Watch: IIT-Kanpur students make walking robot ‘Bi-ped’

DC | August 14, 2014, 07.08 am IST


Lucknow: Students in IIT-Kanpur have developed a ‘humoid’ robot, aptly called ‘Bi-ped’.

The robot walks on two feet and is not supported on wheels like other robots. Utsav Gupta and Vivek Verma, Shivam Soni, Varun Verma and Deepak Pawar, all B.Tech students, put up their new creation at the first ever student research convention organized by Hall IV (hostel) on the campus of IIT-Kanpur.

The new feature of attaching legs to the robot allows it to perform tasks, which are done by humans and which cannot be performed by robot with wheels.

Watch: How the ‘humoid' robot works

Iranian professor becomes first woman to win top math prize


Iranian—born Maryam Mirzakhani, a professor at Stanford University, received the Fields Medal on Wednesday, becoming the first woman ever to win the top prize in mathematics.

She received the Fields Medal, known as the Nobel Prize of mathematics, at the International Congress of Mathematics in Seoul, South Korea, along with three other mathematicians honoured with the prize this year.

The other recipients were Artur Avila of the National Centre for Scientific Research in France and the National Institute of Pure and Applied Mathematics in Brazil, Manjul Bhargava of Princeton University in the United States, and Martin Hairer of the University of Warwick in Britain.

Dr. Mirzakhani’s research focusing on geometry and dynamical systems has contributed to the understanding of symmetry of curved surfaces, which has implications for physics and quantum field theory.

“This is a great honour,” Dr. Mirzakhani said. “I will be happy if it encourages young female scientists and mathematicians. ... I am sure there will be many more women winning this kind of award in coming years.” Dr. Mirzakhani, who was born and raised in Tehran, received a bachelor’s degree from Sharif University of Technology in 1999 and completed her doctorate at Harvard University.

After working as an assistant professor at Princeton University, she became a professor at Stanford in 2008.

Iranian President Hassan Rouhani posted a message on Twitter congratulating her.

“Congrats to Maryam Mirzakhani on becoming the first ever woman to win the Fields Medal, making us Iranians very proud,” Mr. Rouhani tweeted.

IIT-H is Likely to Start Centre of Excellence

http://www.jagranjosh.com/articles/iith-is-likely-to-start-centre-of-excellence-1408012154-1

Adding more feathers to its wings, Indian Institute of Technology, Hyderabad (IIT-H) is soon receiving an approval to initiate a Centre of Excellence in Sustainable Development with an initial funding of Rs. 4 crore from the center. Apart from that the institute would further receive 20 crore each for its two other projects in Cloud Converged Communication and Cyber Physical Systems.

Earlier IIT-H has initiated a large project called ‘DISANET- Information Networks for Natural Disaster Mitigation and Recovery’ with Japanese collaboration for which the funds have come from Japanese STAREPS programme. Under the aegis of the programme, IIT-H has installed strong motion sensors in the Himalayan region to monitor the seismic activity.

Further, the IIT-H has also initiated a novel programme called the Fractal Academics.

This programme allows the students of engineering to take their preferential courses in the creative and liberal arts. The object of this programme is to provide an all-inclusive education for the students making them facilitate industry participation while they are in their academics.
When it comes to practical training related to data-analysis and picture-boarding, useful in the entertainment industry, the institute is not far behind. It has three incubators set up around the campus which helps students to get their share of practical training on the same.

All over, 266 students have graduated this year from the premiere institute in all the major streams of B.Tech, M.Sc, and M. Tech courses. Five students have got their Ph.D. degrees as well. The convocation which was recently held at the Hyderabad campus saw meritorious students receiving gold and silver medals for their excellent academic performances.

**HRD ministry increases student apprentice stipend**

**HT Correspondent**, Hindustan Times  New Delhi, August 14, 2014


On the eve of 68th Independence Day, the Ministry of Human Resource Development (MHRD) has announced a 40% increase in stipend for apprentices, under the Apprentices Act 1961. In an effort to improve employability, students are provided an opportunity to earn while they train as apprentices.

The last revision was in 2011.

Every year, around one lakh students undergo apprenticeship across 10,000 companies in India. The duration of this training is one year for students who have completed either diploma or degree in technical education.

Last year, the Ministry and employers had jointly contributed Rs. 383 crore in stipends for training apprentices. This year, it is estimated that around Rs. 536 crore will be spent by the Ministry and the Industry.
Rethink required to improve higher education: UGC chief


Chandigarh, Aug 14 (IANS): University Grants Commission (UGC) Chairman Ved Prakash said Thursday major rethinking was required to make institutions of higher education compete at the international level.

