

## Newspaper Clips March 15-16, 2015

March 15

Hindustan Times ND 15/03/2015 P-3

# #savekidslives: An initiative to make Delhi's roads safer

**HT Correspondent**

■ htreporters@hindustantimes.com

**NEW DELHI:** Scores of school and college students, parents and teachers gathered at IIT-Delhi on Saturday to be part of discussions on making Delhi's roads safer for children.

The discussions are part of a road safety day organised by the Automobile Association of Upper India (AAUI) to commemorate the third global road safety week of the United Nations. It was a pre-launch for a worldwide safety campaign.

The idea behind the campaign is to make children messengers of spreading awareness on safe driving practices.

The AAUI in association with United Nations Information Centre for India and Bhutan launched the campaign.

The campaign is being flagged under the hashtag 'save kids lives' in the social media.

Highlighting the importance to bringing the road death rate to the zero tolerance level, Jean Todt, president of the Federation Internationale De l'Automobile (FIA) said: "Fatalities on Indian roads are over 1,40,000 a year. Everyone in India should come together and fight the menace through education, improving infrastructure and good law enforcement."

The students and teachers were taught about the importance of following the FIA's 10 Golden Rules.

The golden rules are: belt up, respect highway code, obey speed, check tyres, sober driver, protecting children, paying attentions, take rest when tired, wear helmet and respect other drivers.

## THE CAMPAIGN IS BEING FLAGGED UNDER THE HASHTAG 'SAVE KIDS LIVES' IN THE SOCIAL MEDIA

"Such campaigns need to be sustained for many years. Among the 1.2 million people who die every year in road accidents in the world, 30 percent are children and young people. Need to educate children is imperative," TK Malhotra, president AAUI said.

The campaign mobilised children and adults alike for signature endorsements and awareness building through events in schools, colleges and offices. A declaration from children all around the world has also been collected, which would be sent to local government representatives.

A global event-- which will be simultaneously organised in around 10 nations-- will happen on May this year.

Asian Age ND 15/03/2015 P-4

# Counselling for NIT, IIT streamlined

**K.A. DODHIYA**  
MUMBAI, MARCH 14

After introducing a centralised Joint Entrance Exam (JEE) for admission to all Indian Institutes of Technology (IIT) and National Institutes of Technology (NIT) in the country, the ministry of human resource and development has announced that a common counselling round will be held to bring in uniformity and transparency in the admission process to these premier institutes.

The same will be implemented from the academic year 2015-16. After becoming eligible for a seat in any of the IITs and NITs in the country based on their JEE (Advanced) scores, students have to register individually in each of the institute that they are desirous of joining. The registration process is followed by choice filling and choice locking wherein students have to give multiple options of the course they want to join, as well as finalising the course based on the availability of the seat in the particular institute. The counselling process ends with seat allocation by the institute and securing a seat by the student by taking admission.

Smriti Irani earlier in the week said, "The councils of the IITs and the NITs decided to adopt common counselling for admissions."

## आईआईटी और एनआईटी में कॉमन सीट एलॉटमेंट

आईआईटी और एनआईटी में दाखिला लेने के इच्छुक उम्मीदवारों के लिए इस वर्ष एक ही वेबसाइट के जरिए सीट एलोकेशन की कॉमन प्रक्रिया संचालित की जाएगी। ऑनलाइन सीट एलोकेशन की यह प्रक्रिया जेईई (मेन) और जेईई (एडवांस) की रैंक के आधार पर होगी। आईआईटी के प्रोफेसर्स से हरी झंडी मिलने के बाद इस संदर्भ में अधिसूचना 31 मार्च को जारी की जाएगी। प्रक्रिया के लागू होने के साथ ही स्टूडेंट्स को अपनी चॉइस का उल्लेख करते हुए एक कॉमन फॉर्म भरना होगा। यह प्रक्रिया आईआईटी में सीटें खाली रह जाने की समस्या को देखते हुए शुरू की गई है। उम्मीद की जा रही है कि इससे तकनीकी संस्थानों में खाली सीटों की संख्या में कमी आएगी। सीट एलोकेशन की इस प्रक्रिया का आयोजक आईआईटी बॉम्बे होगा और नेशनल इंफॉर्मेटिक्स सेंटर इसका संचालन करेगा। अनुमान है कि करीब 13 लाख स्टूडेंट इस कॉमन प्रक्रिया का हिस्सा होंगे।

