

Newspaper Clips November 12, 2014

IIT-Delhi keen to admit students from non-engineering backgrounds

<http://testfunda.com/examprep/catcentre/cat-mba-info/article/iitdelhi-keen-to-admit-students-from-nonengineering-backgrounds.htm?assetid=6e08727e-5bb2-4f11-a5f7-feb3847787c3>

If recent reports are to be believed, Indian Institute of Technology, Delhi (IIT-D) is set to amend its rules and admit students from non-engineering backgrounds for its two-year management programme. Previously only graduates from the fields of engineering and technology and masters from science and economics were eligible for the programme conducted by the institutes's department of management studies. The move results from the growing need for diversity in the job-market scenario, said an official from the institute. There are also reports of a change in the admission criteria for the programme, which previously comprised of only three components – CAT scores, Group Discussions and Personal Interview. The revised criteria will also consider the candidate's academic performances in Class-X, Class XII and graduation along with the three existing criteria. The candidate's extra curricular activities and professional work experience will also play an important role in his/her selection. Both the modifications to evaluate a candidate's profile for admission to the programme will be implemented starting from the 2015 academic year.

Solar flares can play havoc with our wired world, say IISc scientist

[Chethan Kumar](#), TNN | Nov 12, 2014, 04.00 AM IST

<http://timesofindia.indiatimes.com/city/bengaluru/Solar-flares-can-play-havoc-with-our-wired-world-say-IISc-scientist/articleshow/45115615.cms>

BENGALURU: The next time you hear of high-frequency radio communication networks being disrupted, as in some parts of the globe last week, don't spend too much time pondering over how it happened. It could just be explosions on the Sun.

To be precise, over two weeks ago, AR12192 was going up in flames and smoke. Prof Arnab Rai Choudhuri of the Indian Institute of Science said AR12192, a sunspot measuring 1.29 lakh km across, is 10 times the diameter of the Earth, and the largest sunspot observed in 25 years.

"A powerful solar flare can cause havoc to our technology-dominated world. It can disrupt communication networks, and even trip large power grids," said Choudhuri, of the effects of such explosions in the Sun.

The Earth, he says, isn't just a huge ball going around the Sun, but also a giant magnet. "The magnetosphere, the region around our planet, normally protects us from solar flares, but strong flares can penetrate this shield," Choudhuri says.

Many solar flares spit huge bubbles of hot gas in a process called 'coronal mass ejections' (CME), and this gas generally takes two to three days to reach Earth, and can disrupt communication networks. "When CME impinges on the Earth's

magnetosphere, it distorts the magnetic field lines, which produce very high voltages," Choudhuri, who has spent more than three decades studying sunspots, said.

Though the October 26 solar flare was not followed by CME, it still affected the high-frequency radio network, which Choudhuri says is a "little puzzling".

So, how do we deal with this?

Choudhuri says a solar flare cannot be predicted. "However, we can detect a solar flare just a few minutes after it has erupted on the Sun. Today's telescopes are so advanced they automatically record such events. We also know that only those solar flares emanating from a particular region of the Sun have maximum impact on Earth," he said. "If something big is happening in that region, we can expect some problems after three days. This is the best we can do."

SUNBURST

- * Explosion occurred from a spot named AR12191 on the Sun
- * Measures 1.29 lakh km across, 10 times the diameter of Earth
- * Largest sunspot observed in 25 years

COULD HIT CONNECTIVITY

A massive explosion on the Sun on March 9, 1989, caused a widespread blackout in some parts of Canada a few days later. The consequences of a similar flare can be quite different in today's highly connected world. Now almost all power grids in the world are interconnected and this sudden voltage due to solar activity can cause disasters.

Prof Choudhuri | faculty department of physics, iisc

IIT-M wants to go the Stanford way



infrastructure The most visible part of the Cell is the Research Park

<http://www.thehindubusinessline.com/features/iitm-wants-to-go-the-stanford-way/article6587502.ece>

But the Incubation Cell at the institute will need to overcome funding hurdles

When Kishore Natarajan and his friends turned down job offers that would pocket them ₹60 lakh a year, it was tough convincing their relatives. But for them, it was an easier decision. As students of IIT Madras, Natarajan and his four friends had founded their start-up HyperVerge in late 2013. They developed a low-cost system for Indian Railways to inspect overhead lines, from which locomotives draw power.

