

Newspaper Clips

January 4, 2011

Hindu ND 04.01.2011 P-1

Health Ministry declares CET notifications “invalid”

Aarti Dhar

NEW DELHI: Taken aback by the Medical Council of India's notifications for holding common entrance tests for graduate and post-graduate courses, the Union Health and Family Welfare Ministry on Monday declared the two notifications “invalid” and directed the MCI to withdraw these with immediate effect.

The Ministry, in a letter to S.K. Sarin, Chairman of the Board of Governors of the MCI, said the notifications were issued without prior approval as required under Section 33 of the Indian Medical

Council Act, 2010.

The notifications were issued ahead of a meeting of State Health Ministers and secretaries, which was to discuss the matter for arriving at a consensus before taking the final call. The meeting, to be chaired by Union Health and Family Welfare Minister Ghulam Nabi Azad, was to take on board all shades of opinions on the matter of National Eligibility-cum-Entrance Test (NEET) for MBBS. However, no discussion on a common entrance test for PG courses was on the agenda for the meeting, scheduled from January 11 to

13, that would also take up the introduction of Bachelor in Rural Health Care course, among other things.

The common entrance test for MBBS had been opposed by many States, and Tamil Nadu Chief Minister K. Karunanidhi had even spoken to Prime Minister Manmohan Singh on it, following which the notification was put on the hold by the Health Ministry. Some private medical colleges and even the Tamil Nadu government had moved the Supreme Court. The court, in its last order, said it would not come in the way of notifying the common en-

trance test or anyone moving the court against it. Soon after, the Ministry decided to hold the meeting with the States and other stakeholders for a wider consensus. These instructions were passed to the MCI also to ensure that the notification on the MBBS entrance examination was put on hold.

Sources in the Ministry told *The Hindu* that while it was in favour of a common entrance test and had “in principle” approved it, it was a sensitive issue and could not be decided without taking the States on board. Also, there was no agency which

would hold an all-India test of such a magnitude.

The MCI issued the two notifications on December 21 saying the Ministry had approved both. One that amended the Regulations on Graduate Medical Education said the NEET would be the criterion for selection to the MBBS and the marks obtained in mathematics in Class XII would also be considered for admission. According to the second notification that amends Postgraduate Medical Education Regulations, 2000, there shall be a single NEET for admission to P.G. courses.

Hindu ND 04.01.2011
P-1

'Navratna' varsities in the offing

T. Ramakrishnan

CHENNAI: The Centre is working on the concept of having 'Navratna' universities, on the lines of the famous Ivy League varsities, to meet the challenge of making higher education developmental, environmentally sound, and all-inclusive, Science and Technology Minister Kapil Sibal said on Monday.

"We intend to nurture these select universities like the public sector Navratnas, through generous financial support, freedom in access to external funding and total autonomy so as to free them from the shackles of governmental control," Mr. Sibal said.

He was speaking at the inauguration of the 98th Indian Science Congress at the SRM University at Kattankulathur, about 40 km from here.

Innovation Universities

Mr. Sibal said the government was also planning to set up 14 Innovation Universities. The unique institutions would set benchmarks in academics and research comparable to the best in the world with regard to problems of hunger, water, poverty and diseases through cutting-edge science and technology.

At the same time, there would be emphasis on arts and social sciences.

Deputy Chief Minister of Tamil Nadu M.K. Stalin drew attention to shortages of faculty, infrastructure, and financial support to undertake scientific research at the college and university levels. He suggested that incentives be provided to the private sector for investing more in research and development.

Among those who spoke were K.C. Pandey, general president of the Indian Science Congress Association, and T.R. Pachamuthu, Chancellor, SRM University.

Business Standard ND 04/01/2011

p-1

Now, Navaratna varsities

BS REPORTER
Chennai, 3 January

India will soon have 'Navaratna' universities, on the lines of Ivy League institutions in the US. This will help premier Indian universities garner financial support and free them from government control. The human resources ministry has also mooted tax incentives for corporations that collaborate with universities for research.

Speaking at the 98th Indian Science Congress, which was inaugurated at SRM University near Chennai, Union Minister for Human Resource Development Kapil Sibal said: "We are working on the concept of Navaratna universities, or an Indian Ivy League. We intend to nurture these select universities, like public sector Navaratnas, with generous financial support, freedom to access external funding and total autonomy to free them from the shackles of government control."

The eight Ivy League

THE MINISTRY'S PROPOSAL is aimed at developing human and social capital that will enable India's youth to work and compete globally

institutions in the US are Brown University, Columbia University, Cornell University, Dartmouth College, Harvard University, Princeton University, the University of Pennsylvania and Yale.

The ministry's proposal is aimed at developing human and social capital that will enable India's youth to work and compete globally. Sibal said his ministry has set a target of doubling the gross enrolment ratio to 30 per cent and triple it in terms of actual numbers to 40 million students between 2011 and 2020, which the government has christened the 'Decade of Innovation'.

"We have set out three generic principles that any new institute of higher education needs to embrace,"

Sibal said. These include providing access to educational opportunities to all who desire and need it, reducing financial barriers, and building quality and accountability to ensure that what is taught is relevant.

"This is exactly what we are seeking to incorporate in the 30 new central universities that we are setting up," said the minister.

The National Accreditation Regulatory Authority for Higher Educational Institutions Bill, 2010, which has been tabled in Parliament, will provide for mandatory accreditation and create an institutional structure for the purpose. A National Commission for Higher Education & Research will be set up to regulate higher education. An Education Finance Corporation will also be set up to refinance loans to students, especially from lower-income families, and provide not-for-profit institutions access to low-cost funds.

Turn to Page 14

Edit: Annual science con ► 11

Now, Navaratna...

OTHER INITIATIVES, Sibal said, include promoting long-term academia-industry collaborative relationships and better integration of industry with higher educational and research institutions. He said the ministry would encourage multidisciplinary collaboration between business, government, academia and R&D centres to create an environment that supports technological development and supports young researchers.

CAT RESULTS OUT OF THE BAG? RUMOURS ABOUND

KALPESH DAMOR & VINAY UMARJI
Ahmedabad, 3 January

Even as the Common Admission Test (CAT) committee of Indian Institutes of Management (IIMs) braces up to declare the exam results on January 12, CAT aspirants faced an anxious Monday with rumours of a probable leak.

Few students, whom *Business Standard* spoke to, claimed they had seen their results for a brief period before the website became non-functional.

CAT was held between November 28 and December 7 across 30 test centres in India.

A CAT committee member said, "Most of the examination is being conducted offline and in a safe environment. Some candidates may have accessed their results when the testing was being conducted online for a short time."

Himanshu Rai, CAT convenor, said, "The management has not come across any such development. The website will remain down till January 12. Hence, candidates should stop getting anxious about it and wait till the official result date."

The official website www.catiim.in was flooded with visits on Monday, ever since some members of education networking sites claimed to have seen their results.

For instance, one of the threads on a popular website said, "how could the results be faked... I saw my photo, my ad-



A CAT COMMITTEE MEMBER SAID CANDIDATES MAY HAVE accessed their results when the testing was being conducted online for a short time

dress, date of exam, everything which claimed its validity... I scored a dismal 93 percentile.... I wish it was fake, but it seemed 100 per cent valid." The threads, however, have been declared invalid by the website administrator.

An aspirant from Ahmedabad said, "The news about the announcement of CAT 2010 results started spreading around 2 pm today. My result was available with my photograph, which was taken around half-an-hour before entering the examination hall through a camera." While the aspirant was unsure of the authenticity of

the result, the candidate maintained the percentile in the result was according to his expectations.

