they hardly have enough money to invest. It's difficult to reconcile this image of hand-to-mouth subsistence with that of Ivy League universities with generous endowments and complete freedom to operate.

To give a sense of what we're battling against, the same education ministry that is talking of Indian Ivies that are free to run their lives has no problem with shackling India's private sector schools. Under the Right to Education Act, all private schools have to reserve a fourth of their seats for the poor or socially disadvantaged (SC/ST/OBC), and this is to be monitored by the government. It's hard to see how the ministry hopes to free the Navratna universities from such obligations—to go back to the Navratna PSUs, they have to hire socially disadvantaged groups. Indeed, while talking of foreign universities, the minister is on record saying they will also have to fulfil the same quotas that local universities have to. All top personnel of Navratna PSUs, like the directors and heads of government-funded universities, are selected by the government—will the Navratna PSUs be allowed a different dispensation? Till there's some clarity on these issues, it's good to keep in mind that the only ivy that the Navratnas conjure up is poison ivy.

# **CAT website deactivated, IIMs say no security lapse**

## **fe Bureau**

**New Delhi, Jan 4:** The CAT-IIM website that was hacked for a few minutes on Monday, has been deactivated and the IIMs say that only 10-15 students were able to see their results because of this.

This happened because one of the three servers was open to upload the results and during the time enabling students to access their results. "There is nothing to panic about and students who were able to access their results before are not at any advantage or otherwise. There was no security lapse and all servers are closed now," said Devi Singh, director, IIM Lucknow. Prometric, the US-based testing agency, that conducted the computer-based CAT 2010 said it is not involved in development or management of the website.

All results will now be accessible on 12 January on [www.catiim.in](http://www.catiim.in).

Financial Express ND 5/01/2011 P-3

# Survey on higher education to be completed before 12th Plan

**Kirtika Suneja**

**New Delhi, Jan 4:** The Centre is working on a survey to gather statistics about the higher education sector in the country which is to be completed ahead of the 12th five year Plan which begins in 2013. The survey will look at the gross enrollment ratio (GER) and the actual number of enrollments besides one point of contact for differential streams in higher education. The country's current higher education GER is at 12.4% and the Cen-

tre intends to increase it to 30% by 2020.

"While there are authentic figures available on school education, there is absolute lack of clarity on numbers as far as higher education is concerned. A survey will establish what the real scenario is and also bring to light the fallacies propagated by various agencies which work with vested interests in mind," said Sunil Kumar, additional secretary, higher education, at a summit organised by the Confederation of Indian In-

dustry (CII) recently.

In fact, the ministry of human resource development (HRD) has set up a committee for mapping the number of students entering the existing higher education sector. The ministry plans to establish 374 new degree colleges all over the country one each in such district, which has GER below the national average. India's GER in higher education is half of the world's average, two-third of that of developing countries and around a fifth of the developed countries.

**SCIENTISTS** working at the world's biggest particle smasher have turned the masses of data emitting from it into sound for the first time.

More than 40 million pieces of data are processed by the Large Hadron Collider (LHC) every second as it seeks to prove the existence of particles such as the Higgs boson, which researchers believe endows everything in the universe with mass.

Until now the LHC, which lies deep in a 17-mile area beneath the border of France and Switzerland, has produced colourful images as it outputs the data.

This has taken the form of spraying coloured particles in different directions.

But physicist Lily Asquith, who until recently worked with the LHC at CERN, the European Organisation For Nuclear Research, wanted to be able to hear the particles.

So she used music comparison software to turn data from the col-

## Listen to god particle pings as Cern scientists create music

l- lder into sound, thereby giving it another dimension of personality.

"You tend to personify things that you think about a lot," she told radio station NPR. "I think electrons, perhaps, sound like a

### The data is processed by the Large Hadron Collider

glockenspieler to me."

While the sounds that emerge might not be described as music, they would certainly appeal to fans of the avant-garde.

Asquith admits the sounds don't tell scientists much at the moment, but she is hopeful they will shine a

new light on understanding the data soon.

New data on the origins of the universe is pouring in from the LHC so quickly that physicists may extend the current opening phase of their 'Big Bang' project to the end of 2012.

An extension could lead to an early discovery of the elusive Higgs boson, believed to have turned an amorphous mass of particles into solid matter at the birth of the cosmos.

