#### <u>Newspaper Clips</u> <u>December 4, 2015</u>

#### Navbharat Times ND 04/12/2015 P-10



## **2K students to conduct experiment at IIT-D in bid to create world record**

http://zeenews.india.com/news/education/2k-students-to-conduct-experiment-at-iit-d-in-bid-to-create-world-record\_1829594.html

The Ministry of Science and Technology is aiming at creating a Guinness World Record of the highest number of students conducting experiment at the same venue.

New Delhi: The Ministry of Science and Technology is aiming at creating a Guinness <u>World Record</u> of the highest number of students conducting experiment at the same venue and has organised an event at <u>Delhi-IIT</u> where 2,000 students are expected to assemble.

The event will be part of India International Science Festival, which will be held from from December 4 to 8. The experiment in chemistry will be done on December 7 at IIT-Delhi.

"The main thrust of the event will be on students and young innovators. Some 400 research papers are likely to be presented in the event," Harsh Vardhan, the Science & Technology and Earth Sciences Minister, said.

Ireland holds the record of around 1,300 students conducting an experiment at the same venue. "We have working as per the guidelines mentioned by the Guinness World Record authorities," the minister said.

The festival will host a Young Scientist Conference, Techno-Industrial Expo, Science Film Festival, industryacademia conclave and interactive workshops and informative sessions on various topics.

The programme will also display innovations from students and young researchers, who have been funded by INSPRIE scheme of the Ministry.

"There will he some 250 stalls by different agencies which will display activities related to science and research," he said.

## Hindustan Times ND 04/12/2015 P-7

# **IIT-D placements: Students turn down foreign offers for domestic companies**

### Heena Kausar

NEW DELHI: The first phase of placements at the Indian Institute of Technology has seen students junking international offers to work for domestic companies at a lower pay.

Since the placements began on December 1, four students who were offered jobs in foreign locations, out of the total eight, rejected them. The pay package ranged between \$100,000 and \$140,000 (₹60,00,000-₹84,00,000) per annum. Instead, they opted for domestic offers where, according to the college, the pay was much lower. But, the college refused to reveal the figure. We have had eight international offers with fat pay packages as of now. Half of the students turned them down. This signals a change among students who now prefer to stay and work in the country. These are initial trends. We have to see how it turns out.

ANISHYA O MADAN, industrial liaison officer at IIT

"We have had eight international offers as of now and half of the students turned down these offers with fat pay packages. This signals a change among students who now prefer to stay in the country and work here. These are initial trends and we have to see how it turns out in coming days," Anishya O Madan, industrial liaison officer at IIT, told HT.

So far, 275 students have accepted job offers, said Shashi Mathur, professor-in-charge of the Training and Placement Cell. "Some of them were preplacement offers given to students while they were interning," he said Madan said the mix also included a good number of start-ups. "There are quite a few startup companies coming for placements at the IIT-D. We try to have a mix of companies from all kinds of sectors, including consulting firms, banking, coding and core companies," Madan said.

Forty companies came for placement on the first day, while 38 each came on the second and third days, Mathur said.

The first phase of placement session will continue till December 19. The next phase will start in January and go on till June end. "In the ongoing session, we will have around 1,200 students sitting for placement," he said.

## Navbharat Times ND 04/12/2015 P-10

भा नहा बताना पना पैकेज

> और दिक्कत आती हैं। साथ ही, करोड़ों का पैकेज पाने वाले कुछ स्टूडेंट्स को अपने दोस्तों की खातिर भी यह ऐलान करना पसंद नहीं होता।

> आईआईटी टीचर्स का मानना है कि कंपनियां भी सैलरी का खुलासा नहीं करना चाहती, क्योंकि हर कंपनी बड़ा पैकेज नहीं देती। साथ ही, कई स्टूडेंट्स को 7-8 कंपनियों से ऑफर मिलते हैं और ऐसे में कंपनियां ऑफर ठुकराने की खबर भी आउट नहीं करना चाहती हैं।