A similar incident had occurred in 2004, when during the Indian Institute of Management's (IIM) examination results, some candidates were able to access their CAT scores before the official date.

IIM officials said the CAT management committee had ensured to avoid such incidents since then. "Till 2009, IIMs had ensured to conduct result's testing in a safe environment and were successful in avoiding any leakages," said an official.

Mint ND 04/01/2011

p-5

TRACING THE SOURCE

US geologists tinker with seismic model to track quakes, nuke tests

BY JACOB P. KOSHY

jacob.k@livemint.com

NEW DELHI

Scientists in the US are developing a seismic model to differentiate between nuclear explosions and natural causes, and help geologists pinpoint the location, source and depth of earthquakes.

Underground nuclear tests, which countries use to brandish their technological prowess, are in several ways similar to earthquakes and several times harder to catch.

The model, if it works accurately, will also help estimate the true impact, or yield, of a nuclear explosion, a contentious point that scientists squabble over.

The model uses data from the geopolitically sensitive stretch from Turkey to India, including Iran, Iraq and Afghanistan, a region Brian Savage, a professor of geosciences associated with the project, described in a press statement as "tectonically complex".

The geologists, including those from the University of Rhode Island and Princeton University, in collaboration with Lawrence Livermore National Laboratory, have taken an important step towards helping the US government monitor nuclear explosions by improving on a three dimensional (3D) model originally developed at Harvard University.

The improved model is ex-

The model, which uses data from the stretch between Turkey and India, will also help estimate the yield of a nuclear blast

pected to be completed by next summer.

The research was funded by the National Nuclear Security Administration and the Air Force Research Laboratory. The results of their research were presented earlier this month at a meeting of the American Geophysical Union (AGU) in San Francisco.

An AGU statement said the NNSA uses numerous seismic models in its efforts to monitor the globe for underground nuclear explosions by nations that seek to keep their nuclear activities undetected.

But, not only is it difficult to identify exactly where an explosion takes place, it is also especially challenging to differentiate the seismic waves generated by nuclear explosions from those generated by earthquakes, volcanic activity and mine collapses.

Savage and his colleagues analysed data from 200 earthquakes collected by 150 seis-

mic stations in the region between 1990 and 2007.

They compared the data with that from simulated earthquakes to identify deficiencies in the model, then propagated the simulated earthquakes in reverse to determine where to improve and update the model.

Different types of seismic waves travel in different ways and at different speeds.

P-waves, for instance, are the first waves recorded from an earthquake or explosion, and they behave similar to sound waves.

S-waves are secondary waves that travel in a snake-like, side-to-side fashion.

Surface waves are a combination of the two travelling much slower, with much larger amplitude.

"Depending on the material the waves travel through, it may slow down or speed up the waves," said Savage, who notes that the model requires a great deal of computer power to run. "So, when you look at the relative timing of the waves, you can tell what the material is that it's travelling through."

The improvements the researchers made to the model focused on long period surface waves and identifying the magnitude of a seismic event.

"The amplitude ratios of different wave types is a key factor in discriminating whether an event is manmade or not," Savage said.

Mint ND 04/01/2011

p-5

NEW OPPORTUNITY

Vocational PhDs on the cards for school dropouts

Proposed framework seeks to bridge the demand-supply gap for skilled manpower in the country

BY PRASHANT K. NANDA
prashant.n@livemint.com

NEW DELHI

The government is working on a plan to make it possible for the millions of school dropouts to continue studies and even complete master's and doctoral degrees.

The framework it is drawing up is essentially aimed at bridging the skills gap cramping Indian industries.

According to the human resource development (HRD) ministry, at least 50% of school students drop out before they reach class X.

"We have a huge dropout population, and unless we give them due skill, they will remain unemployable. This is not good for industries, for the government or for the Indian economy," said S.S. Mantha, chairman of the All Indian Council of Technical Education (AICTE).

According to the regulator, 220 million students are in schools in India, but fewer than 15 million pursue higher education. "Here, the concept of PhD (doctoral) vocational or masters degree in vocational comes into existence. This will empower millions of people and improve productivity for the country," said Mantha.

Under the proposed framework, a class X dropout can be given 400 hours of skills training and elevated to class 11 level. Similarly, another 400 hours of skills training would make him or her eligible to enter college-level training.

"This way, a school dropout can really go up to PhD level.



Improving prospects: HRD minister Kapil Sibal.

The issue here is will this be at par with normal bachelor's, master's or doctoral degrees?" said Mantha.

"We are working to bring a parlance between the new concept, which is in the planning stage, with that of the current degrees."

AICTE, India's technical education regulator, functions under the HRD (human resource development) ministry. HRD minister Kapil Sibal has said his mission in 2011 would be to put in place a framework on vocational education to bridge the demand-supply gap for skilled manpower.

"We will roll out this in 2011. The demand is huge but supply is too less. Industry requires a lot of people with working knowledge and this can be achieved through proper skill training. We will work out how both skill education and normal academics can have mutual recognition for a larger good," Sibal said on Thursday.

Narayanan Ramaswamy, executive director, education, at consulting and auditing firm

KPMG, said skills education would be a game-changer in terms of employment opportunities for job seekers and productivity for industries.

According to a KPMG survey released last year, India's automobile industry alone faces a shortage of 300,000 skilled people. Ramaswamy said any education tailored to improve employability should involve industries.

"Industry feedback and industry involvement in devising curricula in the area of vocational education will be key to the success of this programme," he said.

A document prepared by AICTE on vocational education in December echoes the suggestion.

Mint has reviewed a copy of the document.

The "two greatest concerns of employers today are finding good workers and training them. The difference between the skill needed and those possessed by applicants is of real concern to human resource managers and business owners", AICTE says in it.

04/01/2011

P5

CAT not out of bag, says exam convenor Rai



Denies Result Leak, Hacking Of Site

Mitul Thakkar & Avinash Nair
AHMEDABAD

THE convenor of the all-India entrance examination for the Indian Institutes of Management has denied reports that the 2010 Common Admission Test (CAT) results were leaked on its website on Monday. He also rejected suggestions that its website was hacked.

The denial came after a frenzy among MBA aspirants who tried to log on to the website after rumours that the results have been announced 10 days ahead of schedule. "There is no reason for panic," Convenor for CAT 2010 Himanshu Rai told ET. "The results will be out as slated on January 12. Currently, the website is down because we are in the process of uploading and testing the results."

Some students said they did see the results on the site, but the convenor said they may have seen the live testing of results. The website had become inaccessible by the afternoon.

Rai said the testing is usually done in an offline mode. But sometimes a live-testing is done to ensure that the contents appear in the correct format.

"The testing is usually done during odd hours when there is little possibility of an aspirant accessing it," Rai said. He, however, was not sure if any live-testing was conducted on Monday.

Three MBA aspirants who claim to have spotted their results on the website said the overall marks displayed against their names were in line with their expectations and

that it did not appear to be a dummy upload.

In Ahmedabad, students who managed to access the CAT website said they downloaded their score cards that show percentile of three sections - quantitative, logic & data interpretation and verbal - having weightage of 150 points each.

The score cards had the pictures of the candidates on the right followed by section wise scores, contact details and a seven-point note at the end.

The CAT was marred by technical glitches when it first shifted to an online format in 2009. The glitches prevented hundreds of students from taking the examination. This led Prometric, the American firm that conducted CAT 2009, to replace NIIT as its delivery partner.

The examination faced another glitch in 2010 when its website was found blocked for some time due to the presence of "malicious content". The official 'Candidate Care Service' numbers issued by Prometric also ruled out the possibility of a leak when contacted by ET.

Monday's incident does not seem to have any issues pertaining to cyber security, according to ethical hacker Ankit Fadia.

