Newspaper Clips
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December 27

Supercomputer to answer weather forecast issue: IIT Madras

http://www.moneycontrol.com/news/weather/supercomputer-to-answer-weather-forecast-issue-iit-madras_4743041.html

Virgo enables researchers at IIT Madras to accurately study data from several past cyclones and monsoons. This data is then coupled with real-time satellite data to enhance the quality of weather forecasting.

Recent Chennai floods brought forward glaring lapses in information circulation with respect to weather forecast and inconsistencies with weather prediction. These shortcomings can be rectified as per Dr C Balaji, Professor of Mechanical Engineering, IIT Madras as he has a completely new approach to weather forecasting. His confidence stems from an IBM developed supercomputer called Virgo. This computer commissioned by IIT Madras is the fastest computer in any Indian academic institution and one of its primary objective is to collect satellite data that will enhance the accuracy of weather predictions. Virgo enables researchers at IIT Madras to accurately study data from several past cyclones and monsoons. This data is then coupled with real-time satellite data to enhance the quality of weather forecasting. Dr Balaji believes that this will change weather forecasting, as the current system works on traditional numeric method by launching sensors attached on weather balloons to study weather patterns. Introducing a satellite into the equation will enhance accuracy and add an extra dimension to weather forecasting. "If we get some measurement from these satellites, which are closer to the truth, can we inject some of this information related to atmospheric thermodynamics or radiation into this numerical model, and correct the model? We should be in a better position to forecast cyclones," he said. Virgo interprets the combined data streams from numerous satellite feeds and enables forecasters to predict the place and time of a storm within few hours with improved accuracy. "The state of the art is: how many hours of computational time is required to predict an event in the next 72 hours? In the case of Virgo, we can predict a cyclone for the next 72 hours with 4-6 hours of simulation," Balaji further said. IIT's methodology will be put to test as part of the Ministry of Earth Sciences' national monsoon mission with the aim to better predict monsoons and provide citizens enough lead time to prepare for disasters like floods and cyclones.

IIT's startup platform for greenhorns

http://timesofindia.indiatimes.com/city/kolkata/IITs-startup-platform-for-greenhorns/articleshow/50338580.cms

KOLKATA: A startup camp is being organised at the Global Entrepreneurship Summit (GES) to be held at IIT-Kharagpur from January 8. This camp will allow students to interact with entrepreneurs. The aim is to allow startups to recruit the finest talent among the GES participants. It will also give would-be entrepreneurs an opportunity to meet some of the biggest venture capital and angel investors in India.

"In 2015, the Entrepreneurship Cell of IIT-Kharagpur went on an entrepreneurship awareness drive, a pan-India initiative to spread entrepreneurship across 22 cities in India. Nearly 30,000 people participated in this drive that had speakers like Ridam Desai, MD, Morgan Stanley, Ashish Chauhan, CEO, Bombay Stock Exchange, Satya Prabhakar, CEO and founder, Sulekha.com and Ashok Soota, chairman, Happiest Mind Technologies. The GES is the flagship event of the Entrepreneurship Cell. It will be one of the biggest entrepreneurial platforms for academicians, new-age entrepreneurs, eminent business personalities, venture capitalists and students to gather and share their entrepreneurial endeavours and experiences and pledge to take entrepreneurship in India to greater scales," said Shivam Kankani, junior associate, Entrepreneurship Cell, IITKharagpur.

This edition of the GES will have guest lectures and workshops focused on building the entrepreneurial acumen of participants by companies like BSE, Vmware, Calcutta Angels, Microsoft, IBM, Intel, Flipkart, Amazon Web Services and Deloitte. The previous editions of GES had stalwarts like Sundar Pichai, CEO of Google, Suneet Singh Tuli, founder of Aakash Tablet, Dominique Trempont, serial entrepreneur and associate of the Late Steve Jobs, Sramana Mitra, Forbes columnist and Silicon Valley entrepreneur, Harish Hande, renowned social entrepreneur, Nachiket Mor, former deputy manager of ICICI Bank and Sanjeev Bhickchandani, founder, Naukri.com as speakers. "The Global Entrepreneurship Con ference, the only one of its kind, will serve as a conclave for discussion of opportunities and programs aimed towards promoting entrepreneurship in various universities across the world.The conference will be followed by Connect the Dots, a discussion among Entrepreneurship Cells in India about the Indian scenario and how best to go about promoting entrepreneurship in their respective campuses," Kankani added.

