Newspaper Clips
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3 Indian institutions among QS world subject rankings

The sixth edition of the QS World University Rankings by Subject, released on March 22 on TopUniversities.com, features a record-breaking 42 disciplines, making it the largest-ever ranking of its kind.

The expert opinion of 76,798 academics and 44,426 employers informed the results, alongside the analysis of 28.5 million research papers and over 113 million citations.

.Harvard and the Massachusetts Institute of Technology (MIT) continue to take the lion's share of top places, leading in 24 subjects between them. Each takes 12 leading positions.

The highest rank by an Indian university is achieved by the University of Delhi, whose development studies department remains in the top 20, despite dropping from 17th to 18th this year.

Indian Institute of Technology Bombay (IITB) is the country's strongest university at the subject level, featuring in 14 different subject tables. It is therefore the most successful of 21 Indian universities ranked in the subject tables for at least one subject. DU's development studies course is one of three Indian top-50 placements. Indian Institute of Technology Delhi (IITD) rises into the top 50 for engineering – electrical and electronic (45), while Indian Institute of Science Bangalore ranks 47th for materials science. "This edition of the World University Rankings by Subject sees an improved performance by Indian institutions. In 2015, there was only one within the top 50 (University of Delhi, development studies, 17th) whereas this year, there are three. The number of placements in the band 51-100 has risen to 25 (24 in 2015). India is, unsurprisingly, particularly strong in technology and the natural sciences," says a QS Ranking spokesperson.

Considering the metrics QS uses, India struggles with the international indicators (international students and international faculty) as well as with the faculty/student ratio indicator.

"When it comes to the research indicator, citation per faculty, the IITs and the Indian Institute of Science perform well while the rest of ranked Indian institutions struggle to make an impact. IIT Bombay and IIT Delhi do well in the employer reputation indicator, ranking 83rd and 104th globally respectively, and IIT Bombay is also the best performing for academic reputation (173rd globally). All in all, while Indian universities are becoming more visible on the global arena, there is still room for improvement across the board," adds the spokesperson.

–GAURI KOHLI

IIT-M incubatee gets award for realty innovation

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Recognising the path-breaking innovation by Nadhi Information Technologies (an IIT Madras Incubated Company) and its contribution to the Indian real estate sector, the Construction Industry Development Council (CIDC) has awarded one of its founders Kalyan Vaidyanathan with the prestigious CIDC Vishwakarma Award 2016 in the Technologist/Innovator category. Looking at real estate scenario in India, where there is lack of real time and correct information flowing to various stakeholders and the end-consumer about the state of the projects, the company came up with an innovative solution to manage the construction information supply chain better.

Its flagship product, nPulse, an analytics based, mobile enabled decision support solution, enables collaboration between all the stakeholders including the project owner, project management consultants (PMC), design consultants, general contractor, and sub-contractors. Owners and contractors can leverage investments in their existing systems better with nPulse and standardise their interface for their internal and external staff. It ensures that all project information is in one central location. nPulse solution has been deployed in multiple sectors including power plants, roads, bridges, and commercial and residential real estate on projects worth an aggregate value of over Rs 35,000 crores.

"If the Realty Bill of 2016 were to be effectively enforced, deveopers are going to need better technology enabled solutions that give them the visibility into (time) delays before they happen so that they can more easily do mid-course corrections.", Vaidyanathan said

आईआईटी के हर छात्र पर खर्च होते हैं 24 लाख

अमर उजाला ब्यूरो

75 करोड़ की कटौती आईआईटी कानपुर के बजट में

कानपुर। आईआईटी से बीटेक करने वाले एक छात्र की चार साल की पढ़ाई पर करीब 24 लाख रुपये खर्च होते हैं। यह खर्च लैब, लाइब्रेरी, इंटरनेट, वाई-फाई के इस्तेमाल, हॉस्टल में रहने और मेस में खाने की सुविधा के हैं। बड़े पैमाने पर स्कालरशिप भी दी जाती है। परास्नातक कोर्स के एक रिसर्च स्कालर को सालाना 36 हजार रुपये स्कालरशिप मिलती है। अब आईआईटी प्रशासन इसी खर्च को समायोजित करना चाह रहा है। इस बीच मानव संसाधन विकास मंत्रालय ने आईआईटी कानपुर के बजट में करीब 75 करोड़ रुपये की कटौती कर दी है। इससे वहां आर्थिक संकट गहरा गया है।

