

# Newspaper Clips

## April 20, 2012

Indian Express ND 20/04/2012

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# IIT-Delhi scouts for a second home in Jhajjar

**NAVEED IQBAL**

NEW DELHI, APRIL 19

A SIX-MEMBER team of faculty members and officials from IIT-Delhi on Thursday visited some plots in and around Jhajjar near Gurgaon to identify a site for the proposed campus expansion plans of the institute.

The team, comprising IIT-Delhi Director R K Shevgaonkar, Deputy Director M Balakrishnan and former Director Surendra Prasad, visited three sites around Jhajjar and has zeroed in on a site “relatively close to Gurgaon”.

The land is likely to be used as a research facility as the current campus, which has about 250 acres of functional area, is not not enough for the research needs of the institute.

Deputy Director (Faculty) of IIT Delhi Professor M Balakrishnan said, “They (Haryana government) has been very positive in their response. They have shown us some sites but there are still many details that need to be looked at. It is really premature right now.”

He said that at the current campus, many faculty members “did

not have the kind of space, required for their research.”

“The proposed site is next to the second campus of the All India Institute of Medical Sciences,” the official said. He added AIIMS has already constructed a boundary wall around the site.

Former IIT-Delhi Director Surendra Prasad had announced during the institute’s Golden Jubilee celebrations in August 2011 that the Haryana government had offered 100 acres of land — free of cost — to IIT Delhi to build a second campus. He had also said that the funding for the expansion will have to be generated by the institute itself as “this was an IIT-Delhi initiative” and not one of MHRD.

Professor Balakrishnan said, “We are yet to look into the details of revenue generation and the facilities that may be developed at the new campus.”

Early last year, the New York City had also offered IIT-Delhi space to open a campus there but the institute had declined saying that they “wanted to expand within the country first before going abroad.”

# Needle-free drugs, fabric testers: IIT's smart tech

Sophisticated gadgets to be revealed at IIT Delhi campus on April 21

PRESS TRUST OF INDIA

New Delhi

RESEARCH designs and prototypes of various technological innovations for a host of items, ranging from everyday household items to sophisticated gadgetry, designed by students at the Indian Institute of Technology would soon be on public display.

The lay public including a mix of curious schoolchildren as well as industry representatives keen on checking the commercial viability of these products, are expected to attend the 8th edition of Open House scheduled on April 21 at the IIT Delhi campus.

"We would be displaying a lot of projects that are innovative and commercially viable by our faculty and our students for the benefit of the society," said professor AK Ghosh, chairman of the Open House Committee.

A few of these ideas such as the electrically enhanced needle-free transdermal delivery of drugs have already been picked up by various industries for further research and development.



The device, a programmed chip, looks like a watch whose dial can be opened and filled with medicine. Adjusting the settings will allow specified quantity of the drug to permeate the body through small amounts of electricity. "After the quantity of the medicine has been absorbed by the body the device automatically switches off and can be programmed to switch on later. We are testing

it on insulin, Diclofenac (painkillers). This device is very safe and dose can be controlled and reduced. It is going to be more effective than taking pills or injections," said professor Sneha Anand, centre of biomedical engineering, who and her team of students have invented the device.

More such devices which might bring about a revolution in the medical world

like light weight composite hinge joint for polio patients which are more affordable for the masses would also be on display. After the 'Smart Cane' innovation for the visually impaired the IITians have come up with 'Roshni' a cell-phone based indoor navigation system for the visually impaired that can be used in homes or in public places like museums or parks to enable the free movement of such people.

"The Fabric Feel Tester is a new kind of device to evaluate the quality of the fabric on the industrial level. Our technology is affordable and can be used by all textile industries," says Apurba Das, associate professor, department of textile technology and the technical expert behind the invention. Compared to the Kawabata Evaluation System (KES), priced at Rs 1.5 crore, the Fabric Feel Tester would be available at Rs 1.5 lakhs only.

"An Ahmedabad-based firm is manufacturing our technology and 15 days back they have already received 15 to 20 orders to manufacture our technology," says Apurba.

# P&B Daily ND 20/04/2012

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## New IIT fabric likely to be a boon to Army personnel

**SUMEDH RAINA**

NEW DELHI, APRIL 19

IN what could prove a boon to the country's Army personnel, the Indian Institute of Technology (IIT) Delhi, has developed a special kind of fabric that can change colour with changes in temperature.

The new fabric, which is likely to be tried by the Army soon, can take the colour of sand if a soldier is in a desert area, for instance in Rajasthan, or white if he is on the snow-bound areas like Kargil and Siachen or even green

if the soldier is in some area with grass and so on.

The department used the concept of Responsive Camouflage Technology (RCT) in developing the new fabric keeping in mind the strategic interests of the Army where any form of camouflage will find it difficult to locate the presence of a soldier who could for instance be lying down on grass.

According to sources, the Army can also make tents using the fabric where arms and ammunition



can be kept without the enemy getting any kind of inkling of where the arms have been stored.

Any uniform or dress made from the fabric, which took over a year to develop, can have a special battery, with a capacity ranging from 9 to 30 watts, attached to the soldier's uniform to keep him warm even in snow-bound border areas which are being guarded by units of both the Army, the Indo-Tibetan Border Police (ITBP) and the Border Security Force (BSF).