The Global Busniess Model competition, Empresario, powered by AugRay, had entries from around the country at the close of the preliminary round in October. The finals of this competitions will be part of the GES and the winners will get a direct entry in the semi-finals of the International Business Model Competition.

According to him, Entrepreneurship Cell, IIT-Kharagpur, aims to educate every member of India's collegiate fraternity on entrepreneurship as a possible way of life, and to provide support to all those who choose this path.Participants should register at http:www.ges.ecell-iitkgp.org for the event.The accommodation of students attending the three-day event will be taken care of by IIT-Kharagpur for which a nominal fee will be charged.

Sunday Guardian ND 27.12.2015   P-04

INTELLIGENT TECH

More students opting for adaptive learning

AREEBA FALAK
NEW DELHI

An increasing number of students across India are opting for adaptive learning platforms to prepare for various entrance examinations. Lakhs of students appear for medical, MBA and IIT entrance exams every year and this has led to a burgeoning demand for coaching centers that promise outstanding success rates.

"But the next big thing now are adaptive learning platforms that ensure the 'last-mile preparation' of aspiring students," said Abhishek Patil, founder, Oliveboard.

"Adaptive learning is exclusively student-oriented… It customises itself according to the student," said Joe Cochitty, vice-president, Product Team, Toppr.

"An Adaptive Learning Platform responds according to the number of questions a student got right or wrong in a particular chapter. The algorithm understands which concepts he/she is weak in and will accordingly pose them with the next question. Students no longer have to keep solving a set number of questions. The questions adapt according to how prepared a student," Joe said.

M.S. Rao signed up for Toppr recently to help his grand-daughter, a class 11th student, prepare for IIT-JEE exam. Himself an IIT-Bombay alumni, he said, "Exams like IIT-JEE need strong basics. Technology is dynamic and you can invent something new only when your concepts are strong. An adaptive learning platform like helps a student to do exactly that."

Joe said, "Adaptive learning is revolutionizing self-study. A student will still have to go to school and take classes, but the amount of time they spend on self-study can lead to far better results if they use adaptive learning."

"Adaptive learning platforms won't replace the need for teachers. But it definitely improves the quality of preparation. To inculcate Adaptive Learning within the primary education system would require some massive changes. But this is where the future of Adaptive Learning will eventually lead," said Abhishek.

Atul Gandhi, who scored 98.85 percentile in CAT 2015, said, "Oliveboard helped me a lot with my preparation. It helped me to evaluate what sections I needed to improve in and provided practice tests accordingly. They provided me with a schedule that was effective. Their adaptive learning helped me improve my speed and accuracy in answering questions. They are technically a must for anyone aspiring to crack various entrance exams." Atul currently works in a German-based IT company in Gurgaon.

Both the Ed-tech start ups, Oliveboard and Toppr, are almost three years old now and boast of a significant rise in their demand. Joe said: "We now have 6,00,000 registered users at Toppr from across the country. Our vast number of users helps us generate more user data that makes our algorithms more efficient. We currently provide study modules from class 8th-12th as well as for MBA, Medical and IIT entrance preparation."

On the other hand, Oliveboard specialises in banking, MBA, government and insurance exams. "We have over 2,10,000 registered users on our platform."

Economic Times ND 28/12/2015   P-01

IITs Asked to Work on Ganga River Basin Plan

Months after a consortium of seven IITs submitted the Ganga River Basin Management Plan, the Centre has asked them to walk the talk, reports **Anubhuti Vishnoi**. ▶▶ 4

WALK THE TALK Each IIT will handhold five villages along the river and help them treat pollutants before releasing them into the Ganga water

IITs Told to Adopt Various Stretches of River Ganga

Anubhuti.Vishnoi@timesgroup.com

New Delhi: Months after a consortia of seven IITs submitted the Ganga River Basin Management Plan, the Centre has asked them to walk the talk. Ten IITs have been asked to pitch in by adopting various stretches of the river and effect 'implementable action plans' there for cleaning up the holy river. Each IIT will also handhold five villages along the river and help them treat pollutants before releasing them into the Ganga water, conduct research on cost-effective solutions for Ganga pollution, ensure real-time monitoring of pollution levels in the holy waters and draw up stretch specific project reports within next 30-45 days.
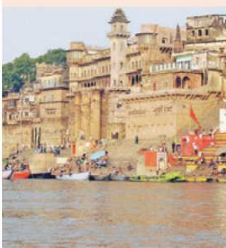
One of the major elements of the RSS' cultural agenda, the cleaning of the Ganga has the full support and backing of the Modi government through the ambitious 'Namami Gange' project piloted by the Ministry of Water Resources.

