Newspaper Clips
May 3, 2014

Times of India ND 03/05/2014 P-19

Ex-IITian to build 'touchy-feely' robot

Kounteya Sinha | TNN

London: Former IIT-Delhi faculty member Ravinder Dahiya has won a £1.07 million grant to make "touchy-feely robot" a reality. The robot would be able to feel weight, lift an elderly person or patient out of bed and gauge the right amount of pressure needed to carry a fragile cup of tea.

"Think of a world where a robot can not only carry a cup of tea to an elderly person but can also sense whether it's too hot to handle," said Dahiya.

No robotics scientist has been able to create ultra-flexible tactile skin. Either the sensor has been too big or the electronics not sufficiently flexible.

Now, Dahiya, who completed his B Tech from Kurukshetra University and M Tech from IIT Delhi, believes he is on the cusp of a breakthrough and that he has found a way of incorporating electronics and sensors on bendable silicon-based surfaces that will be 50 micrometers thick – thinner than the aluminium foil we use every day.

He is about to create silicon based nanostructures such as nanowires printed on bendable substrates in a manner that will eventually lead to flexible electronic or tactile skin with distributed sensors and electronics.

By developing a printing technique for high-mobility materials such as silicon, he will obtain high-performance electronics at a low cost

> **The robot would be able to feel weight, lift an elderly person or patient out of bed and gauge the right amount of pressure needed to carry a fragile cup of tea**

base. This research will also use the state-of-the-art nanofabrication tools in the James Watt Nanofabrication Centre at the University of Glasgow.

"Interfacing the multidisciplinary fields of robotics and nanotechnology, this research on ultra-flexible tactile skin will open up whole new areas within both robotics and nanotechnology," said Dahiya.

"So far, robotics research has focused on using dexterous hands, but if the whole body of a robot is covered with skin, it will be able to carry out tasks like lifting an elderly person."

He said in the nanotechnology field, it will be a new paradigm whereby nanoscale structures are used not for nanoscale electronics, but for macroscale bendable electronics system. "This research will also provide a much-needed electronics engineering perspective to the field of flexible electronics."

His research is aligned with wider work on flexible electronics – the creation of bendable pieces of technology that will replace the flat screen computer or tablet.

HT.Com ND 03.05.2014 P-1

Student pays 80k for JEE challenge

Vanita Srivastava

NEW DELHI: Even as more than 13 lakh students waited anxiously, the Central Board of Secondary Education said that a verification of the answers of the Joint Entrance Exam (JEE Mains) that have been challenged by the students could not be completed on Wednesday.

Among the more than 280 challenges received regarding discrepancies in the OMR sheet, one student had challenged 80 questions and had paid ₹80,000 while another had challenged 59 questions and paid ₹59,000.

"The experts are looking into all the mails that have been received besides the challenges made by the individual students. The final decision would be known on Thursday," CBSE chairman Vineet Joshi told HT.

The board had uploaded the answers on April 28, of all the questions that were asked in the offline and online exams held earlier this month.

One Physics question of the online exam on April 19 had been dropped as all the answers were incorrect.

CBSE declares JEE (Mains) scores, final result in July

Vanita Srivastava

■ Vanita.shrivastava@hindustantimes.com

NEW DELHI: The Central Board of Secondary Education (CBSE) declared the scores of JEE(mains) late Friday night.

Nearly 12.78 lakh students had appeared for the exam and the final result will be known in July. The top 1.5 lakh students would be allowed to sit for the JEE(advanced) exam for admission to IITs.

"We are loading the scores on Friday night. Besides the online challenges, the experts were looking into all the mails that had been received by the individual students. We are uploading the revised answer key with corrected answers," CBSE chairman Vineet Joshi told HT.

CBSE conducts the JEE(mains) for admission to different NITs, IITs and other centrally funded institutes. The board uploaded the answers of questions that were asked in the offline and online exams. Students could challenge the answers on payment of ₹1000 for each question, which would be refunded if they were correct.

