

Newspaper Clips

July 18, 2012

Amar Ujala ND

18/07/2012 P-14

आईआईटी कानपुर के निदेशक की नियुक्ति पर फैसला 28 को

नई दिल्ली (ब्यूरो)। आईआईटी कानपुर के नए निदेशक के चयन पर अब 28 जुलाई को फैसला होगा। मानव संसाधन विकास मंत्रालय ने पूर्व में सेलेक्शन कमेटी द्वारा निदेशक के लिए सुझाए गए तीन नामों को खारिज करते हुए अब 11 नामों का पैनल मांगा है।

कानपुर तथा खड़गपुर आईआईटी के निदेशकों का कार्यकाल पूरा हो चुका है। कानपुर के वर्तमान निदेशक संजय धांडे मानव संसाधन विकास मंत्री के चहेते माने जाते हैं। वे कानपुर आईआईटी के डायरेक्टर के रूप में दो कार्यकाल बिता चुके हैं। कुछ महीना पहले उन्हें नए निदेशक की नियुक्ति तक पद पर बने रहने का एक्टेणशन दिया गया था, जो इसी महीने पूरा हो रहा है। कानपुर तथा खड़गपुर आईआईटी में नए निदेशकों की नियुक्ति के लिए मिले सैकड़ों आवेदन में से सेलेक्शन कमेटी ने तीन नाम छांटे थे। इसमें आईआईटी खड़गपुर के डीन प्रो. पीपी चक्रवर्ती, इंद्रनील मन्ना व राजीव संगल का नाम शामिल था। इन तीनों को जुलाई के पहले सप्ताह में मानव संसाधन विकास मंत्री कपिल सिब्बल ने इंटरव्यू के लिए बुलाया था। इंटरव्यू के बाद पता चला कि एक मामले में प्रो. पीपी चक्रवर्ती के खिलाफ कार्रवाई की सिफारिश हुई थी।

देश के विभिन्न कालेजों में इंजीनियरिंग की पढ़ाई करने वाले छात्रों के लिए यू-ट्यूब पर फ्री ऑनलाइन प्रोग्राम

घर बैठे ही आईआईटी की क्लास में हो जाएं शामिल

नई दिल्ली | हिन्दुस्तान टाइम्स

देश के कॉलेजों में इंजीनियरिंग की पढ़ाई करने वाले छात्रों के लिए अच्छी खबर है। अब ऐसे छात्र अपने कोर्स से संबंधित आईआईटी की क्लास घर बैठे ही अटेंड कर सकते हैं। ऐसा संभव हो सकेगा ऑनलाइन लेक्चर के जरिए।

मानव संसाधन विकास मंत्रालय और आईआईटी के संयुक्त प्रयास से नेशनल प्रोग्राम ऑन टेक्नोलॉजी इंस्ट्रूमेंट लर्निंग (एनपीटीईएल) प्रोग्राम बनाया गया है। इसके तहत इंजीनियरिंग के छात्र यू-ट्यूब के

एजुकेशन हब पर ऑनलाइन आईआईटी और आईआईएस बेंगलुरु के लेक्चरों को देख-सुन सकेंगे। फिलहाल एनपीटीईएल की ओर से 250 कोर्सों से संबंधित वीडियो लेक्चर छात्रों के लिए उपलब्ध हैं। ये सभी कोर्स देश के सभी इंजीनियरिंग कॉलेजों के लिए मान्य हैं। अच्छी बात यह है कि इसके लिए छात्रों से कोई शुल्क नहीं लिया जाएगा।

एनपीटीईएल वेब प्रोजेक्ट के राष्ट्रीय संयोजक प्रोफेसर मंगला सुंदर श्याम कृष्णन के अनुसार 'हम साल दिसंबर तक 1200 कोर्सों से जुड़े लेक्चर