Addressing universities across the country from Panjab University (PU) campus here, the UGC chairman said: "While there is a common belief in improving the quality, the efforts and resources are not in commensuration. The Government of India is in the process of preparing a legislation to capture the more recent trends in accreditation and provide a legislative framework to achieve this."

Admitting that the prevalent system in higher education was not enough to help in the upgradation of institutions, Ved Prakash said: "In a massive system like ours, where we have about 700 universities and about 38,000 colleges, there is a need to increase the capacity of the existing organisations."

"The UGC has made assessment and accreditation mandatory since 2013. The present capacity of NAAC is so very inadequate that of the total number of institutions of higher learning, the NAAC has accredited only 375 universities and 9,946 colleges.

"Our problem is that we have been confined to an approach which requires a major rethinking in the context of changing expectations of benchmarking institutions of higher education," Prakash said.

He pointed out that the National Assessment and Accreditation Council (NAAC), National Board of Accreditation (NBA) and Accreditation Board (AB) were into institutional accreditation and program accreditation but they had limited resources to carry out the work.

"Of course, we have an obligation to improve the global ranking of our universities and for which we need to set up a committee that should study the features of those universities which are continuously figuring in the global ranking and suggest ways and means to improve the ranking of our universities," he said.

The UGC chairman's address on the topic "Impetus to Research: Strategic Planning and Work-Plan" was transmitted nationwide through internet. The programme was organised as part of commemoration of completion of 60 years of the UGC.

"Research is undoubtedly fundamental to the existence of a university, but what is important is to engage in research which does not only provide authentication to the existing data patterns and models but also lead to newer ideas which have a potential for changing the character and outcomes of knowledge," he said, adding that funding for research needed to be enhanced and research activities need to be expanded significantly.

"A new culture of research should emphasize that grants are linked to innovation outcomes. It would be relevant in this connection to establish incubation centres in the universities for trying innovations and through them establish their linkage with the industry. Liberal research support needs to be provided for Indian scholars who undergo experiences in high-end research laboratories within the country and abroad," he said.

PU is the highest ranked Indian institution in the Times Higher Education (THE) in its international ranking of universities worldwide.
UGC considering own university rankings

Hindustan Times (Chandigarh)

CHANDIGARH: Stressing on the need to have our own ranking system for universities across the country, University Grants Commission (UGC) chairperson Prof Ved Prakash on Thursday said the “UGC is contemplating to have a ranking survey of its own for universities across India”.

Prof Prakash was at Panjab University (PU) to deliver a lecture on ‘Impetus to research in Indian Universities: strategies planning and work plan’. Once started, the UGC survey would go global for the ranking of various universities across the world, he added.

Commenting on a recent survey that declared PU as the top most university in India, Prof Prakash said, “Such surveys have very limited criteria. Those universities that had not been given a good rank by such surveys should not consider it their failure or feel disappointed, as the factors on which such surveys judge universities are very limited.”

We should participate in such ranking systems to know our strengths and weaknesses, but should not be bogged down by their results, he maintained.

“The focus of such surveys is on research works and universities into research are likely to figure in the top ranking. But different universities may not be good at various things and since the parameters of judging a university used by these surveys are limited, a good university may miss a good rank,” said Prof Prakash.

Elaborating on the UGC plan to hold its own survey for ranking universities, Prof Prakash said the UGC survey would be broad-based. “Besides academic performance and research, we will also focus on special projects being carried out by various universities. In addition, social responsibility will be a very important factor, and thus, participation by universities in various field and special projects will also be evaluated,” Prof Prakash added.

However, Prof Prakash said research was an important factor and universities should involve industry in research projects. Prof Prakash said going ahead with research was important and universities should get in touch with the industry in their vicinity and could also take up research projects for them.

“The industry will not only fund projects, but youngsters from universities can be absorbed by these industry. I don’t see any issue in involving industry in making curriculum,” Prof Prakash added.
INDIAN-ORIGIN SCIENTISTS DISCOVER SLEEP REGULATING GENE

Hindustan Times (Indore)

WASHINGTON: A team led by two Indian-origin scientists has identified a gene that regulates sleep and wake rhythms. The discovery can provide potential therapeutic target to help night-shift workers or jet-lagged travellers adjust to time differences more quickly. “It is possible that the severity of many dementias comes from sleep disturbances. If we can restore normal sleep, we can address half of the problem,” said Satchidananda Panda, an associate professor at Salk Institute for Biological Studies in the US.
VC slammed for ‘troubling’ DU teachers

New Delhi: Slamming the DU executive council’s decision on promotion and pension, all teacher groups have said that following the FYUP rollback, the vice-chancellor is trying to create an atmosphere of anarchy and “picking up issues to trouble the teachers”.