Amar Ujala ND 15/03/2015

P-18

## आईआईटी कानपुर में बन रहा कृत्रिम लिवर

### प्रारंभिक शोध सफल : अभी जंतुओं पर परीक्षण

कानपुर (ब्यूरो)। आईआईटी कानपुर का बायोलॉजिकल साइंस डिपार्टमेंट और दिल्ली का एक अस्पताल कृत्रिम लिवर बना रहा है। इसका प्रारंभिक रिसर्च सफल रहा है और अब जंतु परीक्षण चल रहा है। इसमें सफलता मिली तो मेडिकल साइंस में बड़ी क्रांति होगी। आईआईटी के वैज्ञानिक प्रो. अशोक कुमार का कहना है कि कृत्रिम लिवर की कीमत कम होगी लेकिन इसका प्रत्यारोपण करने वाले डॉक्टर और अस्पताल की फीस कितनी होगी, इसपर आईआईटी का कोई जोर नहीं होगा। कृत्रिम



लिवर के बाजार में आने में अभी समय लगेगा। आईआईटी कानपुर और ग्लोबल साइंस एंड टेक्नोलॉजी फोरम की तीन दिवसीय इंटरनेशनल कांफ्रेंस 'बायोटेक 2015' शुक्रवार से शुरू हुई है। इस दौरान बायोलॉजिकल डिपार्टमेंट के प्रो. अशोक कुमार ने बताया कि कृत्रिम लिवर नेचुरल लिवर का स्थान नहीं ले सकता है लेकिन जब लिवर डैमेज हो जाएगा तो उसे रिप्लेस करके रिपेयर किया जा सकता है। कुछ समय बाद कृत्रिम लिवर सही पोजिशन में आ जाएगा।

## ‘Headless IIM-L unable to plan for future’

Hindustan Times (Lucknow)

### Even best institutions suffer in absence of regular head, says chairman of board of governors

The Indian Institute of Management, Lucknow was still awaiting ‘acheche din’ (good days). There had been no full time director at this premiere B-School for a year now and in the absence of a regular head, even the best of institutions suffered, said Jamshed J Irani, chairman, board of governors, IIM-L in an interview to Hindustan Times on Saturday.

He said, “In the absence of a regular director, the institute is not able to take long term decisions. The present interim director Prof Rajiv Srivastava is not interested in the job of director and prior to him Prof Devi Singh who was given six months extension avoided taking important decisions.”

In a startling revelation, Irani told HT that the search-cum-selection committee constituted during the UPA rule before the general elections had finalised the name for the post of IIM-L director. “We had picked a good person for the job. But it was not considered by the new regime for reasons best know to them,” he said.

“The names were proposed to HRD minister Smriti Irani on June 19 after the BJP came to power. She had said that the MHRD would soon take a call. But later we got a letter saying that the MHRD had turned down the names and ordered fresh advertisement and constitution of search-cum-selection committee. Hence, there has been no regular director for a year now,” he said.

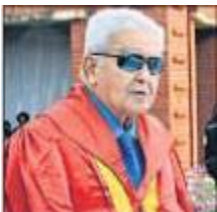
JJ Irani is hopeful that by June end this premiere B-school will get a regular director. “The post has been advertised against which we have received 40 applications. The first meeting of the committee will take place in March and another in April. Two names will be proposed to the MHRD and hopefully the new director will replace the interim director by June end,” he said.

When asked what kind of a person was being searched for, Irani replied, “One who we think will be an institution builder and take IIM-L on to a higher plane.” Irani showered praise on Prof Devi Singh who relinquished office after two successful tenures (more than 10 years) in September last.

IIM-Kozikhode is also functioning without a full time director. Besides, there are at least 40 top institutions in the country without a regular head. The present government should address this problem, Irani said.

The IIM-L campus has a huge corpus of R 400 crore and is by far the richest among all IIMs. It has now surpassed the corpus of IIM Ahmedabad. It is also the largest IIM in terms of student intake and has implemented all possible government guidelines.

In fact, two years back, IIM-L had reduced the fees by 10%. “From R 12 lakh, we brought it down to R 11 lakh whereas other IIMs charge upto R 17-18 lakh. We now want to provide better facilities and better life to our students as IIM is not a profit making institution,” Irani said.



But he is hopeful that things will soon change for the better.