● एनपीटीईएल के यू-ट्यूब चैनल से इन लेक्चरों को देखने-सुनने के लिए लॉग इन करें www.youtube.com/ilt पर।

● इस प्रोग्राम में आईआईटी के साथ गुजरात यूनिवर्सिटी को भी जोड़ा गया है।

ऑनलाइन व्यवस्था के तहत छात्रों को मुहैया करा रहे हैं। एनपीटीईएल के पास एक-एक घंटे के करीब 9600 वीडियो लेक्चर हैं। हम इस साल दिसंबर तक 1200 कोर्सों से जुड़े लेक्चर ऑनलाइन कर देंगे।

कुणाल जैसे छात्र उठा रहे फायदा

कुणाल प्रियदर्शी अन्नामलाई यूनिवर्सिटी की फेकल्टी ऑफ इंजीनियरिंग एंड टेक्नोलॉजी से कंप्यूटर साइंस के स्टूडेंट है। 2009 में आईआईटी जेईई में असफल होने के बाद अब वह ऑनलाइन आईआईटी संस्थानों में दिए जाने वाले लेक्चरों को भी सुनते-समझते हैं।

इनमें इलेक्ट्रॉनिक्स, मैकेनिकल, एरोस्पेस से लेकर सिविल इंजीनियरिंग तक के सभी कोर्स के लेक्चर शामिल होंगे। यू-ट्यूब एजुकेशन की प्रमुख एंजेल्ला लिन कहती है, 'पिछले दो सालों में भारत

2.5 लाख रुपये हर कोर्स के लिए दी जाती है इन कोर्स के फेकल्टी मेंबर्स को सैलरी 40 वीडियो लेक्चर देने होते हैं फेकल्टी को एक-एक घंटे के 07 लाख रुपये कोर्स का बजट 2003 में लॉन्च की गई थी एनपीटीईएल

में हमारी रफ्तार तीन गुनी हो गई है। अब साइट पर हर महीने तीन करोड़ 30 लाख लोग पहुंच रहे हैं। यही वजह है कि इस प्रोजेक्ट को स्टूडेंट्स की जरूरतों को ध्यान में रखकर तैयार किया जा रहा है।'

Pioneer ND 18/07/2012 p-14

IIT MUMBAI ORGANISES E-YANTRA

The Indian Institute of Technology, Mumbai recently launched 'E-Yantra' — a pan India challenge on robotics. The initiative allows students to pre-set tasks on pre-developed robots.

The institute envisages this platform to harness the intellectual talent of aspiring engineers to create utility based robotic applications for usage across vari-

ety of applications like agriculture, manufacturing, defense, home, city maintenance and service industries.

The Ministry of Human Resource Development (MHRD) will sponsor the initiative under National Mission for ICT in education programme. The initiative seeks to provide hands-on learning infrastructure to engineering students.

बिल पास कराने का जुगाड़

कविता जोशी . नई दिल्ली

सरकार में शामिल कोई भी मंत्री अपने स्तर पर कितना अच्छा काम क्यों ना कर ले। उसकी असली परीक्षा तो संसद में होती है जब उस अच्छे काम के लिए तैयार बिल को पास कराने की बारी आती है। चूंकि देश में कानून बनाने के मामले में संसद ही सर्वोच्च संस्था है और इसके लिए मौजूदा सरकार को विभिन्न राजनीतिक दलों की मंजूरी लेना आवश्यक होता है। संसद में दलों की शक्ति का आकलन उनकी संख्या के हिसाब से तय होता है। यूपीए सरकार के एक केबिनेट मंत्री और केंद्रीय मानव संसाधन विकास मंत्रालय का जिम्मा संभाल रहे कपिल सिब्बल भी इन दिनों अपने विभाग से जुड़े अहम बिलों को पास कराने की इस कठिन कवायद में जुटे हुए हैं।

केंद्रीय मंत्री ने इस बाबत संसद के अगले महीने अगस्त में शुरू होने वाले मानसून सत्र में मंत्रालय की ओर