> आईआईटी दिल्ली के ऑफिशिएटिंग डायरेक्टर प्रो. क्षितिज गुप्ता कहते हैं, अभी इसे लेकर हमें ऑफिशल नोटिस नहीं मिला है और प्रलेसमेंट में सैलरी पैकेज के बारे में बताने या छिपाने को लेकर आईआईटी दिल्ली की पहले से ही कोई पॉलिसी नहीं रही है। हम पहले भी ऐवरेज पैकेज के बारे में ही बताते थे और अब भी यही करेंगे। आईआईटी दिल्ली के टेनिंग और प्लेसमेंट सेल की इंडस्टियल लाइजन ऑफिसर अनिश्या ओ. मदान बताती हैं, साल में एक-दो स्ट्डेंट्स को ही करोड़ों तक के पैकेज मिलते हैं, बाकियों का पैकेज इससे बहत कम होता है, ऐसे में पैकेज को ऐसे उछालना गलत है। हम इस बार भी हाई पैकेज और स्टडेट का नाम का खलासा नहीं करेंगे।



मिलता है करोड़ों का पैकेज

सब को इससे काफी कम सैलरी ऑफर होती है। पिछली बार आईआईटी दिल्ली का ऐवरेज पैकेज 9 लाख रुपये सालाना था।

प्रो. माथुर का मानना है कि स्टूडेंट्स इसलिए भी यह अनाउंसमेंट नहीं चाहते क्योंकि हाई पैकेज पाने वाले स्टूडेंट के लेवल के कई स्टूडेंट्स को इसके बाद फिक्र होने लगती है, उनके पैरंट्स भी अखबारों, में पढ़कर परेशान रहते हैं। आईआईटी के इंजीनियरिंग स्टूडेंट राघव नाथ कहते हैं, आईआईटी में वैसे भी बेहतर करने का साल भर प्रेशर रहता है, ऐसे में प्लेसमेंट के वक्त

Katyayani.Upreti@timesgroup.com

🔳 नई दिल्ली : एक करोड, दो करोड, ढाई करोड़... हैरान कर देने वाले स्टूडेंट्स के इन सुपर पैकेज पर देश के सभी आईआईटी में नई बहस चल रही है। हाल ही में आईआईटी खड़गपुर में सभी आईआईटी ने मिलकर फैसला किया है कि अब इस प्लेसमेंट सीजन से सैलरी पैकेज का खुलासा नहीं करेगा। हालांकि, आईआईटी दिल्ली का कहना है कि ऑफिशल तौर पर इस पर दिल्ली कैंपस में कोई फैसला नहीं लिया गया है। पैकेज एनाउंस करने या छिपाने की पहले भी कोई पोलिसी नहीं थी। हालांकि, आईआईटी दिल्ली के टीचर्स का भी मानना है कि इस तरह से पैकेज को अनाउंस करने से बाकी स्टडेंट्स और उनसे परेशान होते हैं और कंपनियों को भी सैलरी पैकेज का ऐलान करने में दिलचस्पी नहीं है।

आईआईटी दिल्ली के ट्रेनिंग और प्लेसमेंट सेल के प्रोफेसर-इन-चार्ज प्रो. शशि माथुर कहते हैं, करोड़ों के पैकेज का मीडिया में आना चंद सालों में शुरू हुआ है। यह कुछ लोगों को मोटिवेशन देता है, लेकिन ज्यादातर स्टूडेंट्स नहीं चाहते कि पैकेज सबके सामने लाए जाएं क्योंकि हाई पैकेज सिर्फ एक या दो स्टूडेंट को मिलता है, बाकी

## Times Of India ND 04/12/2015 P-9 16 desi institutes figure in Times' top 200 univs

#### TIMES NEWS NETWORK

**New Delhi**: Indian educational institutes occupy 16 places among top 200 universities in Times Higher Education BRICS and Emerging Economies rankings for 2016. At 16<sup>th</sup> place, Indian Institute of Science, Bangalore is the only Indian institute to feature in the top 20.