Success in the project spurred the youngsters, aged between 22 and 24 years, to opt for entrepreneurship over a nine-to-five job. The founders are now working on an image recognition technology for taking photographs and storing them. In their short entrepreneurial journey, “IIT-M’s ecosystem has been critical,” says Natarajan.

HyperVerge is one of the 30 start-ups under the premier institute’s Incubation Cell, which came up in 2013. The Cell formalised an ecosystem that has been brewing in the IIT-M campus for the past three decades. “At least 20 start-ups, such as Desicrew and Midas Communications, came from IIT-M from 1980s to the 1990s. Since 2007, over 70 companies have been incubated”, says Tamaswati Ghosh, In-Charge of the Incubation Cell.

There is a reason for the spurt in start-ups. “Most of the students are now from middle and upper-middle-class families and don’t have financial obligations. So, instead of regular jobs, they can opt to become entrepreneurs,” says Ashok Jhunjhunwala, a Professor in the Department of Electrical Engineering. He is also the Co-chairman and Faculty-in-Charge of the Cell.

As the number of start-ups increased, there was a need to build a structure that handholds the young businessmen in their initial years. The most visible aspect of the new ecosystem is the IITM Research Park. The Park hosts 24 of the 30 start-ups and also has R&D labs of leading companies such as Tata Consultancy Services and BHEL.

The start-ups, which get a seed funding of ₹5 lakh from the Cell, can lease office space at discounted rates. The fund and the space are critical for a start-up like Ather Energy, which is developing an electric scooter with a battery that is three times smaller and lighter than existing ones.

“We continue to be guided by the faculty and have access to labs in IIT Madras. Also, with the brand of IIT backing us, we can reach out to the alumni,” says Ather co-founder Tarun Mehta. That proved crucial for Ather’s team when an alumnus gave them a start on building a supply chain for the electric scooter.

Alumni support

Separately, the alumni have also been generous. Ather’s first angel investor was an IIT-Madras alumnus. Similarly, when two of Natarajan’s colleagues visited the US to raise funds earlier this year, they got twice the money that they needed, thanks to the alumni network.

The seniors have also come back to the campus. Senthil Nathan passed out of IIT-Madras in 1980 and co-founded two companies before selling them. Now, along with his former IIT classmate SV Ramanan, Nathan has founded RelAgent, which is based in the Research Park. “It is high time that we take IIT-Madras to the standards of Stanford and MIT,” says Nathan.

(This article was published on November 11, 2014)

HT.COM ND 12.11.14 P-3

IIT DIRECTORS TO BE APPOINTED SOON

NEW DELHI: The HRD ministry has finally kicked off the process to appoint new directors for the three IITs – Patna, Ropar and Bhubaneswar– with the search and selection committees for each holding their first this week. All the positions have been lying vacant for over four months after the directors' term came to an end in June. The committee had not met for short listing yet. **HTC**

Mail Today ND 12/11/2014

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MoD technocrats

THE Ministry of Defence (MoD) has two IITians at the helm of affairs. Former Goa chief minister Manohar Parrikar, who took over as the defence minister on Monday, is an alumnus of IIT-Bombay, from where he did metallurgy engineering.



He was the country's first IITian chief minister. In South Block, he will team up with Defence Secretary R.K. Mathur, who studied at IIT-Kanpur and IIT-Delhi. Mathur did his B.Tech in mechanical engineering from IIT-Kanpur and M.Tech in industrial engineering from IIT-Delhi. Mathur briefed Parrikar for over three hours on Tuesday, explaining the functioning of the ministry.