Why Indian Universities Are Not Performing Well In Global Rankings?
May 1, 2014

by **Ramandeep Kaur**

http://www.mapsofindia.com/my-india/india/why-indian-universities-are-not-performing-well-in-global-rankings

At last India has managed to get its university in the top 100 universities ranking by the 'Times Higher Education' (THE). The Indian Institute of Technology, Guwahati has been ranked at number 87in the 2014 league table of '100 Under 50 (the list of universities whose age is below 50 years). For the first time an Indian university has managed to enter into the 100 ranking. Ranking is based on 13 performance indicators such as teaching, research, citations, industry income, international outlook etc. Universities not teaching undergraduates or teaching just one or two courses, or doing less research are excluded from the ranking.

This makes us feel good, but in the 2014 'World Reputation Rankings' by the annual Times Higher Education (THE) magazine again the Harvard University, the Massachusetts Institute of Technology (MIT), Stanford University, the University of Cambridge, the University of California topped the list. Not even a single Indian University has managed to enter into the top 100 list. Though Brazil, Russia and China among BRIC nations have universities in the top rank but India does not. China has two universities in the top 50, Brazil and Russia has one each in the list. The unranked part of the list contains the name of Punjab University (226-300) and the Indian Institutes of Technology (IITs) in Delhi, Kanpur, Kharagpur and Roorkee (351-400). Ranking is based on invitation-only survey of senior academics across the world. In the QS World University Rankings, just four Indian institutions, IIT-Bombay, IIT-Delhi, IIT-Madras and Indian Institute of Science (IISc) were featured among the top 50. Many experts call the ranking criteria biased and based on western norms. Reputational surveys and research citations are the two main source of getting information about any institute for ranking. No institute or university can directly file nomination for the ranking. But some industry experts believe that official websites of universities and institution are checked for ranking and sometimes these websites do not contain enough data so can be misguiding. Hence most of the Indian universities are doing well and able to complete with their global counter parts.

But not coming in the global ranking is a matter of concern because in India there are 42 central universities, 285 state, 125 private and 130 deemed universities. We cannot escape by saying that ranking is not relevant. Universities must take new roles and responsibilities and adopt a progressive approach to compete globally.

Research and knowledge creation must be taken seriously by the universities. Teaching and research must go hand in hand and in coordination with each other. Since independence the main focus is to build number of universities for providing education to young aspirants. While doing this research has been neglected to a great extent in India.

Most of the Indian universities do not meet the said international standards. An institute must be clear on its role and what it can contribute. Other factors that need to be checked are academic reputation, student faculty ratio, international students, citations and faculty exchange.

It has also been seen that students in India are not interested in going for a research job. Even after doing BSc Science they prefer to go for MBA or Civil Services and rarely a M.Sc. Sensing the needs IITs are taking steps to push enrolment in PhD programmes in IITs.

Universities cannot ignore the world university ranking and keep doing what they are doing. We are competing at a global level so must follow the rules. India has a very intellectual past and an honor of giving the first University to the World. Universities must work to improve its research and development quality. We must have a right talent and plenty of resources for higher education.

THE TIMES OF INDIA

UGC plans cluster colleges as option to deemed university

TNN | May 3, 2014, 05.05 AM IST

CHENNAI: No new deemed university has come up in the country in the last seven years, primarily because of the court case challenging the 2010 University Grants Commission regulations. With the issue still in court, the UGC now plans to introduce the idea of cluster colleges as an alternative to deemed universities.

"We want to get some big universities to disaffiliate some institutions. They can't become deemed universities at the moment till the Tandon Committee report issue is resolved, but can be considered an alternative," said UGC vice-chairman H Devaraj.

Some, like Osmania University with 900 affiliated colleges, Pune University with 811 and Tamil Nadu Teachers' Education University with 661 colleges, were too big and the UGC was open to helping groups of colleges under possibly the same management to disaffiliate from the university and be grouped together. They may be made into degree awarding institutions, provided they meet requirements. Instead of the management having to make extraordinary efforts to ensure that one college meets university criteria, it would be easier to club all colleges under the same management to bring it to university standards, Devaraj said.