■ 'एजुकेशनल मेलप्रक्सिस बिल' के लिए मिले

से पास कराए जाने संबंधी कुछ अहम विधेयकों को लेकर विपक्ष की सहमति बनाने की कोशिश की। जिसमें सिब्बल ने हाल में लोकसभा में विपक्ष की नेता और भाजपा नेत्री सुषमा स्वराज से मुलाकात की। हाल में इसकी जानकारी देते हुए केंद्रीय मानव संसाधन मंत्री कपिल सिब्बल ने कहा कि मैंने 'द नेशनल एक्रीडिटेशन रेगुलेटरी अधोरिटी बिल' और

'एजुकेशनल मेलप्रक्सिस बिल' को लेकर लोकसभा में नेता विपक्ष श्रीमती सुषमा स्वराज से मेरी मुलाकात हुई और मैंने नेता विपक्ष को दोनों बिलों से जुड़े कुछ अहम पहलुओं की जानकारी दी। सिब्बल ने कहा कि जल्द ही मैं इस मामले पर राज्यसभा में नेता विपक्ष और भाजपा के नेता अरूण जेटली से भी मुलाकात करूंगा। मालूम हो कि राष्ट्रीय स्तर का एक एक्रीडिटेशन प्राधिकरण बनाने के पीछे सरकार की मंशा उच्च शिक्षा व इससे जुड़े अन्य मामलों में सामने आ रहे भ्रष्टाचार व अन्य विवादों के साथ मजबूती से निपटा जाना माना जा रहा है। मंत्रालय की जानकारी के मुताबिक सीबीएसई को एक स्वायत्त संस्थान बनाने संबंधी बिल को लेकर भी अंतिम प्रक्रिया चल रही है। केंद्र सरकार जल्द ही इस बिल को केबिनेट से पास कराकर आगामी मानसून सत्र में संसद की मंजूरी के लिए रखने की तैयारी में लगी है।

World's top varsities open classrooms to netizens

Guardian News Service
 ■ letters@hindustantimes.com

LONDON: Twelve best universities in US and Europe on Tuesday joined an internet platform created by two Stanford University scientists that provides free online access to classes at elite institutions.

The move marks the expansion of online university teaching that will herald a shakeup of the lecture theatre model.

The new participants in

Coursera, which combines online lectures with assignments, include the California Institute of Technology, Johns Hopkins University, University of California, San Francisco in the US, Edinburgh University and the Swiss Federal Institute of Technology of Lausanne.

Caltech and the University of Pennsylvania have also announced a combined \$3.7m investment in Coursera.

Coursera offers classes from Princeton, the University of

Michigan, Stanford, University of California, Berkeley and the University of Pennsylvania.

The universities joining the platform will offer dozens of new courses in the fields of arts, computer science, health, mathematics, history, literature and other disciplines.

These classes do not credit towards degrees at the universities, but online students receive certificates for completing their studies.

Andrew Ng and Daphne

Koller, who founded Coursera said the move gave students "greater access than ever before to the world's foremost subject experts."

Learners would have to pay for the certificates that mark the completion of their courses. This revenue will be shared with the universities.

With many universities offering online lectures, observers say the rise of Coursera, marks a shift in the balance of power in higher educations.

COURSERA FOR ONE AND ALL

■ Coursera was founded by Stanford University scientists Andrew Ng and Daphne Koller

■ 12 best universities in US and Europe like University of California and Edinburgh University have joined

■ Courses in arts, computer science, health, mathematics, history, literature will be offered

■ These classes will not credit towards degrees at the universities but certificates for completion will be given to students

■ Learners would have to pay for the certificates and the revenue will be shared with the participating universities

■ Courses have started in Princeton, Stanford, Berkeley.