"Due to malfunctions in the past, CAT organisers might be conducting online tests to ensure smooth access of results for candidates," Fadia said. "Incidentally, some of the students might have stumbled upon the results online. The results accessed by the students may or may not be dummy."

(With inputs from Viney Sharma from Chandigarh)

Statesman ND 4/01/2011

P-5

Coming up Navaratna Universities: Kapil Sibal

radhika giri

KATTANKULATHUR (TN), 3 JAN: Union minister for Science and Technology, Mr Kapil Sibal, today said that the ministry is working on the concept of having "Navratna Universities" on the lines of public sector Navratnas terming them an "Indian Ivy League."

"We intend to nurture these select universities, like the public sector Navratnas, by generous financial support, freedom in accessing external funding and total autonomy so as to free them from the shackles of government control," Mr Sibal said at the inaugural function of the 98th Indian Science Congress here, about 40 kms from Chennai. The focus of these institutes is to develop a new paradigm of higher education that is individually centered, environmentally sound and all inclusive.

Mr Sibal also informed of steps for formation of fourteen "Innovation Universities". "These will be unique institutions which will set benchmarks, in academics and more importantly, in research, comparable to the best in the world in the context of problems of hunger, water, poverty and diseases through cutting edge science and technology. At the same time there will be emphasis

on liberal arts and social sciences. These Innovation Universities would be innovative in their governance, in their financial structure, in their academic and research structure, in their content and in every other way," Mr Sibal said.

Referring to a statistic, he said, India's share of research publications from Indian universities was registering a healthy growth. A little less than one third of India's scientific publications have emanated from the university sector last year, Mr Sibal said.

Mooting a series of steps for making India an Innovation hub he said a long term academia-industry collaboration with open access to and resources free of intellectual property entanglements is a must. Giving thrust to interaction between industry and academia, he said there must be better integration of corporates with higher educational and research institutes in India.

Developing technology suiting industry needs has to be encouraged via multidisciplinary engagement among business, government, academia and R&D. Engaging corporate executives as champions for publicly funded research to reach out to young researchers, collaboration with economic ministries of state governments for upgradation of technology in use in small and medi-

um enterprises, formation of international R&D, technology and innovation consortia between Indian and foreign entities to provide tax incentives to businesses that collaborate with academia and R&D researchers.

Speaking about the government's goal in higher education, he said it is to double gross enrolment to 30 percent by 2020, which would mean tripling of enrolments in the tertiary sector from 13 million to 40 million. "This will entail massive capacity building, both institutional as well as human. Besides enhancing the quantum of teachers and faculty in colleges and universities we have also to improve their quality."

A running thread of complaint at the inaugural function was the shortage of competent teachers. "Competent teachers are an acute shortage," noted Mr Sibal in his speech which was also mentioned by K C Pandey, general president of the Indian Science Congress. Mr Pandey sought a switch over to differential salaries for star researchers. He said that the present courses and programmes offered in universities are "archaic and inadequate for the present" with the need being of "close links with agriculture, industry" and the like. He also said that reputed foreign universities must be encouraged to set up campus in India.

Red-tape free, navratna varsities on cards: Sibal

■ Select universities to get funding, right to raise money overseas

fe Bureau

Chennai, Jan 3: India will soon have 'Navratna' universities on the lines of Ivy League varsities, which will be "free them from the shackles of government control," Union HRD minister Kapil Sibal said. "We are working on the concept of having Navratna universities or an Indian Ivy League. We intend to nurture these select universities, like the public sector navratnas, by generous financial support, freedom in accessing external funding and total autonomy so as to free them from the shackles of government control," he said at the Indian Science Congress here on Monday.

An effective quality assurance system will be put in place to provide a common frame of reference for students and others to obtain credible information on academic quality across institutions. A National Commission for Higher Education and Research (NCHER) will be set up to regulate higher education followed by an Education Finance Corporation to refinance



We intend to nurture these select universities, like the public sector navratnas, by generous financial support, freedom in accessing external funding and total autonomy so as to free them from the shackles of govt control

Kapil Sibal,
HRD minister

educational loans to students, especially from lower income families seeking to pursue professional courses, at much more favourable terms than available presently and also provide not-for-profit educational institutions access to low cost funds.

He said, "With a view to enhancing excellence in science research in Indian universities, we have set out three generic principles that any new institute of higher education needs to embrace. They have to provide access to educational opportunities to all who desire and need it; second, affordability by reducing financial barriers; and third, building quality

and accountability to ensure that what is taught is relevant and at global levels, delivering good value for money."

The gross enrollment ratio in higher education is around a mere 15% and the ever-changing labour markets and demographics are driving a 'new' demand for higher education. This has come mainly from two groups that traditionally were not known to attend universities, such as rising lower-middle class and women. This will necessitate many more universities and colleges to be opened in the years to come which are estimated minimum doubling over the next decade, he said.

Stalin seeks sops for private R&D

fe Bureau

Chennai, Jan 3: Tamil Nadu deputy chief minister MK Stalin on Monday sought incentives for the private sector for encouraging them to make more investments in research and development. Speaking at the inauguration of the 98th Indian Science Congress here, Stalin said resources allotted for research and development and scientific research were meagre. "We have to substantially increase the resources. We should provide incentives to private sector to invest more on R&D."

Stalin also said there was an increasing tendency among students to shy away from Mathematics, Science courses and research, due to lack of employment opportunities and career prospects. "We must therefore broad-base career opportunities in private and public R&D, as well as in the university system," he said, adding, there was a need to raise the standard and quality of higher education in India.

"There is no reason why every college and university cannot be like Indian Institute of Science and IITs," he said. He also called for close collaboration between society, industry, research organisations and educational institutions. "It is only when they work in unison, socially and economically relevant technologies can be developed," he said.

PM tells scientists to think big

fe Bureau

Chennai, Jan 3: Exhorting the Indian science community to once again think big, think out of the box; and think ahead of the times, the Prime Minister Manmohan Singh on Monday declared that the year 2012-13 will be celebrated as the Year of Science in India coinciding with the centenary year of the Indian Science Congress.

Addressing the 98th Indian Science Congress in here, he said, "2012-13 is the centenary

year of the Indian Science Congress. I would like the ministry of science and technology in collaboration with the Indian Science Congress to designate 2012-13 as the 'year of science in India'. I sincerely hope the year of science will unleash the energies of our young scientists and inspire a new generation of Indians to enter the world of science, cross new horizons and explore new possibilities."

Taking a serious view of the scientific discoveries and

their impacts, he said the question is whether scientists should step beyond their discipline and at least guide the social discourse on the use of scientific knowledge. "Should they develop a code of conduct that defines the limits within which they will work on the application of their discoveries? Should there be a collegial process for deciding difficult cases? I leave these as questions because the very idea of ethics for science needs further discussion," he said.

Business Line ND 04/01/2011 p-4

Govt to identify 'Indian Ivy league' to boost research

Greater autonomy, funds promised; regulatory body on cards

Our Bureau

Chennai, Jan. 3

The Government plans to identify a set of 'Indian ivy league' educational institutions for additional support to promote higher education and research, said the Union Minister for Science and Technology, Mr Kapil Sibal.

Addressing the 98th Indian Science Congress inaugurated by the Prime Minister, Dr Manmohan Singh, here today, Mr Sibal said that along the lines of the public sector 'navratnas', the Government will identify these educational institutions with high potential for growth.

These would be given total autonomy, supported with generous funds and freedom to source external funds.

The existing Navratnas - the IITs and IIMs - will get greater administrative and financial autonomy. They can approve their own budget and manage funds generated on their own. The Director and



The Human Resource Development Minister, Mr Kapil Sibal, addressing the 98th Indian Science Congress at SRM University in Chennai on Monday. - V. Ganesan

the Board would prepare annual action plans and key performance indicators at each level.