Academics said this may not be possible unless the UGC Act was amended. Sastra University dean (planning and development) S Vaidhyasubramaniam said, "The character of a university is its comprehensiveness. Besides grouping and awarding university status, the UGC could award university status and encourage multi-disciplinarity."

The UGC on Friday approved a three-year bachelor of vocation (BVoc) course, going beyond the conventional arts, commerce and science streams. Of 338 applications from educational institutions across the country, the UGC approved 92. "A majority of the colleges offering the course are in Maharashtra (around 30) because the state has an industrial culture," said Prof Devaraj. In Tamil Nadu, it will be offered at Avinashilingam College and PSGR Krishnammal College for Women in Coimbatore and St Joseph's College in Trichy.

The course will provide skill and specialization in different vocations, including retail marketing, hospitality management and carpentry. It will have a multiple-exit provision - a certificate at the end of the first year, a diploma after two years and a degree after three years. The UGC has made provisions for financial assistance up to Rs 1.85 crore for the colleges selected for BVoc programme under the National Skill Qualification Framework.

THE TIMES OF INDIA

Mumbai University flouting UGC order on technical colleges: Teachers

TNN | May 2, 2014, 12.00 AM IST

MUMBAI: The Mumbai University and College Teachers' Association (MUCTA) wrote to the University Grants Commission (UGC) recently to seek disciplinary action against university officials for allegedly processing applications for new technical colleges.

The UGC, in an order dated April 4, had placed a moratorium on affiliation of new colleges providing technical education and on approvals for increase in intake of students in existing colleges.

By then, the university had already invited applications for new technical colleges, and inspection committees visited these and submitted reports.

These reports were tabled in the management council meeting on April 28, claimed the letter sent to the UGC.

The letter said the university had identified proposed innovative courses in engineering colleges and also collected processing fees from the institutes. The teachers also said that the management council decision had been communicated to the government.

The teachers, Subhash Athavle and Vaibhav Narawade, claimed that "this episode amounts to insubordination by the university in following UGC orders".

Pro-vice-chancellor Naresh Chandra said MU had only accepted applications from colleges ready to offer non-existing innovative courses.

"We will send all applications to the state government along with the UGC letter for the final decision," he said.

The management council meeting agenda showed that proposals of 14 colleges in engineering, pharmacy, architecture and the like were tabled.

hindustantimes
Saturday, May 03, 2014

[Vandana Singh](#), **Hindustan Times**

Ludhiana, May 02, 2014

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Recognise CBSE's 13 new subjects: UGC tells varsities

Additional vocational or add-on subjects introduced by the Central Board of Secondary Education (CBSE) will now get recognition at undergraduate level also. The University Grant Commission (UGC) has directed all universities to recognise 13 new subjects introduced by the CBSE for Classes 11 and 12 and take appropriate steps to consider these subjects while admission to undergraduate courses.

In a circular issued by UGC deputy secretary Shakeel Ahmed, he had instructed the vice-chancellors of all universities to give appropriate consideration to these subjects during admission process at the undergraduate level.

He said the new subjects have a reflection in the subjects already being offered at educational institutes and should be accorded due consideration.

The new subjects introduced by the CBSE are knowledge tradition and practices of India, legal studies, human rights and gender studies, national cadet corps, heritage crafts, graphic design, creative writing and translation studies, functional English, entrepreneurship, biotechnology, fashion studies, mass media studies and theatre studies.

The UGC circular gave a reason to cheer to students, who earlier used to face difficulty in admission at undergraduate level because only core subjects were given due consideration.

Welcoming the UGC step, Harmeet Kaur Wairach, principal of Nankana Sahib Public School and chairman of Ludhiana Sahodaya School Complex, said, "The new subjects are rigorous in nature and designed keeping in mind the industry and employability avenues."

Principal of BCM Arya Model School Paramjit Kaur said, "Vocational courses are need of the hour. We need to make students learn subjects that can bring easy employment or help them start as an entrepreneur. It is high time and the higher educational institutes should also upgrade them and include such courses in their curriculum."

