### Newspaper Clips February 3, 2016

## **IIT-Bombay Develops Satellite-Based Fog Monitoring System**

### http://gadgets.ndtv.com/internet/news/iit-bombay-develops-satellite-based-fog-monitoring-system-797724

Scientists at the Indian Institute of Technology-Bombay (IIT-B) have developed a satellite-based fog monitoring system with the ultimate goal of integrating the fog information to air, rail and vehicular transportation management to ensure safe travel.

"The Indo-Gangetic Plains covering northern India, Pakistan, Nepal and Bangladesh is subjected to dense haze/fog during winter months severely impacting on air, rail and vehicular traffic," Ritesh Gautam, assistant professor at the IIT's Centres for Resources Engineering and Climate Studies, told IANS in an email.

"We have developed this system for monitoring and dissemination of fog information to government agencies and also to the general public."

Formerly a research scientist at the Climate and Radiation Laboratory of Nasa's Goddard Space Flight Centre in the US, Gautam said the fog monitoring system was developed with the help of his students Reema Chourey, Dinesh Patil, Sarwar Rizvi and Manoj Singh.

According to Gautam, the system uses in-house developed software to automatically process data from the <u>Nasa</u> satellites (Terra and Aqua MODIS) and produces daily maps of fog and low cloud regions for the Indo-Gangetic Plains at a moderately high resolution.

He said his team was presently testing retrievals and processing of fog-related parameters from geostationary satellites, such as India's own INSAT satellites, "for near-real time continuous monitoring of fog, water vapor and aerosols over south Asia".

"This satellite monitoring system is quite complex but I am glad that we have developed the capability and are moving forward," Gautam said. "It can also be used to monitor dust storms, biomass burning events, cyclones and monsoon clouds."

In addition to datasets obtained from both polar orbiting and geostationary satellites, the IIT team is also working on integrating surface-based meteorological and pollution related measurements, he said.

According to Gautam, his team has also analyzed spatial and temporal variation and trends of fog occurrence frequency over the entire Indo-Gangetic Plains along with trends in pollution for the winter season (December-January).

"We have found a highly interesting trend where the long-term satellite data analysis suggests a statisticallysignificant increasing fog frequency trend over the eastern parts of the Gangetic Plains (parts of Bihar and West Bengal)," Gautam said.

"This is in sharp contrast over the western regions of the Gangetic Plains (such as Delhi), where a decreasing trend in fog frequency is found."

The upward trend in fogginess over eastern Indo-Gangetic Plains is found to be strongly coincident with upward trend in pollution, suggesting that increasing winter-time pollution over this region could be linked to increasing fogginess.

While the focus of media is mostly centered over Delhi, Gautam said the increasing fog over eastern Indo-Gangetic Plains was not usually reported.

However, long term analysis of satellite data by the IIT team has found that "most of northern India is subjected to severe and persistent fog and pollution haze events during the winter months".

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## **IIT-B gets counsellor to help students tackle stress**

http://www.hindustantimes.com/mumbai/iit-b-gets-counsellor-to-help-students-tackle-stress/story-T4wlGcMfTLAuvccJbKRMBN.html

The Indian institute of Technology-Bombay (IIT-B) has finally hired a third full-time counselor to help students deal with examination and placement worries.

The authorities said with the placements still on and mid-term examination to start this month, an extra hand on board will help them reach out to more students.

With the latest hiring, the total number of in-house counselors at the campus goes up to three. Another expert has been working part time with the institute. "We've been on a look out for another full-time counselor for some time. We are hoping this will help students who need help," said Soumyo Mukherji, dean, student affairs, IIT-B.

Mukherji said the management is also looking at other features that could benefit students.

In 2015, a student had committed suicide, while another student had tried to kill himself. Following these incidents, the management decided to bring about changes in the student support system on the campus, including workshops for freshers and allowing students' families to live on campus.

Another interesting feature was placing counselors in hostel buildings on a rotational basis, so students can approach them easily. "It is nice to see counselors approaching students in hostels now, because that way more students are opening up about their problems. Living away from home is often the biggest reason for depression," said a third-year electrical engineering student of the institute.

According to the statistics revealed by IIT-B authorities, the number of students visiting counselors has increased over the years. In 2015, on an average, 120-130 sessions were conducted by both the counselors.