China, on the other hand, has five institutes among top 10, followed by two from South Africa, and one each from Taiwan, Brazil and Russia. Even Taiwan has done better than India with 24 universities in top 200.

Releasing the report on Thursday, Phil Baty, editor, Times Higher Education World University Rankings, said, "It is good news for India that 16 of its institutions feature in this year's list of the best universities in the BRICS nations and emerging economies. However, India will have to work harder to compete with other developing nations, such as Russia, which have a higher proportion of institutions in the upper echelons of the table. India is the only BRICS nation without a university in the top ten."

At 29<sup>th</sup> place, Indian Institute of Technology, Bombay makes to the Top 30, but rank-

#### BRICS & EMERGING ECONOMIES

ings show that it requires investment and international collaboration if it has to compete with institutions from other BRICS nations.

China dominates the rankings, with Peking Universityand Tsinghua University at first and second position respectively. The University of Science and Technology of China is at seventh place, Zhejiang University at eighth and Shanghai Jiao Tong University at tenth. Lemonosov Moscow State University from Russia is at third place; from South Africa, University of Cape Town from is at fourth and University of Witwatersrand is at sixth. National Taiwan University is at fifth. University of Sao Paulo, Brazil is at ninth place.

Baty said, "India spends less than 0.88% of its GDP on science research, compared with 2.76% for the United States and 4.04% for South Korea. With the population of young people in the country continuing to expand resulting in further pressure on resources, it is now more crucial than ever that India invests in research and strengthens its links with other nations."

Rankings that also include a number of countries which are outside the BRICS bloc, show they had a good year. Chile has six institutions represented (two last year) while Colombia has two universities included (one last year).

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

Indian Institute of Science	16
Indian Institute of Technology, Bombay	29
Indian Institute of Technology, Madras	36
Indian Institute of Technology, Delhi	37
Indian Institute of Technology, Kharagpur	45
Indian Institute of Technology, Roorkee	48
Jadavpur University	80
Indian Institute of Technology, Guwahati	83
Indian Institute of Technology, Kanpur	95
Panjab University	12
Savitribai Phule Pune University	127
University of Calcutta	137
Aligarh Muslim University	150
University of Delhi	154
Amrita University	18
Andhra University	193

### **IISc Bengaluru Ranked 16th Among BRICS Institutes**

http://www.newindianexpress.com/nation/IISc-Bengaluru-Ranked-16th-Among-BRICS-Institutes/2015/12/04/article3159803.ece

NEW DELHI: The Indian Institute of Science, Bangalore has been ranked 16th in a list of top institutes in the BRICS countries in a latest ranking list followed by IIT Bombay at the 29th position.

According to the Times Higher Education Ranking of the best universities in the BRICS and other emerging economies for 2016, 16 Indian institute find place among the top 200, which otherwise is dominated by Chinese institutes.

While most of the IITs have been placed within the top 100, Jadavpur University in Kolkata has been ranked at the 80th place, Punjab University at 121, Aligarh Muslim University at 150 and Delhi University at 154th place.

Amrita University and Andhra University have been ranked at 181 and 193 respectively, said a statement on Thursday after the rankings were made official.

"It is good news for India that 16 of its institutions feature in this year's list of the best universities in the BRICS nations and emerging economies.

However, India will have to work harder to compete with other developing nations, such as Russia, which have a higher proportion of institutions atop the table. India is the only BRICS nation without a university in the top ten," said Times Higher Education World University Rankings Editor Phil Baty.

China dominated the rankings, with institutions from there occupying first and second places, half the Top 10 and 39 places in the Top 200. Taiwan came a distant second with 24 universities in the Top 200 and India emerged as the third best represented country. The 2016 rankings include 200 institutions from 35 countries, up from 100 from 18 countries in 2015.