**Continued on P6**

## IITs to draw up fresh admission regulations

**Mumbai:** The Indian Institutes of Technology have decided to draw up a fresh list of workable suggestions to select students after a proposal to partially consider Class XII scores for admission was shot down by faculty members of the elite institutions.

The decision was taken after discussions at all IIT campuses on the T Ramasami report, which looks at having a single pan-India entrance exam for admission to engineering colleges. Suggestions in the report were met with stiff resistance. More importantly, the report raised innumerable questions on the fairness of the system that would normalise the Class XII scores of all the boards in India.

The new suggestions will be placed before the respective IIT senates. Each senate will discuss the proposal before all the IITs meet and ratify them by mid-May.

IIT-Bombay director Devang Khakhar said, "There is a large support for some reforms... The ball is in our court now and we will come up with a proposal on how to select students."

Most faculty members had stated that teaching-learning, facilities and assessment of Class XII were highly varied across school boards and could not be statistically normalised. The IIT faculty federation had met HRD minister Kapil Sibal and submitted a list of its concerns about the new system.

It is still unclear if the new admission method would be in place by 2013 or the roll-out may be delayed by a year. "That largely depends on how big the change is," added Khakhar. Meanwhile, in a move to improve its industry collaborations, IIT-B has decided to identify the challenges in various sectors and create a roadmap for research & development (R&D) with the concerned industries. TNN

## आईआईटी विद्यार्थी लगाएंगे प्रदर्शनी

नई दिल्ली। भारतीय प्रौद्योगिकी संस्थान (आईआईटी) के विद्यार्थियों द्वारा डिजाइन किए गए विभिन्न अनूठे उत्पादों की जल्द ही एक प्रदर्शनी लगाई जाएगी जिसमें रोजाना इस्तेमाल के घरेलू सामानों से लेकर खास इलेक्ट्रॉनिक उपकरण लोगों को देखने को मिलेंगे। यहां आईआईटी दिल्ली कैंपस में 21 अप्रैल को लगने वाली इस प्रदर्शनी में आम लोगों के अलावा जिज्ञासू स्कूली बच्चों व उद्योग जगत के प्रतिनिधियों के आने की संभावना है।

प्रदर्शनी में उद्योग जगत के प्रतिनिधि इन उत्पादों की व्यावसायिक व्यवहार्यता परखेंगे। आईआईटी में ओपेन हाउस कमेटी के चेयरमैन प्रोफेसर एके घोष ने कहा कि हम प्रदर्शनी में कई परियोजनाएं पेश करेंगे जो व्यावसायिक तौर पर व्यवहारिक हैं और समाज के लिए लाभप्रद हैं।

Punjab Kesri ND 20/04/2012 p-1

# आईआईटी दिल्ली का लीडरशिप कॉन्क्लेव

आईआईटी को अर्थव्यवस्था के अनुसार ज्यादा मजबूत बनाने के लिए संस्थान को

स्थित शेरटन होटल में आयोजित इस कार्यक्रम में आईआईटी, दिल्ली के पूर्व छात्रों का संघ (आईआईटीडी एए) से जुड़े हुए जाने-माने लोगों ने विचार-विमर्श किया

जिसका मुख्य विषय था भविष्य में भारतीय प्रौद्योगिकी संस्थानों का स्वरूप कैसा हो। इस विशेष परिचर्चा में ज्वाइंट एंट्रेस एग्जामिनेशन (जेईई) को समाप्त करने के सुझाव की पृष्ठभूमि पर विशेष चर्चा की गई।

संघ के अध्यक्ष हिमांशु वैश ने कहा कि अतीत में चयन प्रक्रिया में बदलावों की वजह से संस्थान में आने वाले छात्रों की गुणवत्ता पर असर पड़ा है और इस प्रक्रिया में और अधिक बदलाव लाने से आईआईटी की विकास पर गंभीर असर हो सकते हैं। उन्होंने कहा कि

जल्दीबाजी में आईआईटी के नाम पर और अधिक संस्थान

खोले जाने पर शिक्षा की गुणवत्ता पर असर पड़ सकता है।

उनके अनुसार हावर्ड एवं स्टेनफोर्ड जैसे संस्थानों के नाम पर नए कालेज नहीं खोले गए, पर आईआईटी मामले में ऐसा होना हमारे लिए चिंता की बात है। कॉन्क्लेव की आयोजन समिति के चेयरमैन और आईआईटीडी एए के पूर्व अध्यक्ष शशि मुंजाल ने इस बात पर विशेष बल दिया कि वर्तमान भारतीय परिस्थितियों में मूल्यांकन के मापदंड कैसे होने चाहिए जिससे आईआईटी की सफलता को निर्धारित कर सकें और उन्हें कैसे हासिल किया जाए।

