IIT Kharagpur, Bombay among top 100 varsities in the world: QS Ranking


NEW DELHI: In the first edition of Quacquarelli Symonds (QS) Graduate Employability Rankings, IIT (Indian Institute of Technology) Kharagpur and Bombay rank among the top 100 institutes in the world. IIT Kharagpur ranks 77 while Bombay is at 93rd position in the ranking. India has got three more institutions featured in the top 200 list, the others being IIT Madras, IIT Delhi and University of Delhi.

The top three universities in this ranking are Stanford University, Massachusetts Institute of Technology (MIT) and Harvard University. This is the first time ever a ranking like this has been conducted by QS.

Usually, Indian institutions do not fare well in the QS Worldwide University Rankings. IIT Kharagpur has scored impressively in the parameters 'Graduate Employability Rate' and 'Employers' Presence'.

The Institute records the highest number of degree holders among all IITs, according to its director, PP Chakrabarti. Chakrabarti added: "The students at IIT Kharagpur come with an inherent talent for excellence. We have launched Microspecialization courses in order to facilitate students pursue career in their desired areas or much coveted fields of placement."

For the first (pilot) edition of the QS Graduate Employability Rankings over 44,000 survey responses have been analysed, 1,239 universities considered and 723 evaluated.

These criteria are: the reputation a university has among employers (weighted at 30%), alumni outcome (20%), employer partnerships (25%), employer presence on campus (15%), and graduate employment rate (10%).

'IIT-B students waste around 950 kg of food every day’


MUMBAI: You will find company in students from the country's premier tech institute, if you think your canteen serves tasteless food. Over 950 kg of food is wasted on an average in a day at IIT-Bombay, stated a report by the students' magazine. The students, through an NGO, found the amount wasted at the institute daily can feed 300 children.

The report mainly blamed the wastage on "miscalculated estimates by caterers" and "students' hopefulness for tasty food which more often than not turns out to be tasteless".

The report found special food items like non-vegetarian dishes, sweets, salads, generally do not contribute to the wastage as much as staple food like dal, rice and vegetables. "Examples of students throwing plates full of food are common," says the students' magazine, Insight.

Data compiled by the institute from 2011, which students quoted in the report, states the institute wasted 952 kg of food daily on an average. After 2011, most hostel messes were privatised, so wastage should have
gone down. But with addition of two new hostels, it remains almost the same. The report added the 'it's not my problem' attitude of students was responsible for the wastage.

Currently, some of the wasted food is put to use in a biogas plant, which generates energy that is supplied to hostel 3. However, as most hostels do not follow a waste segregation policy, the solution can't be implemented across board. "Allowing donation of leftover food can be one solution, but students on the campus need to act more responsibly to avoid the wastage," said Niranjan Thakurdesai, one of the chief editors of Insight.

Soumyo Mukherji, dean of students' affairs, agreed there should be more awareness to dissuade students from wasting food. "To some extent there can be punitive measures, but beyond that awareness over how it hurts society in general is essential," he said. From November, the institute is allowing students to pay only for what they want to eat, but the system's success can be reviewed only after six months.

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Bring Euro VI to check pollution: IIT-K

Draft Report Says 60% Of Bad Air In Winter Due To Vehicles, Norm Must Be Enforced By 2020

New Delhi: IIT Kanpur has recommended that Euro VI fuel standards be introduced in Delhi at the earliest in order to check the rising air pollution. It has also recommended that LPG be considered as an alternative and coal burning in power plants or otherwise be stopped completely. The IIT Kanpur team recently submitted a draft report which said that vehicles are responsible for 60% of the air pollution in winter. The report, which is based on modelling exercises and on real-time data collected over two and a half years between 2012 and 2015, will be finalised in December once Delhi government officials meet Professor Mukesh Sharma, the lead investigator of the study. "Vehicles are a major source of pollution in winter and IIT Kanpur has given us a list of recommendations but we have to see which of these can be implemented quickly," said Ashwani Kuman, secretary environment, Delhi government.