Paramjit said, "I have written a letter to the Punjab Agricultural University vice-chancellor, requesting him to start an undergraduate course in the mass media and journalism, though the PAU is already offering postgraduate course in the subject."

Paramjit said if a student wanted to do graduation in mass media and journalism then he or she had to go to other

Deccan Herald

IISc has big plans for Big Data initiative

Prashanth G N, Bangalore, May 2, 2014, DHNS :

Lecture series, scholarships on the cards

The Indian Institute of Science is planning to built teams of data analysts and scientists in all possible fields as part of its Big Data Initiative.

The initiative, launched by a 10-member team of IISc's Computer Science and Automation (CSA) department, has been garnering attention from students, scholars and industry experts.

The plan is to have a series of lectures on different aspects of Big Data over a period of six months by experts in the field. The lectures will be delivered free of cost as a step to increase awareness on the study discipline among students and create an ecosystem of big data in the institute.

Apart from academicians, industry specialists will spell out the practical benefits about things simple - even as simple as why we need to drink filtered water. The data generated on water filtering is so high that ordinary people would not have the time to understand it. Big data experts will break down data and make it understandable.

Scholarship

A good feature of the initiative is that students can look forward to fellowships on big data. IISc team plans to recruit and train best talents in big data and related areas and provide them with scholarship to pursue relevant courses offered at the institute. Top companies are expected to sponsor the training campaign and fund the fellowship. The duration and extent of funding will be decided in due course.

Prof Jayant Haritsa, faculty at CSA and Supercomputer Education and Research Centre (SERC), says big data systems have to be tested seriously to confirm whether they work well. He describes what he would present in his lecture:

"Big Data has become the buzzword of choice in recent times, especially in the software industry. The accompanying hoopla has spawned frenetic claims foretelling the development of great and wondrous solutions to Big Data challenges However, very little is said about the testing of such systems, an essential pre-requisite for deployment. We will discuss the research challenges involved in the testing process, especially from the database perspective."

Higgs Boson experiment

The massive experiment going on at the Large Hadron Collider (LHC) in Geneva to understand the origins of the universe by understanding the particle Higgs Boson, has a mind-boggling 150 million sensors delivering data of 40 million times per second. The number of collisions per second is nearly 600 million.

Post filtering and after not recording more than 99.999 pc of these streams, only 100 collisions per second would be of interest. Is it humanly possible therefore to analyse data created in millions of reams? The big data field is looking at building tools to break down the huge volume of data to understandable levels.

Bangalore has companies such as EMC, HP,SAP, IBM and Accenture, which are into big data mining.

Business Standard

Australian university names scholarship after Big B

IANS | Mumbai   **May 02, 2014** Last Updated at 12:00 IST

Megastar Amitabh Bachchan, who inaugurated the Indian Film Festival Melbourne (IFFM) along with the governor and his wife Thursday, is ecstatic to hear that the La Trobe University has named a scholarship after him.

"The La Trobe University names a scholarship after me, to be accorded to deserving students from all walks of life that will come and study media and entertainment courses here," the 71-year-old posted on his blog srbachchan.tumblr.com.

He took to the platform also to thank the governance of Victoria, Australia, for calling him to inaugurate the 11-day festival.

"Thank you, the Governance of Victoria for this gesture, fructifying the bonds that exist between our two nations and lending unstinted support to our film industry in conducting such events to acquaint the locals with our cinema," Amitabh, who wore a combination of pink and purple to the event, posted.

"The warmth and graciousness shall be carried by us all to India, and in particular to our countrymen," he added. "And finally an award ceremony in the evening that shall decorate winners of selected films in categories ranging from short films to feature, with an Achievement Award for yours truly..." he added.

The star-studded festival will showcase over 40 films.

IIM-A to increase intake of non-engineering students

TNN | May 3, 2014, 12.45 AM IST

AHMEDABAD: The Indian Institute of Management, Ahmedabad (IIM-A) has decided to change its admission policy to include more students from diverse backgrounds including humanities. As compared to previous batches, where over 95% of students belong to engineering background, fewer engineers may walk into the management school this year.