उन्होंने कहा कि ज्वाइंट एंट्रेस एग्जाम को हटाने की बात जो सरकार द्वारा की जा रही है, उससे आईआईटी के छात्रों की गुणवत्ता प्रभावित होगी। इस सम्मेलन में आईटीसी के चेयरमैन वाई.सी. देवेश्वर, आईओसी के चेयरमैन बी.एम.बंसल, एनआईआईटी के सीईओ विजय थडानी, साइबर मीडिया के चेयरमैन प्रदीप गुप्ता, फिक्की के सलाहकार राजन कोहली, एयरटेल के सीईओ विनोद सूद, एनटीपीसी के सीएमडी अरुण रायचौधरी, आईआईटी, रुड़की के निदेशक प्रदीप बनर्जी समेत अनेक विशेषज्ञों ने भाग लिया।

●फीडे



स्वायत्तता देने के साथ यहां के स्नातक छात्रों को राष्ट्रीय नीति निर्माण से जोड़ने के साथ-साथ उद्योग जगत को संस्थान के करीब लाने की विशेष जरूरत है। ये विचार आईआईटी, दिल्ली के पूर्व छात्रों द्वारा आयोजित लीडरशिप कॉन्क्लेव में उभर कर सामने आए। दिल्ली के साकेत

Jansatta ND 20/04/2012 P-3

## आईआईटी के छात्र लगाएंगे प्रदर्शनी

नई दिल्ली, 19 अप्रैल (जनसत्ता)। भारतीय प्रौद्योगिकी संस्थान (आईआईटी) के विद्यार्थियों द्वारा डिजाइन किए गए विभिन्न अनूठे उत्पादों की जल्द ही एक प्रदर्शनी लगाई जाएगी जिसमें रोजाना इस्तेमाल के घरेलू सामानों से लेकर खास इलेक्ट्रॉनिक उपकरण लोगों को देखने को मिलेंगे। यहां आईआईटी दिल्ली कैम्पस में 21 अप्रैल को लगने वाली इस प्रदर्शनी में आम लोगों के अलावा जिज्ञासु स्कूली बच्चों व उद्योग जगत के प्रतिनिधियों के आने की संभावना है। प्रदर्शनी में उद्योग जगत के प्रतिनिधि इन उत्पादों की व्यावसायिक व्यवहार्यता परखेंगे। आईआईटी में ओपेन हाउस कमेटी के चेयरमैन प्रोफेसर एके घोष के मुताबिक इस प्रदर्शनी में कई परियोजनाएं पेश होंगी जो व्यावसायिक तौर पर

व्यवहारिक हैं और समाज के लिए लाभप्रद हैं। बड़ी संख्या में स्कूली बच्चे व उद्योग प्रतिनिधि इसमें शिरकत करेंगे। इन अनूठी परियोजनाओं में से एक बिना सुई के दवा का शरीर में प्रवेश करने की प्रौद्योगिकी है जिसे विभिन्न उद्योगों द्वारा आगे अनुसंधान व विकास के लिए अपनाया गया है। उन्होंने बताया कि इस प्रौद्योगिकी में एक घड़ी के जैसा दिखने वाले एक उपकरण में प्रोग्राम की गई चिप लगी है जिसका डायल खोलकर इसमें दवा भरी जा सकती है। इसमें सेटिंग कर एक निश्चित मात्रा में दवा को बिजली की एक छोटी मात्रा के जरिए शरीर में डाला जा सकता है। यह यंत्र मधुमेह के ऐसे रोगियों के लिए बड़ा उपयोगी हो सकता है जिन्हें निरंतर इंजेक्शन लेना पड़ता है।

TRIBUNE ND 20/04/2012 P-12

# Major breakthrough in breast cancer research

## DNA study identifies 10 types of breast cancer, each of which could be treated differently

STEVE CONNOR

**C**ANCER is the quintessential genetic disease, so it comes as little surprise to find it has benefited most from the unravelling of the human genome — the blueprint of life written in the digital DNA code of the cell's chromosomes. It is now more than 10 years since the full DNA sequence of the human genome was first published and the benefits of that understanding are now apparent in a remarkable breakthrough in breast cancer genetics.

For the first time, scientists have been able to tease apart differences in the DNA of breast cancer patients that go far beyond the results of classical medical science, based on the tradition of analysing tumour tissue under a microscope. Researchers have used advances in genetics to determine 10 subtypes of breast cancer, each of which has a unique genetic fingerprint that could in the future determine a patient's tailor-made treatment — or cure.

At present, breast cancers are classified according to the presence or absence of a few "markers" or proteins found on the surface of tumour cells. In future, doctors will classify breast cancers based on the presence, absence or even activity of the smallest bits of DNA code.

The power of the latest study, published in the journal *Nature*, resides in the ability to retrospectively analyse some 2,000 frozen samples of breast-tumour tissue collected from women in Britain and Canada between five and 10 years ago.

Using powerful new developments in DNA analysis, such as computer-controlled "micro arrays" that can automatically scan the entire three-billion-letter code of the human genome for the smallest of mutations, scientists were able to confidently pigeon-hole each tissue sample into one of 10 subtypes.

Each subtype had defined characteristics in terms of DNA variations and gene activity. The scientists could also show that each subtype displayed subtle but important features in terms of a patient's prognosis — in other words the DNA differences mattered. Instead of looking at breast cancer as a single disease with a limited range of treatments, the scientists believe that their breakthrough demonstrates a range of cancer subtypes that can and should be treated differently.