At a meeting of the water resources and HRD ministries, held on December 9, 2015, it was strongly felt that the intervention proposed by the IITs in their report must be translated into implementable action plans "with clear scope, mode of implementation and likely costs".

It has now been agreed that various stretches of the Ganga basin will be allocated to the IITs, which will identify all possible projects to control pollution in the Ganga in the allocated stretches. Each IIT will also engage dedicated research scholars for the same and finalise a preliminary project report for the stretch concerned in the next 30-45 days.

It is learnt that the same has already been communicated to the IITs,

Cleaning Ganga River Basin

CONSORTIA OF SEVEN IITs – Bombay, Madras, Kanpur, Kharagpur, Guwahati and Roorkee –set up in 2010 to prepare a blueprint to clean the Ganga river basin

AT THE DECEMBER 9 MEETING, water resources minister Uma Bharati sought assistance of IITs and other institutions and had suggested small stretches of rural areas be adopted by them for treatment of small drains

HRD MINISTER SMRITI IRANI SUGGESTED 3-PRONGED APPROACH

- Integration of all villages along Ganga in Unnat Bharat Abhiyan
- Special Literacy Package for Namami Gange
- Bringing team of national and international experts to develop innovative technologies and perform research in areas to address the challenges faced by river Ganga

THE ACTION PLANS

At a meeting of water resources & HRD ministries it was felt that intervention proposed by IITs must be translated into implementable action plans

ENGAGING SCHOLARS

Each IIT will engage dedicated research scholars for various stretches and finalise a preliminary project report for the stretch concerned in next 30-45 days

which are expected to soon hold a meeting of the IIT Consortia.

It is also agreed that three more IITs — the ones at Patna, Bhubaneshwar and Hyderabad — should be roped in to join the consortia of seven IITs.

The consortia of seven IITs — Bombay, Madras, Kanpur, Kharagpur, Guwahati and Roorkee — was set up in 2010 to prepare a blueprint to clean the Ganga river basin.

That apart, taking off from the Unnat Bharat Abhiyan, each IIT will be required to identify a cluster of five villages along the allocated Ganga stretch where they will implement the preliminary project report and help turn them into 'model villages for treating pollutants flowing into the river'. IIT Kharagpur has been asked to develop a GIS-based monitoring system to assess the levels of pollution at various points and give real-time updates on it. The HRD ministry's Adult Education Bureau will alongside run a campaign in villages and town near the Ganga basin to generate awareness on the need to keep the river clean.

Each IIT will also take up research projects for cost-effective solutions for the various kinds of pollution plaguing the Ganga. Specific attention will be paid to the industrial pollution flowing into the Ram Ganga and Kali East tributaries to the Ganga.

That apart, the Schools of Planning & Architecture will be involved as well to devise ways to assist with urban planning of habitations along the Ganga basin and also to help preserve heritage structures in these areas.

At the December 9 meeting, water resources minister Uma Bharati had sought the assistance of IITs and other educational institutions and she had also suggested small stretches of rural areas be adopted by them for treatment of small drains.

Hindustan ND 28/12/2015   P-12

प्रधानमंत्री नरेंद्र मोदी ने कहा, उच्च तकनीकी संस्थानों और केंद्रीय विश्वविद्यालयों की भूमिका अहम होगी

स्टार्टअप इंडिया से आईआईटी भी जुड़ेंगे

मन की बात

नई दिल्ली | एजेंसी

प्रधानमंत्री नरेंद्र मोदी ने कहा है कि स्टार्टअप इंडिया-स्टैंडअप इंडिया अभियान में आईआईटी जैसे उच्च तकनीकी संस्थानों और केंद्रीय विश्वविद्यालयों की महत्वपूर्ण भूमिका होगी। आकाशवाणी पर प्रसारित मन की बात कार्यक्रम में पीएम ने कहा कि केंद्र सरकार 16 जनवरी को योजना का खाका पेश करने वाली है।

उन्होंने कहा कि देश भर के आईआईटी, आईआईएम, सभी केंद्रीय विश्वविद्यालय, एनआईटी समेत जहां-जहां भी युवा पीढ़ी है, उन सबको सीधे संपर्क से इस कार्यक्रम में जोड़ा जाएगा। मोदी ने स्पष्ट किया कि स्टार्टअप सिर्फ डिजिटल दुनिया तक सीमित नहीं है, इसे किसी भी क्षेत्र में अपनाया जा सकता है। उन्होंने कहा कि गरीब व्यक्ति को हर जगह शारीरिक श्रम करना पड़ता है, लेकिन कोई नवोन्मेष से एक ऐसी चीज बना दे कि मजदूरी में थोड़ी सुविधा हो जाए।