वर्तमान स्थिति में इंटरनेशनल हॉस्टल सहित तमाम लैब, लाइब्रेरी और क्लास रूम का निर्माण कार्य लटक गया। अब शिक्षक, कर्मचारियों का वेतन देने में दिक्कत आ रही है। यही वजह है कि आईआईटी प्रशासन खर्च में कटौती कर रहा है। बिजली और पानी का बिल नियंत्रित किया जा रहा। हॉस्टल में रहने वाले स्टूडेंटों से मेंटीनेंस चार्ज बढ़ाकर वसूलने की तैयारी है।

शक्तिशाली है आईआईटी काउंसिल

आईआईटी काउंसिल का फैसला ही अंतिम माना जाता है। यदि मानव संसाधन विकास मंत्रालय फीस बढ़ाने को हरी झंडी नहीं देता है तो भी काउंसिल प्रस्ताव पारित कर सकती है। ऐसा पहले हो चुका है। कपिल सिब्बल मानव संसाधन विकास मंत्री थे, तब सिंगल एंट्रेंस टेस्ट पर मंत्रालय और काउंसिल आमने-सामने आए थे। आईआईटी कानपुर की काउंसिल ने एंट्रेंस टेस्ट से अलग होने का संकेत तक दे दिया था। इसी का नतीजा रहा कि दो तरह (जेईई मेन और जेईई एडवांस) के टेस्ट की व्यवस्था की गई।

IITP to be supercomputing centre, says Ravi Shankar
http://paper.hindustantimes.com/epaper/viewer.aspx

The IITPatna will be part of innovation and research for 5G technology in India. Announcing this here on Tuesday, Union minister Ravi Shankar Prasad said the IITPatna would work on the project along with the IITBombay , IITMadras and the Indian Institute of Science, Bangalore.

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Innovations with robots, the IIT Bombay way

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An apprenticeship is the best way to get hands-on experience of any subject you want to master. To help students learn the finer nuances of robotics, the Indian Institute of Technology (IIT), Bombay organised e-Yantra Robotics Competition (eYRC) to promote the concept of learn engineering by doing engineering.

Participating teams designed robots that could make day-to-day service delivery easier. One of them was able to pick up packages from courier companies and deliver them to their destinations. Another robot was able to detect service requests and deliver services within hotel rooms in order of priority. An amazing invention could collect and sort out hazardous waste and take it to a dumping site across a river crossing a bridge. One could even take down orders and deliver pizza to homes on time!

For youngsters participating in the project this was a dream come true. "We learnt the process of documentation, the way in which the project is to be written, and converting the coding into a flowchart format," says Shubham Baranwal studying at the National Institute of Technology, Meghalaya who worked on the theme of hazardous waste disposal"

Discussing various ideas with teammates helped Harshit Goel of Maharaja Agrasen College, Delhi learn about the different ways to approach a challenge, and come to a unanimous solution.

e-Yantra is a national robotics outreach project of IIT Bombay funded by MHRD (GoI) and tar-

Young innovators get their act together at the e-Yantra contest at IIT Bombay.

geted at engineering and science colleges throughout India. The project runs the e-Yantra National Robotics Competition (eYRC) every year based on a small homegrown educational robot developed at IIT Bombay. A total of 19,568 students (representing 4,892 teams) registered for eYRC in August 2015. Out of these, 3,036 participants comprising 759 teams were shortlisted through an online test. e-Yantra provided robots to these selected teams, gave them training (for free) and assigned tasks that were evaluated over a period of four months. As a part of the tasks, these teams were asked to design robots for specific services for the following themes: Courier service, hotel guest service, gas leakage detection, puzzle solver (using gripper), puzzle solver (using LCD), search and rescue, hazardous waste disposal, recyclable waste management and pizza delivery service.

The top three teams from each of the nine themes were awarded cash prizes. The win-

ning teams in each theme were awarded ₹20,000. The second and third prize winning teams received prize money of ₹16,000 and ₹12,000 respectively.

The teams coming first in each of the nine themes also won a paid six-week internship at IIT Bombay over the summer. The summer internship programme puts these interns under mentors who help them work on challenging technical problems with 24x7 access to labs.

"Our engineering education system creates one-dimensional techies who are traditionally technology consumers. Our attempt is to open their eyes to their indigenous culture and its place in the world at large to increase their self-esteem as potential inventors," says Kavi Arya (principal investigator, e-Yantra Project, IIT Bombay. "The purpose of the internship (beginning in last week of May) is to give the students an exposure to things besides engineering; especially to awaken them to the added value of the humanities and the arts."

IIT-Kharagpur, Jadavpur University on list of top 10 research units

http://timesofindia.indiatimes.com/city/kolkata/IIT-Kharagpur-Jadavpur-University-on-list-of-top-10-research-units/articleshow/51609232.cms

KOLKATA: At a time when Bengal has witnessed largescale exodus of students to other states for higher studies, two of its campuses have made it to the Department of Science and Technology's list of top 10 institutes in research and innovation.