Political Business Daily ND 18/07/2012

P-6

India to have navigation system after US, EU, Japan

PBD BUREAU/PTI

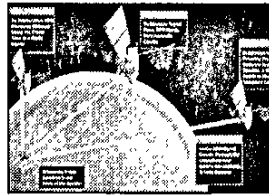
BANGALORE, JULY 17

AFTER the USA, Japan and Europe, India is on course to put in place a regional satellite-based augmentation system (SBAS) for civil aviation purposes by June next year, say key officials associated with the ambitious project.

Airports Authority of India (AAI) and Indian Space Research Organisa-

tion (ISRO), which have jointly taken up the Rs 774 crore project GAGAN (GPS-Aided Geo Augmented Navigation), yesterday commenced the process of its Final System Acceptance Test (FSAT).

The objective of FSAT is to evaluate the system performance and its critical parameters in the integrated live environment using the satellite signals and ground based systems on integrity, accuracy, continuity and



availability for aviation use.

"GAGAN is expected to be ready for operation and certification by June 2013", an official of Bangalore-headquartered ISRO said.

AAI Chairman VP Agrawal added: "We are

going ahead with certification of the entire signals and systems". He noted that since GAGAN is a "new technology, new concept and there are safety issues", it needs DGCA certification. The certified system for aviation purpose would be available from June.

AAI officials made a presentation on the project to Union Civil Aviation Minister Ajit Singh, who visited the Indian Navigation Master Control Centre (INMCC), GAGAN com-

plex, here last evening.

"Only three countries (the USA, Europe and Japan) have it before us", Singh said. According to AAI officials, the GPS (global positioning system) satellite navigation system designed to provide instantaneous position, velocity and time information anywhere on the globe in its vicinity, cannot support requirements for all phases of flight, its integrity is not guaranteed and accuracy not sufficient.



QUANTUM LEAP

DINESH G. SHARMA

Symbols of an all new race to space

AT a time when astronauts are leaving the American space agency, NASA, in hordes, it is good to hear about Sunita Williams blasting off into space for a long stay at the International Space Station (ISS). The event is far more significant than just Williams' Indian connection, which has been the highpoint of celebratory coverage in Indian media.

Just consider the import of what has happened — an American astronaut on board a Russian spacecraft taking off from a former Soviet run Cosmodrome with Japanese and Russian astronauts for company. It is space history in the making. It is no longer about Russian-American cooperation in space. The first docking of an American spacecraft with a Russian one took place 37 years ago when an Apollo, launched from Kennedy Space Centre docked with a Soyuz 7K-TM vehicle from Baikonur. Williams' journey to the space station is significant because it places America at par with other space powers. Today, America no longer has a functional shuttle to transport humans to space, having terminated its shuttle programme exactly a year ago with the last flight of Atlantis.

The space agency says it is developing a new crew capsule and heavy-lift rocket that will provide an entirely new capability for human exploration beyond low-earth orbit.

It is also investing financial and technical resources to stimulate the private sector into developing space transportation systems. This has already resulted in the demonstration of Dragon Spacecraft, the first commercial vehicle to successfully attach to the ISS in May this year. Developed by a private firm, Space Exploration Technologies or SpaceX, the hope is that the Dragon will, in the future, be able to carry humans to the ISS. Till that happens, NASA will have to depend on Soyuz to

transport humans and cargo to the space station.

If the space race between America and Russia has cooled down, another one appears to be brewing, with China aggressively pursuing its manned space programme. In June, the Chinese programme reached a milestone when it achieved manual space docking — a crucial step towards building its own space station. China has a prototype unmanned laboratory in space, Tian-gong-1, which has been serviced by unmanned spacecraft. The Shenzhou-9 mission, which carried the first Chinese woman into space, first demonstrated manual docking. All this is part of a 30-year mission — Project 321 — to assemble a Chinese space station by

2020, just when the ISS would have completed its lifetime.