March 16

Dainik Bhaskar ND 16/03/2015 P-11

## आईआईटी-एम में स्टार्टअप के लिए मिलेगा सेमेस्टर ड्रॉप

पढ़ाई के साथ-साथ स्टार्टअप खड़ा करने की इच्छा रखने वाले स्टूडेंट्स के लिए अच्छी खबर है। आईआईटी-मद्रास में एक ऐसे प्रोग्राम पर काम किया जा रहा है जिसकी मदद से स्टूडेंट्स को अब पढ़ाई के लिए अपने स्टार्टअप से पीछे हटने की जरूरत महसूस नहीं होगी। इसके तहत अपने स्टार्टअप आइडिया को गाइडिंग फैकल्टी मेंबर्स से स्वीकृत करवाने के बाद स्टूडेंट एक सेमेस्टर के लिए अपनी पढ़ाई रोक कर अपना ध्यान पूरी तरह बिजनेस वेंचर को विकसित करने पर लगा सकता है। जिन स्टूडेंट के स्टार्टअप सफल होंगे उन्हें ज्यादा समय प्रदान किया जा सकेगा। आसान शब्दों में कहें तो स्टार्टअप पर काम करने वाले स्टूडेंट्स को अपनी डिग्री पूरी करने के लिए 4 साल की जगह 4.5 या 5 सालों का समय मिल सकेगा और बड़े हुए समय का इस्तेमाल वे अपने वेंचर को स्थापित करने में कर पाएंगे।

Tribune ND 16.03.2015 p-12

# Bad weather keeps Prez away from Mandi IIT convocation

In message, Pranab says growth of institutes hasn't improved quality of education

## TRIBUNE NEWS SERVICE

MANDI, MARCH 15

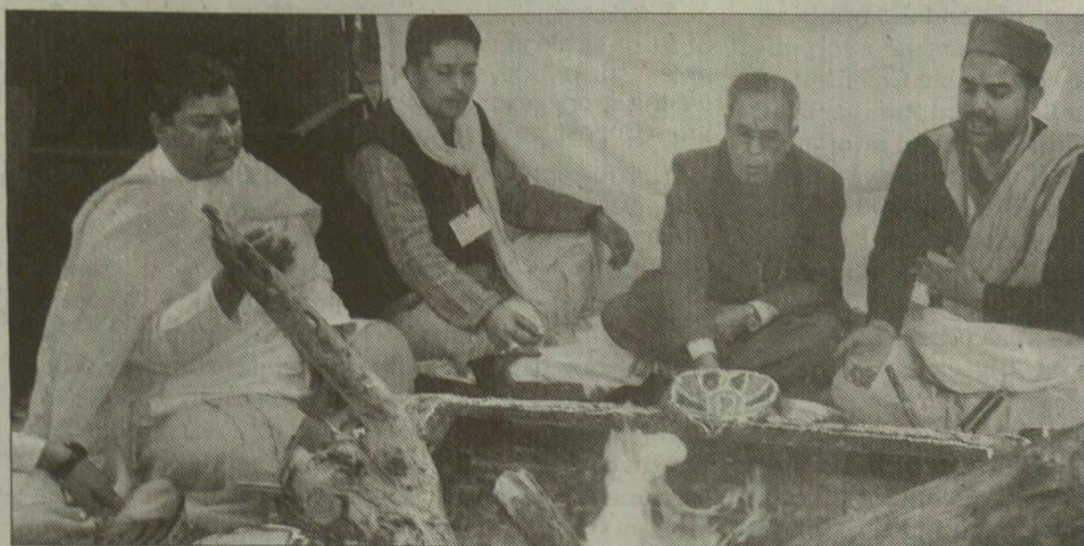
President Pranab Mukherjee failed to keep his date with Mandi today. He was the chief guest for the second convocation of the Indian Institute of Technology (IIT) here. However, his helicopter could not land due to inclement weather here and he directly left for Baglamukhi temple in Kangra district.

Governor Kalyan Singh was the chief guest at the convocation and Chief Minister Virbhadra Singh presided over it.

M Natarajan, Chairman, Board of Governors, IIT-Mandi, read the President's speech, in which he had exhorted the students to serve the nation and the needs of the common man and secure new vistas of frontier technology.

The President, in his message, congratulated the IIT for its convocation and for achieving the desired quality of education in scientific and technical education.