"Our results will pave the way for doctors to diagnose the type of breast cancer a woman has, the types of drugs that will work, and those that won't, in a much more precise way than is currently possible," said Professor Carlos Caldas of Cambridge University, a senior member of the Anglo-Canadian research consortium. "Essentially we've moved from knowing what a breast tumour looks like under a microscope to pinpointing its molecular anatomy — and eventually we'll know which drugs it will respond to," Professor Caldas said.

It would mean that breast cancer patients in the future would have a genetic test before doctors decide on which treatment options to consider. This would end the blunderbuss approach of past therapy, leading to custom-designed "silver bullets" to treat cancer subtypes.

"This has the potential to change the face of breast cancer; from how we diagnose and treat it, to how we follow it up," said Julia Wilson, head of research



A doctor examines a mammograph of a breast cancer patient.

at the charity Breakthrough Breast Cancer.

At present, some patients are receiving treatment that serves no benefit and is likely to have harmful side effects. The DNA revolution could change this, although scientists emphasised it will take many years before NHS patients experience the benefits first-hand.

"I want to be very cautious here. This is a very important first step, and now what follows is to validate its clinical use," Professor Caldas said. "My caution is that this will not be available immediately to every single NHS hospital. It will be available to those hospitals with the clinical trials infrastructures and expertise."

Being able to classify breast cancers into 10 subtypes will have immediate implications for how clinical trials are designed. The streaming of a clinical trial's patients into different groups should lead to rapid development of new drugs and therapies tailor-made for each cancer.

"It's happening already in the context of clinical trials and I think a lot of these (genetic) tests, or a fraction of these tests, will be used on NHS patients within the next three to five years," Professor Caldas said. One of the first groups to benefit, he said, would be patients who are currently being "over-treated" with potentially toxic drugs because current tests do not distinguish between those patients who will benefit from a particular drug and those who do not.

"We have a better classification with better powers to predict. It is a new way of selecting the best trials for patients and that's the first use we will make of this," Professor Caldas said.

"It's not going to change the way we manage women being treated in the NHS tomorrow, but it will surely change the way we manage clinical trials (so that) we will be running trials that are much more targeted at each of these different cancer subtypes," he said.

The study, carried out in co-operation with the University of British Columbia (UBC) in Vancouver, also discovered that certain genes are involved

### TIMELINE: MILESTONES IN THE STUDY OF HUMAN GENETICS

**1953** James Watson and Francis Crick at Cavendish Laboratory in Cambridge and Maurice Wilkins of King's College London unravel the double-helix structure of DNA molecule and so open the doors to the age of modern genetics.

**1977** Fred Sanger of the Laboratory of Molecular Biology in Cambridge devises a method of "sequencing" the four-letter genetic code of DNA and thereby laying the foundations for unravelling the human genome.

**1979** The first natural "tumour suppressor" — a gene named p53 — is discovered by Lionel Crawford and David Lane.

**1990** The Human Genome Project is launched with the aim of sequencing the entire three-billion letters on the DNA in each of the 23 pairs of human chromosomes.

**1990** Mary-Claire King and her colleagues at UC Berkeley prove the existence of the first gene to be associated with hereditary breast cancer, now known as BRCA1.

**1994** BRCA1 isolated by Myriad Genetics.

**2003** Final version of the human genome is published. The ultimate "Book of Life" finds that we have about 23,000 genes, far less than originally estimated.

**2006** Scientists find people can carry more than two copies of any gene.

**2009** Stephen Quake of Stanford University declares he has decoded his own genome for under \$50,000.

in either driving breast cancer or holding it back from spreading. Some of these genes are known to be involved in the production of enzymes within human cells, which will make them attractive targets for the development of new anti-cancer drugs, said Sam Aparicio of UBC, the study's co-leader. — *The Independent*

PIONEER ND 20/04/2012 P-7

# Isro flying high, all set for Mars mission

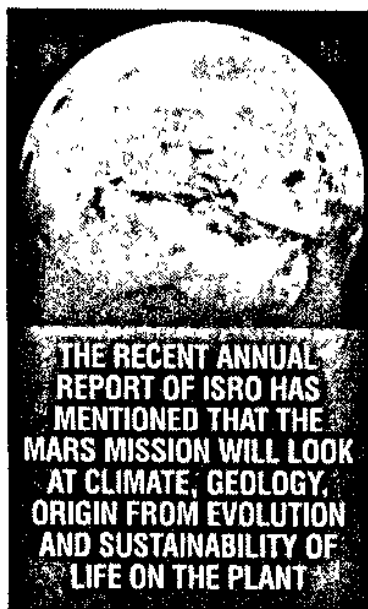
**KESTUR VASUKI ■ BANGALORE**

After the success story of Chandrayan-1, Bangalore headquartered Indian Space Research Organisation (Isro) is now gearing up for its prestigious mission to Mars. A source in the Isro told *The Pioneer* that a formal approval from the Government for the Mars mission is expected soon. According to Isro, the Mars Mission will be in 2013 and space scientists are working in this direction to make it possible well within the time frame after the formal approval from the Government.