EC on Thursday passed a resolution to implement Career Advancement Scheme (CAS) with effect from 2008. Based on the recommendations of a task force, it also decided to challenge the Delhi high court order that gave relief to teachers under the pension scheme.

The promotion decision, which follows a UGC order, means the teachers who have been already promoted under the old scheme and those waiting for promotion since 2011 could be in trouble. “The main problem with this decision is that I cannot retrospectively earn points required for eligibility of promotion today. This is a completely unreasonable demand,” said J Khuntia, chairman, Academic for Action and Development (Rathi).

The high court judgment on April 30, 2014 had facilitated the GPF-cum-pension scheme for many teachers who till now had been denied pension. “This is a deliberate move to deny the post-retirement benefits of teachers who have served the university for a long period. Both the decisions are retrograde and unfortunate. DUTA will have to fight unitedly on these issues,” said Abha D Habib, an EC member.

“This decision reflects the vice-chancellor’s mindset of destroying the entire university and academic environment,” said Nandita Narain, president, DU Teachers’ Association (DUTA).
You Pitch Your Idea, They Make Your Product

Hot Startup

Witworks
Bangalore-based
Witworks promises to ready a prototype of a chosen design or idea in 30 days

Inventors and designers can now bring their products to the market by merely pitching ideas to an online community of fellow innovators. This community is being organised by Bangalore-based Witworks, founded by three IIT Kharagpur graduates, who promise that a prototype of a chosen design or idea is ready in 30 days. The manufacturing of the products is outsourced to specific companies that Witworks has tied up with. The startup, which launched operations last year, already has a 1,000-strong community, who decide how useful and unique an idea pitched to them will be as a final product. Witworks selects the top three ideas and puts it on the fast track.

“In India, there is no place to invent,” said 25-year-old Somnath Meher, who cofounded Witworks this year with a seed fund of Rs 10 lakh from IIT Kharagpur.

Two of the cofounders, Meher and Ankit DP, decided to put off their admission to the Indian School of Business (ISB) Hyderabad to start on their own.

Chandrashekar Iyer left his job with Tata Steel in Jamshedpur to become the third cofounder. One of the ideas has already been turned into a product. Rewind — a simple device that keeps earphones from getting tangled.

The founders realised that this common problem had not been solved yet. Meher, a former Google employee, said he expects to sell 60,000 pieces of the product, which is currently priced at Rs 190, and available at the startup’s online store. The trio is in talks with e-commerce companies Flipkart and Snapdeal and quirky sites like Happily Unmarried to carry their products.

To keep the community involved, the startup shares 5% of sales with the product’s designer.

“From ideation, prototyping, manufacturing in bulk to packaging, we know the landscape. We now have suppliers in place,” said Meher, who said future projects could also involve making electronic gadgets that he hopes to sell to large IT firms in the offline B2B space.

The young firm is targeting Rs 2 crore in revenue this fiscal and is in talks with angel investors to raise funds.

“I hope inventors take advantage of this platform and bring innovative stuff to the table,” said Meher.”

maivika.murali@timesgroup.com

From left, Somnath Meher, Ankit DP, Chandrashekar Iyer
Univ makes new MoU-ve to woo engg students

By Pallavi Smart, Pune Mirror | Aug 15, 2014, 02.30 AM IST

*VIT’s agreement with Binghampton University is being seen as a model for other engineering colleges under SPPU to attract students with the lure of an international degree at the end of the course.*


Grappling with 15,000 vacant engineering seats, the Savitribai Phule Pune University (SPPU) has found a carrot to draw students in from the next academic year. A memorandum of understanding (MoU) signed last week by one of its autonomous colleges — Vishwakarma Institute of Technology (VIT) — with State University of New York's Binghampton campus (also called Binghampton University), is showing the way. As per the agreement, students enrolling into any of the engineering streams offered by VIT stand a chance to do half their course on the Binghampton campus in New York. Reckoning that such a proposition could be a brilliant incentive to coax students to enroll in the city's engineering colleges, SPPU is keen to replicate this international liaison in other campuses.

Last week the Board of College and University Development (BCUD) Director, Dr V B Gaikwad, Dean of Engineering faculty Dr Gajanan Kharate and VIT Director Dr Rajesh Jalnekar travelled to New York to sign the memorandum. Now, impressed with the opportunity this presents, Dr Gaikwad told Mirror, "This arrangement is possible as VIT as an autonomous body already has a credit system in place. We are introducing the credit system in our other affiliated colleges this year. We are hoping that by the next academic year we can sign more such MoUs between colleges here and respected universities with potential abroad."

