### Newspaper Clips April 28-30, 2015

April 30

#### Times of India ND 30/04/2015 P-8

# DU, JNU, IIT depts make it to global top 100 list

#### Nine Indian Varsities In QS Rankings Within Nine Disciplines

Manash.Gohain @timesgroup.com

New Delhi: Indian universities might struggle to make the top 100 of the QS World University Rankings list, but their individual departments are amongst the best in the world. Delhi University tops the list, achieving the highest rank of all 20 Indian universities that have made the cut, while being placed 17th globally on the development studies subject table.

Nine Indian institutions are listed in the top 100 within nine disciplines. In the QS World University Rankings by Subject 2015 published on Wednesday, India has secured 107 places across the 36 subject tables, including the six new disciplines for 2015—architecture, arts and design, business studies, dentistry, development studies and veterinary science.

IIT Bombay is the most prevalent Indian institute, appearing in the top 100 for eight subjects. IIT Delhi too has five of its departments in the top 100 while Jawaharlal Nehru

Some Indian unive a stronger present	rsities in the top 100 have ce subject-wise		
Institution	Subjects in which it ranks among best		
IIT Bombay	Art & design, computer science & information systems, engineering—chemical, civil & structural, electrical & electronic, mechanical, aeronautical & manufacturing, materials science, statistics & operational research		
IIT Delhi	Computer science & information systems, engineering—chemical, civil & structural, electrical & electronic, mechanical, aeronautical & manufacturing		
IIT Kharagpur	Engineering—civil & structural, mechanical, aeronautical & manufacturing, materials science		
IIT Madras	Engineering—civil & structural, electrical & electronic, mechanical, aeronautical & manufacturing		
Indian Institute of Science	Electrical & electronic, materials science		
IIT Kanpur	Statistics & operational research		
Jawaharlal Nehru University	Sociology		
Shanmugha Arts Science Technology	Art & design		
University of Delhi	Development studies		

while securing 17th position for development studies

University figures on one subject list. "This is a reflection of the progress made by Delhi University in four years. Rankings have improved in several disciplines. If we can keep up the momentum, we would be placed even higher next year," Malay Neeray, media coordinator, DU, said.

Within the inclusion of the new subject of art and design, Shanmugha Arts Science Technology and Research Academy Thanjavur. has been placed in the top 100, while Indian Institute of Science, Bangalore, has made it for materials science and electrical and electronic engineering. From Delhi, IIT also appears in the top 100 for civil and structural engineering. electrical and electronic engineering, mechanical aeronautical and manufacturing engineering and computer science and information system.

However, in business and management studies, none of the B-schools could make it into the top 100. The top ranks in this subject table are shared by IIM Ahmedabad, IIM Bangalore and IIT Delhi.

## IIT Bombay Best Technical Institute in India: Quacquarelli Symonds

http://profit.ndtv.com/news/careers/article-iit-bombay-best-technical-institute-in-india-quacquarelli-symonds-759294

**New Delhi**: IIT Bombay has emerged as the best technical institute in India and one among the top 100 worldwide according to subject-wise ranking by Quacquarelli Symonds (QS), a leading world university ranking agency.

Delhi University topped the 20 leading Indian varsities which featured in the ranking list, bagging the 17th position in the world for its performance in Development Studies, as per QS University World Rankings by Subject released on Wednesday.

Nine Indian institutions are listed in the top 100 within nine disciplines, a statement issued by the agency said.

"Indian universities display increased international competitiveness in the top 100 with a stronger presence across the subjects," it said.

According to the ranking list, IIT Bombay is the most prevalent Indian institute, appearing in the top 100 for eight subjects - Statistics and Operational Research; Material Science; Mechanical, Aeronautical & Manufacturing Engineering; Electrical and Electronic Engineering; Civil and Structural Engineering; Chemical Engineering; Computer Science and Information System; Art and Design.

"IIT Delhi appears in the top 100 for Civil and Structural Engineering, Electrical & Electronic Engineering, Mechanical Aeronautical and Manufacturing Engineering and Computer Science and Information System," the statement said.

In Art and Design, Shanmugha Arts Science Technology and Research Academy in Thanjavur has been ranked among the top 100, while Indian Institute of Science is in the top 100 for Material Science and Electrical & Electronic Engineering.

Also in the top 100 is the IIT Kharagpur within Material Science, Civil and Structural Engineering, Electrical and Electronic Engineering, and Mechanical Engineering.

The IIT Madras ranks in the top 100 within the disciplines of Mechanical, Engineering, Electrical and Electronic Engineering and Civil and Structural Engineering.

QS World University Rankings are annual university rankings published by British Quacquarelli Symonds (QS). This is the fifth QS World University Rankings by Subject.

"India secures 107 places across the 36 subject tables, including the six new disciplines for 2015 - Architecture, Arts and Design, Business Studies, Dentistry, Development Studies and Veterinary Science," the statement said.

"Of those places, 37 have moved downwards compared to 2014, 44 have maintained the same position, seven have gone up and 19 are new entries," it added.

On DU's ranking, the university's spokesperson Malay Neerav said, "This is a reflection of the progress made by DU in

last four years where it has been continuously ranked number one among Indian universities and our rankings have improved in several disciplines. We are committed to securing a better ranking in future".

#### **IIT-G slips in ranking**

**Basant Kumar Mohanty** 

http://www.telegraphindia.com/1150430/jsp/frontpage/story 17510.jsp#.VUJ3Z C2Iy0

**New Delhi, April 29**: IIT Guwahati has slipped from its last year's 87th rank and failed to find a place among the top 100 institutions this year in a ranking by a London-based agency. This follows a drop in citation score, which is a measure of research output.

The Times Higher Education (THE) ranking of top under-50 institutions released today placed the IIT between 110 and 120, if the ranking table is extended. After 100, THE does not give individual ranking.

Just two Indian universities had qualified for the ranking - IIT Guwahati and Jawaharlal Nehru University (JNU) - last year. If the ranking table extended beyond 100 this year, JNU would be placed between 100 and 110, a better position than IIT Guwahati.

IIT Guwahati director Professor Gautam Biswas said citation was not under the control of the institute. He said the research output of the institute has increased.

Citation refers to work of faculty cited by another faculty in a research paper published in a peer review journal.

The older IITs were not included under this ranking since they are more than 50 years old. Some of the other universities were excluded for publishing too few publications each year.

THE's Under-50 ranking highlights the new breed of global universities with the potential of becoming the next generation's Harvard or Oxford.

Eight nations make the top 10, including Switzerland, the Netherlands, France, the UK and the US. The US, which dominates the traditional global rankings, has seven top 100 universities, the same number as Germany.

Brazil has one representative, but there's no room in the rankings for the other BRICS - Russia, India, mainland China and South Africa. Morocco, Iran, Macau and Greece also make the top 100.

The ranking has been prepared on basis of 13 criteria. They are teaching, staff-to-student ratio, PhDs verses undergraduate degrees awarded, PhDs verses academic staff, institutional income verses academic staff, research volume, income from research and reputation of research, average citations per paper, international students, international academic staff and scholarly papers with one or more international co-authors and industry collaboration.

Switzerland's École Polytechnique Fédérale de Lausanne has moved from second place last year to number one position this year, pushing South Korea's Pohang University of Science and Technology to second place.

Phil Baty, THE's rankings editor, said some of the institutions ranked among the top under-50 have achieved in a matter of decades what some older institutions have taken centuries to do.

"Without the trappings of tradition, the accumulated wealth or the generations of alumni to act as brand ambassadors, these youngsters have been able to make a big impression in a short space of time. They serve as

powerful examples for others to follow."

THE also publishes a separate World Universities Ranking (WUR) where the institutions irrespective of their age participate. In that list, Punjab University and Indian Institute of Sciences (IISc) Bangalore were placed between 275 and 300.

#### Business Standard ND 30/04/2015 p-10

#### India fails to feature in Times Higher Education 100 under 50 list

BS REPORTER . New Delhi

India's schools did not find a mention in the Times Higher Education 100 Under 50 rankings for 2015. The ranking is an analysis of the world's top 100 universities under 50 years. The list shows which nations could challenge the US and the UK as future higher education powerhouses. Switzerland's École Polytechnique Fédérale de Lausanne moved from second place, where it was since the first 100 Under 50 was published in 2012, to pole position. It swapped places with South Korea's Pohang University of Science and Technology. Others on the top-five list were Korea Advanced Institute of Science and Technology, Hong Kong University of Science and Technology and Singapore's Nanyang Technological University.

#### Dainik Bhaskar ND 30/04/2015 P-6

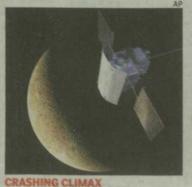


#### Times of India ND 30/04/2015 p-19

### Out-of-fuel 'Messenger' bangs into Mercury today

Cape Canaveral (Florida): Nasa's Mercury-orbiting spacecraft, Messenger, is going out with a bang this week, adding a hefty crater to the little planet closest to the sun.