Isro spokesperson S Satish told *The Pioneer* that the proposal is awaiting approval from the Government and the Mars mission is targeted for November 2013 which the earliest opportunity is considering earth mars geometry.

The recent annual report of Isro has mentioned that the Mars mission will look at climate, geology, origin from evolution and sustainability of life on the planet. The Mars mission envisages launching an orbiter around Mars using Polar Satellite Launch Vehicle (PSLV-XL). The orbiter will be placed in an orbit of 500x80,000 km around Mars and will have a provision for carrying nearly 25 kg of scientific payloads onboard.

According to the annual report the scientific payloads



have been shortlisted by the Isro's Advisory Committee for Space Sciences (ADCOS) review committee. Baseline, solar array and reflector configuration of the satellite have been finalised. Frequency filing for communication subsystem is under progress.

In another development Isro has signed an MoU with Indian Institute of Astrophysics in Bangalore for development and delivery of solar coronagraph payload for its ADITYA-1 project while mechanical configuration of the satellite is in progress. ADITYA-1 is the first space-based solar coronagraph intended to study the outermost region of the sun called corona. ADITYA-1 in the

visible and near IR bands will study the Coronal Mass Ejection (CME) such as the coronal magnetic field structures and evolution of the coronal magnetic field and consequently the crucial physical parameters for space weather.

Meanwhile Isro is gearing up to launch its RISAT -1, Radar Imaging Satellite, on April 26 early morning from Sriharikota.

According to Satish, the preparations were on for the launch of this indigenously built satellite which has the capacity to take images of the earth during the day and night as well in any condition.

India had launched RISAT-2, which it bought from Israel for \$110 million, on April 20, 2009, and Resourcesat-2 mission took place on the same day last year. Both were successful ventures.

RISAT-1, weighing around 1850 kg, is slated for launch by Isro's workhorse Polar Satellite Launch Vehicle (PSLV-C19 (XL)) into a 536 km orbit. The RISAT-1 will be useful for monitoring of agriculture and water resources management, among other applications. RISAT-1 carries a C-band Synthetic Aperture Radar (SAR) payload, operating in a multi-polarisation and multi-resolution mode to provide images with coarse, fine and high spatial resolutions respectively.

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# Agni V roars into elite ICBM club

## More Trials Soon, Deployment Likely in 2015

Rajat Pandit | TNN

New Delhi: After the mischief played by the weather gods a day earlier, the god of fire or Agni came in to his own on Thursday morning to hurl a potent fireball more than halfway across the expanse of the Indian Ocean at over 20 times the speed of sound.

India heralded a new era in its "credible" strategic deterrence capability by testing its most ambi-

**FULL COVERAGE: P 12**  
**► Canister storage, P 12**

tious nuclear missile — the over 5,000-km range Agni V — that brings all of China and much more within its strike envelope.

With the launch of the 50-tonne missile from the Wheeler Island off Odisha coast at 8.07 am, and its 20-minute flight to an "impact point towards western Australia", India also yanked open the door to the super-exclusive ICBM (intercontinental ballistic missile) club that counts only the US, Russia, China, France and the UK as its members.

India can, however, sit at this high table only when the 17.5-metre tall Agni V, which just about meets the 5,500-km ICBM benchmark, becomes fully operational after "four to five repeatable tests" and user trials. It will be around 2015 that the three-stage, solid-fuelled missile will be ready for deployment by the tri-Service Strategic Forces Command.

### QUANTUM LEAP ON AGNI PATH

► Surface-to-surface Agni V launched from Wheeler Island off Odisha at 8.07 am

► 17.5m-tall, 2m-wide missile weighed 50 tonnes, including 1.5 tonne dummy warhead

► Missile reached altitude of 600km and attained velocity of 7,060m/second. Hit target over 6,000km away in Indian Ocean

► Test places India in 5-member ICBM club — US, Russia, China, France and UK

► Can hit targets deep inside China, including Beijing & Shanghai. Can target whole of Pakistan, south Asia, Europe and parts of Africa

Even if it (India) has missiles that could reach most parts of China, that doesn't mean it... (can be) arrogant in disputes with China... India would stand no chance in an overall arms race with China

China's state daily





# 'Production of Agni-V to begin in a year's time'



PBD BUREAU/PTI

NEW DELHI, APRIL 19

INDIA has emerged as a major missile power with the successful launch of Agni V ballistic missile and the production of the weapon system would start in a year's time, DRDO chief VK Saraswat said today.

"This launch has given a message to the entire world that India has the capability to design, develop, build and manufacture missiles of this class, and we are today a missile power," Saraswat said after the launch of the 5000 km range surface-to-surface Inter Continental Ballistic Missile (ICBM).

The Defence Research and Development Organisation chief said that the missile launch was a major milestone in the strategic defence preparedness of the country.

"We are going to conduct two more tests and that will be validation tests... and then the pro-

duction of this system will start. It is going to take an year maximum," he said.

Saraswat said that he expected the missile to be inducted into the armed forces in the next two years.