Students, at the time of admission, will be given the option to indicate their interest in being picked for the international leg of the course, which is estimated to cost approximately $16,000-$17,000 a year. But this does not mean all of who choose the option will get the opportunity. At the close of the first two years, around 10-15 students will be cherry picked from each stream and only they will be sent to Binghampton.

"With credits earned here transferred to the New York based institution, the students will get their degree from that university and will also participate in their placement programme. There will be no financial scholarship but this is still an opportunity to earn an international degree at half the cost of doing the entire course abroad," said Dr Rajesh Jalnekar.

Currently, the process to clear formalities involved in the arrangement is underway. "This is part of the twinning programme All India Council for Technical Education (AICTE) has rolled out, allowing colleges here to tie-up with varsities in other parts of the world to give student wider exposure," Jalnekar explained.

Engineering colleges under SPPU have reason to cheer now, though with a sense of caution. "This is an innovative concept if the tie-up is healthy. The local institute as well as the foreign university should be of credible repute, as they are in this case. But when it comes to individual college tie-ups, credibility should be thoroughly verified. Colleges here can forge tie-ups with any random varsity abroad just to bring that international flavor to attract students. Students and parents also need to be cautious while choosing a college," Dr L K Kshirsagar, principal, MIT College of Engineering. Dr Appasaheb Keste, principal of the MES College of Engineering, appreciated the initiative, and said, "This will allow great exposure to students in today's global village. University should encourage more and more colleges for such tie-ups. However, at the same time, it should have strict parameters to check the credibility of the foreign university, so that the tie-ups will not be misleading."

IIT JAM 2015: Notification

http://indiatoday.intoday.in/education/story/iit-jam-2015-notification/1/377061.html

The Indian Institutes of Technology (IIT), Guwahati on behalf of the Ministry of Human Resource Development, government of India has notified for the conduct of Joint Admission Test for M.Sc (JAM-2015) The JAM online examination will be held on February 08, 2015.

JAM is conducted for taking admission to two-year Master of Science (M.Sc), joint M.Sc-Doctor of Philosophy (Ph.D), M.Sc-Ph.D dual degree, M.Sc-Master of Technology (M.Tech), M.Sc-MS (by research), other post-bachelor's degree and Ph.D dual degree programmes at the IITs in Bhubaneswar, Bombay, Delhi, Gandhinagar, Guwahati, Hyderabad, Indore, Kanpur, Kharagpur, Madras, Roorkee and Ropar and integrated Ph.D programmes at Indian Institute of Science (IISc), Bangalore and to consolidate Science as a career option for bright students from across the country for the academic session 2015.

Eligibility Criteria:

Educational qualification required for admissions:
IISc Bangalore: Candidates should have at least 60 per cent marks as declared by the university, without rounding off in the qualifying degree.
For IIT Guwahati: Candidates should have at least 55 per cent marks or 6.0 CPI in a scale of 10, without rounding off, in major/honours and pass in all other subjects, including Languages and Subsidiaries or 60 per cent aggregate marks or 6.5 CPI in a scale of 10, all years combined, without rounding off, taking into account all subjects, including Languages and Subsidiaries,
For all other IITs: Candidates should have at least 55 per cent aggregate marks, all years combined, without rounding off, taking into account all subjects, including languages and subsidiaries.
Relaxation of percentile is applicable for SC/ST/PwD candidates

Paper Pattern:
JAM 2015 examination will be conducted online only as a Computer Based Test (CBT) for all test papers.

JAM 2015 will have seven test papers, namely, Biological Sciences (BL), Biotechnology (BT), Chemistry (CY), Geology (GG), Mathematics (MA), Mathematical Statistics (MS) and Physics (PH), each of three hours duration.

All the seven test papers of JAM 2015 will be of fully objective type, with three different patterns of questions as follows:

Multiple Choice Questions (MCQ): Each MCQ has four choices out of which only one choice is the correct answer.

Multiple Select Questions (MSQ): Each MSQ is similar to MCQ but with a difference that there may be one or more than one choice(s) that are correct out of the four given choices.

Numerical Answer Type (NAT) Questions: For each NAT-type question, the answer is a signed real number which needs to be entered using the virtual keypad on the monitor. No choices will be shown for these types of questions.
Important Dates:
Commencement of online registration and application process: September 3, 2014.
Last date for payment of fee through challan: September 30, 2014.
Closure of online application procedure: October 09, 2014.
Date of JAM: February 08, 2015.
Announcement of JAM Results: March 19, 2015.

Plea to review stance against special JEE

TNN | Aug 15, 2014, 12.24 PM IST

http://timesofindia.indiatimes.com/City/Bhubaneswar/Plea-to-review-stance-against-special-JEE/articleshow/40306124.cms

BHUBANESWAR: In a last ditch effort to fill up at least some of the 39,000 vacant undergraduate engineering seats, a delegation of technical colleges’ representatives and students on Thursday met technical education minister Sanjay Dasburma requesting him to reconsider the government’s stance against a special JEE in the Supreme Court.