A statement from IIM-A on Friday said that "non-engineers constitute 11% of the students to whom offers have been made this year, compared to 5% or less of the entering classes being non-engineers in each of the past three years."

The admissions process has two stages - Common Admission Test (CAT), followed by Written Analysis and Personal Interview (WA-PI) of candidates shortlisted after the first stage. In the new process, minimum cutoffs for CAT-scores were applied and WA-PI scores were based on not only academic performance and written analysis but also quality of interview, extra-curricular activities, awards, and work experience.

In August 2013, TOI had reported that IIM-A was planning to increase diversity among the incoming students by proposing changes in its admission policy.

The institute also made record 28% of the admission offers to women applicants this year compared to 11% to 22% in the past three years.

In the 2013-15 batch of IIM-Ahmedabad and IIM-Bangalore, engineers made up 94.9% and 91.09% respectively. Other IIMs had 83-85% engineers.

Business Standard

More non-engineers, women in IIM-A's new PGP batch

BS Reporter | Ahmedabad   May 02, 2014 Last Updated at 21:39 IST

In a bid to enhance the student diversity at its campus, the Indian Institute of Management, Ahmedabad (IIM-A) has made some changes in the recruitment and admissions process for the 2014-16 post graduate programme in management (PGP) batch.

As a result, the share of non-engineering students has gone up to 11 per cent as against five per cent in last three years, while that of female students is up to 28 per cent from 11-22 per cent in last three years.

The changes in admission process were brought in both the stages of applying Common Admission Test (CAT) scores as well as performance in the Written Analysis and Personal Interview (WA-PI).

As per the institute, In each category of candidates (General/NC-OBCCT/DA), minimum cutoffs for CAT-scores were applied to generate the list of candidates eligible for further consideration. Historically, a weighted average of CAT scores and prior academic performance has been used to generate a merit list of candidates invited for WA-PI. This year, this list was supplemented with CAT toppers (top 50 or 1 per cent of candidates from the academic stream, whichever was lower) from five broad academic classifications to arrive at the set of candidates invited for WA-PI.

Moreover, The Written Analysis and Personal Interview was conducted to form a holistic perspective on the candidates' eligibility for the PGP programme. "WA-PI scores were based on not only academic performance and written analysis but also quality of interview, extra-curricular activities, awards, and work experience," the institute stated.

"Partly as a result of these changes, and partly with greater recruiting effort by IIMA in non-traditional areas, non-engineers constitute 11 per cent of the students to whom offers have been made this year, compared to 5 per cent or less of the entering classes being non-engineers in each of the past three years," the institute further stated.

4 Indians win Harvard awards for startups

New York: Four Indians are among the winners of a Harvard Business School competition that awards prizes worth over $300,000 to new and innovative business and social impact startups conceptualized by the US institution's students and alumni.

Harvard MBA student Amrita Saigal won the grand prize in the 'Social Enterprise' category at the 18th Harvard Business School New Venture Competition for her venture 'Saathi', which she cofounded with Oracle engineer Kristin Kagetsu. 'Saathi' provides sanitary pads made from waste banana tree fibre to women in rural India. They received a $50,000 prize.

The winner in the business track category was 'Alfred', launched by Saurabh Mahajan, Marcela Sapone and Jess Beck. It is a concierge service which can be used for daily, weekly tasks, including dry cleaning, groceries, laundry etc. The Alfred team also won $50,000. The runner-up in the social enterprise track was 'Tomato Jos' founded by MBA students Mira Mehta and Mike Lawrence to help small farmers in Nigeria grow tomatoes that can then be made into tomato paste.

In the business category, 'Booya Fitness' founded by MBA student Pritar Kumar won the runner-up award and a $25,000 cash prize. AGENCIES

Quota issue raises head at AIIMS

TIMES NEWS NETWORK

New Delhi: A section of AIIMS faculty will stage a protest at Jantar Mantar on Saturday against the denial of reservations in various medical institutions and other institutions of higher education across the country.