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अब साढ़े तीन साल में आईआईटी संभव

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छात्रों की सहूलियत और उन्हें आगे की पढ़ाई में फायदा दिलाने के मकसद से आईआईटी से बीटेक साढ़े तीन वर्ष में भी पूरी की जा सकेगी। देश की कुछ आईआईटी में चार वर्ष की बीटेक को साढ़े तीन वर्ष में पूरी करने पर विचार चल रहा है। सब कुछ ठीक रहा तो अगले वर्ष के शैक्षणिक सत्र से इस योजना को लागू किया जा सकेगा। इस योजना का लाभ केवल उन्हीं छात्रों को मिल सकेगा, जोकि निश्चित क्रेडिट प्वाइंट हासिल कर पाएंगे। चार साल की बीटेक की साढ़े तीन साल में होने पर बचे समय में छात्रों को अपना कारोबार और आगे की पढ़ाई के लिए छूट मिल सकेगी। इस योजना के तहत आने वाले छात्र चाहे तो शेष छह माह किसी कंपनी में इंटरशिप कर पाएगा या फिर अपने कारोबार करने के लिए स्वतंत्र रहेगा। इतना ही नहीं एमटेक कोर्स के क्रेडिट प्वाइंट अर्जित करें। इससे छात्रों पर

अतिरिक्त भार तो पड़ेगा, लेकिन पढ़ाई का समय कम हो जाएगा।

ऐसे होगी साढ़े तीन साल में बीटेक

▶ आईआईटी एक अधिकारी ने बताया कि नए नियम के तहत बीटेक के लिए जरूरी क्रेडिट प्वाइंट साढ़े तीन साल यानि सातवें सेमेस्टर में हासिल करने होंगे।

▶ यदि कोई छात्र सात सेमेस्टर में करीब 176 से 182 प्वाइंट हासिल कर लेता है तो उसके सामने अगले छह माह के लिए विकल्प खुले होंगे।

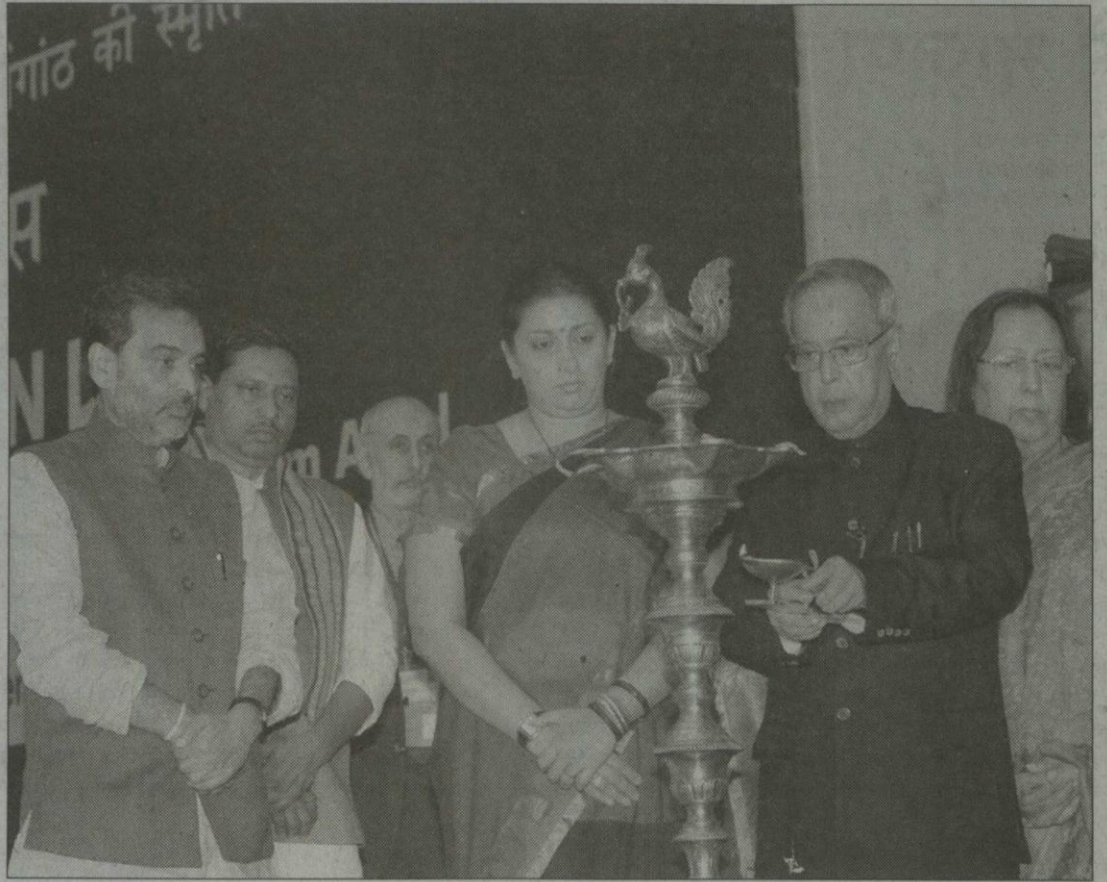
▶ नए सिस्टम के तहत छात्र लेक्चर, प्रयोगशाला और वर्कशॉप के जरिए क्रेडिट स्कोर हासिल कर सकेंगे। छात्रों को इसका फायदा आगे की पढ़ाई में मिल सकेगा।