Responding to a petition by the Odisha Joint Entrance Examination Committee (OJEE), the apex court on August 7 stayed Orissa high court’s August 1 direction asking the state government to hold the special JEE. The government had scheduled it on August 10.

“We requested the minister to reconsider the government's stance against the special JEE. We told him that OJEE had no authority to challenge the HC order and had misled the apex court,” said Odisha Technical Colleges’ Association president Biswajit Mohanty.

OTCA, BPUT Students' Union (BSU) and Odisha Private Engineering Colleges Employees' Association also called for a judicial probe into the functioning of the OJEE, alleging large-scale corruption in its functioning and demanded a fixed annual calendar for colleges under Biju Patnaik University of Technology (BPUT), which admit students through OJEE, and deemed universities, which hold their own entrance tests.

Odisha Private Engineering College Association (OPECA) has sent a memorandum to the minister saying that if OJEE was unable to hold a special JEE, the government should assign the task to OPECA. "We have requested the government to give us a chance to hold the special JEE under OJEE supervision if it is unwilling, since it concerns the future of over 5,000 students who applied for the special entrance,"

Its secretary Binod Dash said OPECA also requested the government to extend the deadline for engineering admission in view of the floods, since August 15 is the deadline as per Supreme Court guidelines. Andhra Pradesh and Telengana governments have sought relaxation of the August 15 deadline from the apex court, he said.

After the final round of admission on Thursday, the private colleges are left with around 39,000 BTech seats lying vacant. At present, the total intake capacity of engineering colleges in the state, excluding the deemed universities and a private state university, is 51,121. These include 3,517 seats of government colleges and 45,170 seats in private colleges.
Tata Business Leadership Awards 2014 go to SP Jain Institute of Management and Research and Tata Motors

Friday, August 15, 2014

http://indiaeducationdiary.in/Shownews.asp?newsid=30836

Report by India Education bureau, Mumbai: Teams from the SP Jain Institute of Management and Research and Tata Motors are the winners of the coveted Tata Business Leadership Awards (TBLA) 2014. The Chairman of Tata Sons, Mr Cyrus P. Mistry, presented the prestigious awards at a ceremony held in Mumbai. This is the 12th year of TBLA, an annual business case competition, aimed at recognising, promoting and encouraging future leaders.

‘Driving Business Growth through increase in Customer Centricity’ was the theme of the competition this year. The challenge for the participants was to:

Identify & analyse a best-in-class customer centric approach that has proved to be a game changer to the fortunes of an organisation.
Identify any one Tata group company and suggest a strategy to change the company’s growth trajectory by placing the customer at the centre.

According to Mr N. S. Rajan, Member, Group Executive Council and Group Chief Human Resources Officer, “Our commitment to defining tomorrow is best reflected in our keenness to invest in the youth and in growing them. The TBLA, for us, is much more than a case contest. It is a platform for us to engage with fresh minds and ‘refresh’ our view of the challenges facing our businesses through their eyes.”

TBLA is conducted across premier business schools (campus-track) and Tata companies (internal-track), to engage with bright young minds and provide them with a platform to showcase their leadership and entrepreneurial capability.

In the Campus-track of TBLA, Team SP Underdogs of SP Jain Institute of Management and Research, Mumbai, won the top honours, followed by FMS Delhi’s Team Step Out (1st runners-up) and IIM Bangalore’s Team Value Creators. The participants in the national round also included teams from IIM Calcutta, IIM Lucknow, IIM Kozhikode, XLRI Jamshedpur, and TISS, Mumbai. In all, there were 150 teams for the campus-track. For the first time, this year, TBLA was held at TISS, Mumbai, and received an exceptionally enthusiastic response.

In the Internal-track of TBLA, Team Blue Chip of Tata Motors won the top honours, followed by Tata Motors Team Vikreta (1st runners-up) and Tata Motors Team Customericks (2nd runners-up).

In both the categories, the TBLA 2014 national winners walked away with the TBLA rolling trophy and Rs. 2,00,000 cash prize while the 1st runners-up and 2nd runners-up received an attractive cash prize of Rs. 1,00,000 and Rs 50,000, respectively.