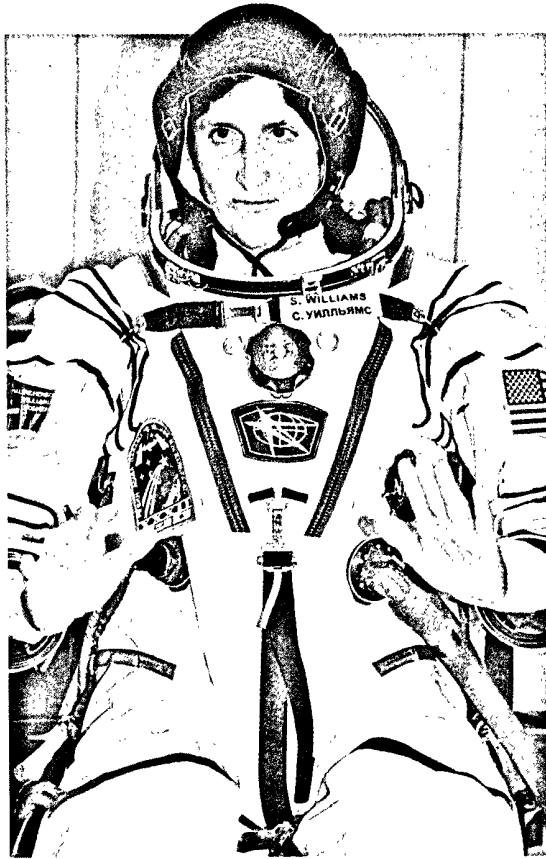
Meanwhile, India's plan for a manned space flight is yet to leave the drawing boards. The

Indian Space Research Organisation (ISRO) is grappling with a number of issues.

The plan calls for a huge budget, upwards of Rs 10,000 crore. Then there are technology

issues — we are yet to develop and demonstrate indigenous launch capability. Several other associated technologies have also to be proven. After the Antrix affair, the Indian space agency may find it difficult to get the much needed political support for its manned space flight.

China's aggressive pursuit of a manned space programme is replacing the once contentious US-Russia space race



US astronaut Sunita Williams (above) and China's first woman astronaut Liu Yang (below-right) represent a changing space dynamic.



NANOTECH COMES TO THE RESCUE

SCIENTISTS are exploring the intricacies of the human body to find novel solutions to some of the most complex diseases. Disruption of normal blood flow to the heart, lung, and brain due to thrombosis or clotting of blood is one of the leading causes of death in India and other developing countries.

Obstructed blood vessels can be cleared by clot-dissolving drugs, popularly called clot-busters, but the doses have to be carefully decided because they can cause severe and sometimes fatal bleeding. Clot-busters can be most effective if they are delivered directly to places where vessels are blocked. Scientists have found that nanotechnology may just be able to do this.



Plaques form when normal blood platelets quickly adhere to the lining of already-narrowed vessels. When vessels narrow, high shear stresses provide a cue for circulating platelets to stick to the vessel wall selectively in these regions. This further narrows the vessel and obstructs blood flow.

Inspired by the fact that platelets are attracted to high-fluid shear stress and naturally migrate to narrowed blood vessels, researchers have developed biodegradable nanoparticles, about the same size as platelets, with a coating of clot-busting drug called tPA.

When injected, these drug-coated tiny particles move in blood vessels but get attached only to regions of vascular narrowing just like platelets do. The drug thus gets released at the very site where it is needed, and degrades clots.

Studies in animals have yielded encouraging results, which appeared in *Journal Science* recently. Though still a few years away from use in humans, the technique offers a lot of hope.

EVEN after decades of research, malaria continues to evade a solution. Besides drugs and vaccines for humans, scientists have also been trying to tinker with mosquitoes, to stop the disease from spreading. They have genetically modified mosquitoes to resist malaria, but the environmental release of such insects may pose problems. Now, researchers have genetically modified a bacterium commonly found in the mosquito's midgut and found that the parasite that causes malaria in people does not survive in mosquitoes carrying this modified bacterium. Genetically altered version of the bacterium secretes proteins toxic to malaria parasite but safe to the mosquito and humans. However, releasing the genetically modified bacteria in the environment could still be fraught with unknown consequences.