REGULATORY AUTHORITY

To promote higher education, the Government plans to set up regulatory authority to oversee institutions and a refinance institution for education loans, he said. The Education Finance Corporation will refinance students' educational loans and give ac-

cess to low cost funds for not-for-profit educational institutions. A National Commission for Higher Education and Research would be created to regulate higher education.

To develop India as a hub of innovation, long-term academia-industry relationships will be encouraged through tax incentives and open access to resources free of intellectual property entanglements; corporates will be integrated with academic and research

institutions to create a pipeline of skilled human resource. Public funding for market-oriented research will be enhanced; technology in SMEs will be modernised; and collaboration between Indian and foreign entities will be encouraged.

The National Accreditation Regulatory Authority for Higher Educational Institutions Bill, 2010, introduced in Parliament provides for mandatory accreditation and creation of an institutional structure, he said.

The Prime Minister, Dr Manmohan Singh, said an Academy of Scientific and Innovative Research to produce more than 1,000 doctoral and post graduate fellows every year is being established. The teaching community has to strengthen the teaching and research sides of the University system, he said.

Universities have to be more hospitable to creativity and genius, and less captive to

bureaucracy and procedure. Universities are the vital link in science teaching and research. Unless the base of educational system is strengthened, the height of the pyramid of excellence cannot be extended.

The Prime Minister emphasised the need to strengthen the link between universities, research laboratories and industry. Scientific principles discovered by Indian scientists like C.V. Raman have helped develop advanced instruments which are now imported at great cost. The Science Congress should discuss these issues and come out with actionable recommendations. The scientific community should give due recognition to scientists who build advanced instruments.

The Ministry of Science and Technology should designate 2012-13, the centenary year of the Indian Science Congress, as the 'Year of Science in India,' he said.

Mail Today, 04-Jan-11 p-14



Tamil Nadu deputy chief minister M.K. Stalin with PM Manmohan Singh.

By Max Martin In Chennai

THE GOVERNMENT seeks to give an image makeover to the scientific community in India.

"Science is ageless but our scientists must be younger," Prime Minister Manmohan Singh said while inaugurating the 98th Indian Science Congress here on Monday.

"The time has come for Indian scientists to once again think big, think out of the box, and think ahead of the times," Singh said.

Making a case for attracting the youth to science, the Prime Minister announced that 2012-13, which would mark the centenary of the science congress, would be observed as the Year of Science.

"I sincerely hope the 'Year of Science in India' will unleash the energies of our young scientists and inspire a new generation of Indians to enter the world of science, cross new horizons and explore new possibilities," he said.

The Prime Minister urged the scientists to translate their research into technology. He pointed out that there is a big gap there and it must be filled. "C.V. Raman won the Nobel Prize eighty years ago for

6 The time has come for Indian scientists to once again think big; think out of the box; and think ahead of the times.

—PM Manmohan Singh

the Raman Effect but most of the instruments based on this principle are imported," Singh said while quoting the August 2010 report of the PM's Science Advisory Council.

Singh also sought to underline the importance of creating an atmosphere in the universities that is conducive to innovative ways of teaching and research. "Our universities have to be more hospitable to creativity and genius, and less captive to bureaucracy and procedure," he said.

Besides setting up eight new IITs and five Indian Institutes of Science Education and Research, the government is now establishing an Academy of Scientific and Innovative Research to produce over 1,000 doctoral and post-graduate fellows every year, the PM said.

Human resource development minister Kapil Sibal presented a road map to make India an "innovation hot spot". He stressed on the need for industry participation at all levels, including teaching, training and research.

Indian scientists gave a qualified welcome to the suggestions by the PM and the HRD minister. "It is clear from the PM's speech what he expects from scientists — individual excellence that is relevant to the society," Samir K. Brahmachari, director general of Council of Scientific and Indus-

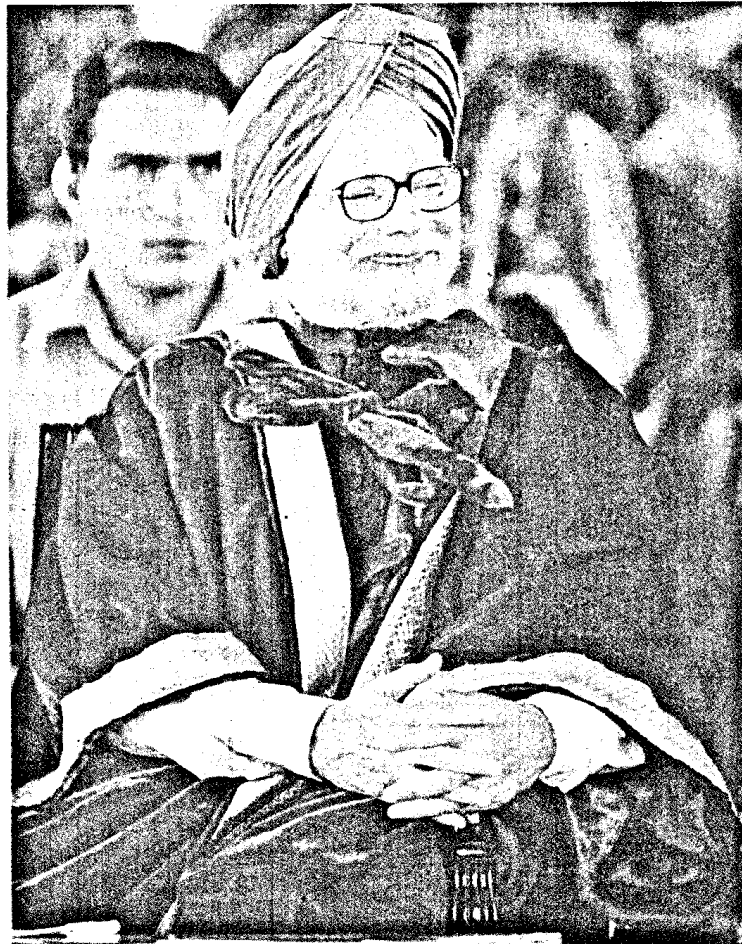
trial Research, said.

"Scientists are driven by intellectual curiosity and their own values. Research finds an application — may be 10 years or 100 years later," Planning Commission member Arun Maurya said, reacting to PM's suggestion over translating research into technology.

Over 7,500 delegates, including five Nobel laureates, are participating in the congress being held at the private-sector SRM University about 40 km north of Chennai.

max.martin@mailtoday.in

Manmohan seeks to bridge generation gap in Indian science



A smiling Prime Minister Manmohan Singh at 98th Indian Science Congress in Chennai.

Desi Ivy League of varsities on anvil

By Max Martin In Chennai

The Centre is planning to set up 'Navratna' Universities or an 'Indian Ivy League' of select institutions, said human

resource development minister Kapil Sibal on Monday.

The envisaged elite universities will get generous financial support and freedom to get external funding and total autonomy, free from 'the shackles of government control', the minister said. Navratna is the collective name for the top public sector firms, originally nine.

At the inaugural of the 98th Indian Science Congress at SRM University on the outskirts of Chennai, the minister said the National Innovation Council (NIC) will prepare a road map for the Decade of Innovation 2010 - '20 marked by an inclusive and sustainable ecosystem.

"The move will be complemented by a set of measures that will make higher education accessible, affordable, accountable and cost-effective. The 30 new central universities being set up will take into account these factors," Sibal added.

"Mainly two groups, a 'rising' lower-middle class and women will necessitate many more universities and colleges. We must also broaden our skills base beyond a few centres of excellence," Sibal said.