The cases in the national finals were evaluated by a panel comprising renowned academicians and Tata leaders including Dr Nirmalya Kumar, Member, Group Executive Council, Tata Sons, Mr Harish Bhat, Member, Group Executive Council, Tata Sons, Mr Ajit Joshi, MD and CEO, Infiniti Retail, Mr Harit Nagpal, MD and CEO, Tata Sky, Mr Brotin Banerjee, MD and CEO, Tata Housing, Mr Ajoy Chawla, Chief Strategy Officer, Titan Company, Dr M. L. Singla, Dean, FMS Delhi and Prof Sesha Iyer, Director, SP Jain Institute of Management and Research.
These IIT Bombay Students Will Change Your Definition of First Love

http://www.ndtv.com/article/offbeat/these-iit-bombay-students-will-change-your-definition-of-first-love-576464

Sathi, an LGBT community group of IIT Bombay, first screened the video - First Love #ProudToLove #NoGoingBack - at the institute’s orientation programme a few weeks ago and later shared it on YouTube.

This lovely video captures the confessions a handful of young lovers. What makes it wonderful is the out of the ordinary and unconventional flavour that they add to it.

Aditya Joshi, a Ph.D in Computer Science and Engineering, stumbled in and out of love many times, and his first love wasn't the dream-perfect one hoped for. "Everyone says first love is special and that it lasts a lifetime, but that didn't happen to me. When I felt attracted to people in school, I held back myself," he shares. However, for Prudhvi Tej, a B.Tech student, it worked out. He fell in love for the first time when he was in third grade. His love gifted him chocolates and sometimes even kissed him.

Peeyush, M.Sc, brings out a rather unusual aspect of first love. "When I fell in love, I started to love myself even more than before," he says. "First love is a beautiful experience," he adds.

"I might not be conventional, but everything will be okay for me," Aditya Shankar says he always had faith in love.

Aren’t all of these confessions beautiful? Should love be tied down by gender?
The Top Universities

1. Harvard University, USA
2. Stanford University, USA
3. Massachusetts Institute of Technology (MIT), USA
4. University of California-Berkeley, USA
5. University of Cambridge, UK

301-400 Indian Institute of Science, India

---

**IISc Among Top 500 in Chinese World Ranking**

**BEIJING:** Indian Institute of Science (IISc) is the lone Indian institution to bag a spot in the top 500 in an annual ranking of global educational institutions dominated by American universities, according to a list released by a Chinese organisation on Friday.

Bangalore-based Indian Institute of Science, conceived as a ‘Research Institute’ by Jamsetji Nusserwanji Tata, in the final years of the 19th century, has been placed in the world rank category of 301-400 by the Academic Ranking of World Universities (ARWU).

IISc, ranked as the top Indian university, was placed in the category of 151-200 in the Natural Sciences and Mathematics category, similar to the previous year’s rankings.

In the academic ranking of world universities for chemistry, the premier institute has been placed in the category of 51-75 global ranking, similar to the US-based Johns Hopkins university and Carnegie Mellon university.

In the subject-wise academic ranking of computer science, Indian Statistical Institute features along with IISc in 101-150 category, similar to King’s College, London.

In the ARWU rankings, Harvard University followed by Stanford and Massachusetts Institute of Technology (MIT) are ranked at first, second and third positions, respectively.

ARWU ranks universities on the basis of several indicators of academic and research performance, including alumni and staff winning Nobel Prizes and Fields Medals.

Highly-cited researchers, papers published in *Nature and Science*, papers indexed in major citation indices and the per capita academic performance of an institution are also factors which play a vital role.

---

Press Trust of India
New Delhi: As he fast-forwards his plan to launch his bank sooner than scheduled, Chandra Shekhar Ghosh, founder of microfinance institution Bandhan, is grappling with serious manpower challenges, aggravated by his employees’ inexperience in handling regular banking functions.

Although Bandhan has received nearly 30,000 applications for new posts, some from premier institutes such as the IIMs and IITs, Ghosh is straddled with an existing workforce that does not have the requisite know-how to run a bank. “The biggest challenge for us is to change the microfinance culture in our organization. For 13 years, we have focused on serving only women in rural areas. Now, as we turn our attention to other segments, we will need a different mindset and approach. It’s a big cultural gap that we have to bridge fast,” he said.

Ghosh wants to open his bank in the first quarter of next year. He has set up eight centres to train existing employees. He wants to open his bank in the first quarter of next year. He has set up eight centres to train existing employees. “We have 41 trainers. Most of our staff have either been educated up to high school or are graduates. The transition will play an important part as we are also planning to tap the middle-class and the rich. These customers will need to be handled differently.”

In April, Ghosh, who started off as a modest sweet seller in Agartala in Tripura, beat the likes of Indian billionaires Anil Ambani and Aditya Birla to get a banking licence along with IDFC, which is the country’s biggest lender to road projects. RIL hopes that they will be able to push deeper into underdeveloped areas that are often overlooked by other banks.