# Science's challenge in rural schools

**EFFECTIVE** Rural schools face different problems than urban schools when it comes to teaching science. Making the subject fun to learn and enabling the teachers to stay on is crucial, says **R V M Chokkalingam** 

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ural India has been and continues to be a vital part of the mission. Its conditions can vary greatly across settings. Various community to the next. Proximity to urban areas affects the rurality of a community as well. Most often our rural initiatives focuson rural economic development and agriculture and are not involved in rural science education. The nature of teaching science can be different in rural areas than suburban or urban areas. Rural science education reflects the

Rural science education reflects the circumstances, challenges, and context of places, Rural schools face different problems than urban schools when it comes to improving their instruction in science. Many of the issues are based in financial constraints but take on different forms. The biggest challenge has been finding teachers who are willing to work in a rural community, which traditionally means their salary will be slightly lower than in nearby urban schools. Staffing problems are compounded by a lack of facilities. In very rural areas, middle schools in particular, there are simply no laboratories. Together, these challenges can discharge teachers from accepting rural positions or rause them to leaver rural positions or rural schools after a short teaching stint. Making a special contribution to rural science education is a top priority, while enabling home grown prospective science teachers to remain in rural schools is next priority. Indigenous roots allow prospective science teachers to remain in their communities.

#### Improving policies

Very little research has been done on preparing science teachers to work and stay in trual communities and teach in rural schools. The teaching of science has long been viewed as problematic within classrooms of rural areas. In fact, many of education's so called best practices were born out of necessity long ago in the rural schools including cooperative learning, multigrade classrooms and intimate links between schools and communities.

While the shortage of qualified science teachers in rural areas is not a new phenomenon, teachers not qualified in each specialisation they teach are now required to seek the necessary credentials if they are to continue teaching in that specialisation. Also rural schools tend to have fewer teaching positions than urban or suburban schools. There is a need to find out other ways to alleviate the science teachers shortage in rural areas, such as convenient access to their programmes for prospective teachers and possibly working in rural communities or to prepare teachers for teaching in rural settings.

Potential contributing factors include social and collegial isolation, low salaries, multiple grade or subject teaching assignments and a lack of familiarity with rural schools and communities. In many cases, teachers with enough knowledge in one area might be forced to take on science teaching because of understaffing. Some rural schools enter partnership with local business that lend students their time, money and resources and rely on professional's time and expertise to help teach science to rural students.

There has been limited or no research on preparing science teachers to work and stay in rural communities. Teaching conditions are unique to rural schools and science teachers find it difficult to prepare for the conditions of rural teaching, Rural policy makers have found it difficult to recruit and retain science teachers in rural schools. Rural educators have long been calling for special preparations for new science teachers to teach in rural schools. There is a vital need for policy options to help rural schools address the challenges of improving student performance and retaining a qualified science teacher workforce.

Special preparations for new science teachers to teach in rural schools include preparing them for the dynamics of life in rural communities, developing and adapting curriculum to the needs of students in rural communities, reading self-directed professional development practices, using a variety of resources and technology to reduce the barriers of isolation, and functioning effectively in community service areas other than teaching. One suggestion that comes first is to recruit prospective teachers from rural areas, and in some cases, make course arrangements to allow them to stay in their areas while they pursue their education.

Rural schools tend to be smaller than urban schools and this carries a number of benefits for rural students. Class sizes tend to be smaller and students can enjoy more individual attention from their teachers. There is also some evidence that small rural school can be more effective in helping their students learn better, behave better and participate better in civic life. There is a necessity to break down negative stereotypes about teaching in rural schools. Rural educators have long been calling for special preparations for new science teachers to

teach in rural schools.