The first spacecraft to circle Mercury, Messenger is expected to slip out of orbit and slam into the planet on Thursday following a successful four-year tour of the rocky mass. The spacecraft will be traveling at 14,081 kmph when it hits, fast enough to carve out a crater 52 ft wide. The spacecraft itself stretch-



es 10ft solar wingtip-to-wingtip.

Messenger has run out of fuel, but ground controllers managed in recent weeks to eke out some extra life, raising Messenger's orbit by dipping into helium gas reserves not originally intended for use as fuel. But now that's all gone and Messenger is at the mercy of gravity: "I guess the end is coming," the Messenger team said via Twitter earlier this week. "After 10 years, spacecraft will end life as just another crater on Mercury's surface."

Messenger rocketed away from Cape Canaveral, Florida, in August 2004. It flew twice past Venus and three times past Mercury, before entering orbit around Mercury in March 2011. Only one other spacecraft, Nasa's Mariner 10, has ever visited Mercury, and that was back in the 1970s. Mariner 10 flew past, but did not orbit the innermost planet. The \$427 million Messenger mission was developed and run for Nasa by Johns Hopkins University, AP

#### Hindustan Times ND 30/04/2015 P-5

# New higher education system remains stuck at feedback stage

DELAY Delhi University teachers say choice based credit system can't be introduced this year

Shradha Chettri

shradha.chettri@hindustantimes.com

NEW DELHI: There are just two months left for the academic session 2015-16 to start but the introduction of the choice-based credit system (CBCS) appears to be a distant dream.

The system, which was supposed to be implemented in the new session, is still in the feedback process.

On Wednesday, the University Grants Commission (UGC) released draft syllabuses of seven other subjects. On April 10, UGC had first issued the draft syllabuses of 19 subjects and invited feedback on them.

Delhi University teachers have already said that the CBCS cannot be introduced from this academic session. Staff associations of 32 DU colleges have already rejected it and forwarded their reservation to the UGC.

Premier colleges like Lady

#### DRAWING CRITICISM

#### What is CBCS

- Semester system, where students will study core, elective, enhancement courses for skill development. Students will choose inter-disciplinary, intra-disciplinary courses
- Marking system would be changed to credits and grades
- Students will be able to complete one course from different institutions

Shri Ram College for Women, IP, Jesus and Mary, Kirori Mal, Hansraj and Miranda House calling it "FYUP in disguise". "There is no time left for the implementation in the current academic session. It will take more time for UGC to come up with the final syllabus document and after that it needs to be discussed in the right forum. This cannot be done in

#### Problem with the system

- Standarisation of syllabus will hamper the diversity of each university
- Added burden on teachers and students too
- Lack of infrastructure to support mobility of students
- No clear instructions on which type of institutions will be part of credit sharing

haste," said AK Bhagi, executive council member.

The Ministry of Human Resource Development had asked all central universities to implement CBCS, popularly referred to as "cafeteria scheme", from the new academic session.

As per the government, the CBCS will allow students to choose inter-disciplinary, intradisciplinary courses, skill-oriented papers and give them more flexibility. For example, a student can choose to study Physics with Economics, Microbiology with Chemistry or Environment Science.

Termed as student-centric learning, the CBCS will allow easy mobility for students through transfer of credits. The students will be able to study one semester in one college and then pursue the course in another college in any part of the country.

With students already protesting, teachers are questioning the UGC's power to draft syllabus. "UGC has categorically said varsities have to follow the common curriculum and only 20 per cent of deviation is allowed. If you see the syllabus put up by UGC, it is a combination of DU's earlier syllabus and the FYUP syllabus. Where does the university's autonomy go?," said Rajesh Jha, political science teacher at DU.

## ISRO's New Test Set to Put India into Cryogenic Orbit

#### Our Bureau

Bengaluru: The Indian Space Research Organisation (ISRO) on Tuesday successfully tested its indigenous cryogenic engine for 635 seconds, the full duration of an actual flight. A successful cryogenic engine will let India launch 4-tonne satellites - the INSATs - into geostationary orbit. These satellites are the backbone of India's communications. weather forecasting, broadcasting and other applications.

Tuesday's test is the fifth ground test of the cryogenic engine. Earlier tests were of short duration of 10-20 seconds.

When ready ISRO will use this engine as the upper stage of the heavy lifter GSLV Mark III. This vehicle is ready and has had a short flight last year. but is waiting for the cryogenic engine for a full flight. There are several tests to be done before the engine can integrate with the rocket, but it has crossed a major hurdle on Tuesday.

This means that the technology has been achieved and the design is sound," says K Sivan, director of the ISRO Liquid Propulsion Centre (LPSC)

ISRO's Mark III version of Geostationary Launch Vehicle is being developed to carry fourtonne class satellites into geostationary orbit. This would mean that the country can launch large weather and communication satellites on its own, while also offering cheap launch services to others.

tationary orbit. "The engine ister Narendra Modi tweeted.

Mark II, the current flight ver- tested today will enable us to put sion of GSLV, can launch up to satellites of up to 4 tonnes in ge-2500 tonnes of weight into geos- ostationary orbit," Prime Min-

#### Dainik Bhaskar ND 30/04/2015 P-6

#### 19 साल में आईआईटी से पीजी, अब अमेरिकी यनिवर्सिटी से पीएचडी की तैयारी



पांच वर्ष पहले केवल 14 साल की उम्र में आईआईटी. कानपुर के बीटेक कोर्स में प्रवेश पाने वाले सहल कौशिक अब अमेरिका जाने की तैयारी में हैं। इंजीनियरिंग में मास्टर डिग्री पुरी करने के बाद वे

स्टोनी बुक युनिवर्सिटी, न्युयॉर्क से पीएचडी करेंगे। प्रवेश के समय सहल आईआईटी में प्रवेश पाने वाले सबसे कम उम्र के छात्र थे। जीआरई और टोफेल स्कोर के आधार पर उन्हें अमेरिकी यूनिवर्सिटी में एडिमशन के लिए चुना गया है। सहल को जीआरई में 340 में से 337 ओर टोफेल में 120 में 112 स्कोर मिला था।

#### Economic Times ND 30/04/2015 P-3

## India Lost Chance to Record Shocks

Nistula.Hebbar@timesgroup.com

New Delhi: Could India have lost seismic data over funding issues related to a key project? A March 2015 letter from the director of the now defunct Programme for Excellence in Strong Motion Studies (Pesmos) to the ministry of earth sciences (MoES) seems to point in that direction, even as Nepal and India struggle to come to terms with the worst earthquake in South Asia in eighty years. The director of Pesmos was Ashok Kumar of the HT. Roorkee.



Programme to install 294 strong motion stopped due to lack of funds

The ministry of earth sciences, in collaboration with IIT-Roorkee, had decided to install 294 strong motion accelerographs in the north, northeast and elsewhere in accelerographs 2004 covering seismic zones V, IV and some cities in seis-

mic zone III under Pesmos.

The instruments were supposed to collect data for analysis of the motion of the earth's tectonic plates, which leads to earthquakes. Some of the data from the system has been used to set up an early warning system for earthquakes in India. The project was supposed to have been funded until December 2014, but the money ran out in September despite favourable reports by the Project Monitoring and Advisory Committee or PMAC.

Kumar wrote to the ministry on March 26 that handing over the project to the new National Centre for Seismology in February 2015 would be acceptable "if MoES (or NCS) has made sufficient efforts to take charge of this instrumentation".

#### Political Rush to Bihar for Relief



PATNA: The visitation of the twin disasters of cyclone and

earthquake -in quick succession-in Bihar has come at a time when the state assembly elections are just five months away prompting leaders both from the BJP and ruling JD(U) leaders to pitch aggressively on relief operation front. The BJP in particular is seen proactively engaged in the relief operations even as one union minister after another headed for Raxaual, the border town where relief camps have been set up. From the ruling JD(U), it is Nitish Kumar who has take the burden all by himself-opp

## HRD Ministry formulates joint seat allocation authority for admissions to IITs, NITs and IIITs

http://www.prepsure.com/news/hrd-ministry-formulates-joint-seat-allocation-authority-for-admissions-to-iits-nits-and-iiits/

The Human Resource Development Ministry has formulated a joint seat allocation authority for admissions to <a href="ITS">ITS</a>, NITs and IIITs. This would lead the 80 IITs, NITs, IIITs and other centrally funded technical institutions, with more than 32,000 seats across the country, to be available on one common platform for students. A meeting is scheduled by the end of this week for brainstorming on details for releasing the official notification. Another major change is that all the courses would be offered online instead of individual process by these institutes. National Informatics Centre (NIC) is to host the site for online joint seat allocation.

"A joint seat allocation process will save time for students and will ensure there are not many vacancies in premier institutions. Since the process does not allow any student to take more than one seat, there is no fear of students blocking seats," said an <u>IIT</u> professor.

The process would take into consideration multiple rank lists and which would be based on merit and choices given by students. A student can select as many options as possible from all 81 institutes.