▶ समय से पहले बीटेक करने पर छात्र को प्रोविजनल मार्कशीट साढ़े तीन साल में ही दे दी जाएगी ताकि उसे नौकरी तलाशने में दिक्कत न हो। हालांकि उन्हें डिग्री चार साल के बाद ही मिलेगी।

शिक्षा की क्वालिटी पर जोर देने का आह्वान

भाषा

नई दिल्ली। तेजी से प्रसार हो रहे शिक्षा क्षेत्र में गुणवत्ता एवं मापदंड बनाए रखने पर बल देते हुए राष्ट्रपति प्रणब मुखर्जी ने शिक्षण परिणाम के लिए मानदंड तथा प्रदर्शन पर आधारित तंत्र स्थापित करने पर बुधवार को आह्वान किया। उन्होंने बताया कि शिक्षा के हो रहे प्रसार के बीच हमें गुणवत्ता की अनदेखी करने की प्रवृत्ति पर लगाम लगाने की जरूरत है। उन्होंने यहां राष्ट्रीय शिक्षा दिवस कार्यक्रम में कहा, हमें शिक्षण प्रक्रिया और परिणाम में मानदंड तथा प्रदर्शन आधारित अंक प्रणाली स्थापित करना चाहिए तथा सभी विद्यालयों में उन्हें लागू करना चाहिए। भारत के पहले शिक्षा मंत्री मौलाना अबुल कलाम आजाद की जयंती पर राष्ट्रीय शिक्षा दिवस मनाया जाता है। उन्हें 'संस्थान संस्थापक' के रूप में याद करते हुए मुखर्जी ने कहा कि प्रतिष्ठित भारतीय प्रौद्योगिकी संस्थान की स्थापना के पीछे उनकी प्रेरणा थी और अब ये संस्थान भारत के मानव संसाधन विकास के प्रतीक बन गए हैं। राष्ट्रपति ने कहा कि सार्वभौमिक शिक्षा कवरेज के साथ ही शिक्षा में सार्वभौमिक उच्च शिक्षा मानदंड साथ लेकर चलना चाहिए। उन्होंने कहा कि देश को प्रौद्योगिकी संस्थानों की उपलब्धियों का लाभ उठाना चाहिए तथा डिजिटल सक्षम एवं चंचित तबकों के बीच फासला घटाना चाहिए।■



Asian Age ND 12/11/2014 P-4

PREZ EMPHASISES ON QUALITY EDUCATION

AGE CORRESPONDENT
NEW DELHI, NOV. 11

President Pranab Mukherjee on Tuesday sought establishment of norms and performance-based system for ensuring learning outcomes in the education system. He emphasised on maintaining quality and standards in fast expanding education sector.

Addressing the National Education Day function here, the President said, "We must establish norms and performance-based marks for learning process and outcome strictly and enforce them across the schools".

The day is celebrated to mark the birth anniversary of India's first education

minister Maulana Abdul Kalam Azad. Remembering Azad as an "institution builder", Mr Mukherjee said he was the inspiration behind setting up of prestigious Indian Institute of Technology (IIT), which became a symbol of India's human resource development over the years. The President said universal education coverage should be complemented by universal higher standards in education. "Our education programmes must be driven by expansion, equity and side-by-side excellence," he said.

He called on the country to leverage on the advancement made by the technological institutions and narrow the gap between the "digital haves and have-nots".

Space debris: ISRO chief raises concern over satellites' safety

'Efforts on to deal with the problem at the global level'

PRESS TRUST OF INDIA

New Delhi, November 11

ISRO chairman K Radhakrishnan on Tuesday raised concern over the safety of satellites due to space debris and batted for a comprehensive space policy for the country.