He said the successful launch of Agni V was just the beginning of a new series of missiles. "We go from here to many other missiles which will have capability for MIRV (Multiple Independently Targetable Re-entry Vehicle), for anti-satellite system, which will also be built using this technology for launching micro, mini and nano satellite to meet the requirement of the armed forces on very, very short notice," he said.

Saraswat said that barring some electronic components, the Agni V was a completely indigenous product.

"More than 80 per cent of the missile is indigenous, except for the electronic components which we import... Everything has been designed, developed and produced in our industry and our laboratory," he said.

The DRDO chief said that his organisation was working on a very tight time schedule when it came to production and deployment of the missile.

"We have a very tight time schedule on that. I expect that after the completion of its mandatory trials, it would be inducted in the services in the next two years to come. We have a very clear roadmap for development of missile system," Saraswat said.

Giving details of today's launch, Saraswat said that the missile "lifted off at 0807 hours today. It is a three-stage missile, the first stage burned out, gave the required velocity and after that it separated."

Saraswat said that similarly the missile reached its second and third phases and after that it reached the crucial re-entry phase which is the most difficult phase for any ballistic missile of this range.

"All the re-entry conditions were perfect. The missile travelled through the re-entry, got converted into a fireball and finally (hit the target)....and all the payload parameters which result in the detonation of the warhead took place," Saraswat said.

The DRDO chief said that the launch was monitored by three ships deployed in Indian Ocean, 5000 kilometers away, and radars were also there tracking the complete trajectory.

Hindustan Times ND  
20/04/2012 P-17

## OUT OF RACE FOR UGC TOP POST, VED PRAKASH MAY RUN FOR VC

**Vanita Srivastava**

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**NEW DELHI:** After the PMO returned the list of names forwarded by the HRD ministry for the post of University Grants Commission (UGC) chairman, the race has begun for the vice-chairperson's post.

Having lost the race for the top position, present vice-chairperson and acting head Ved Prakash has thrown his hat in this ring as well. The post of UGC chairman has been lying vacant since February 6, 2011.

A three-member search-cum-selection committee, consisting of professors M Ananda Krishnan, SK Joshi and PN Tandon, has been formed to fill the post of vice-chairperson. The HRD ministry had recently posted an advertisement on its website for filling the post. A meeting to shortlist candidates has been scheduled for next week.

"We are yet to scrutinise the applications. Only then will we know if Prakash has applied for the post or not," said an official of the HRD ministry.

Alleging that Prakash's three-year tenure had lapsed on March 3, 2012, and his date of joining (May 8, 2012) had been forged, the Society for Values & Ethics in Education told the PM in a letter that the hushed manner in which the advertisement was posted on the website on April 4 reflected a move to re-appoint him.

"To reduce potential competition for Ved Prakash, the last date for forwarding recommendations has been kept as April 19 — giving others just around seven days. This violates the right to equal opportunity for public positions as well as the guidelines of the department of personnel and training," said Praveen Kumar Januja, president of the society.

Business Line ND 20/04/2012 p-21

## Executive education programmes fetch ISB Rs 60 crore

**G. Naga Sridhar**

Hyderabad, April 19

The Indian School of Business has earned Rs 60 crore from executive education programmes during 2011-12.

"We are now the largest provider of executive education in India offering open enrolment programmes as well as customised programmes to suit specific needs of corporates," Mr Deepak Chandra, Deputy Dean, ISB, told *Business Line* here.

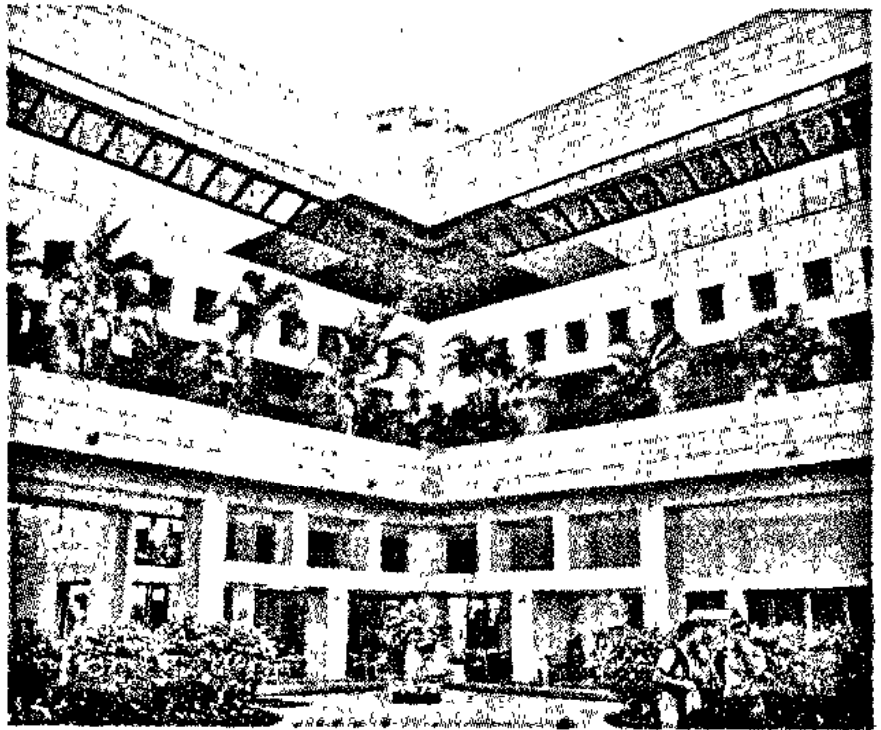
During the last year, the premier business school had trained over 4,000 senior executives through 125 programmes.