In August 2014, the Delhi HC had ordered that common counselling should be implemented from the academic year 2015-16. It gave the verdict based on a PIL that was filed in 2010 which brought to light the fact that a number of precious engineering seats are left vacant because students choose one of the seats offered to them in JEE Main counselling and JEE Advanced counselling. Till now, the counselling process of <a href="NITs">NITs</a> and IITs is completely separate and hence, if a student is offered a seat at an IIT and an NIT and student chooses one of them, the other seat is left vacant.

<u>Ministry of Human Resource Development (HRD Ministry)</u> counsel Additional Solicitor General Sanjay Jain also told the court that the National Informatics Center (NIC), which was responsible for the development of the synchronised counselling software.

#### IIT-B students to create new think tank for education policies

http://www.hindustantimes.com/mumbai/new-think-tank-at-iit-b-for-education-policies/article1-1342297.aspx

In a first, students of Indian Institute of Technology-Bombay (IIT-B) are set to create a think tank that will research and come up with suggestions on education policies announced by the ministry of human resource development (MHRD).

The idea for the student body was formed last month, after PhD and post-graduate students across IITs protested against low stipends, forcing the ministry to revise them.

"After the success of the stipend protests, we realised that despite being the most affected by education polices and decisions, students have very little say in them," Niranjan Thakurdesai, a final-year student at IIT-B.

The think-tank will initially focus on education-related policies and may later on expand to other fields like energy and finance. Three leaders will act as representatives to the core committee. "Every think-tank leader will have three coordinators to collect data required for the topic of study," Thakurdesai said.

Proposals for suggestions and changes in the policies and reform will be regularly sent to the HRD ministry.

The general secretary of academic affairs at IIT-B will chair the core committee and ensure smooth functioning of the group, while the general secretary of hostel affairs at the Institute will seek national and international collaborations to develop the policy-making skills of students through the international relations cell at IIT-B.

The team will collaborate with other IITs, facilitate technical projects and generate referendums for analysing issues and making proposals.

"We are in the process of filing out applications for those who want to be a part of the think tank. Interviews for the core committee and coordinators will happen soon after," said Thakurdesai.

Permissions and suggestions have been sought from the dean of students' affairs at IIT-B, Urjit Yajnik for the proposed student think-tank. "I am happy that students have taken such an initiative to be part of policy making. Student involvement in policy is crucial and IIT-B is perhaps one of the first to do so," Yajnik said.

## Smriti Irani defends appointment of Vice Chancellors by UPA govt

http://zeenews.india.com/news/india/smriti-irani-defends-appointment-of-vice-chancellors-by-upagovt\_1587084.html

New Delhi: Government Wednesday steered clear of getting into any controversy over the appointment of some <u>Vice Chancellors</u> by the UPA government, saying they were selected by Search and Selection Committees and any comment on them would go against the autonomy of the universities.

During Question Hour in Lok Sabha, HRD Minister Smriti Irani defended the appointments after a BJP member questioned the selection of army and IAS officers as Vice Chancellors.

In an apparent reference to the appointment of Lt Gen (Retd) Zameeruddin Shah as the Aligarh Muslim University's VC, Irani said the appointment was made by the UPA government and "if in a democracy, the appointment is made by the Search and Selection Committee", then it should be accepted.

"Any comment would not be good due to the autonomy enjoyed by the central universities," she said, replying to questions.

Under the BJP government, there has been an increase of 55 per cent in fellowships and an estimated 80,000 people had benefitted from it, she claimed.

Irani also said the government had taken measures to fill up vacancies in central universities, adding that the UGC had advised state governments to appoint teachers against existing vacancies.

Her remarks came after members expressed concern over large number of vacant teaching posts in various institutions.

## Smriti Irani to Rajya Sabha: UGC taking action against blacklisted universities

http://indiatoday.in/education/story/smriti-irani-tells-rajya-sabha-about-ugc-action-against-fake-universities/1/432768.html

The Human Resource Development (HRD) minister Smriti Irani has stated in the Rajya Sabha that the University Grants Commission (UGC) is making efforts in dealing with the issue of fake universities. The UGC has identified 21 fake universities across the country. These universities are carrying out their functions in violation of the UGC Act, 1956.

According to investigations by the UGC, these 21 universities are running several undergraduate and postgraduate programmes which are not accredited from either the state, central, UGC or any other authority capable of granting accreditation. These institutions do not have the capacity to award any degrees.

In her communication to the Rajya Sabha, Smriti Irani has mentioned the steps taken by the UGC in order to resolve the problem of fake universities in different parts of the country.]

- The UGC has published a list of fake universities on its website
- It has informed all the unrecognised universities that any misleading advertisements by them will lead to legal action under the IPC and UGC Act and others. Few cases against the unapproved universities have already been filed by the UGC
- The UGC will defend the cases against fake universities in the courts. However, any action against such universities can only be taken by the state governments and local authorities
- The UGC has sent notices to the heads of these universities, asking them to close down the universities with immediate effect. It has also sent reminder letters to the education secretaries of states for taking action against the unrecognised universities

Earlier this month, the Human Resource Development (HRD) Ministry had rejected the University Grants Commission's (UGC) proposal to clear 34 out of 44 deemed universities from the blacklist.

These 44 universities had been blacklisted in 2009, by the Tandon Committee set up under the then HRD Minister Kapil Sibal. The committee found that these universities were lacking in the quality of education as well as the infrastructure that they provided. It said that they are unfit for recognition and awarding degrees. Only three out of these 44 universities voluntarily surrendered their deemed status and established themselves as institutes. The remaining varsities, however, moved court against the committee's report.

Recently, UGC also prepared its reports regarding the conditions of the remaining 41 universities. And according to its investigations 34 out of the 41 universities deserve to hold the deemed status.

As both the reports had inspected, the universities based on different parameters and the results of both commissions are entirely different, a bench led by Justice Dipak Misra had ordered the HRD Ministry to find out the validity of the two reports; and formulate uniform guidelines for conducting such inspections.

#### HT.COM ND 29.04.2015 P-8

# Indian Universities make global top 100 in QS ranking

Vanita Srivastava

while individually the Indian institutes may still be struggling in the ranking index, there is some good news as far as ranking across different subjects are concerned. Indian universities display increased international competitiveness in the top 100 with a stronger presence across the subjects, according to the QS World University Rankings by Subject, released on Tuesday.

The annual Rankings by Subject is a comprehensive guide to the world's top universities in a range of popular subject areas. Using data on reputation and research citations, the rankings highlight the top universities in the world for 36 individual subjects



American universities dominate in terms of the number of subjects in which they lead, just as they do in all the global institutional rankings. Harvard and the Massachusetts Institute of Technology (MIT) continue to take the lion's share of top places, leading in 21 subjects.

India secures 107 places across

the 36 subject tables, including the six new disciplines for 2015– Architecture, Business Studies, and Dentistry,

Delhi University achieves the highest rank of all 20 Indian universities featured in the rankings, placing 17th in the world for the new Development Studies table.

#### Hindustan Times ND 29/04/2015 HT Education Times P-3

## 'IIM Bill is a long-awaited move'

Gauri Kohli

gauri.kohli@hindustantimes.com

It has been a few years since the Indian Institutes of Management (IIM) Bill was proposed. If passed in the ongoing Parliament session, the legislation will empower the 13 IIMs to award degrees to students instead of diplomas. Most management education experts say this will mean good news for over 4,000 students studying at the IIMs.

Currently, all the IIMs award a postgraduate diploma in management (PGDM). According to Bakul Dholakia, former director, IIM Ahmedabad: "IIMs have always been perceived as the pioneers of the PGDM course in India. They have had very high credibility because of their commitment to excellence, quality and culture. This bill is a good move. If the IIMs offer a master's degree instead of a PGDM, it will change their brand value."

IIMs cannot offer degrees as they have been set up under the



PRESERVES OUR AUTONOMY
THAT HAS MADE IIMS CREDIBLE
INSTITUTIONS. THE IIM DEGREE
WILL BE MORE TRANSPORTABLE
ACROSS THE ACADEMIC WORLD

DEBASHIS CHATTERJEE, former director, iim kozhikode

Societies Registration Act. "The bill becoming an act is a longawaited and welcome move. It will help IIMs integrate with the larger academic world. However, the bill's impact on the quality and rigour of the academic processes within the IIMs will only be known after the bill comes into effect. The students will find the IIM degree to be more transportable across the academic world rather than the PG diploma we currently give them," says Debashis Chatteriee, former director. IIM Kozhikode.

Elaborating on the other impli-

cations of the bill. Professor Rajiv K Srivastava, director, IIM Lucknow, says: "For students who live and work in India, the new legislation will not make much difference since the IIM diploma is recognised as equivalent to an MBA. However, it could be beneficial for new programmes launched by institutes. Earlier, students seeking jobs/admissions abroad had to explain to their new institutes the equivalence of degrees but this is gradually reducing, especially with international accreditation. The bill will make it more convenient."