उन्होंने इस क्षेत्र में हाथ आजमाने वाले युवाओं को बैंक से मदद मिलने का भरोसा दिया। साथ ही आश्वासन दिया कि यह अभियान सिर्फ कुछ शहरों तक सीमित नहीं रहने दिया जाएगा। प्रधानमंत्री

04 से तीन स्टार्टअप संस्थापक 35 उम्र से कम के

65 फीसदी भारतीय स्टार्टअप बेंगलुरू, दिल्ली, मुंबई में स्थित हैं

4400 के करीब स्टार्टअप देश में, अमेरिका, ब्रिटेन के बाद तीसरी पायदान पर

05 अरब डॉलर रही फंडिंग स्टार्टअप की 2015 में

85 हजार से ज्यादा कार्यरत स्टार्टअप में अभी

2016 में स्टार्टअप मामले में ब्रिटेन को पीछे छोड़ देगा भारत

15 फीसदी हिस्सा स्टार्टअप का ई-कॉमर्स क्षेत्र में है

3-4 स्टार्टअप पैदा होते हैं हर रोज

स्रोत–नैसकॉम की रिपोर्ट

ने कहा कि क्या भारत स्टार्टअप राजधानी बन सकता है, क्या हमारे राज्यों में नौजवानों के लिए एक उत्तम अवसर के रूप में नए-नए स्टार्टअप, विनिर्माण क्षेत्र, सेवा क्षेत्र, कृषि क्षेत्र आदि में नए-नए नवोन्मेष लागू हो सकता है। उन्होंने कहा कि हर चीज में नयापन, नया तरीका, नई

सोच, दुनिया नवोन्मेष के बिना आगे नहीं बढ़ती है।

स्टार्टअप इंडिया, स्टैंडअप इंडिया युवा पीढ़ी के लिए एक बहुत बड़ा अवसर लेकर आई है। उल्लेखनीय है कि 15 अगस्त को लालकिले पर मोदी ने पहली बार इस अभियान का जिक्र किया था।

> गणतंत्र दिवस का एक सुनहरा पल है और यह सुखद संयोग है कि इस बार हमारे संविधान के निर्माता बाबा साहब डॉ. भीमराव अंबेडकर की 125वीं जयंती है। संसद में भी दो दिन संविधान पर विशेष चर्चा में भी बहुत अच्छा अनुभव रहा।
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> – नरेंद्र मोदी, प्रधानमंत्री

पीएम तक महंगाई, दलितों की परेशानियां पहुंचाएं

नई दिल्ली | विशेष संवाददाता

कांग्रेस ने नरेंद्र मोदी मोबाइल ऐप को लेकर प्रधानमंत्री नरेंद्र मोदी पर निशाना साधा है। पार्टी ने लोगों से अपील की है कि वह इस ऐप के जरिए महंगाई, किसान और दलितों की समस्याओं के बारे में बताएं, ताकि प्रधानमंत्री को जमीनी स्थिति की जानकारी मिल सके, क्योंकि प्रधानमंत्री विदेश दौरों में व्यस्त रहते हैं।

पार्टी प्रवक्ता टॉम वडक्कन ने कहा, 'खुशी की बात है कि प्रधानमंत्री ने मन की बात कार्यक्रम में लोगों से अपने ऐप से जरिये सीधे जुड़ने की अपील की है। प्रधानमंत्री बेहद व्यस्त व्यक्ति हैं। वह लगातार विदेश दौरों पर रहते हैं। ऐसे में उन तक स्थानीय समस्याओं के बारे में जानकारी पहुंचाना जरूरी है।'

कांग्रेस ने मोदी के काबुल में दिए बयान पर ऐतराज जताया है। वडक्कन ने कहा कि पाक को अफगानिस्तान और भारत के बीच पुल करार देना गलत है। भारत और अफगानिस्तान संप्रभु देश हैं और इन दोनों देशों के बीच किसी पुल की कोई जरुरत नहीं है।

पाकिस्तान का जिक्र नहीं : कांग्रेस ने कहा कि उम्मीद थी कि प्रधानमंत्री नरेंद्र मोदी मन की बात कार्यक्रम में रूस,

'अधिकारों जितनी चर्चा कर्तव्यों की हो'

