Window cleaners, foosball stations draw crowds at IIT

INNOVATIVE IIT students make projects that can be used easily around the house

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NEW DELHI: Hundreds of students, proud parents and impressed teenagers gathered at IIT Delhi on Saturday to take a look at the projects compiled by various IIT students. The projects included everything from high-tech software and machinery to simple projects that can be used around the house.

Among the projects more popular with professors and industry at the ninth Open House were the multifunctional wheelchair that makes it easier for a user to use the toilet and to reach objects at a height, a biochip sensor to test the purity of milk, earthquake safety technology and a chemical to make clothes fight bacteria.

A number of other projects, also caught the visitors fancy. PORTABLE FOOSBALL STATION: This is a smaller, low cost and portable version of the game made immensely popular by the well loved TV series F.R.I.E.N.D.S. Designed by first year students of the mechanical engineering department, the project garnered a lot of interest.

CONTINUOUS MOTION TROLLEY: Aimed at small industries where articles have to be delivered from one point to another repeatedly, the continuous motion trolley is completely mechanical and uses the concept of weights and balances to create continuous motion. According to the students who made the project, the equipment will work without electricity and will be more cost-effective.

WINDOW CLEANERS: Cleaning the window panes from both inside and outside is a task that each one of us has tried and failed. The students at IIT Delhi have created a device to clean the outside as well as the inside. Magnets are attached to two separate panels and these are then covered by scrub pads. When a person starts cleaning the pane from inside the second panel is clamped on to the other side. The magnets on both panels keep the one outside from falling. It also mimics the movement of the panel in our hands.
Innovation fest brings out best of IIT-Delhi

Indian invents world’s 1st smartphone for the blind

Chitra Unnithan | TNN

Ahmedabad: Blind people will soon be able to read SMSs and emails on their smartphones. Innovator Sumit Dagar, whose company is being incubated at the Centre for Innovation Incubation and Entrepreneurship (CIIIE) based on the Indian Institute of Management Ahmedabad (IIM-A) campus, has developed the unique device. Send this unique smartphone an SMS or email in any language and it converts it into blind-friendly braille.

Dagar, who holds a postgraduate degree from the National Institute of Design (NID), Ahmedabad, had always been passionate about making technology more usable.

He is now collaborating with the Indian Institute of Technology (IIT), Delhi. “We have created the world’s first braille smartphone,” he said. “This product is based on an innovative ‘touch screen’ which is capable of elevating and depressing the contents it receives to transform them into ‘touchable’ patterns.”

Dagar started the project three years ago while studying interaction designing at NID. After working with a couple of companies, he gave up his job to concentrate on his technology, formed a team of six people and started his venture Kriyate Design Solutions. Currently, the venture is being funded by Rolex Awards under its Young Laureates Programme, where they select only five people from across the world every two years to fund their projects.

Earthquake safety

The project aims to ensure safety of household items during earthquakes. PhD scholar Pravin Jagnpam started working on the technology with his professor Dr Venkat Murugan in July 2011. At IIT-Delhi, household items were subjected to simulated earthquakes as part of a demonstration.

Nanotech for fabric

This project takes into consideration the harmful effects of colour leaking off garments when they are washed as well as the polluting effects of detergents. Developed by IIT professors Manjesh Jaswal and Adeshwati Aggarwal, it aims at adding value to textile substances using nano-finishes. Nanofibre has anti-bacterial properties. It helps keep the fabric fresh even after a person sweats while wearing it. The Spinia Research Lab of IIT Delhi has developed two technologies which provide nearly 100 per cent anti-odouric and extremely low concentrations. The technology has been transferred to REGQ, CHEMINT, Bangalore.

Braille SMART

> The smartphone uses Shape Memory Alloy technology, which is based on the concept that metals remember their original shapes i.e expand and contract to its original shape after use

> The phone’s ‘screen’ has a grid of pins, which will move up and down as per requirement. The grid has a braille display, where pins come up to represent a character or letter
बस एक एसएमएस कर अपनी तलाश लें आप

कानपुर | आविष्कार चित्रों
अब आपका दौर आपकी लॉकेशन से दूर नहीं है। अगर उसके लिए ताजा और नया दौर तो यह एसएमएस का नया तरीका है।

अगर आपकी लॉकेशन नहीं है तो इस माध्यम से नए लॉकेशन खोजने का माध्यम है।

उपयोग का मतलब यह है कि आपकी लॉकेशन का नया दौर होता है।

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Young doctors in limbo

At least 90,000 MBBS graduates are stuck in a battle between the Medical Council of India and private medical colleges. The outcome will have serious implications for the future of post-graduate medical education in India.