#### Hindustan Times ND 29/04/2015 HT Education Times P-1

### IIM Bill: PGDM institutes at a disadvantage

Gauri Kohli

a gauri.kohli@hindustantimes.com

Authorities in the 400 non-IIM B-schools in the country are concerned about the Indian Institutes of Management (IIM) Bill. These institutes offer a postgraduate diploma in management (PGDM), which is also offered by the IIMs. The proposed bill will allow the IIMs to offer degrees once it is passed, while other B-schools would still offer a PGDM.

Expressing his apprehension over the implications of the bill, Harivansh Chaturvedi, alternate president, Education Promotion Society of India (EPSI), says: "For all PGDM institutions, being run by private trust or societies, the bill will create a very unfavourable situation. If the IIM Bill 2015 is passed by the Parliament, it will put a big question mark on PGDM programmes. The legal, financial and market validity of a PGDM will be in jeopardy."

EPSI, a confederation of private business schools, has been fighting for the autonomy issue of PGDM institutions along with Association of Indian Management Schools.

EPSI had written to Smriti Irani, minister for human ALL PGDM INSTITUTES
WHICH ARE 20 YEARS
OLD OR HAVE BEEN
ACCREDITED BY NBA
CAN BE GIVEN DEGREEAWARDING POWERS

resource development (HRD), on the issue in October 2014. Chaturvedi says that EPSI has always demanded a level-playing field for autonomous private B-schools offering PGDM programmes with IIMs.

"These B-schools have been in place for the last 50 to 60 years

and some of the top private institutions are comparable to many IIMs. A level-playing field can be created by confering them the power to grant degrees. This can be achieved by allowing them to become deemed universities. A separate bill can be prepared and passed in Parliament for this," says Chaturvedi.

He suggests other alternatives that can help achieve this.

"All those PGDM institutions which are 20 years old or have been accredited by the National Board of Accreditation can be given degree-awarding powers, similar to the IIMs as pro-

posed. The rest of the PGDM institutions can be asked to get affiliation from any state/public university. An Indian Management Council can also be set up as a regulatory body for management education. It can take over the current role of the All India Council for Technical Education and should act as a catalyst for management education at undergraduate, postgraduate and doctoral levels," says Chaturvedi.

**CONTINUED ON PAGE 04** 

SEE PAGE 03 FOR RELATED STORY

**CONTINUED FROM PAGE 1** 

## IIM Bill: PGDM institutes at a disadvantage

The Federation of Associations of Managements of Unaided Professional Educational Institutions in India has also written to the HRD minister on the matter. "The trump card for the 400 autonomous B-schools is that they also offer PGDM programmes as in the case of IIMs. This opportunity will be lost once you pass the bill giving degree-awarding status to IIMs. In fairness, kindly consider these institutions also as degreeawarding institutions. They are centres of excellence and have been in existence for more than 20 years," says the letter dated April 8, 2015, a copy of which is with HT Education.

EPSI had sought feedback from PGDM institutions on the matter and they have expressed concern over the bill. "Why should the law of equality not apply to both IIMs and PGDM institutions as IIMs are also AICTE-approved institutions like us? PGDM institutions should be treated as self-financed autonomous degree holding institutions and given the freedom to offer

undergraduate, postgraduate and research level courses. They should be allowed to create their own financial resources. They should also be free to fix and follow high quality international education standards from time to time," says PL Maggu, chairman, Graduate School of Business and Administration, Greater Noida, in a letter to EPSI.

B-schools in other cities have sent their suggestions to EPSI. "The present IIM Bill can be renamed as the Indian Management Education Bill to provide a level-playing field to other private institutes. Moreover, a clause should be added in such a bill which says that the PGDM offered by AICTEapproved institutions be deemed equivalent to an MBA degree offered by universities in India and be treated at par with MBA degree awarded by universities for pursuing higher studies ie MPhil, PhD and post doctoral fellowship," says SS Mohanty, director, St Francis Institute of Management and Research, Mumbai.

#### Hindustan Times ND 29/04/2015 HT Education Times P-1

## 'Proper planning' not done to launch IIM-Indore programme

When IIM Indore had launched its management course called Integrated Programme in Management (IPM) in 2011, industry experts had questioned the rationale behind starting this course as they said it did not follow the mandate for which IIMs were created in India.

"The IIM mandate is not to start undergraduate programmes and admit students for that. That's the reason why, thus far, the institutes have not been granted degree-conferring status. IIMs were set up as institutes of excellence for postgraduate management programmes. So directors and senior faculty of other IIMs were amazed when IIM-I launched an undergraduate programme without having the power to grant degrees," says a former IIM director.

Asking the students to study for an open university degree with the five-year programme was also not right. Bakul Dholakia, former director of IIM Ahmedabad, says, "It was a conceptual error on the part of IIM Indore to launch such a course. IIMs should not get into teaching undergraduate programmes."

JB Singh, principal, Guru Gobind Singh College of Commerce, Delhi University, says, "I have no hesitation in saying that it amounts to fraud if an institute that's so well reputed asks the students to do a degree from an open university just because it doesn't have the mandate to run an undergraduate programme. Why should the institute start such a course until it gets degree-conferring power?"

Singh is of the opinion that swimming and physical training should not be compulsory subjects for students of management. These are optional subjects and are not related to management. When contacted, N Ravichandran, who started the course in IIM-I as director, refused to talk about it. "It was my past. I don't want to talk about it or give any clarifications now. You should talk to the present director Rishikesha T Krishnan," he adds.

MJ Xavier, founding director of IIM-Ranchi, currently the executive director at VIT Business School (Vellore/Chennai), says that the idea of starting a five-year management programme is quite valid "but on the operational front, there are serious challenges and IIM-I should do a rethink on continuing the course. It is not keeping promises when you are saying that you are IIM and you are making students do an open university degree course," he says.

- Jeevan Prakash Sharma

Hindustan Times ND 29/04/2015 (HTEducation Times) P-1



## IIT-B wins National Intellectual Property awards in two categories

http://timesofindia.indiatimes.com/home/education/IIT-B-wins-National-Intellectual-Property-awards-in-two-categories/articleshow/47083563.cms?

MUMBAI: IIT-Bombay won the National Intellectual Property awards for 2015 in two categories. It won the top Indian academic institution for patents, best commercialization of patents based in India and the WIPO Users trophy. The award was presented by minister of commerce and industry, Nirmala Sitharaman, to Devang Khakhar, IIT-B director, Prasanna M Mujumdar, dean (research and development) and Padma Satish, chief technical officer, at an event organised by the Confederation of Indian Industry (CII) and the Indian Patents Office (IPO), last week in New Delhi.

The Indian intellectual property office in the Department of Industrial Policy and Promotion of the Ministry of Commerce and Industry, Government of India, confers the annual IP awards on outstanding innovators, organizations and companies in the field of patents, designs, trademarks and geographical indications on the occasion of World IP Day every year.

Khakhar said, "With more than 55% of the student strength of 9,800 enrolled for post graduate programmes and the establishment of high end research and development infrastructure, the research output of the institute is sizeable in terms of generation of new knowledge, know-how and intellectual property. We have been steadily refining policies, processes, mechanisms and incentives to promote R&D amongst our faculty, students and staff." IIT Bombay received a cash prize of Rs.2 lakhs for winning the award in two categories.

#### Faculty crunch affects higher education

Despite multiple HE quality of higher education institutions monitoringthe o start with the nature of higher educato start with the nature of higher educa-tion institutions. The nature of degree-awarding institutions in India is compli-cated primarily due to affiliation and funding sources. They may be cate-gorised into Central Universities (fully quality of higher education in India, gorised into Central Universities (fully funded by the central government), state universities (funded by state government), state universities (funded by state governments), and constant government). Private state universities (funded by private individuals or trusts). Deemed universities (government) or privately funded), and institutions of national importance (funded by the central government).

With more than 700 universities and 36,000 affiliated colleges enrolling nearly 30 million students which makes about 22 per cent Gross Enrolment universities are working with half the capacity of the faculty required. This results in dilution of

36,000 affiliated colleges enrolling neary 30 million students which makes
about 22 per cent Gross Enrolment
Ratio (GER) in higher education in
India, the scene is quite complex. With
all these institutions, nearly 36 per cent
of students are enrolled in bachelor's
degree programmes with about 74 per
cent enrolling in three-year B.A.,
B.Com. or B.Sc. degrees. One-sixth of
all Indian students are enrolled in engineering technology degrees. Education, medicine, agriculture, veterinary
science and law all together accounts
for less than 10 per cent students pursue post graduate studies whereas only
2 per cent are enrolled in doctoral
degree and other diploma programmes.
These numbers would see a changewhen the country meets the target of 30
per cent Gross Enrolment Ratio (GER)
in higher education by 2030.

