

Newspaper Clips

September 27, 2012

Millinnium Post ND 27/09/2012

P13

IndianOil, IIT-D sign MoU to promote research



NEW DELHI: A MoU was signed by R K Malhotra, director (R&D), Indian Oil Corporation and R K Shevg-aonkar, director, IIT Delhi, on 11 September, to collaborate for promotion of education, research and innovation. Under the MOU, IndianOil will award about ten research scholarships to students of IIT Delhi, who will carry out research work at IndianOil-R&D, in areas of downstream hydrocarbon and alternative energy sources like technology, biotechnology, nanotechnology, alternative energy sources and polymer science.

(Already appeared on Sept. 15, 2012)

Pioneer ND 27/09/2012

P-3

RENEWABLE ENERGY ASSISTED PUMP INSTALLED IN EAST DELHI SCHOOLS

New Delhi: To harness renewable energy, a number of Delhi Government schools in East Delhi have installed a new water pumping solution using solar energy. Renewable Energy Assisted Pump (REAP) is easy to install submersible pump connected to a water tank with a specially- designed motor powered by a solar panel.

The technology has been developed by power distribution-company BYPL and IIT-Delhi. Already, REAP has been installed in a number of Government schools — including Sarvodaya Bal Vidyalaya (Seemapuri), Raja Ravi Verma Sarvodaya Baal Vidyalaya (Nandnagri) and Government Senior Secondary School No-1, (Shahdara). REAP will be installed in many more schools in the coming days, said an official.

The installation of REAP systems in the schools are being funded by MLAs from their development fund. To ensure availability of purified drinking water in the schools, the REAP's have been especially provided with an ultra violet water purification system. **SR**

Schools get new solar system to purify water

EXPRESS NEWS SERVICE
NEW DELHI, SEPTEMBER 26

TO harness renewable energy, four government schools in East Delhi have installed a new water pumping system that uses solar energy and developed jointly by power distribution company BYPL and IIT-Delhi.

Called the renewable energy assisted pump (REAP), it is an easy to install submersible pump connected to a water tank with a specially-designed motor powered by a solar panel.

The innovative, energy-saving water purification system has been installed at Sarvodaya Bal Vidyalaya in Seemapuri, Raja Ravi Verma Sarvodaya Bal Vidyalaya in Nandnagri, Government Senior Secondary School No-1

The NEW, energy-saving water purification system has been installed in four government schools in East Delhi

in Shahdara and Government Senior Secondary School No-2 in Shahdara.

A dozen other East Delhi schools are already in the fray to install the system that saves electricity and ensures purified drinking water.

“Potable water along with adequate sanitation facilities in schools is part of the Right to Education (RTE). By providing safe drinking water, REAP is helping make these schools RTE compli-

ant. To ensure availability of purified drinking water in these schools, the technology provides an ultra-violet water purification system,” a BYPL official said

“Raw and untreated water is being used for sanitation purposes. Additionally, the REAP system will help conserve 3-4 KW of electricity at each school,” the official said.

The REAP systems in schools are being funded by local legislators from their MLA Local Area Development funds.

“The system is useful for schools in addressing their needs for sanitation and clean drinking water. Public representatives and school authorities have shown a great interest in this system,” Ramesh Narayanan, the CEO of BYPL, said.

IIT-Madras working on new solar cell for domestic, agri use

TIMES NEWS NETWORK

Chennai: The Indian Institute of Technology–Madras is working on perfecting the technology to use solar photo voltaic cell for domestic and agriculture use. IIT-M director Bhaskar Ramamurthi said the institute was working with three private drip irrigation companies on developing a technology that would integrate borewell pumps with solar PV cells.

On the occasion of the 60th foundation day of the Council of Scientific and Industrial Research (CSIR) on Tuesday, professor Ramamurthi said there was a need to meet domestic power consumption using solar power to tide over power shortage in the country. "Residential,

commercial and agriculture sectors are most affected by power cuts. It's crucial to remove or reduce basic electricity needs from the grid. Schools and colleges should all go off the grid and only use it as a back-up," he said.