However, he said, the growing demand for engineering



President Pranab Mukherjee performs puja at the Baglamukhi temple in Kangra district on Sunday. PHOTO: KAMALJEET

education had resulted in the establishment of a number of technical institutions. But in the process, quality of education and physical infrastructure has taken a backseat. Rejuvenating the higher education sector called for greater dynamism on part of the institutions. With fast occurring changes in various disciplines, the faculty must keep themselves abreast with the latest developments," he added.

As many as 127 students

graduated from the institute. Shoubhik Debnath was awarded the President's Gold Medal and Anand Dhandhanian was awarded the Director's Gold Medal. Shoubhik Debnath, Krishna Karnani and Deepak Sharma bagged the Institute Silver Medal. Damini Singal was awarded the Rani-Gonsalves Medal for Outstanding Female B.Tech Student.

The convocation ceremony began with a welcome speech and report by IIT-Mandi Direc-

tor Timothy A Gonsalves.

Health Minister Kaul Singh Thakur; Rural Development Minister Anil Sharma; Excise and Taxation Minister Prakash Chaudhary; Chief Parliamentary Secretary Sohan Lal; Mandi MP Ramswaroop Sharma; Additional Chief Secretary Tarun Shridhar; DGP Sanjay Kumar; DC Sandeep Kadam; SP Mohit Chawla and senior officers of the state were also present.

—With inputs from PTI

## President cancels visit to IIT, prays at temple

[http://www.business-standard.com/article/news-ians/president-cancels-visit-to-iit-prays-at-temple-115031500559\\_1.html](http://www.business-standard.com/article/news-ians/president-cancels-visit-to-iit-prays-at-temple-115031500559_1.html)

President [Pranab Mukherjee](#) on Sunday cancelled his visit to the [IIT](#) in Himachal's Mandi city due to inclement weather but he visited a popular temple in Kangra, officials said.

A government official told IANS here that the president was not able to reach Mandi town due to bad weather there.

"When he was on the way to Mandi from Chandigarh in a helicopter, it was decided to cancel his visit due to inclement weather and poor visibility," he added.

Mukherjee was scheduled to attend the second convocation of the Indian Institute of Technology.

The president then landed at the Sapri helipad in Kangra district where he travelled by road to the Maa Baglamukhi temple.

Official sources said after praying for almost half hour, Mukherjee left for Delhi from Pathankot airport in Punjab.

As per his original schedule, the president had to visit Mandi in the morning. Before his return to Delhi, he was to visit the temple.

Chief Minister Virbhadra Singh and Governor Kalyan Singh gave away the degrees and medals at the IIT.

The IIT campus is located in Kamand village near Mandi, about 175 km from here.

## Text of speech of the President of India at the Second Convocation of the Indian Institute of Technology, Mandi

[http://www.business-standard.com/article/government-press-release/text-of-speech-of-the-president-of-india-at-the-second-115031500718\\_1.html](http://www.business-standard.com/article/government-press-release/text-of-speech-of-the-president-of-india-at-the-second-115031500718_1.html)

1. I am happy to join you for this Second Convocation of the Indian Institute of Technology (IIT), Mandi, one of eight IITs established during the Eleventh Plan period. It is a sheer delight to visit your institution situated in the Kamand valley, which beckons with its pristine and natural beauty. The simple lifestyle of the local agrarian people; their traditional songs, dances and crafts, enhance the innate grandeur and magnificence of this place.
2. Established in 2009, [IIT](#) Mandi is the first among the new IITs to shift to its permanent campus, Kamand. The tranquility of this place provides the perfect setting for a seat of higher learning. IIT Mandi has gradually expanded its academic programme. It offers B-Tech in the streams of computer, electrical and mechanical engineering. It has plans to introduce B-Tech in Civil Engineering from August, this year. This Institute has more than 650 students, including 148 research scholars. Undeterred by the relative remoteness of the location and paucity of physical infrastructure, this Institute has made best efforts to maintain the quality of education. I compliment the management, faculty and staff of IIT Mandi for their energy, dynamism and commitment in nurturing this Institute most admirably in its formative years.
3. IIT is a global brand today. It stands for excellence in scientific and technical education. The alumni of IITs have made them and our nation proud, irrespective of the profession they have pursued be it science or engineering, teaching or research, entrepreneurship or corporate sector, or public service. They have earned respect for their intellect, diligence and

professionalism. I am sure that with hard work and determination, IIT Mandi will keep up the good name of the IIT brand, and its students will shine wherever they go.