The above statistical details on the
number of universities and colleges present quite a satisfactory picture of higher
education in India. However, when one
looks at the quality, the scenario is quite
disappointing. Even the highly rated ITEs
and IIMs do not figure in the top 200 universities in the world by any of the rankversities in the world by any of the rank-

disappointing. Even the highly rated ITIs and IIMs do not figure in the tog 200 universities in the world by any of the ranking agencies. There are many reasons for such dismal performance even after 70 years of independence. One of the important reasons may be attributed to low Pupil-Reacher Ratio (PTR) and quality of faculty. The present Pupil Teacher Ratio (PTR) in higher education (universities and colleges in executed 32) and colleges) is around 1:23 whereas the recommended values as per University Grants Commission guidelines is 1:12 for postgraduate students and 1:15 for

Multiple agencies to control
In India, the Ministry of Human
Resource Development (MHRD) is
responsible for supervising the functioning of all the universities through its chief
regulatory body —Universities Grants
Commission (UGC). The other government organisations which are responsible for the regulation of technical education are All-India Council for Technical
Education (AICTE). There are two quality assessment bodies, namely National
Assessment and Accreditation Council
(NAAC) and National Board of Accreditation (NBC). AICTE and UGC are responsible for providing guidelines for recruitment
of faculty that specifies the
minimum qualifications and experiences
required at different levels. Recruitments required at different levels. Recruitments of faculty are being made by the univer-sity authorities or the state governments. Today most of the educational institu-

tions in the country are facing a serious faculty crunch. Many graduate and post



Less than 2 per cent of enrolled students in India nur

The course curriculum at undergraduate and postgraduate levels should be revised. Provisions should be made for interested students to take up research-oriented courses so that they get motivated and are encouraged to enrol Ph.D. programmes. Such courses may even be introduced at the school level.

graduate departments in colleges and universities are functioning with less than 50 per cent of the total sanctioned faculty strength. Even institutions of international repute like IITs are working with more than 30 per cent faculty positions lying vacant in most of the departments. One estimate projects more than 30,0,000 vacancies of college and university teachers in the country. A task force on faculty shortage is the the country at 54 per cent. A further 1,00,000 teachers will be required each year in colleges in the coming decade if the shortage is not addressed as the country's higher education system expands. The recruiters cite lack of competent candidates as the main reason for such a large scale vacancy of faculty members in the country. However, one needs to look at this problem more objectively. graduate departments in colleges and uni

Plecemeal solutions
In recent years the governments have tried to address the problem of faculty crunch by increasing the retirement age of college and university teachers from 60 to 65. ITS and Central Universities have even made the precisions of 60 to 65. IT's and Central Universities have even made the provisions of extending the services of their faculty members up to 70 years. But is this enough to solve this problem? Unless colleges and universities have sufficient qualified and competent teachers on their regular rolls and PTR is sufficiently and suitably brought down it is hard to think that quality of higher education in India would match with the good institutions of the world.

The University Grants Commission

through the Central Board of Secondary Education (CBSE) conducts National Eli-gibility Test (NET) for prospective col-lege and university teachers every year. lege and university teachers every year.
On the similar line various state governments also conduct their State-Level Eligibility Test (SLET). However, when it
comes to recruitment, colleges and unisersifies have never been regular in
recruiting teachers for their departments. Many universities take years to
recruit teachers and in the process the
students are the worst sufferers. Some of
the reasons for the delay in permittened. students are the worst sufferers. Some of the reasons for the delay in recruitment of teachers are: the political interference in Vice Chancellor and other university higher officials' appointments and even for faculty recruitments (leading to judi-cial intervention), the clash between the Chancellor and respective state govern-ments and bureaucratic hassles created through college and university services. through college and university service commission. Also, the poor financial con-dition of the institutions is another factor. Moreover, the question of not getting sufficient qualified and competent peo-

sufficient qualified and competent peo-ple for faculty positions also needs a seri-ous scrutiny. Even though central and state agencies through their NET and SLET certify candidates qualification for the job, colleges and universities look for candidates with Ph.D. degrees. This might be to help the candidates in future as they might fine difficulties to get pro-position for spirites the highest least with as they impure accumentates one promotion for going to the higher level without a Ph.D. degree. When NET and SLET qualified candidates are not recruited directly for teaching positions, many of those who can't afford pursuing their Ph. D. degrees or wait for years to get recruited, go for other lower-level jobs.

#### Burden of mixed population

dents towards teaching and research. It is quite natural that anyone would like to financially settle down at an early age to look after their dwn as well as their familys well-being. Since a country like India has very large population, where the literacy rate is improving, mortality rate is coming down, life expectancy is increasing but economic growth is not consistantly high and is to expectations. increasing but economic growth is not consistently high and job opportunities are limited, everyone wants a job first. They cannot wait for an unknown period to get absorbed in higher education teaching profession when they are not werey sure when the recruitment would actually take place. Once they get a job, either they remain satisfied with the job or work only to get a career growth.

Moreover, in Indian society, people at large long for early recognition. They try

hardeover, in riman society, people at large long for early recognition. They try hard to get a reasonable job at an early age to be socially recognised. A person continuing in studies/research is usually not recognised at par with the person of the same age group who gets into a job and is drawing a handsome salary. It is also natural that the parents from poor economic backgrounds would like their wards to complete their education and start earning at the earliest. The parents from the middle and higher income groups want their wards to join a job with a high starting salary and for that they would send them for acquiring some degree in management or computer applications if required. Thus, there is hardly any encouragement even from socio-economically well-off educated families for their children to start a career in teaching and/or pursue research

#### Lack of clarity in guidelines

It is high time that governments pre-pare clear guidelines for the recruit-ment of college and university teachers

sponsored institutions. For private insti-tutions, their recognition must be linked with their PTR matching with the national expectations. It has been noticed that various institutions have gone for contractual appointments but these contractual appointments in pri-vate as well as government institutions may prove to be a temporary solution, for long-term interest of the organisa-tion a tenure appointment would always be the necessity and for that a clear and mandated policy is required. Any viola-

beins enthre appointmen would aways be the necessity and for that a clear and mandated policy is required. Any violation of the policy and guidelines must invite serious consequences for the organisation. It is also required that faculty recruitments for all disciplines are paid equal attention to ensure a balanced growth of the country.

The government also should take measures to attract bright young postgraduates by offering handsome scholarships to the Ph.D. scholars. However, while increasing opportunities for doctoral research in terms of number, care must be taken to ensure that quality is in no way compromised. This is going to be a real challenge.

While it is generally not that difficult to

a real challenge.
While it is generally not that difficult to get well qualified candidates with Ph.Ds. in sciences and humanities, the real challenge is to recruit faculty in engineering disciplines as the number of suitable applicants is abnormally low. The major reason is that with professional degrees it is relatively easy to get a decent job for the students graduating from well-recognised institutions. The initial salary is so high compared to the scholarships offered for doing Masters or doctoral programmes that even the

scholarships offered for doing Masters or doctoral programmes that even the motivated students cannot resist the temptation of taking up a job. The family and social pressure also plays a major role in such decisions.

One of the solutions, especially for Engineering institutions, could be to recruit bright young graduates and postgraduates as Teaching Assistants and Lecturers, respectively, with a good initial package and other benefits. While working, they would work for their degrees and also do some undergraduate teaching. This will reduce the load on the existing faculty members and they would be able to concentrate on their research as more time will be and they wound be able to the contentiate on their research as more time will be available with them. Thus it offers a win-win situation for the institute and the country. The institute will be able to partially handle its scarcity of faculty and ultimately help in creating a pool of cualified and econyatest teachers.

qualified and competent teachers.
Furthermore, it is also needed that the course curriculum at undergraduate and postgraduate levels be revised. Proand postgraduate levels be revised. Pro-visions should be made for interested students to take up research-oriented courses so that they get motivated and are encouraged to emol for Ph.D. pro-grammes. Such courses may even be introduced at the school level. Finally, the existing teaching commu-nity has also got a major role to play in addressing the problem. They need to work for improving the image of this pro-

work for improving the image of this pro-fession so that it gets its old glory back. The new generation of smart students must see the hard work and genuine must see the hard work and genuine efforts put in by their teachers in prepar-ing them for the future. Teachers should not limit themselves as content providers rather they should present themselves as role models for the young generation. This would attract the new generation of students towards teaching. A.K. Sarkar is Senior Professor, Dept of Civil Engineering and Director, BITS Pilani Capmpus and S.K.

#### Politically incorrect

quality

- mended value as per University Grants Com-mission guidelines is 1:12 for postgraduate students and 1:15 for undergraduates.
- Even institutions of international repute like ITS are working with more than 30 per cent faculty positions lying vacant in most of the departments. One estimate projects more than 3,00,000 vacancies of college and university teachers in the country.
- By increasing the retirement age of college and university teachers from 60 to 65, and up to 70 for IITs and Central Universities, the government is trying to plug the acute shortage of faculty.
- The political interference in appointments of vice chancellors, senior officials and even for the facas further complicated

#### Hindustan Times ND 29/04/2015 P-14

#### focusonafew

## We've got a lot of catching up to do

The China-India gap in higher education, if left unattended, will impact the economy and defence in the future

#### Pushkar

The China versus India story continues to be re-told since the topic first became a cottage industry among academics and commentators just over a decade ago. Most comparisons between the two countries are based on hard economic issues; occasionally, however, some accounts discuss the state of health, environment and education, including higher education.