Buckwheat has been hit by competition

The disappearing staple

BUCKWHEAT, a short-duration crop grown in Jammu and Kashmir and Arunachal Pradesh, is facing virtual extinction. It used to be one of the staple foods of Ladakhi people till a few years ago.

A popular food item made of buckwheat flour is called kiseer or giziri, which is similar to plain dosa. The same flour is better known as kuttu ka attia in the plains where people make its pancakes during festivals.

Buckwheat cultivation and consumption has reduced drastically, according to Faizan Ahmad and Anup Raj of Kargil station of Sher-e-

Kashmir University of Agricultural Sciences & Technology.

There are several reasons: The crop is highly sensitive to the climate. Cropping patterns are changing. Buckwheat used to be grown as a second crop along with barley. Now barley has been replaced with wheat and competition from newer crops like French beans and turnip is also growing. Keeping in view nutritional quality of its grain and suitability for marginal lands, there is a need to revive its cultivation in Ladakh, researchers have written in the journal *Current Science*.

Higher the degree, less is the chance of getting a job

Labour Bureau Report Reveals India's Peculiarity

Rukmini Shrinivasan
TIMES INSIGHT GROUP

New Delhi: India's official unemployment rate last year was 3.8%, data released recently by the Labour Bureau shows, but, as always, averages hide many stories. A closer look at the numbers shows that unemployment rises with education level to 10% among graduates, and higher still for backward castes.


The Chandigarh-based Labour Bureau under the Union ministry of labour and employment released

► Backward groups, P 14

the 'Employment and Unemployment Survey 2012' last week. The pan-India survey had a representative sample of 1.2 lakh households. According to the survey, India's official unemployment rate is 3.8%, with urban unemployment at 5.1% and rural at 3.5%. Unemployment is higher among women than among men; 6.7% for women as against 2.8% for men.

Calculations by TIG using the Labour Bureau numbers show that unemployment rises steadily with education level. While unemployment

| REVERSE SWING | | | |
|--------------------------------------|--------------|--------------|-------------|
| Educational unemployment rate | | | |
| Level | Urban | Rural | All |
| Illiterate | 1.3 | 1.1 | 1.2 |
| Primary | 2.1 | 1.6 | 1.7 |
| Secondary | 4.4 | 5.8 | 5.4 |
| HSc | 7.3 | 7.8 | 7.3 |
| Graduate | 8.2 | 11.0 | 9.4 |
| PG | 7.7 | 13.9 | 10.0 |
| All | 5.1 | 3.5 | 3.8 |



Source: Labour Bureau; all figures in %

among the illiterate is 1.2%, unemployment among graduates is 9.4% and among post-graduates it is 10%. In the United States and the United Kingdom, where recession has led to poor job growth, the unemployment rate for graduates is at a record high, but this is still under 5%, in comparison.

For urban India, graduate unemployment is 8.2% while unemployment among post-graduates is slightly lower, at 7.7%.

These findings are consistent with those of the National Sample Survey 2009-10

which show that the higher the level of education, the higher the open unemployment, says Santosh Mehrotra, economist and director-general of the Institute of Applied Manpower Research, an autonomous institution functioning under the Planning Commission.

"The illiterate are the poorest, and the poorest simply cannot afford to be unemployed, so they do some work, even if they are under-employed," says Mehrotra. "As a result, in poor economies like ours, you see very little open unemployment," he says.

HEAT ON MOBILE TOWERS

Phone towers in India emit very strong radiations. With rising concern about their role in certain types of cancer, government has decided to cut radiation limits to a tenth from Sept 1. Will new norm be observed?