"On an average, a counselor can meet 8-10 students daily. With three full-time counselors, more and more students will get to talk to counselors," said Mukherji.

## **IIT nod to surveillance system**

### http://timesofindia.indiatimes.com/city/noida/IIT-nod-to-surveillance-system/articleshow/50829949.cms

Noida: The multi-crore Integrated Security Surveillance System for Noida has received the green light from IIT-Delhi. Tenders for the project, which will help check crime and traffic rule violations in the city, will now be initiated for selection of an agency to put in place nearly 1,000 cameras including face readers and number plate readers. Work on the proposed project is expected to commence within two months and will be completed in a year.

The estimated budget cleared by the department of electronics, IIT-Delhi, has been set at Rs 114 crore. A request for proposal (RFP) for appointment of the agency has been approved by the department of computers. "We are likely to initiate the RFP this week for the project," said Salil Yadav, Noida's project engineer (E&M), handling the project.

"Once the tender process is complete, the project should be online by April this year and should be functional a year from then. The maintenance and operations for five years will be the responsibility of the selected agency besides the installation," he told TOI. tnn

According to officials, the Noida traffic cell has already worked out the modalities to implement the system on a pilot basis over a 25 sqkm area of the city. Once implemented, Noida will be the first township in Uttar Pradesh to have such a hi-tech surveillance system.

## **Two Indian institutions among best small varsities**

Indian Institute of Technology Guwahati has been ranked 14th globally, followed by Savitribai Phule Pune University in 18th place. Small universities are defined by having fewer than 5,000 students and teach and research across more than four disciplines from arts/humanities, medicine/clinical, engineering/technology, physical sciences, life sciences and social sciences. Only 20 small universities in the world are world-class (included in the Top 800 World University Rankings), according to the ranking.

California Institute of Technology, US, has been ranked number one on the list followed by two French institutions – École Normale Supérieure and École Polytechnique in the second and third place, respectively.

Phil Baty, Times Higher Education rankings editor, says: "When it comes to universities, size matters. For some students big is best, but for others, a small university is the right option. Small universities can potentially offer students a more intimate environment, with more support and attention from lecturers, and – let's be honest – more of a chance for students to spend time with the star professors who in bigger universities may simply be too busy. The smaller university can also offer a greater sense of collegiality and community, where students are less likely to get lost in the crowd."

Commenting on Indian institutions, Baty says, "India's institutions are well represented in the World's Best Small Universities Ranking 2016. Alongside Caltech, they demonstrate the world-class offering available at smaller institutions, no matter their location."

## Dainik Jagran ND 03/02/2016 P-15 आइआइटी की फीस तिगुना बढ़ाने की सिफारिश

नई दिल्ली, प्रेट्र : भारतीय प्रौद्योगिकी संस्थानों

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का एक फंड शुरू करने का सुझाव भी दिया है। सूत्रों के मुताबिक, मानव संसाधन विकास मंत्रालय को सौपी अपनी रिपोर्ट में समिति ने आइआइटी की औसत वार्षिक फीस मौजूदा 90 हजार रुपये से बढ़ाकर करीब तीन लाख रुपये करने की सिफारिश की है। समिति में विभिन्न आइआइटी के निदेशक शामिल है। समिति ने नॉन-बैकिंग वित्तीय कंपनी (एनबीएफसी) के तौर पर दो हजार करोड़ रुपये के फंड निर्माण की सिफारिश की। इसमें सरकार और निजी क्षेत्र दोनों की भागीदारी होगी। एक हजार करोड़ रुपये सरकार और एक हजार करोड़ रुपये कॉरपोरेट जगत से लेने की बात कही गई है।

### P-07 Veer Arjun ND 03/02/2016

निर्मल गंगा के लिए मंत्रालयों के बीच सहमति विशोष प्रतिनिधि मन् नई दिल्ली। गंगा को निर्मल एवं अविरल बनाने की नरेन्द्र मोदी नीत

सरकार को महत्वाकांक्षी योजना को तेजी से आगे बढाने के लिए आठ केंद्रीय मंत्रालयों ने एक संयुक्त सहमति पत्र पर :एमओय: हस्ताक्षर किये है जिसके तीन वर्षों के दौरान गंगा और उसकी सहायक नदियों में प्रदूषण फ़ैलाने वाले तत्वों पर प्रभावी ढंग से अंकुश लगाने और आपसी तालमेल के साथ स्वच्छता पहल को गति प्रदान को जायेगी।