The protesting doctors are demanding that those responsible for denial of reservation should face criminal prosecution. They will submit a memorandum to the President.

"The gross under-representation of SC, ST and OBC in the advertisements from other

PROTEST AT JANTAR MANTAR

medical institutes clearly suggests that infraction of reservation roster is not only confined to AIIMS," said Dr L R Murmu, professor at AIIMS.

Members of Forum for Rights and Equality and Progressive Medicos and Scientists Forum of AIIMS said those responsible for undermining the policy of reservation have developed a kind of immunity to action against them. It is imperative that a system is put in place wherein infraction of the due rights of SC, ST and OBC is treated as a crime that would attract penal punishment, they said.

e-paper

Honour For India's Green Heroes

Earth Care Awards Bring Recognition To Community Groups & Corporate Houses That Show Eco Initiative

Pics: Shriram Vernekar and Aditya Waikul

TIMES NEWS NETWORK

In May 2009, cyclone Aila hit the Sundarbans, a delta in the Bay of Bengal consisting of 102 islands, sheltered from the sea by mangroves and embankments. In a day, the cyclone washed away 1,300 embankments, killing about 300 people and rendering many homeless. One of its consequences was increased salinity of the soil, which could no longer support paddy. "It occurred to me that a 100 years ago, people lived in this area but these embankments weren't there," said A K Ghosh, president of ENDEV (Society for Environment and Development), "so what did they eat?"

On Wednesday, at the fifth edition of the Earth Care Awards instituted by JSW Foundation and The Times of India, ENDEV and Lutheran World Service India Trust (LWSIT) received the 'Community-based Mitigation

and Adaptation to Climate Change' award for tracing indigenous, salt-tolerant rice varieties and developing seed banks so the community would be more resilient to natural disasters. "Farmers now have 2,000kg of seeds from the initial 10kg," said Ghosh.

The Centre for Environment Education (CEE) was the knowledge partner for the awards, and the TERRE Policy Centre was the outreach partner. The awards ceremony was held at the JSW Centre, which has LEED Platinum Certification, the highest possible green rating. The jury included McKinsey's Rajat Gupta, retired civil servant Shailaja Chandra, Prof. M S Swaminathan, chairman of the M S Swaminathan Research Foundation, Dr William Dar, director general of the International Crops Research Institute for

the Semi-Arid-Tropics (ICRISAT), Kartikeya Sarabhai, director of the Centre for Environment Education, TERRE Policy Centre's chairperson Rajendra Shende, Pradip Shah, the chairman of IndiaAsia Fund Advisors and the Centre for Development Studies director, Aneeta Benninger.

During the ceremony, chief guest Dr R K Pachauri said, "The scientific community can give you a detailed assessment of climate change but what is far more compelling is to have those implementing measures tell us about their successes and struggles."

Take, for instance, the use of

expired Cadbury chocolates, Nivea Cream, broken tyres and industrial waste, which are burnt as fuel in the manufacture of clinker (a cement intermediate) by Kymore Cement Works, ACC Ltd, which won the award for 'Green House Gases Emission Reduction in Industry.' "The use of alternate fuel and raw material has resulted in a 4% reduction in the use of coal energy," said S C Chaudhary, Kymore's senior general manager, plant operations, adding that the plant harvests rainwater in old mine pits, and does not use any river water for cement production.

The plant has cut down 4 units of electrical energy per tonne of cement by improving their equipment and replacing inefficient motors.

Tata Consultancy Services won an award in the same category as ACC for creating green office infrastructure, procuring renewable energy sources and reducing its carbon footprint by 34% in 2007-2008 and 26% in 2009.

Farmland Rainwater Harvesting Systems, which developed a 'V-Wire injection well' technology for runoff rainwater harvesting and recharge in Karnataka, won the 'Innovations for Climate Protection' award.

By decentralising water management in villages, the Aga Khan Rural Support Programme, India (AKRSP) hit on an environ-

mentally-friendly way of dissolving caste barriers. They won an award for 'Community-based Mitigation and Adaptation to Climate Change.'