China and India have enormously huge higher education sectors. China's is the largest and India is third, in terms of number of enrolments. Both countries also have a relatively small number of elite institutions — such as the IITs, the IIMs and central universities in India and around 100 research universities such as Peking University and Tsinghua University in China — which dwarf other institutions in terms of State funding and support and in the quality of education.

Large numbers of Chinese and Indian students also continue to head abroad for higher education. The migration of an increasing number of students to private universities and to the West is in part driven by growing prosperity but also by the inability of the State to build

new institutions at a rapid pace and to maintain quality at public institutions.

China placed six universities in the top 200 (and 32 in the top 500) in the Academic Ranking of World Universities 2014—considered by many experts to be more accurate than the rankings by QS and THE—prepared by the Shanghai Jiao Tong University. Only the Indian Institute of Science finished in the top 500 at 327.

China's success in raising several world-class universities goes back to 1995 when it launched Project 211 to develop 100 universities. Supported by massive government funding, these universities hired the most competent academics from China and also well-established academics from the Chinese diaspora in the US and elsewhere.

China's lead over India is also large in terms of patents filed. According to the World Intellectual Property Organization, in 2013, China filed 825,136 patent applications to India's 43,031.

To the extent that it is elite institutions that are at the forefront of knowledge production and innovation, the India-China gap in higher education should be a cause for concern. If left unattended, this gap will impact on the economy, defence and

other areas, in the coming years.

China has surged ahead by making a concerted effort to elevate its elite institutions to world-class status, perhaps at the expense of the majority of its universities. The Chinese appear to have realised that improving overall quality across the higher education sector is a humongous task which must come second.

India's policymakers appear to be either lacking in clarity or seem far too ambitious. The Universities for Research and Innovation Bill 2012, which intended to establish universities focused on innovation and research, has been buried. Instead, the ministry of human resource development has cast a bigger net in launching the Rashtriya Uchchatar Shiksha Abhiyan to address the problem of quality across the higher education sector. Scarce resources have been committed to building new IITs and other central government-funded institutions without sufficient attention to quality. It is not surprising that India's elite institutions have not made as much progress as China's, leaving India trailing behind.

Pushkar is assistant professor, department of humanities and social sciences, BITS Pilani-Goa

The views expressed by the author are personal

#### Hindustan Times ND 29/04/2015

## In quake mock-ups in India, a million deaths

HIGH RISK NDMA reports based on 8-magnitude quake simulations is worrying

Sanjib Kr Baruah

sanjib.baruah@hindustantimes.com

**NEW DELHI:** Swathes of northwest India will be reduced to heaps of body bags if an earthquake a tad stronger than the 7.8-magnitude Kangra Valley earthquake of 1905, identical in intensity to Saturday's Nepal monster, occurs now, say scientists.

Similarly, close to a million people in the Northeast will be entombed by hills of rubble if a quake similar to the one that struck Shillong in 1897 strikes

But first, the disclaimer: these are not forecasts but hypothetical scenarios published in National Disaster Management Authority (NDMA) reports based on separate simulations of the Kangra and Shillong quakes that collectively killed more than 21,000 people over a century ago.

Second, a repeat disclaimer: science has yet to give humanity a technology to predict an earthquake in advance. NDMA and other agencies depend on science-based scenarios, however alarming they may look or sound, to assess risk factors.



A member of a rescue team from Holland marks a wall at Bhaktapur, near Kathmandu, on Tuesday. **RAJ K RAJ/HT PHOTO** 

The July 2014 report says about a million people in Himachal Pradesh, Haryana and Punjab will perish if an 8-magnitude earthquake epicentred at Mandi strikes at midnight when most people are sleeping indoors. And nearly 5 million will suffer injuries, serious or slight.

The catastrophe will wipe out 2.35% of Himachal's population, says the nearly two-year study conducted in 2012-2013 by IIT-Bombay and IIT-Kanpur professors. It was part of a presentation by the country's top disaster-management agency that the Prime Minister chairs.

"We replicated the 1905 Kangra earthquake and superimposed it to current times. We studied factors like the intensity of vibrations, building structures such as mud, timber or brick, and collected in detail data on the number of houses, people, etc. to arrive at conclusions with a reasonable amount of accuracy," said research team leader Ravi Sinha, who teaches civil engineering at IIT-Bombay and is also a top earthquake

Considered one of the six most seismically active regions in the world, the Northeast has seen some of the biggest quakes in history - Shillong in 1897 and Assam in 1950.

The NDMA report prepared by the Jorhat-based CSIR-Northeast Institute of Science and Technology says Assam will top the casualty list with 6 lakh deaths while Arunachal Pradesh will suffer the least, mostly because of its low density of population.

Ranju Duarah, chief scientist at CSIR-NEIST's geo-science unit, said the findings were based on a scientific assessment of the region's vulnerability to any 1897-class earthquake. "Our focal areas of interest in simulating the scenario are populations, housing structures and

local geology."

#### Times Of India ND 29/04/2015 P-25

## Two-way trip to Mars possible

#### Electric Solar Sail To Be Used To Mine Water From Asteroid, Make Fuel

London: Electric solar wind sail could make continuous bidirectional manned Mars flights possible by utilizing water mined from the asteroids, researchers claim.

In the heart of this scheme is the electric solar wind sail which provides propellantless transportation within the solar system, thus enabling economical asteroid mining. The E-sail, that was invented in Finland in 2006, utilizes long, charged tethers to convert natural solar wind momentum flux into spacecraft thrust.

According to Pekka Janhunen, a researcher in the Finnish Meteorological Institute, and colleagues the E-sail could make asteroid mining feasible by providing essentially free logistics in the solar system outside of Earth's magnetosphere.

After finding a suitable water bearing asteroid, a mining unit could be sent by the E-sail to extract the water from asteroid soil.



GIANT LEAP: Electric solar wind sail provides propellantless transportation within the solar system, thus enabling economical asteroid mining. It utilizes long, charged tethers to convert solar wind momentum flux into spacecraft thrust

This can be done by heating the material and letting the evolving water vapour condense in a cool container. When the container is full, it is separated from the mining unit and transported with an E-sail in to the orbit of Mars or Earth, where it is split into hydrogen and oxygen and liquefied.

The liquid hydrogen/oxygen (LH2/LOX) fuel can be used to fill the tanks of manned vehicles

travelling between Earth and Mars, researchers said.

Due to the exponential nature of the rocket equation, intermediate tankings reduce the launch mass dramatically.

During the trip, asteroidmined water could also be used as radiation shielding of the manned module to reduce the launch mass further.

With cheap propellant available in Mars orbit, there is also the option of fully propulsive landing on Mars which eliminates the need of a massive and expensive heat shield. The Electric solar wind sail facilitated Manned Mars Initiative, EMMI, could provide a fundamentally new, economically sustainable way to approach manned Mars flights, researchers said. The running costs of the EMMI are not expected to much exceed those of maintaining the International Space Station, they said. PTI

#### Hindustan Times ND 29/04/2015 P-19

#### CALLING ET

## Nasa begins hunt for alien life outside our solar system

#### Press Trust of India

■ letters@hindustantimes.com

WASHINGTON: A new NASA initiative is embracing a team approach to the quest for life on planets around other stars.

The Nexus for Exoplanet System Science (NEXSS) initiative will bring together the "best and brightest" and marshal the expertise of 10 universities, three NASA centres and two research institutes in an effort to find clues to life on faraway worlds.

The programme aims to better understand the various components of an exoplanet, as well as how the parent stars and neighbouring planets might interact to support life.

NEXSS will bring together planetary scientists, Earth scientists, heliophysicists and astronomers to identify and search for biosignatures, or signs of life. "This provides a synthesised approach in the search for planets with the greatest potential for signs of life," said Jim Green, NASA's director of planetary science.

"The hunt for exoplanets is not only a priority for astronomers, it's of keen interest to planetary and climate scientists as well," said Green.

One NEXSS project, called Exoplanets Unveiled, will specifically try to find out what the properties of exoplanetary systems are, particularly as they relate to their formation, evolution and potential to harbour life.

The project is led by James Graham, a professor of astronomy at the University of California, Berkeley, and will draw upon the expertise

### IS ANYONE OUT THERE?

NExSS initiative will bring together several experts in search for alien life

#### MANY CANDIDATES

More than 1,800 exoplanets, a planet that orbits a star other than the Sun, have been discovered since the launch of NASA's Kepler space telescope six years ago

Some of these worlds are potentially habitable.
Scientists are trying to understand how biology interacts with the atmosphere, geology, oceans, and interior of a planet, and how to spot theses interactions from afar

This "system science" approach is what NExSS will use to spot life on exoplanets

#### **COLLABORATIVE EFFORT**

Earth scientists develop a systems science approach by studying our home planet

Planetary scientists apply systems science to worlds within our solar system

Heliophysicists add another layer, by looking at how the Sun interacts with planets

Astrophysicists provide data on the exoplanets and host stars for the application of this systems science framework

## SEARCH TO UNDERSTAND WHAT MAKES UP AN EXOPLANET AND HOW A STAR AND ITS ORBITING PLANETS INTERACT TO SUPPORT LIFE

of Bruce Macintosh, a professor of physics at Stanford University and the principal investigator for the Gemini Planet Imager (GPI).