Euro VI norms call for 10 ppm sulphur in diesel compared to 50 ppm sulphur stipulated by the Euro IV standard, which is being used now. "Even if we consider the present growth rate of vehicles in Delhi, as many as 5 million new vehicles will be added to the existing fleet of 8 million. There are implications of not having Bharat Stage VI in PM and NOx emission load will be enormous in terms of health damage. Also, remember the future stock will remain on road for at least 10 years. In view of this, the government should not ignore IIT's recommendations and must bring BS VI not later than 2020," said Vivek Chittopadhyay, Centre for Science and Environment (CSE). However, the Auto Fuel Policy Committee for 2025 has recommended Euro VI be implemented by April 2020 and Euro VI by April 2024. But International Council on Clean Transportation (ICCT) in a letter to the ministry highlighted that implementing Euro V may not address high emission of nitrogen oxides from heavy duty vehicles that can cause emphysema, bronchitis and heart disease. Gufran Beig, project director, SAFAR under Ministry of earth sciences, said the IIT report may be highlighting the impact of various seasons on pollutants. "The reason vehicular emissions are higher in winter is probably because fine particles cannot disperse due to lower boundary layer. The emissions will be the same in summer as well," he said. Prof. Sharma could not be reached for comments.

The environment department has decided to make the draft report public soon. Meanwhile, a blanket of smog covered the city on Friday as the air quality deteriorated once again and the moisture in the air seemed to trap the particles very close to the surface. Even though PM 2.5 (fine, respirable particles) levels were going up to 400 micrograms per cubic metre in certain places.

"There is a lot of moisture in the air causing fog. Sunday onwards pollution levels may reduce because minimum temperature may increase," Beig added.
Teachers protest amendments to higher education

STAFF REPORTER

NEW DELHI: Continuing their protest against the Central government's proposed amendments to higher education, a body of teachers is going to organise a camp at Jantar Mantar against 'Committing Higher Education to WTO'.

AIFRTE (All India Forum for Right To Education), an umbrella platform of 64-member organisations including various teachers' associations is organising the camp from December 7 to 14. Retired Justice Sachar who is chairing a reception committee formed to organise the eight-day long All India Resistance Camp said: "Government is trying to make education a trade-able commodity by opening room for private plunder at the hands of global capital."

"If we do not withdraw from the 10-year-old commitment made to WTO in the 15th Ministerial meeting from December 15-18, 2015 at Nairobi, education will become a trade-able service, leaving it open for private plunder and pillage at the hands of global capital, government is trying to do so," Mr. Sachar said.

Supporting his views, Emeritus Professor at JNU, Prabhat Patnaik said: "In a country where farmers have been committing suicides due to burden of loans now students will also be seen sailing the same boat".

"In order to highlight the grave and imminent danger, we have decided to convene an eight-day long All India Resistance Camp where issues such as 'Democratisation of Education vs Corporatisation of Knowledge' and 'WTO vs Diversity and Social Justice' will be debated," Mr. Sachar added.
**IMPRINT: An MHRD initiative to solve India's Engineering challenges**

http://www.pagalguy.com/articles/imprint-an-mhrd-initiative-to-solve-indias-engineering-chall-37582462

The Prime Minister, Narendra Modi is trying to transform India, and to eliminate the technological constraints in achieving this goal, IMPRINT was launched on November 5, 2015. IMPACTING RESEARCH INNOVATION AND TECHNOLOGY (IMPRINT) is a pan-IIT and IISc joint initiative led by the Ministry of Human Resource Development (MHRD). IMPRINT’s main focus is sharpening India's competitive edge by empowering human resources, enhancing India's international standing in science and technology, and boosting the country's economy.

IMPRINT is a first of its kind initiative to solve challenges and problems faced by the engineering sector in India. To start with, ten technological domains have been chosen by IMPRINT members, in terms of priority and urgency. They include Healthcare, Information and Technology, Energy, Nanotechnology Hardware, Environment and Climate, Water Resources, River Systems and Advanced Materials, Manufacturing, Security and Defence, and Sustainable Habitats.

Prof Indranil Manna, IIT Kanpur's director and the national coordinator for IMPRINT, said, "Today, many tech leaders across the world happen to be of Indian origin. If they can do it abroad, why can't we, here in India?" Initiatives of IMPRINT will also strike a synergy with important national missions. For example, Manufacturing will contribute to the 'Make in India' campaign; Information and Technology to the Rashtriya Avishkar Abhiyan and Unnat Bharat Abhiyan; and Nanotechnology to the Digital India Mission.

Prof Manna gave a presentation about IMPRINT at the Visitor's Conference held at the Rashtrapati Bhavan on November 5, 2015. He discussed, "We want to ensure that we work in teams with all scientific organisations, research and development (R&D) labs, and industries right from the beginning. So that whatever we try to innovate eventually sees the light of application, making all inventions sustainable."