जल संसाधन, नदी विकास एवं गंगा संरक्षण मंत्रालय के एक अधिकारी ने बताया कि इस सहमति मत्र को 30 जनवरी 2016 को अमलीजामा पहनाया गया। इसके तहत जल संसाधन; न्दी विकास एव गंगा संरक्षण मंत्रालय के साथ मानव संसाधन विकास मंत्रालय, स्वच्छता एवं पेयजल मंत्रालय, ग्रामोण विकास मंत्रालय, पर्यटन मंत्रालय, आयुष संत्रालय, युवा एवं खेल मंत्रालय, पोत पुरिवहन मंत्रालय ने सहमति पत्र पर

हस्ताक्षर किए। सहमति पत्र को अनुसार, गंगा को अविरल एवं निर्मल बनाने के लिए सात मुख्य क्षेत्रों की पहचान की गई है साथ ही 21 कार्य बिन्दु तय किये गए है। गंगा को स्वच्छ बनाने के लिए सरकार ने, 2015 से 2020 को दौरान करीब 20 हजार करोड रूपये का कार्यक्रम तय किया है जिसमें 12728 करोड़ रूपये नये कार्यक्रमों के लिए तथा 7272 करोड़ रूपये अभी जारी कार्यक्रमों के लिए है। नमामि गंगे परियोजना का 100 पतिशत खर्च केंद्र सरकार वहन करेगी। रेले मंत्रालय और जल संसाधन मंत्रालय के बीच हए सहमति पत्र के मुताबिक, दोनों पक्षों ने गंगा यम्ना नदी क्षेत्र पर स्थित जल शोधन संयंत्रों से शोधित जल की आपूर्ति और उपयोग :पीने के लिए नहीं करने पर सहमति व्यक्त को है।जल संसाधन एव गंगा संरक्षण मंत्रालय सभी मत्रालयों के बीच समन्वय का काम करेगा। वह शोधित जल के उपयोग के लिए बाजार का विकास करेगा। यह योजनाओं को लागु करने के लिए

शोर्ष मंत्रालय होगा और नमामि गंगे परियोजना के लिए राज्य सरकारों के साथ भी समन्वय स्थापित करेगा। मानव संसाधन विकास मंत्रालय साफ सफाई, जैव विविधता की जरूरत के बारे में जागरूकता और पर्यावरण साक्षरता फैलायेगा।

सहमति पत्र के अनुसार, मानव संसाधन विकास मंत्रालय उत्तराखंड. उत्तरप्रदेश, बिहार, झारखंड और पश्चिम बंगाल जैसे राज्यों में गंगा नदी के तट पर साक्षर भारत कार्यक्रम <आयोजित करेगा। यह गंगा नदी बेसिन प्रबंधन योजना पर प्रारंभिक परियोजना रिपोर्ट तैयार करेगा जिसे भारतीय पौद्योगिको संस्थानों के कंसर्टियम ने विकसित किया है। यह आईआईटी और एनआईटी को उन्नत भारत अभियान के तहत गंगा बेसिन पर स्थित कम से कम पांच गांवों को गोट लेने को प्रेरित करेगा. साथ ही नदी में औद्योगिक एवं रासायनिक प्रदेषण रोकने संबंधी पायलट परियोजना तैयार करने के लिए आईआईटी को प्रैरित करगा।

# NIT Silchar invests in student initiatives; conforms with 'Make in India'

### http://www.pagalguy.com/articles/nit-silchar-invests-in-student-initiatives-conforms-with-mak-39565599

Government initiatives like 'Startup India' and 'Make in India' have given wings to budding entrepreneurs in the country. These initiatives have encouraged many engineering students to opt for higher studies and start-ups over job opportunities. NIT Silchar, to promote student developments in the field of innovation, had established a Research Promotion Cell (RPC) in the year 2013.

Students at NITS receive funds for consumables, labour, travel, etc. pertaining to their research work from the RPC. Faculty may help them with their research, but the idea of the project belongs solely to the student. Dr. Brinda Bhowmick, in-charge of the RPC said, "We provide advances to the students who work on outcomebased projects. A budget is allotted keeping in view the credibility of the research. Also, progress of the research is reviewed every six months, which helps us take a call on the subsequent assistance sought by them."