"What happens to the various types of satellites after their work is over. This is a new area of study.

"Are we able to catalogue them? Are we able to predict their movements? Are we able to see whether our actual satellites are safe from them? How do we move them to safety? If we can

There are nearly 15,000-16,000 debris scattered in the space.

tackle that or if we can identify arrival of debris, a spacecraft can itself move out of the place," Radhakrishnan said.

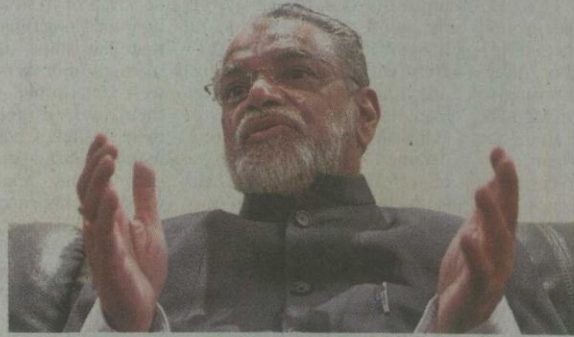
India's contribution

The Indian Space Research Organisation (ISRO) chairman was delivering a lecture on 'Contribution of India's Space Programme in Nation Building' at the Institute for Defence Studies and Analysis here.

He added that there are nearly 15,000-16,000 space debris scattered in the space.

He said efforts are being made at the international level to deal with this problem.

"There are groups outside India which are looking at the issue of intentional creation of space debris through guidelines and general arrangements.



Indian Space Research Organisation chairman K Radhakrishnan. AFP

There are groups, experts looking at these debris and how to deal with it," he said.

Space law

Radhakrishnan also said that government was looking to have a space law for the country. "In January 2015, we are going to have a workshop on this. We are work-

ing with a Hyderabad-based institute and the International Institute of Space Law School," he said.

The ISRO chief said policies related to different aspects such as space and remote sensing of remote sensing data was in place, but there was a need to have an overall policy.

"In the country, we have a policy on satellite, we have a SATCOM policy. We have a policy on remote centre data dissemination. An overall space law for the country is what we are trying to evolve. The workshop is supposed to provide light on the issue," he said.

Inroads

Radhakrishnan said that when it comes to human space module and robotics, India is not been able to make inroads as compared to other countries, but it would master the art and the space agency is working towards it.

"We are going to, by December 2014, have a test flight of our GSLV Mark III. It's a crew model we have prepared for the human space module. It's an unmanned crew model. As it enters the atmosphere we wish to know what happens to it and how does it stand," he said.

Hindustan ND 12/11/2014 P-9

भारतीय छात्रों को ब्रिटेन 15 करोड़ की स्कॉलरशिप देगा

नई दिल्ली | विशेष संवाददाता

ब्रिटेन अपने विश्वविद्यालयों में भारतीय छात्रों को विज्ञान पढ़ने और शोध के लिए आकर्षित कर रहा है। इसी कड़ी में मंगलवार को ब्रिटेन के विश्वविद्यालयों की नई खोज सुपरसोनिक (ध्वनि की गति से तेज चलने वाली) कार का मॉडल यहां प्रदर्शित किया गया। इस मौके पर ब्रिटेन की तरफ से भारतीय छात्रों के लिए करीब 15 करोड़ रुपये की 401 छात्रवृत्तियां अगले साल सितंबर से लेकर जनवरी 2016 के बीच दी जाएंगी।

ब्रिटिश काउंसिल के निदेशक (एजुकेशन) रिचर्ड एवरिट ने कहा

कि ब्रिटेन में पढ़ाए जा रहे कोर्स की अवधि कम होने के कारण भारतीय छात्रों के लिए अमेरिका या अन्य देशों की तुलना में ब्रिटेन कहीं ज्यादा फायदेमंद एवं किफायती है।