प्रधानमंत्री ने रविवार को 'मन की बात' कार्यक्रम में लोगों से माईगॉव वेबसाइट पर कर्तव्य विषय को लेकर निबंध, कविताएं एवं अन्य माध्यमों से विचार भेजने का आग्रह किया। उन्होंने स्कूलों, कॉलेजों के छात्रों को परिसर में महापुरुषों की प्रतिमाओं की साफ-सफाई करने का भी सुझाव दिया।

मोदी में विवेकानंद की झलक : दिलीप चौहान

अहमदाबाद। प्रधानमंत्री ने अपने 'मन की बात' कार्यक्रम में अहमदाबाद शहर के जिस दिलीप चौहान नामक दृष्टिबाधित शिक्षक का जिक्र किया था, उन्होंने मोदी को संवेदनशील और मेहनती व्यक्ति कहा है। चौहान ने कहा, मोदी में स्वामी विवेकानंद के लक्षण हैं। विवेकानंद की तरह ही पीएम भी हमेशा सोचते हैं कि भारत कैसे महान बने।

अफगानिस्तान और पाकिस्तान यात्रा का जिक्र करेंगे। लेकिन उन्होंने नवाज शरीफ के साथ मुलाकात के बारे में कोई जानकारी नहीं दी।

Economic Times ND 28/12/2015   P-19

Modi Vows to Unveil Startup India Project Details in Jan

In his Mann Ki Baat address, PM stresses that the project should spread to all corners of the country

Our Political Bureau

New Delhi: Prime Minister Narendra Modi delivered his year-ending Mann Ki Baat address on All India Radio on Sunday, without mentioning his surprise trip to Pakistan. But he promised to soon unveil details about the the Startup India, Standup India project announced last year.

"Startup India, Standup India will bring about a big opportunity for the youth of the country. On January 16, the government will launch the complete action plan of the project. All IIMs (Indian Institutes of Management), IITs (Indian Institutes of Technology), central universities, NITs (National Institutes of Technology) will be joined with this programme through live connectivity," Modi said. He added that a startup is not necessarily associated solely with the digital or IT world.

"We have to change the concept according to the requirements of our country. If a poor man does physical labour and a youth creates something through an innovation which lessens the physical effort of the labourer, I would consider that also a startup. I would ask banks to help such youth. Also, Startup India, Stan-

BRIDGING THE GAP

All IIMs, IITs, central universities, NITs will be joined with this programme through live connectivity

dup India, should not be limited to certain cities – it should spread to all corners of the country. I want to urge state governments also to spread this thought," Modi said.

Modi also said that the Direct Benefits Transfer (DBT) scheme had been extended to the Mahatma Gandhi National Rural Employ-

ment Guarantee Scheme (MGNREGS) whereby benefits were being directly credited in many regions into the bank accounts of the beneficiaries and the same is being extended to central scholarships.

He said there were many complaints earlier regarding payments under MGNREGS.

"Till now, almost ₹40,000 crore has been transferred through DBT in various schemes, including LPG subsidy to 15 crore consumers till the end of November. Almost 35-40 schemes are now directly coming under the ambit of DBT," Modi said. The Prime Minister also asked people to send him suggestions for the National Youth Festival to be celebrated January 12-16 in Chhattisgarh during the birth anniversary of Swami Vivekananda. He also appealed to citizens to clean the statues of national and state leaders as part of the Swachh Bharat Abhiyan before January 26.

Modi also announced the launch of a new Duties of a Citizen contest on the occasion of the 125th birth anniversary year of BR Ambedkar aimed at enhancing greater understanding of the constitution and inculcating a sense of duty.

He said there was much discussion of rights enshrined in the constitution but not as much of duties.

Starting Business Must Be a Breeze

ET VIEW

An enabling framework for startups makes sense. India needs an array of startups to realise the creative potential of its people, generate wealth and more jobs. These companies also need to be spread across cities and towns, not be concentrated in only a few geographical locations. So, it is incumbent on state governments to be creative as well to foster entrepreneurship, and provide the enabling infrastructure. Startups bring in new products and services to the mass market, and even disrupt the market at times. The most important element in the framework is to make it easy for startups to set up their business.

Hindu ND 28.12.2015   P-01

At IITs, average offers are more modest

RUKMINI S

NEW DELHI: Contrary to the media narrative on crore-plus offers at the IITs, the median salaries offered to new graduates are far more modest, internal data on placements obtained by *The Hindu* shows.

Like most years, the headlines on the 2015-16 placement season at the IITs were captured by the minority of students who got crore-plus offers from companies including Google and Facebook. However, these headlines miss the reality of IIT placement offers, a range of official sources and

> The median salary, which an average student gets, was Rs. 8.5 lakh at IIT-B in 2014-15

students said.