Before getting the funds sanctioned, the student needs to set a deadline for the project and explain its applicability to the NITS authorities. Kanchan Kumar, a fourth year student of Electrical Engineering said, "I was clueless about starting my own project in the first year. However, a conference organised by the RPC to help student innovation motivated me to invest more time in research." Kumar has received Rs 25,000 and Rs 50,000 respectively from the RPC for two research projects. The projects are reviewed by the student's guide, the coordinator of the concerned department, student members, and faculties from other departments before getting the final nod for funds.

There are instances where students failed to get the required funds for their research studies. "We have students who have succeeded in registering their own patents with the financial aid provided by the RPC. But when students ask for subsequent funds without showing convincing progress in their projects, we have to deny the funding. However, we ensure that proper guidance is provided to them by the faculty to advance the research," said Dr. Bhowmick.

The research projects need not necessarily be a part of the students' academics. However, when the student graduates from NITS, the components and devices utilised in the project need to be submitted to the RPC. Also, there are no provisions laid by the institute to repay the money utilised by the students in their research work.

With institute initiatives like Research Promotion Cell being the backbone of students' innovations, the success of a nationwide campaign like 'Make in India' can be classified as an attainable feat.

## Is your foreign degree valid in India?

Hindustan Times (Indore)

### SAFETY CHECK Be careful while selecting degree courses abroad which are of shorter duration than the ones in India or are in open learning mode

Do you do your due diligence before selecting a programme or institution abroad for higher studies, especially in the UK, Australia, West Europe, China or Russia? If not, then you must start the process now to check if your qualification or course would be given the equivalence (considered at par with a course) in India for higher studies, professional practice and jobs.



- in India Degrees awarded by foreign universities for courses pursued in their offshore campuses in other countries if the offshore campus is duly approved

Degrees in disciplines like medicine, nursing, pharmacy, law, architecture etc will have to be verified by and given equivalence by the respective professional bodies

- proficiency, certificate or diploma-level examination conducted either by universities or by nonuniversity level bodies
- Two-year (fast track) degrees awarded by foreign accredited universities.
- level institutions are not given equivalence. Open/distance or online degrees
- Students who have completed their education as private candidates are not issued equivalence certificates

ILLUSTRATION:

### ABHIMANYU SINHA

Though the Association of Indian Universities (AIU), which grants equivalence to these courses, had relaxed certain norms on recognition of certain foreign university qualifications a few months ago, some courses are still not treated with parity in India.

For instance, students getting degrees from foreign universities for programmes of a shorter duration than similar programmes in India will find it easier to get equivalence and recognition in India. However, degrees for medicine and law get equivalence only from professional bodies.

Till mid-2015, programmes in foreign institutions were required to be completed in full-time regular mode as those of Indian universities as per AIU rules. Just like in India, the duration of bachelor's programmes in the foreign university had to be of three years and master's courses of two years.

A number of foreign universities allow students to complete their postgraduate degree quickly ( compared to Indian institutes) as acceptance of credits and credit transfer is common in a number of foreign and Indian universities.

These courses were not given equivalence in India, but the AIU later changed its policy to accommodate programmes shortened on account of credits accepted by foreign universities.

"While AIU does not relax the requirements of the minimum duration of degrees, the duration instead is measured in terms of precise number of months/years and completion of the number of semesters/trimesters. Professional degrees awarded by foreign universities which also entitle the student to practice a profession in India in disciplines such as medicine, nursing, pharmacy, law and architecture are given equivalence by the respective professional councils," says an AIU official.

Initially, equivalence was accorded by the AIU on a course to course basis only after the proposal for equivalence of foreign qualification was received from an Indian mission abroad or from the university concerned, adds the official.

Other problem areas are vocational degrees and nondegree qualifications such as proficiency, certificate or diploma- level examination conducted either by universities or by non-university level bodies which are not given equivalence.

Two-year (fast track) degrees awarded by foreign accredited universities are also not recognised.

Degrees granted for courses pursued on offshore campuses of foreign universities are only valid in India if the offshore campus is duly approved by the competent authorities in that country.

Foreign degrees awarded to students through pathway or diploma- level institutions also not given recognition as well in India.

Open distance lear ning, online degrees and those in the virtual mode from foreign institutions are also not treated equally