Threr is a vital need for policy options to help rural schools address the challenges of improving student performance and retaining a qualified science teacher workforee. There is a need to encourage the students of rural areas to take interest in study of basic sciences. There is the shortage of reading materials during their studies, no tably textbooks, modules, and other reference books as well as shortage of library facilities which are identified as the major handicap. With fewer students per school and limited funding to match the rural schools have been behind in science education.

#### Backyard science There is a lot of hidden talents within rural

Incre is a nor in its better to make sure children get what they need so they can choose what they love and want. It is a good way to transform school backyard into a very own science lab and have a blast with awesome experiments. Backyards and neighbourhood provide many wonderful opportunities for kids to both play and learn. The science based activities help students to develop literacy skills. Science activities stimulate curiosity, provide practical opportunities to explore a concept in easy ways, develop appropriate science understanding of the concepts. Nothing energises students and teachers more than examples of what they can do with what they already have. Stimulating hands-on backyard science activities such as launching rockets and studying the weather make it fun to learn science.

It is a good to creatively come up with ways to supplement rural limited resources on their own, by the simple experiments. For any backyard science adventure, you may need butterfly nets, magnifying glasses, insect cages to understand natural world. Rural schools can focus more on connecting students to the larger world with video and teleconferences. Popular science kits and books promote hands-on labs. Games are powerful learning tools, when combined with other exploratory, hands-on activities.

Nature study is a popular practice in rural schools to learn about the natural world. Bird watching, plant examination, and star glazing further the curiosity of students. This provides the setting for practicing observation skills and awaken scientific curiosity and inquiry. Field trips are one such which help expand their learning of the natural world. It helps motivate learning and enhance concepts. So there many ways as to how science can effectively taught in rural schools, even if they have limited resources. And these are just a few that can help.

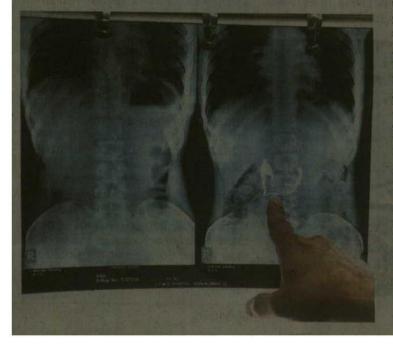
## Business Line ND 04/12/2015 P-16

Cancer: scientists' proton theory in final stages

#### ASIAN NEWS INTERNATIONAL

Members of the multi-national research team behind the PRAVDA (Proton Radiotherapy Verification and Dosimetry Applications) project, led by the University of Lincoln (UK), are now building the instrument that will produce for the first time detailed three-dimensional images of a patient's anatomy, using protons rather than xrays.

To produce these Proton CT images, the world-first technology will use the same



high energy particles that are used to destroy a tumour during proton therapy treatment.

Like x-rays, protons can penetrate tissue to reach deep tumours. However, compared to x-rays, protons cause less damage to healthy tissue in front of the tumour, and no damage at all to healthy tissue lying behind, which greatly reduces the side effects of radiation therapy. Led by Nigel Allinson from the University of Lincoln, the PRaVDA team aims to become the first in the world to produce clinical-quality Proton CT imagery. They are currently working near Cape Town at the South African National Cyclotron - a type of particle accelerator

Allinson said: "Proton therapy is an improved approach for treating challenging tumours especially in the head and neck, and near critical organs. It is likely to become the preferred radiotherapy method for most childhood cancers, as the unwanted exposure to radiation of healthy tissue is much reduced and so the risk of second cancers later in life is also much reduced."

He added that having the ability to administer a high dose in a small region is the main underlying advantage of proton therapy, however accurate planning is absolutely essential to ensure that the dose does not miss the target tumour.

PRaVDA researchers believe that Proton CT will soon be used as part of the planning process for cancer patients, as well as during and after treatment.

Proton therapy is rapidly gaining momentum as a cancer treatment.

The NHS will open two proton therapy centres in 2018 and up to another four private centres are also being planned for the UK.