Most exoplanets are detected through the Doppler technique - measuring the "wobble" of the parent star as an unseen planet's gravity tugs on it - or though detection of a transit, as the planet's orbit brings it between

the star and Earth.

As the newest generation of instruments for imaging exoplanets, GPI blocks out the bright star to directly see the faint planet next door.

GPI has already imaged two previously known exoplanets and disks of planetary debris orbiting young stars where planets recently formed.

"Getting a complete picture of all the incredibly strange planetary systems out there will require every different technique," Macintosh said.

"With this new collaboration, we will combine the strengths of imaging, Doppler and transits to characterise planets and their orbits," said Macintosh.

#### April 28

#### Only prez can remove IIT director, says board

Hindustan Times (Jaipur)

FOUR FACULTY MEMBERS WOULD BE APPOINTED IN THE NEXT FEW MONTHS AND POST OF SENIOR PROFESSOR WOULD BE FILLED

JODHPUR: The Board of Governors (BoG) of Indian Institute of Technology (IIT) on Monday clarified, on the demand by the students, that BoG has no right to remove the director of IIT. The right lies only with the President of India.

Members of BoG held long talks over all aspects on the issue with students and faculty members.

Chairman of BoG, Govardhan Metha, while speaking to mediapersons, said in view of the protest being carried out by IIT students since March 31, a meeting of the members of BoG was called. A long discussion with the students and faculty members on their respective demands was held before this meeting, Metha said. The members of BoG took positive decisions on all demands.

Metha said that the director of IIT is himself a member of BoG and added, "BoG, in such condition, cannot take decision to remove its own member." The decision to remove the director of IIT can only be taken by the President of India, Metha said.

He said that all other demands of the students have been accepted. Metha said that the library, as per the demand, would now remain open till 12 midnight.

Four faculty members would also be appointed in the next few months and that the vacant posts of senior professor would also be filled soon, he said.

Labs in the institute, which had been closed earlier, would also be reopened soon, Metha said. Entrepreneurs and private individuals would also be allowed in these labs so that extra income can be earned, he added.

Metha also said that the IIT senate is likely to take a decision on reopening of system science course that had been closed in the institute for long. He said BoG would send a proposal on reopening of system science course to the Senate.

Metha also said that the amendments would also be made in code of conduct of the students but it would be done with the trust of the students. He added that that construction work of IIT buildings is also underway at progress on Nagour Road and research work in this new building is likely to be started by July 2015.

The classes of 40 to 50 students would also be conducted very soon. By July 2016, IIT Jodhpur would be functional in the new building and premises.

Meanwhile, students claimed that they are disappointed at the decisions of BoG. The students said they would not give up their demand of removal of director and would head to Delhi on May 2 with their demand. The students said they would explain to the President the ground level at IIT Jodhpur.

The students were demanding the ouster of institute director CVR Murti as they allege that he is responsible for termination of the services of many faculty members after assuming charge.

#### Hindustan Times ND 28/04/2015 P-8

CISF to conduct security analysis of all IITs, AIIMS **NEW DELHI:** The government asked the CISF to conduct a threat assessment and security analysis of all the 16 Indian Institutes of Technology (IITs) and Delhi's All India Institute of Medical Sciences (AIIMS). The decision was taken by the home ministry. All the 16 IITs - in Mumbai, Delhi, Kanpur, Chennai, Kharagpur, Guwahati, Indore, Roorkee, Varanasi, Hyderabad, Jodhpur, Patna, Bhubaneswar, Ropar, Gandhinagar and Mandi - and the AIIMS campus in Delhi have been brought under the "institutional and uniform" security processes as outlined by the CISF.

#### Millennium Post ND 28/04/2015 P-7

#### Govt sanctions CISF security consultancy for 16 IITs, AIIMS

M POST BUREAU

NEW DELHI: Prime Minister Narendra Modi-led NDA government has handed over the exercise of conducting a threat assessment and security analysis of all the 16 Indian Institutes of Technology (IITs) and Delhi's premier medical institute AIIMS to the central security force CISE.

The decision has been taken by the Union Home Ministry keeping in mind the vulnerability of these vital institutions and after witnessing the increasing reliance of important service sectors of the country on CISF consultancy to secure their businesses and large workforce against potential security threats like terror attacks and similar breaches, official sources said.

All the 16 IITs located in Mumbai, Delhi, Kanpur, Chennai, Kharagpur, Guwahati, Indore, Roorkee, Varanasi, Hyderabad, Jodhpur, Patna, Bhubaneswar, Ropar, Gandhinagar and Mandi and the All India Institute of Medical Sciences (AIIMS) campus in Delhi have been brought under the "institutional and uniform" security processes as outlined by the central force which has a centre of excellence in this regard.

#### Asian Age ND 28/04/2015 P-9

## CISF to carry security checks in AIIMS, IITs

AGE CORRESPONDENT NEW DELHI, APRIL 27

The Central Industrial Security Force (CISF). guarding vital installtions in the country, will undertake assessment and security analysis of all the 16 Indian Institutes of Technology (IITs) and Delhi's premier medical institute AIIMS. The decision is learnt to have All India Institute of been taken by the Union home ministry keeping

in mind the vulnerability of these vital institutions and after witnessing an increasing reliance of important service sectors of the country on CISF consultancy to secure their businesses large workforce against potential security threats like terror attacks and similar breaches, official sources said.

All the 16 IITs and the Medical Sciences (AIIMS) campus in Delhi have

been brought under the "institutional and uniform" security processes as outlined by the Central force. Sources said the experts and officers of the force will travel to all these locations in the coming days to chalk out fool-proof security apparatus.

Latest records show India Inc has been increasingly investing in professional anti-terror consultancy provided by

CISE.

#### Hindustan ND 28/04/2015 P-2

सीबीएसई ने सोमवार को घोषित किया प्रवेश परीक्षा का परिणाम

## नेईई मेन की कटऑफ 115 से गिरकर 105 हुई

#### पहला चरण

नई दिल्ली | कार्यालय संवाददाता

इंजीनियरिंग संस्थानों में दाखिले के लिए सीबीएसई ने सोमवार को जेईई-मेन परीक्षा का परिणाम घोषित कर दिया। इस बार सामान्य वर्ग के लिए 105 कटऑफ तय हुई है। पिछले साल कटऑफ 115 तय थी। इसके आधार पर जेईई-एडवांस्ड की परीक्षा में भाग लिया जा सकेगा।

इस वर्ष कटऑफ तीन साल के न्यूनतम स्तर पर पहुंच गई है। 2014 में यह 115 और 2013 में 113 रही थी। इस दफा आंकड़ा 105 पर पहुंच गया। बहरहाल, छात्र jeemain.nic.in पर परिणाम देख सकते हैं। वेबसाइट पर 'स्कोर ऑफ पेपर-01' ऑप्शन पर क्लिक करना होगा। उसके बाद एक नया पेज खुलेगा, वहां रोल नंबर और जन्म तिथि डालकर परिणाम देखा जा सकता है। वहीं इस साल ओबीसी के लिए कटऑफ 70, एससी के लिए 50 और एसटी वर्ग के छात्रों के लिए 44 अंक तय हुई है।

परिणाम दो चरण में घोषित किया जा रहा है। पहले चरण में सोमवार को पेपर का स्कोर घोषित किया गया है। दूसरे चरण में (रैंक) परिणाम 12वीं कक्षा के नतीजों के बाद घोषित होगा। इसके तहत

#### जेईई एडवांस के लिए 02 मई से पंजीकरण

जेईई एडवांस में पंजीकरण की प्रक्रिया
02 मई से शुरू होकर 07 मई तक
चलेगी। इसके लिए jeeadv.iitm.ac.in
पर पंजीकरण होगा। 24 मई को पेपर01 और पेपर-02 होंगे। 03 जून को
ओएमआर शीट की कॉपी सार्वजनिक
होगी। इसके बाद 08 जून को आंसर
शीट की कॉपी जारी होगी। 18 जून को
आईआईटी संस्थानों में दाखिले के लिए
जेईई-एडवांस का परिणाम आएगा।

jeemain.nic.in पर देख सकते हैं पर एडवांस के लिए परिणाम होगा पंजीकरण



#### क्या है जेईई मेन और एडवांस

आईआईटीं समेत अन्य इंजीनियरिंग संस्थानों में दाखिले के लिए जेईई-मेन और एडवांस्ड परीक्षा का आयोजन किया जाता है। पहली प्रक्रिया में जेईई-मेन की परीक्षा होती है। इसमें सफल होने वाले शीर्ष 1.50 लाख छात्र ही एडवांस्ड की परीक्षा दे सकते हैं। दरअसल, एडवांस्ड के लिए जेईई मेन क्वालिफाई परीक्षा है। एडवांस्ड की परीक्षा आईआईटी समेत एनआईटी संस्थानों में दाखिले के लिए होती है। वहीं जेईई-मेन की परीक्षा देने वाले जो छात्र शीर्ष डेढ़ लाख छात्रों में जगह नहीं बना पाते, उन्हें मेन के स्कोर और 12वीं के अंकों के आधार पर राज्य स्तर के इंजीनियरिंग कॉलेजों में दाखिला दिया जाता है।