Durgesh Nandan Jha | TNN

If you are worried by the radiation emitted by cellphone towers around you, there is some good news. From September 1 this year, India will lower the level to one-tenth of the prevailing standard—from 9.2 w/m² (watt per square metre) to 0.92 w/m². The decision follows a report of the inter-ministerial committee formed by the ministry of communications and information technology to study the hazards posed by EMF (electromagnetic field) radiation from base stations and mobile phones.

Dr R S Sharma, deputy director general of Indian Council of Medical Research (ICMR), who represented the health ministry on the committee, said the new norms will place India among the more radiation conscious countries. "India's current radiation exposure limit (9.2 watt/m²) for mobile towers is higher than countries like Russia (0.2 w/m²) and China (0.4 w/m²). In USA, Canada and Japan, however, the radiation exposure limit is much higher (12 w/m²)," he said.

Sharma said lowering of the limit is a preventive step against serious health risks posed by radiation emitted from towers which includes the possibility of developing certain types of cancer. The cause and effect relationship though hasn't been established yet.

The department of telecommunications has also issued directions for reducing the specific absorption rate (SAR), a measure of the amount of radiofrequency energy absorbed by the body while using a phone. In May last year, WHO classified radiofrequency EMF associated with a wireless phone as 'possibly carcinogenic to humans'. The UN's health body urged phone owners to restrict their use and take pragmatic steps to reduce exposure like use of hands-free devices and texting.

The telecom operators are, however,



Shashwat Malik

FUP SIDE: The industry argues that lowering radiation intensity will hit service quality, and require many more towers

resisting the move. According to Rajan S Mathews, director general of Cellular Operators Association of India (COAI), lowering of EMF limits will give no health benefits but affect services. "Deteriorated coverage will mean the handset will have to work harder/at a higher power which will cause greater personal exposure. Also, if the handset operates at a higher power, the battery will discharge faster, giving consumers lesser talktime/standby time, leading to a degraded customer experience," said Mathews. He said more towers

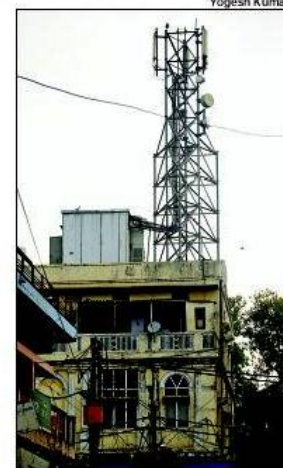
would then be needed to plug the gaps, which will increase the overall EMF. He said the rollout of 3G and broadband services will also get adversely affected.

Telecom companies argue that the steps are not needed as there is no proof of a direct correlation between the radiation emitted by cellphone towers and phones and health.

Delhi health minister A K Walia recently held a meeting with scientists from ICMR and JNU, besides others, where it was decided to impose strin-

gent norms for installation of cellphone towers in residential areas. "We are also talking to the union government to make radiation level tags mandatory for different brand of handsets," Walia told TOI.

Girish Kumar, professor in the department of electrical engineering at IIT Bombay whose research on hazards of cellphone is being used as a reference for most policy decisions in India, said that most countries like Australia, Russia and China have lower levels of EMF radiation exposure



Yogesh Kumar

LOWERING OF THE LIMIT IS A PREVENTIVE STEP AGAINST SERIOUS HEALTH RISKS POSED BY RADIATION EMITTED FROM TOWERS WHICH INCLUDES THE POSSIBILITY OF DEVELOPING CERTAIN TYPES OF CANCER

compared to India. "In the US, though the radiation exposure from cellphone towers is higher, they ensure that the site of installation is also higher," said Kumar.

He said it was important to educate people about the duration of mobile usage. "There are more than 900 million mobile subscribers in India. And many youngsters and professionals are using them more than ever—up to two hours daily. Cellphones should not be used for more than 30 minutes in a day," he said.