The handful of students who get offers for jobs overseas which tip the payscales over Rs.1 crore — just five per cent of all placements last year at IIT Bombay for instance — skew the average IIT graduate's starting salary, as do Computer Science graduates, placement officers at several IITs said.
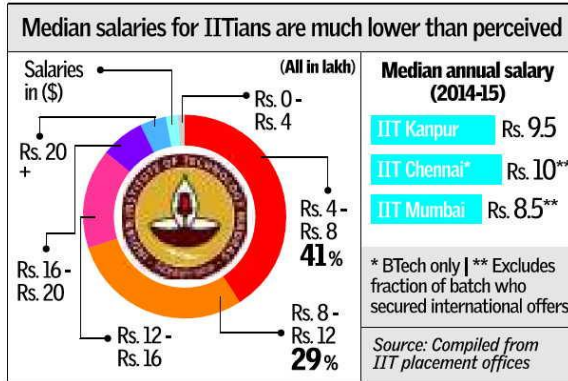
Average offers at IITs modest

The median — which reflects what the average student is offered — is far more modest; Rs. 8.5 lakh at IITB in 2014-15 for instance, according to Rahul Soni, placement manager at IITB. Data for the 2015-16 season was not available as the process is ongoing.

At IIT Kanpur, the median salary in the Computer Science stream in 2014-15 was Rs. 18 lakh, while the median for aerospace and civil engineering was Rs. 8 lakh, internal documents of IITK's placement office show. At IIT Madras, the median salary for B.Tech students placed in 2014-15 was Rs. 10 lakh.

Most of the crore-plus salaries reported by the media are simple conversions into Indian currency of placement offers made in U.S. dollars, placement officials said. Many, however, are keen to point out that this is an unfair metric.

"Those [crore-plus] salaries are nothing special," Brijesh Kumar, assistant professor at IIT Roorkee, told *The Hindu*. "Every engineer in these companies starts with those salaries when they work in California because the cost of living is so high over there. The crore-plus

packages that the companies advertise include stock components payable over five years contingent upon the person working there for that many years," he said.

Moreover, it is meaningless to convert these salaries to Indian rupees because if the income is in dollars, so are the taxes and expenses, Mr. Kumar said. "All it does is to create unnecessary stress for students and unrealistic expectations for the parents. I feel sorry for my students who are burdened by these unrealistic expectations of the society around them," he said.

While most students at the

IITs have a realistic idea by the time the placement season comes of what salary they should expect on graduating, some are demoralised by the 'crore-plus headlines', students say. "What it does is push you towards taking a job that might not even be in the area you have studied or your passion because you do not want to turn down the big sums," a student at IITB who had not been placed in the pre-placement season said. "So the computer science guys turn to the tech majors and the rest feel like they should try and catch the investment banks and consulting firms," he said.

REALITY BITES

Median salaries for IITians are much lower than perceived

Median annual salary (2014-15)	
IIT Kanpur	Rs. 9.5
IIT Chennai*	Rs. 10**
IIT Mumbai	Rs. 8.5**

* BTech only | ** Excludes fraction of batch who secured international offers

Source: Compiled from IIT placement offices

Navodaya Times ND 28/12/2015   P-07

IIT की नई ईजाद
सस्ता एयर प्यूरीफायर

वायु प्रदूषण के खतरनाक होते स्तर को देखते हुए वह दिन दूर नहीं, जब एयर प्यूरीफायर घर-घर की जरूरत बन जाएगा। इसे देखते हुए आईआईटी, मद्रास के शोधकर्त्ताओं की टीम ने सस्ते एयर प्यूरीफायर की खोज की है। यह इंडोर और सैंसर पर आधारित है, जो कि वायु प्रदूषण ही नहीं, जीवाणुओं से भी निजात दिलाएगा।

चेन्नई में वायु की गुणवत्ता करीब 55 सूचकांक है। वायु प्रदूषण की लिहाज से यह शहर अच्छा माना जाता है। वहीं दिल्ली में वायु की गुणवत्ता करीब 313 सूचकांक है और यह बदतर वायु प्रदूषण की स्थिति है। आईआईटी, मद्रास की नई ईजाद, खासकर दिल्ली के लिए बेहद उपयोगी साबित हो सकती है। वायु प्रदूषण की खतरनाक स्थिति पर दिल्ली सरकार के जागने के बाद कई कंपनियों ने एयर प्यूरीफायर बाजार में उतारे हैं। एक छोटे-से कमरे के एयर प्यूरीफायर की कीमत फिलहाल 15,000 रुपए से ज्यादा है। आईआईटी की ओर से जल्दी ही एयर प्यूरीफायर बाजार में उतारा जाएगा और इसकी कीमत कम होगी। सांस संबंधी बीमारियों और अस्थमा के मरीजों के घरेलू इस्तेमाल के लिए यह उपयोगी