The LHC was officially launched to much international fanfare two years ago - but was then forced to shut down less than a fortnight later after a fault.

*Daily Mail*

Deccan Chronicle Hyderabad 04.01.2011 p-3

● INSTITUTE TO BE SET UP WITH INVESTMENT OF ₹130 CR IN PPP MODE

## Centre plans another IIT in AP

L. VENKAT RAM REDDY

DC | HYDERABAD

**Jan. 3:** The Centre has decided to set up a new Indian Institute of Information Technology (IIIT) in the state with an investment of ₹130 crore in public-private partnership mode.

The new IIIT will be a part of the Centre's plans to establish 20 IIITs across the country. The funds would be shared in the ratio of 50:35:15 between the Centre, the state and the industry. The state already boasts of an IIIT in Gachibowli, established in 1998, which was eventually upgraded into a deemed university.

**The new IIIT will have a capacity of about 1,000 students and will offer under-graduate, master's and Ph.D programmes within a period of six to seven years of its functioning.**

The proposal to set up 20 new IIITs was approved by the Union Cabinet in December 2010. The Union HRD ministry has written to the state government,

expressing its willingness to allot one IIIT to the state. It has asked for proposals to be submitted immediately.

In response to this, Mr Damodara Rajanarasimha, minister for higher and technical education, said: "We have convened a meeting with officials of higher and technical education departments to discuss the Centre's proposal this week. Initially, we will identify the suitable cities and about 50 acres required for the purpose of setting up the institute. Based on this, we will submit a report to the UMHRD after shortlisting the location."

He said the new IIIT will

have a capacity of about 1,000 students and will offer under-graduate, master's and Ph.D programmes within a period of six to seven years of its functioning. The project will start in the 2011-12 academic year.

The new IIIT, intended to specialise in application of IT skills in one or more domains, will be of world-class standard and will be set up as an autonomous institute.

The new IIIT is expected to produce world-class, high-quality technical personnel, which will generate manpower for emerging industries, science departments and laboratories.

# 'शिक्षा को आगे बढ़ाने में निजी क्षेत्र सहयोग करे'

कपिल सिब्बल ने कहा, एजुकेशन की मार्केटिंग सामाजिक या सार्वजनिक भलाई के उपाय के तौर पर करनी चाहिए



निजी शिक्षण संस्थानों को इन्फ्रास्ट्रक्चर, फैकल्टी, वित्तीय साख, फीस और अन्य शुल्क, मान्यता, प्रदर्शन और प्लेसमेंट के बारे में सचाई और पारदर्शिता बरतनी चाहिए। वह शिक्षा क्षेत्र को अन्य उत्पाद की तरह नहीं देखें

## कपिल सिब्बल

केंद्रीय मंत्री, मानव संसाधन विकास मंत्रालय

देश में अगर कोई सेक्टर जबरदस्त तेजी के मुहाने पर खड़ा है, तो वह है शिक्षा। अर्न्त एंड यंग के एक अध्ययन के मुताबिक, देश में उच्च शिक्षा पर किया जाने वाला कुल खर्च फिलहाल 46,200 करोड़ रुपए है। रिपोर्ट के मुताबिक, इस सेगमेंट में सालाना 12.8 फीसदी की दर से बढ़ोतरी का अनुमान है और आगामी दशक में इसके तकरीबन 1,50,000 करोड़ रुपए तक पहुंच जाने का अनुमान है। किंडरगार्टन से लेकर पोस्ट ग्रेजुएशन तक, सभी जगह ऐसी संस्थाओं और संगठनों की भीड़ लगी है जो मार्केटिंग और ब्रांडिंग के जरिए बाजार में अपनी जगह पक्की करना चाहते हैं। इकोनॉमिक टाइम्स के अमित बापना से खास बातचीत में केंद्रीय मानव संसाधन विकास मंत्री कपिल सिब्बल ने शिक्षा क्षेत्र में पब्लिक-प्राइवेट (पीपीपी) भागीदारी के फायदे गिनाए। साथ ही, उन्होंने यह भी बताया कि एजुकेशन ब्रांड की मार्केटिंग सामाजिक या सार्वजनिक भलाई के उपाय के तौर पर की जानी चाहिए।

शिक्षा की गुणवत्ता बढ़ाने में निजी क्षेत्र की क्या भूमिका हो सकती है? आपके मुताबिक, शिक्षा क्षेत्र में प्राइवेट-पब्लिक भागीदारी का सबसे अच्छा नमूना कौन सा है?