12वीं के अंकों के अनुसार 07 जुलाई को रैंक घोषित होगी। इसमें ऑल इंडिया रैंक, राज्य स्तर की रैंक और वर्ग के अनुसार छात्रों की रैंक का ऐलान होगा।

इस बार भारत के अलावा आठ देशों में भी परीक्षा कराई गई थी। परीक्षा केंद्र कोलंबो, काठमांडु, सिंगापुर, बहरीन, दुबई, मस्कट, रियाद और शारजाह में थे। 2013 से आईआईटी में दाखिले के लिए होने वाली परीक्षा में बदलाव किया गया। इसे दो भागों, मेन और एडवांस्ड में आयोजित करने का फैसला लिया गया था। आईआईटी की सीटों पर दाखिले के लिए जेईई एडवांस्ड जरूरी है।

#### Amar Ujala ND 28/04/2015 P-7

## 1,52,401 ने किया क्वालिफाई

केंद्रीय माध्यमिक शिक्षा बोर्ड ने जेईई मेन का रिजल्ट घोषित किया

अमर उजाला ब्यूरो

नई दिल्ली। केंद्रीय माध्यमिक शिक्षा बोर्ड (सीबीएसई) ने जेईई मेन 2015 का रिजल्ट घोषित कर दिया है। इसके आधार पर 1,52,401 छात्र-छात्राओं ने क्वालिफाई किया है। इसमें 1,24,297 लड़के जबकि 28,104 लड़कियां हैं। क्वालिफाई करने वाले उम्मीदवार अब 24 मई को होने वाली जेईई एडवांस परीक्षा में बैठ सकेंगे।

नतीजों में बीते दो सालों के मुकाबले में गिरावट देखने को मिली है। सामान्य से लेकर ओबीसी-एससी और एसटी के कट ऑफ का ग्राफ गिरा है। इस साल जनरल के लिए 105 मार्क्स का कटऑफ स्कोर, ओबीसी के लिए 70, एससी के लिए 50 और एसटी के लिए 44 रहा है।

जेईई मेन की अप्रैल में हुई ऑफलाइन और ऑनलाइन परीक्षा के लिए 12,92,711 उम्मीदवार पंजीकृत हुए थे। जिसमें से ऑफलाइन के लिए 11,05,021



क्वालिफाई करने वालों में 1,24,297 छात्र और 28,104 छात्राएं

कट ऑफ ग्राफ नीचे, २४ मई को एडवांस परीक्षा आयोजित होगी

और ऑनलाइन 1,87,690 रिजस्ट्रेशन हुए थे। वहीं रिजल्ट घोषित के बाद ही उम्मीदवारों को अपना स्कोर कार्ड देखने में परेशानी हुई। कई परीक्षार्थियों ने नेटवर्क धीमा होने से रिजल्ट न देख पाने की शिकायंत की। सीबीएसई ने फिलहाल छात्रों को रैंक नहीं दिया गया है। दरअसल रैंक के लिए जहां 60 फीसदी अंक प्रवेश परीक्षा के होते हैं वहीं 40 प्रतिशत नंबर 12वीं के परिणाम के होते हैं। ऐसे में 12वीं के रिजल्ट के बाद रैंक जारी होगी। ऑल इंडिया रैंक स्टेट रैंक और कटेगरी रैंक बोर्ड की वेबसाइट पर 7 जुलाई को जारी होगी।

जेईई मेन के नतीजों के आधार पर तैयार होने वाली मेरिट लिस्ट के जिरवे एनआईटी, आईआईआईटी, डीटीयू व अन्य तकनीकी शिक्षण संस्थानों में दाखिले हो सकेंगे, जबिक देश की 15 आईआईटी, आईटी-बीएचयू व आईएसएम के

#### 2 मई से जेईई एडवांस के लिए पंजीकरण

आईआईटी की ओर से आयोजित जेईई एडवास के लिए पंजीकरण 2 मई से शुरू होगा। 24 मई को पेपर-1 और पेपर- 2 की परीक्षा होगी। 3 जून को ओआरएस इमेज जारी की जाएगी, जबकि 8 जून को एडवास केलिए आंसर-की जारी होगी। 18 जून को रिजल्ट जारी होगा।

स्नातक पाठ्यक्रमों की लगभग दस हजार सीटों में दाखिले के लिए जेईई एडवांस की परीक्षा 24 मई को होगी।

#### तीन सालों का कट ऑफ ग्राफ

श्रेणी	2015	2014	2013	
सामान्य	105	115	113	
ओबीसी	70	74	70	
एससी	50	53	- 50	
एसटी	44	47	45	

#### Pioneer ND 28/04/2015 P-4

## Govt not saffronising education: Irani

#### Defends scrapping of FYUP

PNS NEW DELHI

Rejecting allegations of Copposition MPs on Sangh Parivar's influence and saffronisation of education, Union Human Resource Development Minister Smriti Irani on Monday said the Centre was bound to act by the Constitution and accused people from certain sections of unleashing malicious propaganda against her.

Replying to the debate on Demands for Grants for the HRD Ministry in the Lok Sabha, which mostly witnessed arguments and counter-arguments with MPs, Irani made a strong defence for scrapping FYUP and asking IITs to seek her Ministry's advise on MoUs.

In her reply, which lasted more than 50 minutes, she rejected charges against her by the Opposition MPs for interfering in academic appointments and accused the UPA Government's tenure for

favourtism in such appoint-

The HRD Minister and TMC MPs were engaged in a verbal duel on matters related to the affairs of Visva-Bharati. In a combative mood, she cornered TMC MP Sugata Bose with facts and figures, after he questioned her style functioning in the Ministry.

questioned her style functioning in the Ministry.

Irani said that the spending in education during the Narendra Modi Government is more than the previous UPA regime. The Minister attacked the Opposition for accusing her of appointing Hindutva scholars to academic bodies, saying many of them are associated with the Left and Congress as well.

Irani singled out TMC MP Sugata Bose, drawing sharp reaction from his party members who demanded an apology which was outrightly rejected by her. Taking on Bose and Congress MP Sushmita Dev for their claims of appointing peo-

been on the streets, were we ready to meet that situation? If I have protected their future, why are they hurt?" she asked, taking a dig at leaders of some Opposition parties.

Opposition parties.

Responding to charges that Government was interfering with MoUs being signed by institutions like IITs, she wondered why the UPA Government was silent when the Delhi IIT had signed an agreement to open a campus in

Replying to the debate on Demands for Grants for the HRD Ministry in the Lok Sabha, Smriti Irani said that spending in education during the Narendra Modi Government is more than the previous UPA regime. She also attacked the Opposition for accusing her of appointing Hindutva scholars to academic bodies, saying many of them are associated with the Left and Congress as well

ple with "saffron" ideology to the Indian Council of Historical Research (ICHR), she said scholars like Purabi Roy, associated with CPI, and Sacchidananda Sahai, a close associate of Congress leader Santosh Mohan Dev (father of Sushmita Dev), too were appointed to the body. She strongly defended her decision to intervene in Delhi University's Four-Year Undergraduate Programme (FYUP).

"This was not approved by the President. The programme would have produced 77,000 students each year with degrees without any worth. Had they Mauritius using "taxpayers' money." She only went by the law passed by Parliament, she said. Trinamool Congress members vehemently protested Irani's jibes at Bose and demanded that she express regret for pointing her finger at him during her reply which, TMC leader Saugata Roy said,

was "just not acceptable". Irani rejected the demand and said "aspersions were made, doubts cast and snide remarks" made against her and "there is no question of an apology".

question of an apology".

Terming her reply as "combative and aggressive", Roy said it was due to the pressure she was facing within her party. Bose said he was not treated in such a manner earlier and added that he in his speech had only pointed out that the HRD Ministry should have shown a "modicum of respect" for noted experts, referring to the reported resignation of nuclear scientist Anil Kakodkar as the head of Board of Governors of IIT Mumbai. He was reportedly persuaded to stay on.

She accused Bose, a well-

She accused Bose, a well-known historian, of "mislead-ing" the House by referring to Kakodkar's resignation saying he, was still working. Responding to the demands of several members, she said she will try to increase Kendriya Vidyalaya admission "coupons" for MPs from the present six to ten.