HRD minister Kapil Sibal

TATA MISSING IN AWARD LIST

The name of top industrialist Ratan Tata, who was embroiled in the recent 2G controversy, was missing from the list of awardees honoured at the 98th Indian Science Congress in Chennai on Monday. Indian Science Congress Association president K.C. Pandey had announced on Sunday that Tata would be presented the Jawaharlal Nehru Award by Prime Minister Manmohan Singh for the development of Nano car.

Pandey said on Monday that the award will be presented to Tata "at a later date". He expressed surprise at Tata's absence.

Tribune ND 04/01/2011

P12

IMPROVING THE QUALITY OF PhD RESEARCH

RAMESH GUPTA

The essential element in improving the standard of PhD programmes is that the topic allotted to a research scholar should be original and there should not be duplication or any repetition of any research work being done at other Indian universities.

However, sometimes the same topic registered at two or more universities at the same time. Unfortunately, there is no Central Registration Agency which can provide data before registration of a particular topic whether same topic or same topic in a modified form is being pursued at some other University or not.

In order to improve quality of research work for PhD programme, the UGC should create a cell where information from all Indian universities regarding the registration of topics in a particular subject for PhD is available right at the initial stage of research. As soon as PG Board of Studies of a university clears a topic, it should be sent to the UGC and only after clearance from the UGC, should student be finally registered for PhD. Alternatively, universities can also take some initiatives of their own.

The evaluation system of a PhD thesis is the root cause of our abysmally low standard of research. Unfortunately, many students who have no aptitude for research, are first admitted to a PhD programme and worse still, acquire the degree because the theses are sent for evaluation to "friendly" people.

In most of the universities, the supervisors themselves suggest the names of PhD examiners! The supervisor always looks for safe examiners, and if he does not know any, he takes the help of his colleagues to procure the names of such safe examiners. Basically, the policy is, 'You scratch my back, I will scratch yours.'

As a result of this mal practice, the

supervisor has a casual approach and does not take much interest in scrutinizing the thesis of his student because he knows that irrespective of the quality of the PhD thesis, the student will get the work approved as it is going to be evaluated by his friend.

Some examiners even dare to evaluate the PhD thesis, which is not at all related to their field of specialisation. This approach is the main cause of our mediocre PhD degrees as the supervisor is not bothered about the rejection of the thesis.

Something serious has to be done with the evaluation system if we really want to improve our standard. Firstly, the supervisor should not be involved at any stage, in selecting the panel of the examiners. This will make the supervisor work harder and take the PhD thesis of his student more seriously. Secondly, there should be a centralised system of evaluation.

The UGC can play a major role in this direction. It should build a data bank of all specialised serious and good workers in the country who can act as examiners of the PhD thesis. The universities should send the PhD thesis to the UGC, from the names of student, supervisor and their affiliations. Alternatively, the university

can have its own data bank and pool

of examiners in a particular subject without bringing it to the knowledge of chairperson or supervisor. The evaluation should be strictly on merit.

Right from Matriculation exam to MA, the identity of examines is kept secret from the examiners. However, it is strange that in this examination the identity of candidates is not secret from. Not only is this, even the names of supervisors boldly printed on the title of thesis/dissertations. As a result, most of the examiners do not evaluate the thesis/dissertation but write reports/award grades proportionately to the status of the supervisor. While sending PhD Thesis/M.Phil dissertations for evaluation to external examiners, the identity of both supervisors as well as

The UGC should create a cell where information from all Indian universities regarding the registration of topics in a particular subject for PhD is available right at the initial stage of research.

candidates should be kept a closely guarded secret.

To improve quality of Higher Research, Video Recording of Viva-Voca of PhD Candidates is a must. If Viva-Voca of PhD candidate is excellent, then the video recording of such a Viva-Voca will help future candidates for PhD learn and to improve their own performance. The recording of Viva-Voca will act as a deterrent against malpractices.

PhD candidate should be the pride of universities. They are the future researchers and teachers. We must exercise extra care in ensuring the quality of their research work.

The writer is Professor at Kurukshetra University, Kurukshetra

Pioneer ND 4/01/2011 p-7

Sibal announces plans for quality education

PNS ■ CHENNAI

The Union HRD Ministry proposes to establish innovation universities that would set a new benchmark in higher academics and research across the country. They would be nurtured like the public sector navratnas and would be free from unnecessary Government control.

Union Minister for Human Resource Development, Communication, Science and Technology, Kapil Sibal on Monday announced this as part of a slew of plans the Union Government had for improving the quality of education. He was speaking at the inaugural session of the 98th Indian Science Congress at the SRM University at Kattankalathur near Chennai.

"We intend to nurture these select universities, like the public sector navratnas, by generous financial support, freedom in accessing external funding and total autonomy so as to free them from the shackles of Government control," he said.

Education Finance Corporation to refinance educational loans to students is also

being contemplated, Sibal informed. This corporation would help students from lower income families wanting to pursue professional courses at more favourable terms than available today. The funds would low cost, not-to-profit education institutions.

Building Educators for Science Teaching (BEST) is another scheme the Centre was thinking of to improve the quality of teaching-learning process. This initiative would be a combined effort of the Union HRD and Science and Technology Ministries on a mission mode.

Another feature his Ministry was working on was the concept of navaratna universities or the Indian version of the Ivy League varsities — Indian Ivy League. This concept of navaratna universities would meet the challenges of making higher education developmental, individually centred, environmentally sound and all-inclusive.

Lastly, Sibal said that the Union Government was also considering introducing a code of conduct which would first be adopted by Central universities and gradually by State universities and other private universi-

ties. He said that his Ministry recognises that universities have their own culture, nuances and sensitivities and they also need to be cautious while offering their facilities for commercial use.

"But we now need to make a beginning. We plan to introduce a code of conduct initially to be adopted by the Central universities, and later perhaps by State universities and others, to facilitate flexibility and autonomy in the university system," he added.

Earlier while inaugurating the Science Congress, the Prime Minister said that the scientific community should transform research findings into marketable products, so that the people received the true benefits of scientific progress in the country.

The five-day Congress is being held at SRM University in Kattankulathur near Chennai, which is being attended by five Nobel laureates and over 7,000 scientific researchers across the world.

"Why is the translation of good science and research into products so weak in our country? How do we strengthen the link between universities, research laboratories and industry?" Singh wondered.

Want an idea, Sirji?

Can the cycle rickshaw become a more evolved means of transport? Is an affordable digital talking, reading device for the blind possible? Can AIDS and TB be fought with a phone? Yes, thanks to some Good Samaritans who are working on such innovations with passion

Swati Bharadwaj-Chand

A new-age cycle rickshaw that is light on both the pockets and the calf muscles of rickshaw pullers; mobile games designed to battle life-threatening diseases like HIV/AIDS and TB; and a low-cost computer that enables visually challenged students to read textbooks.

No, these are not innovations designed by Phunsukh Wangdu aka Ranchoodas Shamaldas Chanchad of *3 Idiots* fame. Much before Aamir Khan's Rancho made innovation a household word, these simple but powerful ideas were being quietly conceptualised and put to practice by enterprising Indians in various corners of the country.

Each one of these innovations is the brainchild of Ashoka Lemelson Fellows from India who want to effect social change through innovation under the aegis of Tech4Society.

47-year-old veterinarian-turned-messiah of rickshaw pullers, Pradip Kumar Sarmah of the NOIDA-based Centre for Rural Development has innovated Deep Bahan — a lightweight cycle rickshaw priced at around Rs 10,500. The rickshaw comes gift-wrapped with a loan from Sarmah's Rickshaw Bank as well as vehicle insurance, licences and uniforms and even Hawaii *chappals* for the pullers. Sarmah services the rickshaw pullers with a one-window clearance as it were. A top to toe deal.