Bandhan, which runs operations in 22 states, has 57 lakh borrowers, who are all women. Now, Ghosh wants to rope in their husbands too. “That would mean a customer base of one crore.”

Other than rural areas, urban markets are also on Ghosh’s radar. But, he feels Bandhan’s core strength lies in its roots. “When you work in rural areas, trust matters the most. Over 13 years, we have built a great reputation and brand. It’s our strength and we will use it to its full potential. At present, we are also developing a mechanism to gauge which customer we need to cater to and whether we have to service them at their doorsteps or bring them to the bank,” he said.

Despite the hurdles, Ghosh is confident that he will pull off one of the biggest success stories in the Indian banking sector: “We have a capital base of Rs 1,500 crore at present. And, if we need more, we have investors standing by.”
Bangalore: An Indian engineer tries to jump quickly to the managerial side, because that's been the only path to career progression. This is the reason why many also rush to obtain MBAs. That trend is now changing.

Indian IT services companies are creating technical ladders for engineers who are keen to focus on their engineering skills rather than manage projects and people. And the Indian arms of global technology companies, which already have such ladders globally, are now actively pushing engineers to climb those ladders.

Wipro has created a four-level technical ladder that goes up all the way to a Distinguished Fellow, a position that is equivalent to the grade of a CEO. TCS has created designations such as technical architect and chief architect, the latter being equivalent to a client director or a segment head on the business side.

"Earlier, a VP meant you have to have a large team under you. Now you can reach an equivalent grade even if you remain an individual contributor," Saurabh Govil, global head of HR in Wipro, told TOI. The company internally calls the initiative The Distinguished Member of Technical Staff (DMTS) programme. It was started earlier this year, and the company said it intends to make significant investments, and provide mentoring and focused assignments, to enable career advancement opportunities to those who are passionate about pursuing technology.

Ritu Anand, deputy head of global HR in TCS, said the company wants to encourage employees to take on technical roles at the senior level.

This is becoming important as IT companies move to offer more sophisticated and differentiated solutions to their clients. Their traditional applications development and maintenance services business, based on large scale use of people, is becoming commoditized, and there is pressure to create innovative and automated solutions. Newer technologies like cloud, mobility and analytics are adding to those pressures, to create solutions around them.

Intel India, which has about 4,500 people, is using training programmes, courses and managerial guidance to encourage engineers to move to the technical ladder. The first major rung in that ladder is principal engineer. A talented engineer could take 10-12 years to reach that step. Intel in India now has 18 principal engineers and 4 senior principal engineers, the next step on the ladder.
IIT research team stumbles on some homespun wisdom

Researchers find protein from cocoon of non-mulberry silkworm makes orthpaedic implants safer


For broken limbs, hips, teeth and joints, conventional medical wisdom dictates a titanium implant. Although a boon, the metal is still a foreign body and does have its drawbacks. For example, there is always the possibility of infection and delayed cell adhesion (the process where the implant gets attached to the bone). To help the body repair itself, the titanium is usually coated with protein derived from mulberry silkworms or some sort of nano particle.

But a group of researchers from a premiere Indian institute have made a discovery that promises to change the field of regenerative medicine. The team, from IIT- Kharagpur, has found that protein derived from non-mulberry silkworms is even better than protein derived from mulberry-reared silkworms especially with regard to cell adhesion and infection. Their finding was recently published in Scientific Reports hosted by Nature.com, an American website belonging to the Nature Publishing Group that publishes scientific journals.

Of all the metals, titanium is the most compatible for orthopaedic surgery. But several studies have proved its limitations: Implant infection, elevated immune response and improper or delayed bone cell adhesion causing poor osseointegration (capability of implant to fuse with surrounding bone cells and tissues) and osteoconduction (capability of bone cells to grow on implant surface). Protein derived from mulberry silkworms helps limit these complications.

Two proteins are chiefly present in silk cocoon — fibroin and sericin. Fibroin is well established in practice as biocompatible (ability of titanium to fuse with bones without causing any complications) coating on medical implants and is cost effective. In addition, it is less immunogenic, can be easily sterilised and is easy to design into any form based on the requirement. Non-mulberry silk fibroin naturally possesses a cell surface binding sequence, called RGD sequence, which facilitates cellular adhesion and proliferation. It is RGD that gives non-mulberry silk an advantage over mulberry silk. Mulberry silk does not have RGD.

The researchers, led by professor SC Kundu of the biotechnology department, found that the biocompatibility of titanium could be increased by surface modification technique — coating the titanium with fibroin.