He disputed the argument that drawing solar power was expensive. He said the use of diesel generators hiked the cost to Rs15 per unit, which could go up to Rs30 a unit unless used optimally. Inverters are almost as expensive at Rs14 a unit. In contrast, over the last three years the generation of solar power, apart from land costs, is Rs4.35 per unit. This is equal to the generation of power from a thermal unit. Taking into account the cost of storage, the total cost

could rise by another Rs4.

He said there were some technical issues with using solar energy which cannot be stored, but which could be overcome in a year's effort by engineers. He called upon interested scientists to work on making the solar power project a success.

Former director of the Central Leather Research Institute G Thyagarajan asked institutions like CSIR and the IIT to play a greater part in helping small industry players to adopt safe practices. "Where is India's claim of a huge technological power if it is not able to help hapless people in the cottage industry," he asked. India's technological prowess could help prevent accidents like the fire at a Sivakasi fireworks factory.

IIT-K's website makes learning Vedas easy

ht SPECIAL
GP Varma

■ htcity.kanpur@hindustantimes.com

KANPUR: A website designed by an engineer at the Indian Institute of Technology-Kanpur (IIT-K) may come as a boon for those who want to learn about ancient Vedas and Upanishads but are deterred by the tough language associated with them.

The website, www.yg.cse.iitk.ac.in/Hinduism, has around a lakh pages containing the Vedas, Upanishads, Geeta and Ashtavakra Geeta in Sanskrit, Devnagari (Hindi) and


■ BM Shukla
JUST LOG ON TO

- The site, www.yg.cse.iitk.ac.in/Hinduism, has around a lakh pages containing the Vedas, Upanishads, Geeta and Ashtavakra Geeta in Sanskrit, Devnagari (Hindi) and Roman English.
- The portal also contains information on Sanskrit, grammar, music, Indian philosophy and Hinduism.

Roman English.

BM Shukla, principal software engineer at the computer science engineering department of the IIT-K, is the brain behind the unique website.

Shukla said, "Along with Sanskrit scholar Dr Vijay

Lakshmi Trivedi, I have been working on the ambitious project since 2009 without any assistance from the government. I have provided the meaning of the shlokas in Hindi to enable the common man to understand them," he added. The portal, which is

updated on a regular basis, also contains exhaustive information on Sanskrit, grammar, music, Indian philosophy and Hinduism.

"Three out of six parts of the Indian philosophy, namely -nyaya, meemansa (poorva) and vaisheshik darshan, have been put on the website. The remaining three parts, including sankhya, yog and uttar meemansa, are in the process of being uploaded," said Shukla.

As for music, the portal contains 535 ragas of the Indian sangeet shastra. Besides, the rules of Sanskrit grammar framed by ancient scholar Panini are also included in a simple language.

"We have created a Sanskrit

dictionary on the website. There are about 28,000 words in the entire Sanskrit dictionary of which we have uploaded 14,000 words so far with their meaning in Hindi as well as Roman English," said Shukla.

Along with Dr Trivedi, Shukla is now developing easy ways for learning 'sandhi' (joining rules) of words.

"We have prepared a simple chart and have put it on the website to help millions of students learn Sanskrit language," he said.

"We will soon put the rules of vangmaya Sanskrit, tantra shastra, jyotish shastra and ganit (maths) shastra among others on the website," he added.

HT New Delhi

Fastest comp or tall claim?

TECH-NO Impossible for India to create wonder by 2017: Scientists

ht SPECIAL
Charu Sudan Kasturi

■ charu.kasturi@hindustantimes.com

NEW DELHI: India's plan to develop a supercomputer 61 times faster than anything available today by 2017 is "near impossible" given technological constraints that have hobbled similar efforts the world over, global and Indian experts have cautioned.

Senior scientists involved in building the new machine, proposed last week by telecom min-

ister Kapil Sibal, told HT that each supercomputer will need a dedicated nuclear plant for power supply and consume as much electricity as 5 lakh homes.