Shobhan Singh

A round 90,000 MBBS students took part in the All India PGMECs’ All India Medical Students Association (AIPGMECS-AMSA) strike of 2014. This led to the suspension of the All India Medical Council’s (AIMC) authority to regulate post-graduate medical education. The AIMC subsequently filed a writ petition in the Supreme Court, which was dismissed by the Court on 31st December 2015. The Supreme Court had given 6 months to the AIMC to resolve the issue. However, the AIMC did not act and the strike continued. The Supreme Court then declared the AIMC’s authority null and void.

The National Medical Commission (NMC) was formed in 2016 to replace the AIMC. The NMC was set up by the government to regulate medical education and practice in India. The NMC has the power to grant recognition to medical colleges and universities, and to conduct examinations and accreditation.

The NMC has been involved in a series of disputes with private medical colleges. The colleges have been accusing the NMC of being biased and incompetent. The colleges have also been critical of the NMC’s decision to increase the number of post-graduate seats in medical colleges.

So far, the NMC has failed to resolve the issue of post-graduate medical education. The outcome of the dispute will have serious implications for the future of post-graduate medical education in India. If the NMC is able to resolve the issue, it will be a victory for the NMC. If the colleges are able to resolve the issue, it will be a victory for the colleges. Either way, the outcome of the dispute will have serious implications for the future of post-graduate medical education in India.

Long wait for aspirants

Over the last few years, many aspiring doctors have been waiting for a chance to pursue post-graduate medical education. However, the NMC’s failure to resolve the issue has led to a long wait for aspirants.

The NMC has been criticized for its slow response to the dispute. The NMC has also been accused of being biased and incompetent. The NMC has been accused of not taking the aspirants’ concerns seriously.

The NMC has been asked to expedite the resolution of the dispute. The government has also been asked to intervene to help aspirants.

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To my mind, NMC has been a failure

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NEW DELHI, IANS: A process to recover nutrients from human urine and an antibacterial shirt to keep the body fresh in sweltering heat are some innovative solutions offered to the industry by IIT, Delhi students.

These are part of some 500 research-based projects showcased at the annual exhibition of the premier institution.

Students of the Centre for Rural Development and Technology have devised a technology that can retrieve nitrogen, phosphorus and potassium from human urine.

"Human urine contains 70 per cent nitrogen, 50 per cent potassium and 50 per cent phosphorus, and if retrieved it has potential to replace any kind of chemical fertiliser and will be environment-friendly," said Vijayaraghavan M Chariar, associate professor in IIT-D. Chariar has been working on the project with a team of seven students. "We have developed reactors that have the capacity to trap nutrients from urine. These reactors can be fitted to toilets for retrieval," he said.

The team has also developed waterless urinals fitted with odour traps and biological blocks to minimise use of water and make urine odourless.

"We have developed silver nanoparticles, which when applied to fabrics during manufacturing, makes it antimicrobial and keeps it cool in scorching heat," said Manjeet Jassal, professor, research group on smart and innovative textile material.
JIT DELHI AWARDS DOCTORATE TO NTPC CMD

Arup Roy Choudhury, Chairman and Managing Director, NTPC has been conferred Doctorate in 'Performance Assessment of Infrastructure Development Projects' — a select study from IIT Delhi. He completed 12 years as CMD of CPSU (earlier NBCC and now NTPC) in April 2013. Under his leadership, NTPC has achieved highest ever turnover in fiscal 2012-13. A graduate in civil engineering from Birla Institute of Technology, Mesra and a post-graduate in management and systems from IIT-Delhi, Roy Choudhury has an illustrious career spanning over 34 years.
‘Human PC’ Shakuntala Devi dead

Bangalore: Shakuntala Devi, known for her mathematical prowess and the ability to compute complex equations mentally, died at Bangalore Hospital at 8.15am on Sunday, age 73. She was admitted to the hospital with respiratory difficulty, following which she endured a heart attack on Saturday and another cardiac arrest early on Sunday, which proved fatal.

Credited with solving some frightfully complicated arithmetic problems with astonishing speed, Devi’s calculating skills stunned the world throughout the 1970s and 1980s.

The computing prodigy was born on November 4, 1929, in Bangalore. Her father, refusing to become a priest, chose to be a circus performer. When she was only three, Devi began showing great affinity with numbers. By the time she was five, she became an expert in solving complex mental arithmetic.