My dear students:

4. I congratulate all of you who have been awarded degrees today. A lot of effort has gone into your success, especially of your teachers, family, friends and well-wishers. The nation at large has invested in your well-being in terms of academic infrastructure and physical amenities that you availed of during your stay here. As you leave the portals of your alma mater today enriched and fulfilled by your training, remember that you have a duty to respond to the needs of your society. A Vedic verse says and I quote: Vidya dadati vinayam; vinayat yaati patratam; Patratva dhanamapnoti; dhanaddharmaha tataha sukham, that is, knowledge creates humility; from humility comes good fortune; with good fortune one performs dharma; in performing dharma, one becomes happy (unquote). I am sure that you all will take the path of sincerity, industry and conviction to be a winner in life.

5. Our technical institutions must usher in social consciousness amongst our budding engineers and scientists. Developing professional competence apart, these centres of scientific learning must induce social orientation in their students. They must help create a pool of bright and motivated youth who will use their knowledge and ingenuity to find solutions to socio-economic problems. I am glad to learn that IIT Mandi has established an Inter-disciplinary Socio-technical Practicum in collaboration with the Worcester Polytechnic Institute of USA. It engages students in projects aimed at deriving solutions to problems like traffic, cleanliness and drinking water.

6. Our higher educational institutions are an integral part of the local eco-system. They must assume greater responsibility for overall development of their region. The Government has taken important initiatives, aimed at financial inclusion, creation of model villages, Clean [India](#) and digital infrastructure. I have urged our institutions of higher learning to adopt five villages each and convert them into model villages in line with the Saansad Adarsh Gram Yojana. I am confident that IIT Mandi will take active part in this drive. I also call upon you to play a key role in realizing the objectives of the Digital India programme in this region.

Friends:

7. The growing demand for engineering education has resulted in the establishment of a number of technical institutions. Yet in this proliferation drive, quality of instruction and physical infrastructure has taken a backseat. The educational standard of our country at the tertiary level has been starkly brought out by two reputed international surveys. They have graded not a single Indian institution amongst the top two hundred universities in the world. We do have a few institutions that can do much better in the rankings with a more proactive and methodological approach. A higher rank can open fresh avenues of growth and placement for students. It can also encourage a greater flow of faculty and students from abroad, opening new vistas of frontier technology. Newly-created institutions will take some time to be in the reckoning. Nevertheless, you must take keen interest in the process not only with the objective of securing a rank but also to achieve all-round academic development.

8. Rejuvenating our higher education sector calls for greater dynamism amongst our institutions. They must identify one or two departments, in which they have core competence, and nurture them into centres of excellence. The quality of faculty must be of a high order to provide students world-class instruction. With fast occurring changes in various disciplines, the faculty must keep themselves abreast with the latest developments.

9. To bring about qualitative changes in teaching, the newly-established IITs must leverage the expertise available in the older IITs. The National Knowledge Network offers a platform for academic institutions to collaborate peer group learning in emerging areas. Additionally, this network can compensate for shortages in faculty, infrastructure and resources.

10. Our educational institutions must make an effort to develop linkages with international academic institutions. In this context, it is heartening to note that IIT Mandi had signed an MOU in 2011 with TU9, the nine leading technical universities of Germany. You must make full use of these inter-linkages to provide global exposure to your faculty and students.

Friends:



11. Knowledge and innovation are the keystones of progress. Competitive advantage can be derived from an eco-system conducive to new learning, research and innovation. Inter-disciplinary approach in course curricula and research, strengthening under-graduate research and making research integral to the teaching-learning process must garner focused attention.

12. You must build strong linkages with the industry. An industry-interface cell must be in place. The cell must engage itself in sponsoring of chair positions by industry; drafting of experts from industry in project guidance and curriculum design; and setting up of incubation centres, laboratories and research parks. Success of initiatives like Make in India hinges on manufacturing quality industrial products where academia-industry interface would play a critical role.

13. The older IITs have a strong alumni network. They leverage the expertise of many of their alumni who have done well in their chosen fields. The newer ones must make every effort to connect with their alumni. They could be made a part of governance structures, or engaged in business and project mentoring and curriculum design. I am certain that the alumni of IIT Mandi will involve themselves, in due course, in the affairs of this Institution in a meaningful manner.