IIT Kharagpur has taken the second spot behind IISc Bangalore, and Jadavpur University has come in at No. 8. There are four other IITs on the list, besides Delhi University , Anna University and Banaras Hindu University. Not only did IIT Kharagpur score in the number of research publications, its foray into advance research left other institutions playing catch-up.

The Department of Science and Technology (DST) is a wing of the Union ministry of science and technology and is the biggest sponsor of research projects in science and tech institutions. This is the first time it has come out with a ranking of beneficiary institutions by skimming their work over 12 years, from 2002-14. The DST initiative follows Narendra Modi's instruc tion to the ministry to bo ost research in top science and technology institutions with added incentives and funding so as not to lose the best brains to the corporate sector. This is especially true of the IITs.

In the past year, DST has provided nearly Rs 174 crore to IITKharagpur. "It is not superb placements, but such national ranking for research that makes us happy as it shows we are on a path towards sustainable gro wth," said IIT-Kgp director Partha Pratim Chakraborty .

The rankings report has been drawn up based on findings by the Elsevier Scopus data, also globally accepted while considering achievements of Indian nstitutions for world rankings. Several faculty members, ike Anil Bhowmick of rubber technology , Amit Patra of electrical engineering and Pallab Dasgupta of computer science and engineering, have been named as the country's top resear cher. Patra, working on power management of integrated circuits, has carried out path-breaking research on developing a design for efficient power supp y circuits. "We are trying to develop tomorrow's solutions to consume less energy ," he said.Dasgupta's work for safety critical systems is considered to be pioneering.

JU vice-chancellor Suranjan Das said, "Despite the fact hat we are a state university with considerable less funding compared to Centre-backed institutions, we have managed to compete and excel."

Hindustan Times 30/03/ 2016 P-33

UGC gets deadline to select world-class universities

CLASS APART Selected through a rigorous process, the proposed 20 'world-class universities' will be free to choose their syllabus and faculty

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The government is now moving quickly to set deadlines for creating world-class universities following finance minister Arun Jaitley's Budget announcement on the selection of 20 such institutes. The University Grants Commission (UGC) has been asked to frame rules for selection and function of the institutes by September 30, 2016.

A note from the Union ministry of human resource development (MHRD) asking UGC to frame rules for 20 world-class institutions – 10 by the government and the rest by private entrepreneurs, says these institutions, once selected through rigorous process, will be free to choose their syllabus, faculty, admission and fees. At present, universities follow UGC rules.

Admitting that "world-class" is difficult to define, MHRD has identified 17 features of globally top-ranked colleges that include teaching and research, proportion of foreign or foreign-qualified faculty, a mix of foreign students, financial aid based on merit students, one faculty for ten students and a target of 20,000 enrollment within 15 years. It asked UGC to follow these standards when making rules.

"Both government and private institutions will have freedom to make their syllabus and charge any fee they want. At present, universities need UGC's consent for foreign collaboration but once they get world class tag, this restriction will go," says an MHRD source.

He adds that while private institutions will be free to hire foreign faculty and admit foreign students, government universities will have a cap of 25% for foreign faculty and 30% for foreign students.

A UGC expert committee will select 10 government universities from the top 25 in the National Institutional Ranking Framework to be released on April 4 or those that will appear in the top 500 in any recognised international ranking. Ten private universities can be shortlisted from existing or upcoming colleges. The note also recommends penalty if universities fail to figure in "top 500 of any of the world renowned ranking frameworks (such as the Times Higher Education World University Rankings or QS or Shanghai's Jiao Tong University) in the first ten years of setting up, and in top 100 eventually."