ब्रिटेन में डिग्री कोर्स तीन साल का है जबकि अमेरिका में चार साल का। इसलिए खर्च में फर्क है। छात्रों को इन सब बातों की जानकारी देने के लिए 15 एवं 16 नवंबर को ब्रिटिश काउंसिल में यूके एजुकेशन फेयर का आयोजन किया जा रहा है। इसमें ब्रिटेन के 63 विश्वविद्यालय हिस्सा लेंगे। इस दौरान छात्रों को कोर्स, फीस और स्कॉलरशिप की जानकारी दी जाएगी। छात्र एवं अभिभावक इसमें हिस्सा ले सकते हैं।



ब्लडहाउंड एसएससी

नई दिल्ली में मंगलवार को ब्रिटेन ने विज्ञान और शोध की बाइंडिंग के लिए सुपरसोनिक कार ब्लडहाउंड का मॉडल पेश किया। ● ४८

1600 किमी प्रति घंटे से दौड़ेगी कार

ब्लडहाउंड एसएससी ध्वनि की गति से तेज चलने वाली सुपरसोनिक कार है, जो सड़क पर सबसे तेज गति के अब तक के सारे रिकॉर्ड तोड़ देगी। लड़ाकू विमान की तकनीक ऐसी कार बनाने का ऐलान वर्ष 2006 में ब्रिटेन के विज्ञान मंत्री लार्ड ड्रेयसन ने किया था। ब्रिटिश इंजीनियर रिचर्ड नोबेल और पूर्व पॉयलट एंडी ग्रीन ने इस सोच को हकीकत में बदला।

बेहिसाब ताकत

180 **42**

फार्मूला वन कारों के बराबर 135 हजार हार्सपॉवर ऊर्जा बनेगी

सेकेंड में शून्य से 1609 किमी प्रति घंटे की रफ्तार तक पहुंचेगी

01 सेकेंड में फुटबाल के मैदान का 4.5 गुना चक्कर लगाने में सक्षम

07 **2015**

टन बजनी रोल्स रॉयस ईंजे 200 इंजन लगा, तीन पॉवर प्लांट

की गर्मियों में सड़क पर उतरेगी ब्लडहाउंड एसएससी कार

Deccan Herald ND 12/11/2014 P-12

New way to generate electricity developed

LONDON, PTI: Researchers have demonstrated a new technique for generating electricity by harvesting energy from mechanical vibrations of the environment.

The new electricity generation technology could be introduced on an industrial scale within three to six years, researchers said.

Energy harvesters are needed, for example, in wireless self-powered sensors and medical implants, where they could ultimately replace batteries.

In the future, energy harvesters can open up new opportunities in many application areas such as wearable electronics.

Research scientists at VTT Technical Research Centre of Finland have successfully generated energy by utilising the charging phenomenon that occurs naturally between two bodies with different work functions.

Work function is the amount of energy needed to remove an electron from a solid and it de-

termines, for example, the well-known photoelectric effect.

When two conducting bodies with different work functions are connected to each other electrically, they accumulate opposite charges.

Moving of these bodies with respect to each other generates energy because of the attractive electrostatic force between the opposite charges.

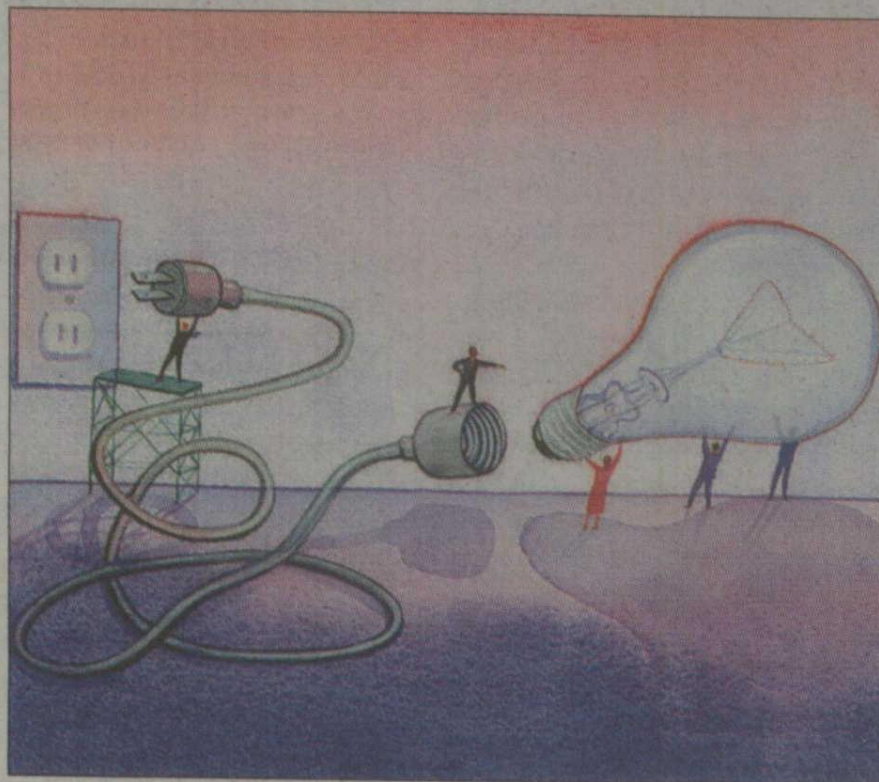
In VTT's experiment the energy generated by this motion was converted into useful electrical power by connecting the bodies to an external circuit. This new energy conversion technique also works with semiconductors.