Friends:

14. Before concluding, let me say that higher educational institutions, particularly engineering institutes, must promote a scientific temperament and a spirit of inquiry in their students. They must encourage their students to follow their curiosity and explore their creativity. They must equip their students to think beyond their textbooks. They must spur ingenious ideas in them.

15. I wish all the students the very best for the future. I also wish the management and faculty good luck for their endeavours.

Thank you.

Jai Hind.

## President urges institutions to adopt villages

[http://www.business-standard.com/article/news-ians/president-urges-institutions-to-adopt-villages-115031500464\\_1.html](http://www.business-standard.com/article/news-ians/president-urges-institutions-to-adopt-villages-115031500464_1.html)

President [Pranab Mukherjee](#) said on Sunday that institutions of higher learning must adopt five villages each, based on the Sansad Adarsh Gram Yojana.

Educational institutions must take greater responsibility for overall development, said the president in a speech that was read out in his absence.

President Mukherjee was scheduled to attend the convocation at the Indian Institute of Technology here, but could not reach due to bad weather.

"Our higher educational institutions are an integral part of the eco-system. They must assume greater responsibility for overall development," he said in a message that was read out by M. Natarajan, chairman of the IIT Mandi board of governors.

"The government has taken important initiatives, aimed at financial inclusion, creation of model villages, clean India and building of digital infrastructure.

"Institutions of higher learning, including IIT Mandi should adopt five villages each and convert them into model villages in line with the Sansad Adarsh Gram Yojana," he said.

Mukherjee also asked them to play a key role in realising the objectives of the 'Digital India' programme.

"India's technical institutions must usher in social consciousness amongst our budding engineers and scientists. Along with professional competence, these centres of scientific learning must inculcate a social orientation in students," he said.

To bring about qualitative changes in teaching, the newly-established IITs must leverage the expertise available in the older IITs, the president said.

He said institutions, particularly engineering institutes, must promote a scientific temperament and spirit of inquiry in their students.

"They must encourage their students to follow their curiosity and explore their creativity. They must equip students to think beyond their textbooks and come up with ingenious ideas," he said.

"The growing demand for engineering education has resulted in the establishment of a number of technical institutions. Yet in this proliferation drive, quality of instruction and physical infrastructure has taken a backseat."

"The educational standard of our country at the tertiary level has been starkly brought out by two reputed international surveys. They have graded not a single Indian institution amongst the top 200 universities in the world," he said.

President Mukherjee said the educational institutions must make an effort to develop linkages with international academic institutions.

"It's heartening to note that IIT Mandi had signed an MoU (memorandum of understanding) in 2011 with TU9, the nine leading technical universities of Germany."

For building strong linkages with the industry, the president said an industry-interface cell must be in place.

"The cell must engage itself in sponsoring of chair positions by industry; drafting of experts from industry in project guidance and curriculum design; and setting up of incubation centres, laboratories and research parks. Success of initiatives like 'Make in India' hinges on manufacturing quality industrial products where academia-industry interface would play a critical role," he said.

Mukherjee said higher educational institutions, particularly engineering institutes, must promote a scientific temperament and a spirit of inquiry in their students.

"They must encourage their students to follow their curiosity and explore their creativity. They must equip their students to think beyond their textbooks. They must spur ingenious ideas in them," he added.

# Green energy must for state: CM

## Urges IIT to focus on hydro, geothermal, solar energy

TRIBUNE NEWS SERVICE

MANDI, MARCH 15

"Green energy is a need and opportunity for Himachal Pradesh," said Chief Minister Virbhadra Singh while presiding over the second convocation function of the IIT here today.

"I wish IIT to focus on hydro, geothermal and solar energy which are relevant in our state," he said, adding that IIT could take the lead in energy education, energy conversion, energy policy, renewable energy technologies, protection of the environment and the dissemination of useful information on energy alternatives and sustainability to users and providers of energy.

He said he was glad to know that energy was the main focus of IIT-Mandi and also that it had introduced MTech programme in energy materials.

Congratulating the graduating students, who were conferred degrees, the Chief Minister said he understood the hard work the students had put in to reach this stage.

He said the capacity to create, organise and apply knowledge was the most important trait of every successful person in every profession. "We have to adopt the latest techniques in the fast-changing trend of technological revolution and adopt it in our day-to-day working," he added.