Apart from its own 50-odd regular faculty members, ISB has also empannelled about 150 visiting faculty from industry and academic institutions across the globe.

The duration of the programmes generally range from three-days to about a month depending on the nature of the course.

Apart from corporates, ISB is also offering programmes to the Government officials, public sector enterprises and also politicians.

A group of legislatures



**An inside view** of the ISB in Hyderabad (file photo)

drawn from different State assemblies were coached last year in leadership and other aspects of public policy.

"The response for this was very good. Going forward, we plan to ramp this up," Mr Deepak Chandra said.

ISB also went global in executive education by entering into a memorandum of understanding with Ka-

rachi-based Institute of Business Administration to commence programmes from June 2012.

"We will also expand our international footprint to Bangladesh, Iran, South Korea, Thailand, Vietnam, Philippines, Indonesia, Turkey, Mexico and Nigeria," the Deputy Dean added.

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# DU revises results, then calls it a snag

HT Correspondent  
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**NEW DELHI:** About 55,000 students who appeared for the first semester exams from different Delhi University colleges and got their results in December suddenly found their marks revised lower by 10 to 20% on Wednesday night.

The university's examination branch, however, admitted later the results were erroneously 'revised' and put up on the official website. The authorities called it a "technical glitch", saying the results declared initially were the correct ones.

"The updated result was just a technical error. We have taken it off the website and issued a corrigendum. The results students got in December are the correct ones," said DS Jaggi, OSD, examination branch.

But the students aren't amused. The move came days before the second semester exams and hours before some students were to appear for their practical examinations.

## EXAM BLUES

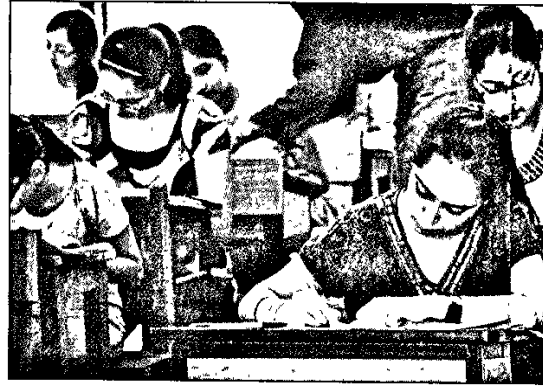
- The glitch resulted in 10 to 20% slash in marks in individual subjects
- About 55,000 first semester students affected
- Some science students of third semester affected too
- Some who had passed were later shown as failed in revised results

"This is preposterous! What is the university trying to do? I scored 78% which was overnight scaled down to 68%. I almost had a heart attack, and that too right before the exams," said Dhruv Khurana, a B Com student at Sri Venkateswara College.

The students wondered what the purpose of the act was. "When the results were already declared in December, what was the need to tinker with them and post a new link on the official website?" asked Kamya Sinha, a student of a North Campus college.

» STUDENTS PANIC, P14

# A night of panic for students, just an 'error' for DU



■ For some students, percentages dipped from 58% to 48%, drastically altering the grade that they had scored. HT FILE PHOTO

Mallica Joshi and Shaswati Das  
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## WHAT HAPPENED

**NEW DELHI:** Isha Sharma, a first year student of English Honours was horrified to see her score of 67% come down to a second division on the Delhi University website on Wednesday.

The university's examination branch revised the first semester results for students on Wednesday evening.

The revised marks were much less than what the students originally got. Though the university later said the new link had been put up by mistake, it caused widespread panic among students.

"I was shocked, as according to the new result I had failed in one subject. It seems like the university was playing cruel jokes on us," Sharma said.

The mood in her house was sombre throughout the night.

"I have always been a good student and it was horrifying to see that I had failed. The incident also shocked my parents," she added.

Meghna Pahwa, too, had a similar experience as she failed in one subject after her marks were slashed by 50.

The reduction of marks varied across different courses. While students of Economics (H) saw a slash of about 15%, students of Statistics (H) saw only a nominal dip of 4%.

For some students, percentages dipped from 58% to 48%, drastically altering the grade that students had secured.

"What was earlier 117 out of a total score of 200, came down to 97 when the new scores were published online. This was very disconcerting because it instantly brought down the division as

■ DU released the revised results on Wednesday night in which marks of the individual subjects were slashed, while the total remained the same as before. In some cases marks were slashed by 4

■ With the introduction of the semester system last year, the final result at the end will be an average of the percentages of the six semesters. This does not give the student a second chance to improve their score at the end of the year

■ When the results were declared in December, teachers had complained that the marks were inflated to make the new semester system popular with students.

well," said Nirjhar Bhattacharya, a History (H) student of ICAC college.