"A typical drinking water system in a village involves an underground bore-well, from which water is pumped to overhead tanks and then goes to public water-taps. The dominant caste would control the water, and switch the pump on at times convenient to them, and not to Dalit labourers," said Apoorva Oza, CEO, AKRSP. "But in the systems we worked on, water from the bore-well goes to underground storage tanks servicing around 25 households. All tanks fill up simultaneously, and no one person or caste controls water."

5th JSW - THE TIMES OF INDIA EARTH CARE AWARDS-2014
Edition — Awards For Excellence In Climate Change Mitigation & Adaptation

(Left) Award winners with the jury members; (above) Sangita Jindal, chairperson, JSW Foundation, with chief guest Dr R K Pachauri

Prototype spacesuit for Mars trip is out

Z-2 To Use Light-Emitting Patches And Luminescent Wire To Identify Individuals

Kounteya Sinha | TNN

London: With the Red Planet set to be the next space colony for humans, provided present explorations deem it fit for life, the US space agency Nasa is already working on the wardrobe essentials. Nasa on Thursday unveiled the first spacesuit to be worn by astronauts to Mars.

Nasa said the Z-2 spacesuit was only a prototype, but elements of it would be incorporated into the suit worn by the first humans to reach the Red Planet.

The "technology" design beat two others with 63% of a public vote of 233,431. The online competition to determine the design of the Z-2 suit closed on April 15. The other designs were: "Bio-mimicry" suit, which mirrored the bioluminescence of aquatic creatures and the tough scaly skins of fish and reptiles and "trends in

AFP

The prototype of the Mars spacesuit. The final version to be ready for tests by Nov

society" suit, which reflected what daily clothes may look like in the future.

The Z-2 will be built using 3D-printed parts and 3D laser scans will ensure each suit fits perfectly. It will be tested in vacuum chambers at Nasa's training pool and at a site that imitates the rocky Martian surface. The suit uses light-emitting patches and luminescent wire that could be customized to identify individuals. Nasa said "Z-2 suit is the newest prototype in its next-generation spacesuit platform, the Z-series. With the agency laser focused on a path to Mars, work to develop the technologies astronauts one day will use to live and work on Mars has already begun. Each iteration of the Z-series will advance new technologies that one day will be used in a suit worn by the first humans to step foot on the red planet".

There are many key advances to be found in the Z-2 suit when compared to the previous Z-1. The most significant is that the Z-1 had a soft upper torso and the Z-2 has a hard composite upper torso. This composite hard upper torso provides the much-needed long-term durability that a planetary Extravehicular Activity suit will require. The boots are much closer in nature to those that would be found on a suit ready for space, and the materials used on the Z-2 are compatible with a full-vacuum environment. Besides the typical fit checks and mobility evaluations, Nasa currently is planning a very comprehensive test campaign for the Z-2 suit.

Engineers will conduct multiple vacuum chamber tests, including one series at full vacuum, mimicking the lack of atmosphere found in space. The suit will be tested at Nasa's Johnson Space Center in Houston in the huge indoor pool used to train astronauts to spacewalk.

Further testing at a site at Johnson that imitates the rocky Martian surface will help evaluate the suit's mobility, comfort and performance. Ultimately, all of these tests will guide engineers in designing the Z-3. With the Z-2, Nasa will employ cover layer design elements, like electroluminescent wiring, never used before in a spacesuit. This design now will be incorporated into the final version of the suit, which is expected to be ready for testing by November 2014.

Publication: The Times Of India Delhi;Date: May 3, 2014;Section: Times Global;Page: 22;

Campus rape: Top 55 colleges under US lens

Chidanand Rajghatta | TNN

Washington: To curb predatory sexual behaviour on college campuses, the Obama administration on Thursday named 55 colleges and universities nationwide, including President Obama's alma maters (Harvard University, University of Chicago, and Occidental College), Princeton University, Carnegie Mellon and Dartmouth among others, for a federal investigation into their handling of sexual abuse allegations by student victims.