"In the present scenario, knowledge is expanding at greater speed and is a never ending process," he said.

The Chief Minister said he was happy to learn that since its inception, it was the first of the new IITs to bag international scientific projects in a span of just five years and the institution was fast expanding.

"It is pleasing for me to note that the sustained



A student, Damini Singal, receives a medal from Chief Minister Virbhadra Singh during the second convocation of IIT in Mandi on Sunday. PHOTO: JAI KUMAR

### Kalyan for more research in agri, IT

**Mandi:** Governor Kalyan Singh, who was the chief guest for the second convocation ceremony at Indian Institute of Technology (IIT) here on Sunday, stressed on the need for intense research for developing new technologies in various sectors such as agriculture, power, environment and information technology to ensure development of the nation and state. He said growth in science and technology only could provide solutions to the existing problems and accelerate the pace of development. The Governor lauded the contributions of IITs which were not only imparting best quality education but also doing commendable job in the field of technological research. He hoped that students of IIT-Mandi would also bring laurels to the state with their professional expertise. He said whatever education they had received would depend upon how to use that to meet the challenges and exhorted the students to have high aim in life.

efforts of the state government to support and nurture this pioneer institute have now begun to bear fruit. This certainly has long-term positive implications for the development of education in the field of science and technology in our state," said the Chief Minister.

He said the IIT-Mandi had recently expanded its academic curriculum to Masters programme in chemistry and energy materials. "I am sure that these programmes will cause rapid skill and knowledge building among the youth of Himachal

Pradesh," he said.

He said the institute had focused on the geographic needs of the state by initiating a programme in infrastructure and civil engineering with a focus on the problems and needs of the state. "These efforts have been bolstered by other efforts of the institute such as a project focused on developing technologies for the Himalayan region and also studying the medicinal and herbal plants in and around the Kamand valley and the region," he said.

"I expect the IIT-Mandi to foster state-of-the-art education in the state.

### GUV'S ADVICE

“Whatever you intend to do in your life, you should be fully committed to whatever you want to do.”

“If we fail to follow our traditions, we don't think that we can be successful in our endeavours.”

**Kalyan Singh, GOVERNOR**

Having IIT in Himachal provides a good opportunity for engineering and science teachers to upgrade themselves by registering for Masters and PhD programmes," said the Chief Minister.

"The IIT has a great potential to act as the hub for a hi-tech research and development (R&D) park in and around the Mandi and Kamand area," said the Chief Minister

He said such a park would help provide cutting-edge research and technology to the industry and focus on building a healthy academic-industry partnership.

# Indian-American to head US' council on education

Hindustan Times (Jaipur)

NEW DELHI: An Indian-American has been named to head US' most influential higher education association Monday onwards. Renu Khator, Chancellor of University of Houston System and President of University of Houston, will be the new Chair of American Council on Education succeeding James H Mullen Jr. The UP-born and University of Kanpur educated Khator said she felt tremendously honoured to be selected for the new position by fellow presidents.

HT.Com ND 16.03.2015 p-6

## GO HI-TECH WITH MATERIALS

**VISTAS** Scientific field that involves studying the synthesis, structure, properties of materials

Kent Thomas

Material science, also known as material science and engineering, is an interdisciplinary field (involving all branches of science and combining them with manufacturing technology) that deals with the discovery and design of new materials. Materials created range from nanotechnology to advanced polymers. A relatively new scientific field that involves studying the synthesis, structure, properties and performance of materials, this discipline has a broad purpose — solving engineering problems.

Material science incorporates elements of physics and chemistry and is also at the forefront of nanoscience and nanotechnology research. In recent years, the discipline has become more widely acknowledged as a specific field of science and engineering and is focussed on creating new technological developments based on cutting-edge scientific advances. Many of the most pressing scientific problems faced today are due to the limitations of the materials that are available and, as a result, breakthroughs in this field are likely to have a significant impact on the future of technology.

Material science is also an important part of forensic engineering which is essentially the investigation of materials, products, structures or components that fail or do not operate or function as intended,

causing personal injury or damage to property.

The materials science degree offered by leading universities across the world is essentially designed to provide the graduate with a suitable background for employment in the constantly emerging field of electronic materials.