In many sensor applications and medical implants such as pacemakers, electricity is typically provided by batteries.

Research into small energy harvesters that turn mechanical vibration into electricity has focused on piezoelectric and electrostatic devices.

Unlike these devices VTT's technique does not require an integrated battery, electrets, a dielectric material that has a quasi-permanent electric charge, or piezo materials.

The findings were published in the journal *Scientific Reports*.



Rashtrya Sahara ND 12/11/2014 P-15

गूगल का नासा से 1.16 अरब डालर का करार

सेन फ्रांसिस्को (एपी)। एक ऐतिहासिक नौसैन्य एयरबेस की जगह को लंबे समय तक किराए पर लेने के लिए

गूगल ने नासा के साथ समझौता किया है।

गूगल की योजना यहां तीन बड़े हैंगरों का नवीकरण करने और फिर इनका इस्तेमाल उड्डयन, अंतरिक्ष अन्वेषण एवं रोबोटिक्स से जुड़ी परियोजनाओं में करने की है। इस संपत्ति के 60 साल के किराए के रूप में दिग्गज इंटरनेट कंपनी 1.16 अरब डॉलर का भुगतान करेगी। इस संपत्ति में एक सक्रि

य एयरफील्ड, गोल्फ कोर्स और अन्य इमारतें भी शामिल हैं। 1000 एकड़ का यह क्षेत्र सेन फ्रांसिस्को

प्रायद्वीप में स्थित पूर्व मोफेट फील्ड नेवल एयर स्टेशन का हिस्सा है। नासा के अनुसार गूगल की योजना हैंगरों के नवीकरण और अन्य सुधार लाने के लिए 20 करोड़ डालर से ज्यादा का निवेश करने की

है। इनमें एक संग्रहालय या शैक्षणिक प्रतिष्ठान भी शामिल है, जो कि मोफेट और सिलिकॉन वैली के इतिहास का प्रदर्शन करेंगे। गूगल के प्रवक्ता ने इस संपत्ति से जुड़ी योजनाओं पर चर्चा से सोमवार को इनकार कर दिया। यह संपत्ति कंपनी के मुख्य परिसर माउंटेन व्यू से कुछ ही किलोमीटर की दूरी पर है।



V-C sticks to stand on women in AMU library, Irani steps in

Hindustan Times (Kolkata)

ALIGARH/ LUCKNOW: Aligarh Muslim University (AMU) vice-chancellor Zameeruddin Shah on Tuesday defended his controversial decision of not allowing undergraduate female students inside the university library, even as HRD minister Smriti Irani termed the statement an ‘insult to daughters’.

On Monday, Shah had allegedly said that if women’s college students are enrolled as library members, it would cause a rush of male students. He stood by the comment, claiming the remarks were being given a sexist tone. “There is no space in the library. We don’t allow even Class 12 boys there,” he said.

The remarks caused a storm with the Akhil Bharatiya Vidyarthi Parishad burning effigies of the V-C, demanding an unconditional apology from him. Several Union ministers, including minority affairs minister Najma Heptullah and social justice minister Thaawar Chand Gehlot, condemned the statement.

The HRD ministry also sought a report from the university with Irani calling the comments unfortunate.