"We modify the surface of the pristine (pure) titanium by coating both mulberry and non-mulberry silk protein fibroin on it," Kundu said. "Then we compare the biocompatibility and immunogenic response of the surface modified implants using bone (osteoblast) cells. Those with non-mulberry silk fibroin showed improved adherence, growth and proliferation of bone cells. It helps bone cells to grow around the implant faster than before. Further, the low blood cytokine (a category of small proteins that are important in cell signalling) level designates less immunogenicity of the material."

The team, that includes students Deboki Naskar, Sunita Nayak, and Tuli Dey, made the discovery after one year of research and are currently involved in animal trials. Kundu said that if developed properly, the findings could be huge for orthopaedic surgery. "To facilitate the transition of titanium implants, the process of animal clinical trials (on New
Zealand rabbits) of this device is already under way. We plan to implant the surface modified titanium to examine the osseointegration process."

Digital learning one of NDA govt’s priorities

Hindustan Times (Delhi)

NEW DELHI: Keeping in mind global trends, the government will emphasise on digitalisation of education. PM Narendra Modi also emphasised on a digital India in his Independence Day speech on Friday.

Some of the programmes in this direction are Campus Connect, national digital library (NDL), India MOOCs (Massive Open Online Courses) platform and national repository of open education resources.

Under the Campus Connect programme, 21,000 colleges and 20 classrooms will get Wi-Fi connectivity. The country’s 600 universities with one gigabit per second (gbps) bandwidth and the 140 institutions under the ministry of human resource development (HRD) will also get the facility. This will help around 20 lakh students across India. The government will also launch a national digital library (NDL). For this, IIT Khargapur is working on a roadmap and a proposal has been prepared. Prof Partha Pratim Das, department of computer and engineering, IIT Kharagpur, told HT: “We aim to create a 24x7 NDL for e-learning. We also plan to initiate a movement for integrated digital learning across India.”

Free-of-cost courses will be provided through the India MOOCs platform.

Golden jubilee of IIT-M alumni in Chennai


The alumni association of Indian Institute of Technology-Madras (IIT-M) will hold their golden jubilee celebrations on Saturday, at the IC&SR auditorium on the campus at 6 p.m.

Bhaskar Ramamurthi, IIT-M director, will felicitate the past presidents and secretaries at the event. The association was formed in July 1964 after the first batch graduated from the institute.

As part of the celebrations, ‘Alumni Mardi Gras 2014’ will be held on September 20 and 21 The proceeds of the ticketed event will go towards the alumni distress fund of the association. September comprising arts, culture and sports activities. There will be a performance of BeatX and Madras Musical Association (MMA) choir at the open air auditorium.

The association will conduct its 51 annual general body meeting at 6.30 p.m. on August 30, at Hotel GRT Grand.
Netizens losing battle against online trolls

Govts, Sites Must Find Way To Fight Troublemakers

Farhad Manjoo

The internet may be losing the war against trolls. At the very least, it isn’t winning. And unless social networks, media sites and governments come up with some innovative way of defeating online troublemakers, the digital world will never be free of the trolls’ collective sway.

That’s the dismal judgment of the handful of scholars who study the broad category of online incivility known as trolling, a problem whose scope is not clear, but whose victims keep mounting.

“As long as the internet keeps operating according to a click-based economy, trolls will, maybe, not win, but they will always be present,” said Whitney Phillips, a lecturer at Humboldt State University and the author of ‘This Is Why We Can’t Have Nice Things,’ a forthcoming book about her years of studying bad behaviour online. “The faster that the whole media system goes, the more trolls have a foothold to stand on. They are perfectly calibrated to exploit the way media is disseminated these days.”

“Troll” is the fuzzy term for agitators who pop up, often anonymously, sometimes in mobs, in comment threads and on social networks like Facebook and Twitter, apparently intent on wreaking havoc. The term is vague precisely because trolls lurk in darkness; their aims are unclear; their intentions unknown, their affiliations mysterious.

In recent years the term has become a catch-all label for routine, graphically provocative online speech of the sort directed this week at Zelda Williams, the daughter of the actor Robin Williams, as well as abusive posts on the website Jezebel. It has even been applied to the work of the underground hacking group Anonymous, which inserted itself into the protests over the police shooting of an unarmed teenager in Ferguson, Missouri.

The broader definition of troll reflects, in part, the rise of social media, which has collapsed all distance between celebrity entertainers and media types and their critics. Scholars note that one of the primary motivations of trolling is to titillate other trolls. This sets up one of the central difficulties in confronting trolling: Shedding light on trolling may only encourage it.

“As more high-profile cases come to light, particularly of celebrities and important figures being chased off social media, people will view trolling as a way of having an effect on these otherwise untouchable figures from the safety of their own smartphones and homes,” Claire Hardaker, a lecturer in linguistics at Lancaster University in England who has studied trolling, said in an email. **NYT NEWS SERVICE**