जल्दी ही बाजार में आएगा

होगा। इसे इस तरह डिजाइन किया गया है कि यह हॉस्पिटल से लेकर बेसमेंट और धूल भरी जगहों में भी इस्तेमाल किया जा सकता है।

50 वाट बिजली की खपत

शोधकर्त्ताओं का कहना है कि वाटर प्यूरीफायर की तरह ही तीन-स्तरीय तकनीक पर एयर प्यूरीफायर भी काम करता है। सैंसर के जरिए जैसे ही वायु प्रदूषण का पता चलता है, स्टील बॉडी के निचले स्तर में लगा पंखा उसे अपनी ओर खींच लेता है। इसके बाद अलग-अलग स्तर पर इसे फिल्टर किया जाता है। इसमें अल्ट्रावायलेट लाइट लगी है, जो कि बैक्टीरिया और वायरस को ट्रीट कर देती है। इसके बाद ट्रीटेड हवा बाहर आ जाती है। इसमें 50 वाट बिजली की खपत होती है। इंवायरमेंटल एंड वाटर रिसोर्सेज इंजीनियरिंग के एसोसिएट प्रोफेसर एसएम शिवा नागेंद्र कहते हैं कि बाहर की तरह ही घर की हवा पर भी ध्यान देने की जरूरत है। हम ज्यादातर समय घर में गुजारते हैं, जबकि बाहर का प्रदूषण घर में आ जाता है और सर्कुलेट होता रहता है।

Times of India ND 28/12/2015 P-14

IITian to walk 400 km for social change

Saibal.Gupta@timesgroup.com

Kolkata: For well over a century now, people have marched for a cause or in protest. The agenda -political, social or otherwise -is fixed before the walk begins. But for Siddhartha Agarwal, an aerospace engineer from IIT-Kharagpur, who has decided to walk 400km from Fatehpur to Lakshmangarh in Uttar Pradesh, the plan is to meet people who live along the way so that he can learn about their problems and offer solutions that could better their lives.

"When I begin the walk, it is a clean slate. Issues get raised during the journey and people talk about problems and many a times even suggest solutions. 'Walking back to the Roots' is an initiative to inspire action and initiate change," the 25-year-old told **TOI**. Agarwal had tried to walk the distance last year too but was forced to withdraw due to a leg injury . This year though, he is better prepared and is confident of completing the walk without a hitch.

"During my 11-day journey, I will stop at every village, every town I cross and speak to people and try to know their problems. We are a nation of a thousand million. There are many problems and few solutions. Is it solely the government's responsibility to solve all problems? Or can we, through individual and collective initiative, make a difference? I believe we need to take a step, involve the community as well as individuals with influence. Many problems can be solved this way ," Agarwal added.

While Agarwal's newly

OFF THE BEATEN TRACK

Siddhartha Agarwal (25) had tried to walk the distance last year but was forced to withdraw due to a leg injury

TRIP BASICS

➤ Veditum to organize logistics

➤ Fund raising organization Rang De to help

➤ To be filmed by Digital Nerve

formed company Veditum will organize the logistics, fund raising organization Rang De will also be involved. The journey will be filmed by Kolkata-based organization Digital Nerve so that the problems and stories get uploaded on Veditum's website.

"Ayan Sil and Akash Das will document the journey .That is extremely important for people to then view issues and problems, discuss them and offer solutions that I can then take back to the villages," he said.

The 25-year-old engineer had begun with Rajasthan since his native village —Neem Ka Thana— is located there. But he aspires to tread beyond Rajasthan and gradually cover as much of the country as he can, discovering new challenges and replicating successes he manages to achieve along the way .

Smita Ram, co-founder and managing trustee of Rang De, believes that the potential of volunteerism, if unlocked, will play a big role in shaping India's future.

A DIFFERENT VENTURE: IITian Siddhartha Agarwal on an earlier trip

Business Line ND 28/12/2015   P-18

Indian students' applications to smaller US varsities may fall

DEEPA NAIR

Mumbai, December 27

The recent deportation of some Indian students by the US immigration authorities is likely to impactthe number of applications to smaller universities.