सबसे पहले कुछ तथ्यों पर नजर डाल लें। हम सभी मानते हैं कि पट्टी-लिखी आबादी देश की सबसे बड़ी संपत्ति है। इसी को ध्यान में रखते हुए इस दशक में सरकार ने प्राथमिक शिक्षा के स्तर पर 100 फीसदी छात्रों को शामिल

करने का लक्ष्य तय किया है। इसके अलावा माध्यमिक स्तर पर दाखिला बढ़ाकर 50 से 75 फीसदी और उच्च शिक्षा में इसे 13 से 30 फीसदी करने का लक्ष्य है। यह लक्ष्य अभूतपूर्व है। ऐसा करना अकेले न तो प्राइवेट सेक्टर के वश का है और न ही सरकारी क्षेत्र के। ऐसे में दोनों का सहयोग जरूरी है।

प्री-प्राइमरी से लेकर पोस्ट ग्रेजुएट- सभी स्तरों पर शिक्षा की जबरदस्त मांग है और इनकी मार्केटिंग भी काफी रफ्तार से हो रही है। इस रुझान के बारे में आप क्या सोचते हैं?

आजकल ज्यादातर प्राइवेट खिलाड़ी शिक्षा क्षेत्र को किसी भी अन्य उत्पाद की तरह देखते हैं, जिसकी पैकेजिंग और मार्केटिंग 'व्यक्तिगत कल्याण' के उपाय के रूप में की जाती है। हालांकि, मैं चाहता हूँ कि इसे सामाजिक और सार्वजनिक कल्याण का हथियार माना जाए और इसी लिहाज से इसकी मार्केटिंग जिम्मेदारी पूर्वक की जानी चाहिए।

आपके हिसाब से एजुकेशन ब्रांड कैसे बनता है?

गुणवत्ता, वैल्यू फॉर मनी, यूएसपी, सामाजिक मान्यता और स्वीकार्यता।

शैक्षणिक संस्थानों को अपनी मार्केटिंग करते वक्त क्या करना चाहिए और क्या नहीं करना चाहिए?

संस्थानों को इन्फ्रास्ट्रक्चर, फैकल्टी, वित्तीय साख, फीस

और अन्य शुल्क, मान्यता, प्रदर्शन और प्लेसमेंट के बारे में सचाई और पारदर्शिता बरतनी चाहिए।

एजुकेशन ब्रांडों की तादाद बढ़ रही है। ऐसे में संख्या के साथ गुणवत्ता किस तरह बरकरार रह सकती है?

शिक्षा क्षेत्र में विभिन्न स्तरों पर गुणवत्ता बरकरार रखने के लिए अलग-अलग उपाय किए जाएंगे। प्राथमिक स्कूलों के स्तर पर आरटीई एक्ट के तहत हमने स्थानीय स्कूल प्रबंधन समिति का प्रावधान किया है। इसके जरिए इन पर निगरानी रखी जाएगी। माध्यमिक स्तर पर पूरे भारत में हमने एक ही तरह के पाठ्यक्रम लाने की पहल की है। उच्च शिक्षा के मामले में दो निकायों के जरिए हम यह काम करेंगे। नेशनल कमीशन फॉर हायर एजुकेशन एंड रिसर्च और नेशनल एक्रिडिटेशन रेगुलेटरी अथॉरिटी फॉर हायर एजुकेशनल इंस्टिट्यूशंस के जरिए निगरानी रखी जाएगी।

भारतीय और वैश्विक स्तर पर कौन से ज्यादा सफल एजुकेशन ब्रांड हैं?

वैश्विक स्तर पर आईआईटी और आईआईएम हैं, जिसके छात्रों को अंतरराष्ट्रीय स्तर पर रिसर्च एंड डेवलपमेंट, कारोबार, इंडस्ट्री और यहां तक विभिन्न सरकारों द्वारा बेहतरीन ब्रांड के रूप में मान्यता प्राप्त है। रिसर्च और एजुकेशन के मोर्चे पर आईआईएससी को पूरी दुनिया में मान्यता प्राप्त है। स्कूली स्तर पर केंद्रीय और नवोदय विद्यालय ने क्वालिटी एजुकेशन के मामले में अपने लिए एक विशेष जगह बनाई है।