Fame became hers when she beat one of the world's fastest computers by 10 seconds in a complicated mathematics calculation. Multiplying two 13-digit numbers in 28 seconds earned her a place in the Guinness Book of Records.

Devi had no access to proper schooling and food in her early years. In an interview with TOI, she had said, “It’s my dream to open a mathematics university and R&D centre. I cannot transfer my abilities to anyone, but I can think of quicker ways with which to help people develop numerical aptitude. There are a large number of people whose logic is still unexplored.”

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

‘Jamia’s research at forefront’

NEW DELHI: The Jamia Millia Islamia University is at the forefront of path-breaking research in nanotechnology, which could change the lives of people for the better, a university official said Saturday.

A sophisticated process machine has been installed in the Centre for Nanoscience and Nanotechnology here, and was recently inaugurated by vice-chancellor Najeeb Jung, the official said. “The end product of the process, the single-wall carbon nanotube, has the potential to change the way we live,” he added.

IANS
In recent times, research and innovation has become an important goal to achieve academic goals. In sync with the global outlook, Amity University has entered into research collaborations with over 100 international universities, laboratories and centres of research. Currently, the university is carrying out more than 300 funded research projects in partnership with government bodies like DST, CSIR, DRDO, ICMR and ICAR.

Research spans areas like developing phytoecdysteroids from plants in the form of tablet and drugs for treatment of breast cancer with no side-effects. Faculty members are working on international projects including those funded by Bill & Melinda Gates Foundation, frau CRISP-URFAD & Leverhulme Trust, UK.

The establishment of Amity Science, Technology & Innovation Foundation (ASTIF) strengthens Amity’s leadership position in research and innovation. ASTIF has announced 2,000 PhD and post-doctoral fellowships to encourage young researchers to do path-breaking research in diverse areas.

The university has been recognised as a Scientific & Industrial Research Organisation (SIRO) by the Department of Science and Technology. As Ashok K Chauhan, the founder president of Amity, says, “I always think 25 years ahead and implement a plan 10 years ahead.”

Putting his thoughts into action, Chauhan brought together eminent scientists and scholars of India pursuing research in cutting-edge areas of science and technology. Amity today, has over 3,500 faculty comprising scientists, researchers and academicians who have authored 500 books and published over 3,500 papers.

In fact, the university has a Nobel Laureate as its honorary faculty of biotechnology. The university’s focus on research and innovation is reflected in its faculty, filing 425 patents, in the last few years in diverse areas like nanotechnology, biotechnology, biosensors, forensic science, microbiology, etc.

Going beyond the areas of science and technology, faculty members have written and researched over 500 management case-studies in the last years, which have been bought across 42 countries by Harvard, Yale School of Management, Oxford and corporates like KPMG, AT Kearney and KLM, among others.

A testimony of Amity faculty’s achievements in research is the ‘Power of Ideas Award-2012’ won by the faculty team. The award, instituted jointly by the department of science & technology (DST), The Economic Times and IIM-Ahmedabad was given for the reusable, easy-to-carry flush-of-its-kind water purifier based on silver nano-particles developed by the team.
World University Tour

The QS World University Tour, organised by the team behind the annual QS World University Rankings, will be in New Delhi, Mumbai and Hyderabad at the end of April, to offer overseas undergraduate study opportunities for students in India.

Milind Patel, QS’s marketing director for India and the Middle East says, “We’ve been bringing universities from some of the world’s top destinations to India for over 10 years now. Despite recent reports of government-imposed visa restrictions for international students in certain countries, we found that universities continue to recognise the talent in Indian students and are keen to offer admissions, visa and funding advice to encourage their applications.”

Over 600 students and parents are expected to attend the free events and meet admissions directors from universities in the US, UK, Australia, Canada, Switzerland and Spain and other top destinations. Attendees will also have the opportunity to attend study-abroad seminars and dedicated workshops on how to improve their IELTS, TOEFL & SAT scores as well as meet with graduate alumni from the attending universities.

QS will also be giving away an iPad to one student in each city along with a copy of the ‘QS Top Universities Guide’ — a guide to the world’s best universities — to the first 100 visitors to each event. For more information and to register for an event, visit www.topuniversities.com/events.

> DATELINE
- Delhi, April 25 - Taj Mahal Hotel, Mansingh Road
- Mumbai, April 27 - Taj President, Cuffe Parade
- Hyderabad, April 29 - Taj Begumpet, Mayuri Road