An advisory issued by the Ministry of External Affairs (MEA) on Wednesday said, "In recent days, there have been several instances of denial of entry by the US Immigration authorities to Indian students having valid student visas to pursue studies in two educational institutions, namely, Silicon Valley University at San Jose and Northwestern Polytechnic University, Fremont. The union government has taken up this matter with the US government. We have asked the US authorities to explain the reasons for denial of entry on a large scale to Indian students holding valid visas. The response of the US government is awaited."

Furthermore, the MEA has also asked students to defer their travel plans to the two universities till the matter is resolved.

Newer geographies

An Assocham study said that Indian students were looking at newer destinations such as Singapore, Germany, France, Italy, Denmark, Sweden, Ireland, Canada, China and Norway. This year, there has been a 20-25 per cent rise in number of students travelling abroad to new destinations, it added.

According to news reports, 14 Indian students were deported last week and 19 others, who had sought admission to these two universities, were not allowed to board their flights.

Vineet Gupta, Managing Director at Jamboree Education, said that it is surprising that the students were deported after getting visas and procuring I-20 forms issued by the educational institutions certifying their admission.

Gupta added that students need to be careful and do due diligence as to which university they are picking in the US.

A Mumbai-based educational consultant said, "Many students – particularly those who have got admission in second-rung universities in the US – may rethink their plans after these incidents."

Interestingly, the number of Indian students to the US recorded a 29.4 per cent jump at 1.33 lakh in 2014-15, a rebound after continuously declining for three years.

Financial Express ND 28/12/2015   P-6

Engineering regression

Fee caps for technical education a poor move

For a country that needs to bridge significant gaps in higher education, a move to cap fees in unaided private-sector technical institutes is ill-advised. By 2020, the government hopes to increase gross enrolment ratio from 18% to 30%, which will mean providing 40 million university seats, an increase of 14 million from the 2014 levels. But this can't be realised if critical private sector participation wanes. The All India Council of Technical Education (AICTE) has accepted the recommendations of a 10-member panel headed by former Supreme Court judge Justice BN Srikrishna on fixing ranges for maximum fees that can be charged by a private institute for various technical disciplines, including engineering and MBA. So, even as India's tertiary-age population is set to become the largest in the world in the next four years, the private sector will find it difficult to carry on functioning. Even though the government has significantly increased public spending on higher education, including technical education, it is nowhere near enough to bridge the supply gap—the private sector accounted for a whopping 59% of tertiary level enrolments in 2011-12.

The severe shortage has led to a situation where, while 1 in every 10 applicants in the US gets into the elite Massachusetts Institute of Technology, the IIMs are only able to take in 1 out of every 150 applicants, Price WaterhouseCoopers (PwC) reports. Ironically, while AICTE wants to put caps, about 450,000 Indian students spend over $13 billion to get educated abroad—while AICTE finds the Xavier Labour Research Institute's (XLRI) ₹9 lakh per annum for a postgraduate management degree too dear, students think nothing of paying several times that much in the US. If XLRI were forced to charge just ₹1.71 lakh per annum (the maximum that AICTE wants to allow), how is it going to survive or maintain quality standards? In such a scenario, the government would have to either subsidise private institutes or give scholarship support to all students, adding to its higher education outgo in both cases. Moreover, such a move impairs the chances of foreign universities—after the relevant Bill is passed—being interested in setting up campuses here. It would be really unfortunate if, just when India needs more quality institutes of learning, populist government policy prevents them from coming up—in the long-run, the biggest sufferers will be the very same students in whose name this charade is being conducted.

Scientists shine at IIT-B Techfest

http://timesofindia.indiatimes.com/city/mumbai/Scientists-shine-at-IIT-B-Techfest/articleshow/50346412.cms

MUMBAI: The second day of IIT-B's Techfest 2015-16, held in association with the Times of India, served as a stage for some of the greatest revolutionists in the fields of science and technology.

The highlights for the day were lectures and talks by author and astrophysist Jayant Narlikar, Noble laureate Serge Haroche, inventor Dr Gurtej Sandhu and co-creator of spreadsheets Bob Frankston.

Sandhu spoke about various flash technologies and their continuous advancement since the past. He also talked about the cause to invent and innovate to solve problems, create wealth and express creativity. Frankston explained to the students the internet as a concept and it's evolution over the years. He described it as a part of a larger picture of opportunity.

Haroche, the 2012 Nobel Laureate in Physics, gave the audience an insight into the history of light and the determination of whether it was a wave or a particle.

Another attraction was a "fast car" developed by the IIT Bombay Racing team, which has 74 students from 10 disciplines.