Social networking sites too, were inundated with complaints as students complained of a steep drop in their marks across the board.

"The news that our marks had been slashed went viral on Wednesday night," said Saranya Dutta, an English (H) student of Lady Sri Ram Coege.

Many teachers, however, wondered how the 'technical error' occurred. "Where did this file come from? How did those marks get to a point where they were uploaded and available for view? I think this file exists because it is university's record of the actual marks obtained by students which were later inflated," said Sanam Khanna who teaches English at DU.

# Promoting talent at home

**In an era where there is much talk of foreign players coming to India to 'hunt' for students, the Society for Research and Development in Education's efforts and policies and its efforts at seeking a mandate to attract students to Indian campuses are appreciable**

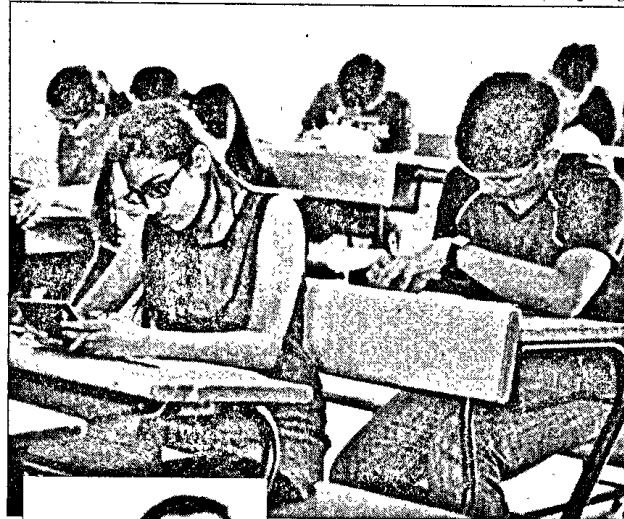
**THE** National Aptitude Test, 2012 — conducted under the aegis of the Society for Research and Development in Education — is all set to take place on 20 May. This exam is administered to meet the requirements of students seeking admissions to multiple Institutions through a Common Entrance Test to fill in open quota seats for courses like MBA, MCA, PGDRP and PGDGC for the postgraduation level and BBA, BCA, BCom and Hotel Management for the undergraduate level.

Forms are easily available at every Syndicate Bank outlet — for Rs 650 — across India till 30 April. The fees include cost of the form, bulletin and examination fee. The Nat is recognised by more than 175 universities and institutions, the list of which is available in the Nat bulletin and also on [www.natindia.com](http://www.natindia.com). However, under special condition, students applying through the Kendriya Vidyalaya Samiti and the Navodaya Vidyalaya Samiti can buy a form from the SRDE's office for Rs 100. The result of the entrance exam will be declared on 31 May.

First held in 2005, the Nat is conducted by the SRDE's Association of Higher Education Institutions every year in an effort to facilitate a single window system for students seeking admission to non-science streams such as management and other professional programmes.

Mukesh Gupta, secretary general of the SRDE's Association of Higher Education Institutions, said, "Our aim is to simplify the entrance test system in higher education for students opting for non-science domains. Since there is no Cet like the All India Engineering Entrance Examination at the 10+2 level in the non-science domain, we expect the Nat to act as one of the major transit mechanisms for non-science students from school education to higher education."

The Nat is an all-India level Cet administered under the aegis of the SRDE and is available for students at the undergraduate and postgraduate levels for fulfilling the requirements of different higher education institutions on a common platform, thereby enabling access to various professional, vocational, management and allied programmes



Mukesh Gupta.

like BBA, BCA, etc, at the undergraduate level and MBA, PGDM, etc, at the postgraduate level in these institutions.

registered under the Societies Registration Act, 1860, and it has submitted a very comprehensive proposal to the Union human resource development ministry for getting the mandate to market

students for Indian institutions abroad and facilitate admissions to Indian institutions at the graduate and postgraduate levels through a Cet on the lines being carried out by the Graduate Management Admission Test and the Sat, etc, for US universities globally. The proposal is being actively scrutinised.

The SRDE is committed to the interests of students faced with the burden of multiple entrance tests at multiple locations on multiple dates at very high separate costs. In an era where there is much talk of foreign players coming to India to "hunt" for students, the SRDE's efforts and policies that focus mainly on creating doctors, engineers and

MBA's and its efforts at seeking a mandate to attract students to Indian campuses are appreciable.

Other SRDE activities include the publication of a monthly higher education journal, a community college, an institute for training manpower in the field of disability and a special school for the differentially-abled, including mental retardation, learning disabled, hearing impaired and visually impaired.

Its advisory board and academic council consist of several vice-chancellors and other stalwarts and the government-allotted campus at Faridabad is now operational.

The Nat bulletin carries the list of Institutions that accept its scores for admission into their programmes. The system facilitates itself as a Cet for institutions who wish to screen students on the basis of Nat scores.

The Nat is a valid, objective, transparent and secure testing system conducted in the paper-pencil format each year for different higher education institutions. The first Nat (paper-pencil mode) was held in 2005 and the system went online from 2010 on a round-the-year basis to facilitate students and institutions through 30 test centers across the country.

The SRDE is a non-profit society