Sarmah's rickshaw is 20 per cent lighter than the traditional 100 kg one. But, surdier: The economics of it is equally attractive. The 'pullers' get to own the vehicle in just 18 months at a nominal repayment of Rs 25 per day. Sarmah's rickshaws have already boosted the earnings of many impoverished pullers.

What motivated Sarmah to come to the rescue of these hapless people? "There are nearly eight million rickshaw pullers in India and most of them suffer from TB. Despite the long, backbreaking hours of work they barely earn enough to make ends meet. It is an unreasonable state of affairs," says Sarmah.

"In 2002, on a trip to Guwahati, I got chatting with a rickshaw puller and was



Umesh Malhotra's Hippocampus Reading Foundation is a low-cost model for running libraries

appalled to find that though he had been pedalling the rickshaw for 16 years, it did not belong to him. He was paying Rs 25 a day as rental. When he went home, he would not be having more than Rs 50 to meet his expenses," says Sarmah. He proudly points out that Deep Bahan owners earn up to Rs 500 per day, after paying the daily loan instalment. Deep Bahan has improved the lot of nearly 5,500 rickshaw pullers in 12 cities including Guwahati, Varanasi, Allahabad and Lucknow. The IIT Guwahati-designed and CSIR-supported Deep Bahan is now all set for a world class makeover, with a Massachusetts Institute of Technology (MIT) design team working on it to make it even stronger, lighter and more user-friendly.

Simultaneously, Sarmah is carrying out a pilot project on solar battery-operated rickshaws branded as Solekshaws. Nine such rickshaws already ply in Delhi's bustling Chandni Chowk and get their charge from solar panels installed atop the Delhi Metro railway station. If they run successfully over a period of time, more Solekshaws will hit the road.

Delhi-based entrepreneur Dipendra Manocha (42) lost his vision to a degenerative eye disease — retinitis pigmentosa — when he was in Class VI. But he did not give up his dream to read and get an education. But no matter how hard he tried, he found it humiliating that he had to be dependent on others' goodwill to meet his basic educational needs.

"I found my dependence on other people frustrating. And I knew it was not just I, there were thousands of people like me out there who needed help. Finally I reached a point where I decided to work towards enabling visually challenged people and empowering them to be independent," says Manocha.

Manocha's first tryst with a DAISY (Digital Accessible Information System) computer, which is a talking digital book, convinced him that the blind could read. He quit his PhD in classical music in 2003, and set up the Saksham Trust to enable the blind.

Today, Manocha's efforts promise to provide a hand-held, digital camera-sized reader-cum-media player named Buddy. Students can load into the small machine their textbooks that they want to listen to. It can also record lectures and play music. Buddy costs just Rs 4,000 against

the Rs 16,000 that a regular DAISY notebook costs. Developed by a Noida-based electronics firm based on inputs from Manocha, Buddy is undergoing field-testing and is set to hit the market soon.

Manocha is also deep into making Bollywood CDs for the visually challenged. What he does is to make special edition CDs for popular movies like *Taare Zameen Par*, *Black* and *Munna Bhai MBBS* blind-friendly by using a narrator to describe the actions, feelings and facial expressions of characters.

Bangalore-based Umesh Malhotra's Hippocampus Reading Foundation focuses on underprivileged children who can't read books just because they can't afford them. And in a country like India, their numbers are vast. The foundation's



Pradip Kumar Sarmah conceptualised Deep Bahan, a lightweight cycle rickshaw

involvement." Malhotra has libraries in nine villages, 130 government schools and 20 in slums in Karnataka and Tamil Nadu. Even as digital archives and online reading systems are increasingly fashionable in Indian cities, Malhotra believes traditional libraries run untraditionally have a great future with the masses.

Another man on the move, Gurgaon-based Hilmi Quraishi, has successfully harnessed the power of mobile phones to generate awareness about life-threatening diseases like HIV and TB. Quraishi's ZMQ, a mobile solutions company, has developed mobile games using a popular sport like cricket to propagate messages to prevent and cure HIV/AIDS and TB. Available through cellular operators as a value added service either free of cost or for a nominal Rs 3-5 per download, the games have been developed specially for entry-level black and white as well as colour handsets.

Quraishi's Freedom HIV/AIDS programme launched three years ago has been successfully used in India and Africa to battle the disease. In India, it is within the reach of over 42 million subscribers in Africa over 2 million. Quraishi says his challenge is to translate that reach into actual numbers. The explosive growth of mobile users in the country is very likely to prove him right.

Quraishi is now working with Microsoft to develop a software to create a database of TB patients. The software will track them and monitor their DOTs dosages like a good doctor. "Currently all the TB patient records are in paper form and any calamity could destroy them forever. If that happens, we'd be back to square one. With this software, we have online records, we can monitor patients and track them to ensure they get their TB medication on time," says Quraishi. He points out the instance of Delhi, which has nearly 57,000 registered TB patients, of which around 43,000 have mobile

speciality is a low-cost model for setting up and running libraries.

Using the Malhotra model, a library can be set up on a one-time investment of Rs 5,000, recoverable in 15 months. The average cost of access per child works out to Rs 10, and it simultaneously provides livelihood to women who operate these libraries from home. Already 65,000 children derive benefit from the Hippocampus network.

Says Malhotra, "With this model, we have moved the onus of running libraries onto the community and not the government, which, in any case, has met with failure in popularising library culture. In a country like India, developmental success is largely dependent on community

phones.

Whoever knew TB could be fought with a phone? Vijay Pratap Singh Aditya, a former IIM-A research associate, has always found the market potential of rural India alluring. So, it is not so surprising that he decided to set up Ek Gaon Technologies in 2002 to develop low-cost technological solutions and provide financial services, citizen services and agricultural services to rural populations. Aditya set up Ek Gaon with an investment of Rs 10,000. His aim was to bring urban services to rural consumers.

Ek Gaon has joined hands with banks, microfinance institutions and non-banking financial institutions to provide mobile-enabled solutions for micro-finance management. It caters to over 4.5 lakh people spread across states like Rajasthan, Tamil Nadu and Orissa. Recently, it stepped up its activities across the border and is now available in countries like Sri Lanka as well. Says Aditya, "If India is an emerging market, then the rural markets are emerging to the forefront as well. We connect money to the consumer with the help of technology."

Ek Gaon provides financial services at 15 paise per transaction. It also offers agricultural services packages, that include weather forecasts, disease alerts, soil management, market prices information, in subscription options of Rs 240 per annum and Rs 120 per crop season through SMS alerts, and through IVRS (interactive voice response system) services for illiterate farmers.

Children, again, are the focus of Bill Drayton, founder and CEO of Ashoka: Innovators for the Public. He works at empowering children to become innovators through its newly launched Youth Venture programme. The programme has been kicked off in Mumbai in a few municipal schools.

"Once successfully completed, it will be replicated in schools in other parts of the country. If India does not empower its children and change its youth culture, how will it make the big shift to innovation and sweeping social change?" asks Drayton, a Gandhian at heart.

He cites the example of 18-year old Mumbai-based Shankar, who dropped out of school at an early age due to strained family circumstances. Shankar took to petty thefts to support his family. Today, Shankar's innovative cricket league venture — Khiladi — at the instance of Drayton, organises tournaments for youngsters in his community. Khiladi also invites guest speakers to talk to youth about moral values, health issues and positive decisionmaking. "In the process, Shankar has become a hero of sorts in his neighbourhood," Drayton smiles.