Science addresses only the fundamental questions of how and why. Engineering translates those principles to inform us how to do it. IIT Kharagpur's Prof Suman Chakraborty, the Healthcare theme leader, said, "My job is to find a road map for education and research activities to address Healthcare challenges. We will work with the interface between medical applications and engineering technologies."

Currently, 200 faculty members are a part of IMPRINT. MHRD has directed all institutes of higher learning to formulate research proposals and submit them for various themes of IMPRINT by January 31, 2016. Prof Bala Govindaswamy, Coordinator from IISc expressed, "I am excited about it. This initiative will make a huge difference to society. There are a billion minds to solve a million problems."
IMPRINT will act as an important guideline for institutes. It will give directions where a research should head and where the results will be applied. Prof V Kamakoti of IIT Madras, the Security and Defence theme leader, said, "I have been associated with IMPRINT right from its initial meetings in 2014. It gives us a multi-institutional and multi-disciplinary framework. We will know how to deploy problems, whom to approach, who will use it. Under IMPRINT we will get different views, and focus properly on what we want to solve."

**What is all the fuss behind the 'Super 30' biopic 'IIT factory'?**


Several leading Bollywood filmmakers have evinced a keen interest in making a film on the man who founded arguably India's best known coaching institute for the IIT examination.

"Noted filmmaker Anurag Basu and actress Priyanka Chopra are among those who have approached me for making a biopic, Super 30 founder and mathematician Anand Kumar said.

"Film writer Sanjiv Datta, who has written script for hits like Barfi!, Page 3 and Gangster, has also offered to script the movie," Kumar said.

While Basu met Kumar at Patna, Priyanka spoke to him over phone and showed an interest in making a film based on his life.

"I will take a call in a month on whom to give the copyright for making my biopic," Kumar said.

The Patna-based Super 30 has groomed more than 300 students who have qualified for the coveted IITs, ever since Kumar launched the initiative in 2002.

Diplomatic officials from France and Germany recently paid a visit to the Super 30 academy, acclaimed for helping students of deprived sections to crack the Indian Institute of Technology (IIT) entrance examination.

Kumar met Maharashtra Chief Minister Devendra Fadnavis in August to discuss ways for imparting quality education to students from poor and underprivileged sections in the state.
Under the Super-30 programme, 30 students from extremely poor families are trained free of cost to crack JEE to secure admission to IITs. The initiative had made its way to the list of 'Best of Asia - 2010', prepared by Time magazine of the US.

The Newsweek magazine had also taken note of the initiative and included his school in the list of four most innovative schools in the world.

**IIT Kanpur’s Innovation to Prevent Accidents at Unmanned Railway Crossings**

The technology, named Radio Frequency and Wireless Based Warning System, will produce a loud sound to alert people to remain off the tracks, and to inform the driver that a crossing is approaching.

http://www.thebetterindia.com/39416/warning-system-at-railways-crossings/

Photo Credit: Abhishek Roy /Flickr

If everything goes well and the trials are successful, the device will be put to use. Currently, trials are being conducted between Unnao and Sonik railway stations (crossing number 29C) and Lucknow-Sultanpur section (crossing number 189C). Following this, IIT Kanpur will hand over the technology to Research Designs and Standards Organization (RDSO) on Dec. 16. RDDS is a research and development organization under the Ministry of Railways and it functions as a technical adviser and consultant with regards to design and standardisation of railway equipment and issues related to railway construction, operation and maintenance. The organization had asked IIT Kanpur to develop such a system that would be efficient for two trains on two parallel tracks in one go.

However, the final system is more advanced than the initial expectation. If spread out on 16 parallel tracks, the warning system can handle 16 trains. The system with embedded GPS and RFID (radio frequency identification tag) will be installed in the train engine and at the unmanned railway crossing. When the train is 1,500 meters away from the crossing, the warning system will get activated and hooters will blow up informing the driver that a crossing is approaching.

“The same thing will happen when the train is just 800 meters away from the track. The flash hooters will stop buzzing when train crosses 50 metre mark from the crossing,” BM Shukla, principal software engineer at IIT-K told The Times of India.

The system is foolproof as even if the GPS stops functions, RFID will ensure that the system never fails.

In case of multiple tracks, like two trains crossing each other, the system will continue to function normally. Hooters will buzz for both trains and will close after the later train clears the 50m mark. The trials have been successful until now.