If the institute is unable to meet the goals, the committee may direct the MHRD/UGC to to strip the university of its special designation and revert to regular university status, says the ministry note. India has today 750 universities of different categories. Out of that, 345 are state universities and 223 are private
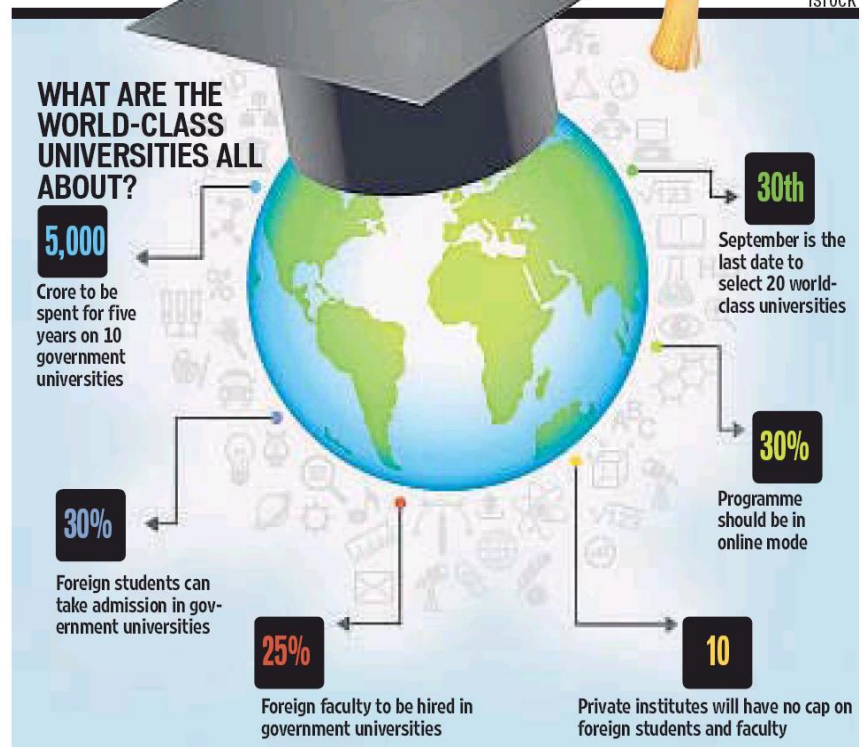
universities. The number of Central universities is 43.

Some academicians hail this initiative to create world class institutions in India but say it requires clarity. "You can say an institute is 'world class university to-be' or 'university with potential to be world class' but you cannot immediately categorise it as 'world class institution' initially. The government should first identify an institution's potential, give full support, review its performance and once it figures in world class rankings only then it should get world class title," says AK Bakshi, a DU pro-

fessor and former head of Tertiary Education Commission, higher education regulator in Mauritius.

Professor M Aslam, vice chancellor, IGNOU, is of the opinion that there should not be too much emphasis on foreign faculty and foreign students. "China spent millions of dollars to recruit internationally renowned, foreign-trained Chinese and Chinese-American scholars to build state-of- the art research laboratories. When we are talking of 25% foreign faculty, why can't we follow the Chinese model and start looking for internationally renowned foreign-trained

Indians. This will make us believe in ourselves," he says.

Welcoming the initiative, Prof NR Madhava Menon, founder director of the National Law School of India University, says, "It will allow promising institutions to compete with world class institutions. Instead of working on minimum standards, I am happy that we are looking at the maximum standards. The purpose of introducing world class universities is to raise the standards of education in India so that it would become an educational hub for students from other countries.

ISTOCK

WHAT ARE THE WORLD-CLASS UNIVERSITIES ALL ABOUT?

5,000
Crore to be spent for five years on 10 government universities

30%
Foreign students can take admission in government universities

25%
Foreign faculty to be hired in government universities

30th
September is the last date to select 20 world-class universities

30%
Programme should be in online mode

10
Private institutes will have no cap on foreign students and faculty

Indian Science Publications making a Mark

http://www.scidev.net/south-asia/capacity-building/news/indian-science-publications-making-a-mark.html

Indian scientific publications are steadily increasing in number and the country is now producing more papers per person than the world average, says a newly released report.

The *International Comparative Research Base* (*2009-14*) for India by Elsevier, released in February, shows a marked increase in the country's performance between 2009 and 2013.

In this period, the number of scholarly outputs, including researchpublications, increased by 68 per cent from 62,955 to 106,065 with India's active researchers publishing an average of 14 papers per head against the world average of five.

Researchers attribute this surge in research impact to increased monetary support for science. "In the last decade, several world class institutions have been set up with state-of-the-art technologies. This was possible through liberal funding, says Amitabha Bandyopadhyay, associate professor at the Indian Institute of Technology-Kanpur (IIT-K).

Bandyopadhyay's own development laboratory was set up in the department of biological sciences and bioengineering at IIT-K with generous government grants. IIT-K was identified in the report as the institution with the highest number of citations per paper in the subject category of biochemistry, genetics and molecular biology.

Similarly, the Indian Institute of Science (IISc), Bangalore, has been able, with the new funding, to build facilities for spectroscopy and analytical testing, electron microscopy and X-ray diffractometry.

"Increased investment between 2000—2010 resulted in rapid increase of facilities, quality personnel, infrastructure and space which resulted in better research performance," says P. K. Das, professor at the department of inorganic and physical chemistry at the IISc.