This piece is from the pages of the Times of India Crest edition, available every Saturday at Rs 6/- SMS. TOICREST to 58888, or write to us at toicrest@timesgroup.com or call on 011-39698099, or contact your vendor

Times of India ND 04-Jan-11 p-17

Fish once swam across Sahara

Washington: A new discovery that fish may have once swam across the Sahara could shed light on how humanity made its way out of Africa.

The cradle of humanity lies south of the Sahara, which begs the question as to how humans made its way past it.

The new study has suggested



The finding proves that the Sahara was not impassable and explains how humans moved out of Africa

that the Sahara might not have been quite as impassable as once thought — not only for humanity, but for fish as well.

“Fish appeared to have swam across the Sahara,” researcher Nick Drake said. “Thus it is possible that early humans crossed the Sahara, and this could explain how we got out of Africa.” ANI

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

PM urges varsities to think out of the box

Chennai: The 98th Indian Science Congress opened here on Monday on an introspective note on higher education with Prime Minister Manmohan Singh asking universities to foster creativity on campuses without bureaucratic restrictions. “Our universities have to be more hospitable to creativity and genius, and less captive to bureaucracy and procedure. They should be more open to talent and to the challenge of established ideas,” he said, inaugurating the five-day event at SRM University.

Indian Science Congress Association general president KC Pandey set the ball rolling with his opening remarks, drawing the attention of the gathering of more than 7,000 scientists and academicians to India’s “systematic failure” in capitalising on its success-



Manmohan Singh with Nobel laureate Venkataraman 'Venki' Ramakrishnan at the Indian Science Congress in Chennai

es. “CV Raman discovered the Raman effect, but we could not capitalise on it, while others invented the Raman scanner,” Pandey said. Vice-chancellors of universities can bring in great changes, he said, but many of them prefer to play it safe and do little innovation. “Assured salaries and absence of monitoring have been the bane of teaching faculties,” he noted. TNN

Hindustan Times ND p-10
4/01/2011

Findings must be marketable, PM tells scientists

HT Correspondent

■ letters@hindustantimes.com

CHENNAI: The Indian scientific community must apply its research findings and translate them into marketable products for the country to realise the true benefits of scientific progress, Prime Minister Manmohan Singh said on Monday.

At the same time, he cautioned scientists on "illiberal" uses of technology and cited use of nuclear weapons, applications of synthetic chemistry in agriculture and in poison gases and "perverse use" of genetics in Nazi Germany to drive home his point.

Inaugurating the 98th Indian Science Congress at the SRM University campus here, Singh asked why some products based on results of Indian scientific research had to be imported.

He said the scientific community must think out of the box to usher in innovations that find applications. He said if India was to reap the benefits of spending on scientific research then the link between universities, where research take place, and the industry, which uses the research results to make products of mass use, must be strengthened.

Urging the Science Congress to devise plans for bringing the varsities and industry closer, Singh said India should tap the talent pool of people of Indian

PM SPEAK

- The PM said Indian scientists must to apply their research findings and translate them into marketable products
- He also cautioned scientists on "illiberal" uses of technology
- He said the scientific community must think out of the box to usher in innovations
- India should tap the talent pool of people of Indian origin across the world
- He asked the science and technology ministry to observe 2012-13 as the year of science to encourage youngsters to take to science

origin across the world.

The PM said he had asked the science and technology ministry to observe 2012-13 as the year of science to encourage youngsters to take to science.

Addressing the gathering, union minister for science and technology and human resource development Kapil Sibal said the government was planning to develop 'Navratna' universities, on the lines of Ivy League varsities, as the scientific education hub that would also devise plans to improve the way science and math was taught to youngsters.

Five Nobel laureates and over 7,000 scientists from across the country and abroad are attending the five-day meet.

(With PTI inputs)

Times of India ND

04-Jan-11

p-14

Did CAT results jump the gun?

Meghnad Sahasrabhojane

Nagpur: CAT scores could be seen online for a few hours on Monday afternoon even though the official date for announcement of the results for the 2010 test is January 12.

Several students TOI spoke to confirmed that the Common Admission Test (CAT) 2010 results could be viewed online on the official website. The leak was apparently a goof-up by the company managing the exam.

A Nagpur student who checked his result said, on condition of anonymity, "I got the link on Facebook. When I clicked on it, I was directed to a page which told me to enter my CAT registration number. When I did, I saw my score card along with a photograph that was clicked just before I took the test. Even though it said the results were for CAT 2009 in the initial link, when I submitted my registration number, it showed me the results of CAT 2010. Some of my friends, too, checked their results."

After an hour, the website, www.catiim.in, shut down

India's 11th IIM to open at Trichy today

Tuesday will see the birth of a new IIM. The country's 11th IIM at Trichy will open its doors with executive education programmes this academic year. Mentored by IIM-B, the Trichy B-school will function out of the National Institute of Technology campus. Although the roll-out of the two-year post-graduate programme is slated for 2011-12, the HRD ministry has asked IIM Trichy to offer short-term executive programmes before this March. TNN

completely and was not accessible later on Monday.

CAT 2010 convener Himanshu Rai said the website was shut down on Sunday. "We have started compiling the results, but the hyperlink and the website, that will display the results on January 12, have still not been created. Students should not rely on what pops up on the cached pages of previous years' CAT results, which is what they saw," he said. TNN

Times of India ND

04-Jan-11

p-14

India will soon have own Ivy League varsities, says Sibal

TNN & AGENCIES

Chennai: Union HRD minister Kapil Sibal said Indian will soon have 'navratna' universities on the lines of the famous Ivy League. They would be given ample funds, freedom to accept funds from outside and also freedom from the shackles of the government, he said at the 98th Indian Science Congress.

"We are working on the concept of having navratna universities or an Indian Ivy League. We intend to nurture these select universities, like the public sector navratnas, by generous financial support, freedom in accessing external funding and total autonomy so as to free them from the shackles of government control," he said speaking on the topic.

The eight Ivy League institutions are Brown University, Columbia University, Cornell University, Dartmouth College, Harvard University, Princeton University, the University of Pennsylvania and Yale University.

"With regard to our ex-



GOING PLACES: Sibal

isting navratnas — the IITs and IIMs — we are according full powers to their boards to create posts within the approved norms, top up the salaries of the directors and faculty from the funds generated by them, open centres in India and abroad, amend rules within the framework of their Memorandums of Association and Rules, acquire and dispose property and manage funds generated on their own," he said.

Seeing a silver lining in the 12% increase in research papers from India, as against the 4% global growth, Sibal called for an international consortia for research.

Times of India ND 04-Jan-11 p-17

Wi-Fi overload at high-tech meetings

As Speakers Talk Of 24x7 Net Connectivity, Audience Struggles To Get Online

Verne G Kopytoff

San Francisco: Internet entrepreneurs climb on stage at technology conferences and praise a world in which everyone is perpetually connected to the web.

But down in the audience, where people are busy typing and transmitting this wisdom, getting a Wi-Fi connection is often downright impossible.

"I've been to 50 events where the organizer gets on stage and says, 'It will work,'" said Jason Calacanis, chief executive of Mahalo, a web search company. "It never does."

Last month in San Francisco at the Web 2.0 Summit, where about 1,000 people heard such luminaries as Mark Zuckerberg of Facebook, Julius Genachowski, chairman of the Federal



GRIDLOCK IN CYBERSPACE: The problem is that Wi-Fi was never intended for large halls and thousands of people, many of them bristling with an arsenal of laptops, iPhones and iPads

Communications Commission, and Eric E Schmidt of Google talk about the digital future, the Wi-Fi slowed or stalled at times.

Earlier this year, Steven P

Jobs, Apple's chief executive, had to ask the audience at a developer conference to turn off their laptops and phones after his introduction of the iPhone 4

was derailed because of an overloaded Wi-Fi network.