The Department of Education's announcement stunned the academic world, although the issue of aggressive and destructive sexual behaviour has been a hot button issue for several months now. There have been increasing instances of predatory sexual assaults on campuses, including a high-profile case last year at Vanderbilt University where five college athletes were accused of raping an undergraduate.

Elite Ivy League schools such as Harvard and Princeton are not an exception to the growing sexual assault epidemic either, with over 100 cases reported in the last three years. In fact, Harvard College students are reported to have filed formal complaints in March to the education department saying the college did not respond promptly to reports of sexual violence, that students were subjected to a sexually hostile environment, and that in some cases assault victims were forced to live in the same residence buildings as their alleged assailants.

According to a 2007 Campus Sexual Assault Study conducted for the justice department, one in five women in US college campuses are sexually assaulted before they graduate, a figure that both President Obama and vice-President Joe Biden have cited while addressing the issue. In recent months, students have flocked to advocacy groups such as End Rape on Campus and Know Your IX, forcing the administration to act on the matter.

FIGHT BEGINS

The 55 schools named by the Obama administration are facing investigation into possible violations of what is called Title IX of the Education Amendments of 1972, which prohibits discrimination on the basis of sex at institutions that receive public funds. The education department released new guidance this week outlining federally funded schools' responsibilities to address sexual violence and other discrimination. All schools — from K-12 to universities — must comply with Title IX or risk losing funding.

For the full report, log on to www.timesofindia.com

Firstouch: Three IIT-grads develop a smartphone that translates English text to Indian languages & vice versa with a swipe

Read more at:
http://economictimes.indiatimes.com/articleshow/34550271.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst

NEW DELHI: A Mumbai firm founded by three former IIT graduates is giving the smartphone a desi makeover. Firstouch, their made-for-India device, allows users to translate text written in English to Indian languages and vice versa by swiping across the 4-inch screen. Not just that, it has a 48-key virtual keyboard that's designed to accommodate Indian alphabets.

Rakesh Deshmukh, Akash Dongre and Sudhir Bangarambandi, who have developed and patented the virtual keyboard and the predictive text engine that goes along with it, are aiming to break the language barrier with the phone. The target customers are likely rural folks, who may not be comfortable with English or even Hindi, but offer a big growth market for telecom operators and device makers.
The first batch of Firstouch phones will be for Gujarati users and will hit stores in Rajkot this month, priced at Rs 6,000, which is roughly what an entrylevel smartphone costs. Hindi and Marathi are next on the cards, set for a June release, and the three partners want to get the phone to support all Indian languages within a year. If they succeed, Firstouch will be the first device capable of such a feat. Why Gujarat first? "Gujjus are far more experimenting," said 31-year-old Deshmukh.

Deshmukh is the CEO and co-founder of MoFirst Solutions Ltd, the company behind Firstouch. Deshmukh, who graduated from IIT in 2006, founded the company two years after that with 30-year-old Dongre, who finished in 2005, and Sudhir, 27, who did so in 2008.

MoFirst has been making iPhone apps since its launch. It developed the country's first mobile trading platform for Motilal OswalBSE 1.49 % Securities in 2012. Other products include m-commerce and m-ticketing solutions besides apps for Android and BlackBerry operating systems.

Even so, the predictive text and swipe technology that it has developed for Firstouch is far more complex and advanced than anything the company has done before. It's capable of translating messages written in a local language to English with a left swipe, and transliterating it by swiping right.

So, if you want to type the message 'How are you?' in Gujarati, it can be done without changing the overall setting from English to Gujarati — because the default keypad has Gujarati alphabets. This message can be translated into English by swiping right. Swiping left will transliterate the message in English into 'Tame kem cho?'

The phone can also translate messages received in English to Gujarati, again with a finger swipe. "This is something new that I've heard," said Gartner Principal Analyst Vishal Tripathi.

"It's very interesting and will be popular among people who are not comfortable with Hindi (the most common non-English language supported by smartphones in India), even among old people whose kids are overseas. I feel the real target market for this device will be tier-3 and tier-4 cities, or villages," he added.