Students receive experience in high-technology materials synthesis and characterisation, including the operation and design of the equipment used to make integrated circuits. Graduates are prepared for employment in areas of semiconductor manufacturing, electronic material development and structural composite development, materials synthesis and testing, and other industries where high technology processing and development are required.

The courses offered in the undergraduate programme include subjects like general chemistry, analytic geometry and calculus, introduction to computing, advanced geometry and calculus, multivariate calculus, differential equations, circuits, signals and controls, mathematics, technical writing, circuit analysis, electronics and magnetism, thermodynamics of materials, structure of solids, nuclear and particle physics and quantum mechanics. Given the interdisciplinary essence of this discipline, professionals cannot afford to work in silos.

*The author is assistant vice president, international programmes, Missouri State University, US*

### COURSES AND JOBS AVAILABLE IN MATERIAL SCIENCE



DEGREE	SECTOR	INDUSTRY	WORK PROFILE
Materials science and engineering, bachelor of science degree	Both private and government	Manufacturing, pharmaceutical and electronic companies	Developing environment-friendly materials, light-weight materials and new materials for solar energy conversion
Materials science and engineering, master of science degree	Both private and government	Renewable energy, public transport, manufacturing, pharmaceutical and electronic companies	Developing environment-friendly materials, light-weight and energy efficient transportation solutions, new materials for solar energy conversion. People can also work in research and advisory companies

HT.Com ND 16.03.2015 p-12

# BIONIC HEART MISSES BEAT

**ARTIFICIAL** The device addresses the major problem of wear and tear

Press Trust of India

**A**ustralian researchers have developed the world's first bionic heart that pumps blood without a pulse and it could be ready for human trials within three years.

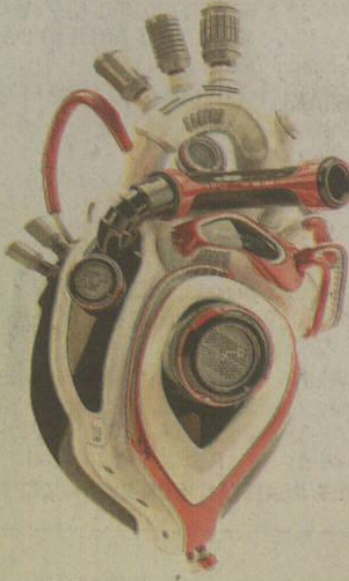
The device, designed by Brisbane engineer Dr Daniel Timms, has been successfully transplanted into a healthy sheep.

Timms, who started the project in 2001, while studying at the Queensland University of Technology, said that the device known as BiVACOR, could last 10 years longer than previous artificial heart designs because of a lack of wear and tear on parts.

The bionic heart has a small bladed disk spins in the heart at 2,000 revolutions per minute to pump blood around the body without a pulse, a significant departure from traditional pulse-based designs, which included balloon-like sacs to pump blood, it was reported.

"There were other devices that were quite large, and they also would break quite easily. And the reason they would break is they would have a sac, so if you're beating them billions of times

## WORLD'S FIRST BIONIC HEART WITHOUT LUB-DUB



Specialists were recently awarded a Centre of Research excellence grant by the National Health & Medical Research

- Dr Daniel Timms a Brisbane engineer designed the bionic heart named **BiVACOR**
- Small bladed disk spins in the heart at **2,000 revolutions per minute** to pump blood around the body without a pulse
- The **device was first tested on a healthy sheep** and the experiment was successful
- The device would be ready for human trials **within three years**
- The artificial heart development is one of the main focuses of **The Common Good crowd-funding campaign**
- Researchers looking for a partnership from around **Australia and South-east Asia**

per year, they're going to break," Timms said.

He said the new device addressed the problem of wear and tear by using magnetic levitation technology to keep the components from touching.

"It means there's no wear and that's the key of the device in that it can actually last for up to 10 years or longer without wearing out," he said.

"And that's a paradigm shift from these earlier pulse-style devices that couldn't last for more than two years," he added.

In January, a combined surgical

team from Brisbane, Texas, Sydney and Melbourne removed a sheep's heart, chosen for its similarity in chest size to women and children, and replaced it with the device.

"We've now shown that the device works. This idea is viable. Now it's a matter of making it robust and reliable so that it works in a patient," Timms said.

"The time frame is three to five years before it could be ready for humans. We need to test it for a year to confirm its safety and regulatory properties before we implant it in a patient," he said.