And few of Silicon Valley's technorati seem willing to forget one of the biggest Wi-Fi breakdowns, on the opening day of a conference in 2008 co-hosted by the technology blog TechCrunch. It left much of the audience steaming over the lack of net access. The next morning, the organizers — who included Calacanis — clambered onto the stage to apologize and announce that they had fired the company that installed the Wi-Fi.

Technology conferences are like revival meetings for entrepreneurs, deal makers and the digitally obsessed. Attendees compulsively blog, e-mail, text and send photos and video from their seats. Some go so far as to watch a webcast of the event on

their laptops rather than look up at the real thing right in front of them. Nearly all conferences make free Wi-Fi available.

The problem is that Wi-Fi was never intended for large halls and thousands of people, many of them bristling with an arsenal of laptops, iPhones and iPads. Calacanis went to the extreme at the Web 2.0 Summit by bringing six devices to get online — a laptop, two smartphones and three routers. He explained that as a CEO, he needed internet access at all times.

Wi-Fi is meant for small spaces with more modest internet demands, says Ernie Mariette, founder of Mariette Systems, which installs conference Wi-Fi. "You're asking a technology to operate beyond its capability." NYT NEWS SERVICE

p-17

View from within: Lung videos to help treat asthma

Melbourne: Australian scientists are developing videos showing how air travels through the lungs in an attempt to improve the diagnosis and treatment of asthma.

A team of scientists from the Monash Institute of Medical Research is using a synchrotron — a type of particle accelerator — to observe how gases travel through each part of the lung.

“We can track the movement of the lung and each little part of the lung... and we can precisely define how each little region of the lung is behaving,” lead researcher Stuart Hooper was quoted as saying by the Age.

The first of its kind globally, the method would allow researchers to know exactly which specific areas of the lungs are affected by asthma.

The motion imaging will also permit researchers to see whether Ventolin and other asthma medications are reac-

A synchrotron, a type of particle accelerator, is being used to observe how gases travel through the lungs

ting the affected parts of the lung. In its early stages, the project is expected to allow pharma companies to review the effectiveness of asthma drugs and determine the most effective dosage and frequency of treatment for patients.

The breakthrough technology will help in development of new medicines that will target the causes of asthma, not simply mask the symptoms. Until now, asthma research has been limited by imaging techniques capable only of producing still images. By using the electron beams of the synchrotron, Hooper and his team are able to produce moving images. PTI

Chinese government pushes for innovation-based economy

You can't command creativity

The Chinese economy might be going strong while western competitors stumble through the global recession's aftershocks. But its success so far has been based on low-cost manufacturing. Now, Beijing wants to up the ante by moving from being the workshop of the world to being a country that also leads the way in innovation and creating cutting-edge technology. To this end, it has instituted various projects to dramatically increase the number of patents filed annually. But is it possible to boost creativity in an authoritarian society?

Innovation, by definition, is an unpredictable, often chaotic process that entails trial-and-error and repeated failures, rewarding risk-taking. This is a business model that is fundamentally at odds with an authoritarian environment. Creativity cannot be mandated as the Chinese government is trying to do by offering incentives to individuals and companies that file patents. Japan serves as an interesting example here. When it was the major competitor to the US economy in the 1980s, there was the possibility of its overtaking the latter in innovation. But as a country that, despite not being authoritarian like China, was nevertheless more rigid culturally than the US, it simply could not keep pace.

The problems with China's initiative become even more apparent with regard to communication technology including the internet. These are among the most vital

and volatile when it comes to innovation. They are also heavily regulated by the Chinese government for political reasons. Thus, while Google, Facebook and Apple create technology in the US that revolutionises communications, the Chinese government focusses on how to limit them. Such a system is incapable of matching the creative prowess of free-wheeling western economies. Unless China goes down the route of democratic reform.

Patenting beyond democracy Deep K Datta-Ray

Doubts about China becoming the leading originator of patents in the absence of democracy are unfounded for they are founded on an inherently Eurocentric developmental model. China's record speaks for itself, quashes the myth that patents follow political freedom and offers a new dynamic route full of possibilities incomprehensible to those stuck in outdated grooves of thought.

The Middle Kingdom has already revolutionised the Communist paradigm, incorporated capitalist Hong Kong and transformed a peasant society into the world's most efficient manufacturers. Furthermore, the astonishing rate at which China already produces patents means it will soon match the world's leading patents producer, the US. But China's plan are afoot to dwarf the number of patents filed in the US.

China seeks to realise this by setting up, with the efficiency and speed possible only within a totalitarian system, the infrastructure required to cultivate innovation. On the cards are an array of incentives, from better housing to tax breaks. Moreover, there will be no reinventing of the wheel as phalanxes of patent developers will be trained to make for 9,000 by 2015. There is nothing surprising in all this. Patents depend on the ability to change, adapt and innovate and the Chinese have been doing so for decades. An example is the Three Gorges Dam. Proposed in 1919, it faced a barrage of criticism, from whether Chinese people could build it, to whether they could live with it. Today, the largest construction project completed by mankind is testimony to China's pioneering abilities. That democracy played no role in activating it, indicates a whole new paradigm for innovation. The doubt therefore is not about Chinese inventiveness, but whether we will be able to comprehend it.



Publication: The Times Of India Delhi; Date: Jan 4, 2011; Section: Times Global; Page: 18;

China masters N-fuel reprocessing

Beijing: Chinese scientists have mastered the technology for reprocessing nuclear fuel, potentially yielding additional power sources to keep the country's economy booming, state television reported on Monday.

The breakthrough will extend by many times the amount of power that can be generated from China's nuclear plants by allowing the recovery of fissile and fertile

materials to provide new fuel, CCTV said.

Several European countries, Russia, India and Japan already reprocess nuclear fuel — the actual materials to make nuclear energy — to separate out and recover the unused uranium and plutonium, reduce waste and close the nuclear cycle for safety reasons. Each country's process is general-

ly considered an industrial secret and not shared.

Both the recovered plutonium and — when prices are high — the uranium can then be re-used as fuel. As well, some types of reactors can use other components that are reprocessed, potentially multiplying the amount of energy that results from the original uranium fuel by 60 times.

However, reprocessing is controversial because the extracted plutonium can be used to produce nuclear weapons. It also costs substantially more than using fuel once and then storing it as waste. China has known supplies of nuclear fuel to last 50-70 years, but the new process could yield enough extra fuel to potentially extend that to 3,000 years, the report said. AP

Hindustan Times ND 4/01/2011 p-7

TRAINING MODULE

IIT to help Delhi Police solve cases

■ A team of former IIT engineers has prepared a teaching module (above) for the police that includes powerpoint presentations, walkthroughs and graphic-aided material.

HT PHOTO

Vijaita Singh

■ vijaita.singh@hindustantimes.com

NEW DELHI: The Delhi Police may soon learn to crack criminal cases sitting in a classroom.

After botching up several cases in the past, the force has started providing e-learning classes to its men to teach them how to crack cases involving rape, accident, burglary and other offences, without ruining the crime scene.

A team of former Indian Institute of Technology (IIT) engineers has been roped in to prepare a teaching module for the police.

"We are using 3D technology to teach new recruits and senior policemen to investigate

crime scenes with the help of audio and visual technology," said a senior police officer.

"An accident scene will be recreated on the screen and the policemen would be taught how to collect evidence," the officer added.

"We provided the photographs and data from our previous records and handed them over to the engineers who prepared this teaching module for us," said a senior officer at the police training college.

The officer claimed that this was the first time that such a training module has been initiated in the country.

"We are trying to standardise the teaching method; it's practised the world over."