Supercomputers, machines with the combined speed of thousands of PCs, are crucial to nuclear, defence, tsunami and cyclone alert systems.

"It won't be possible to build an exaflop supercomputer by 2017," said Pradeep K Sinha, director, High Performance Computing at the Centre for Development of Advanced Computing that will work on the

project. Sibal has sought ₹4,700 crore to build petaflop and exaflop speed supercomputers.

A petaflop is a measure of computing speed; 1000 petaflops make one exaflop.

India's fastest supercomputer can work at 0.3 petaflops and ranks 58th among the world's fastest machines.

A US team recently said an exaflop speed machine wasn't going to be attainable by 2015.


MORE ON THE WEB
hindustantimes.com/supercomputer

We're yet to make a mark in science globally, regrets Manmohan

Special Correspondent

NEW DELHI: Prime Minister Manmohan Singh on Wednesday lauded the Council of Scientific and Industrial Research for its achievements but rued that the country had not been able to make a mark in the global arena.

In an address at a CSIR function got up to celebrate the 70th Foundation Day here, Dr. Singh said: "We cannot rest on our laurels. As a nation, we have not succeeded in mobilising enough private investment in science to raise our investment in scientific research to two per cent of GDP. We need to recognise that excellence has not percolated across all research and academic institutions.

We have not been able to make an impact on a world-scale commensurate with our large scientific manpower pool."

The CSIR should devote itself to these national challenges in the years to come. "It will have to take up national leadership in science, engineering and technology."

Recalling the history of the CSIR, the Prime Minister complemented it on making an attempt to make health-care affordable by exploiting the powers of open source drug discovery and remaining firmly rooted in the country's social milieu while selecting and implementing projects. "I am glad that the Council has proven its professional worth in every phase of India's growth in line with prevailing national policies and priorities."

Referring to the Academy of Scientific and Innovative Research recently set up by the CSIR to train young scientists and engineers in



Prime Minister Manmohan Singh, Union Minister for Science and Technology Vayalar Ravi and CSIR Director General Samir K. Brahmachari with the recipients of CSIR Young Scientist Awards on the occasion of 70th CSIR Foundation Day Celebrations in New Delhi on Wednesday.

— PHOTO: SANDEEP SAXENA

transdisciplinary skills, he said: "This is a good initiative and I look forward to early results."

Dr. Singh presented the prestigious Shanti Swarup Bhatnagar Award for 2011 to 11 young scientists: A.P. Sharma of the International Cen-

tre for Genetic Engineering and Biotechnology, R. Shankaranarayanan of the CSIR-Centre for Cellular and Molecular Biology, B. Sundaram of the Jawaharlal Nehru Centre for Advanced Scientific Research, G.N. Sastry of the CSIR-Indian Institute of

Chemical Technology, S. Doraiswamy of the National Institute of Oceanography, Sirshendu De of IIT Kharagpur, U. Ramamurthy and K.N. Balaji of the Indian Institute of Science, Mahajan Mj of Ramakrishna Mission Vivekananda University, P.

Sarkar of the Indian Institute of Statistics and S. Minwalla of the Tata Institute of Fundamental Research.

Congratulating the awardees, the Prime Minister said, "Young scientists must dream big and refuse to despair."

IIMA dean Prof Jajoo to step down

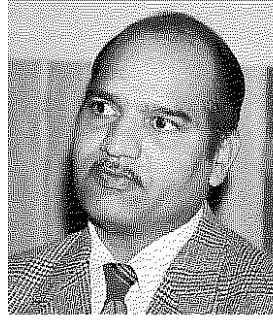
Niyati Rana

After four years, Indian Institute of Management, Ahmedabad (IIMA) will get a new dean. Prof BH Jajoo, who was appointed dean in 2008, has announced that September 30 is his last day in the post.

Serving as dean-institute for four years makes Prof Jajoo the longest serving dean at

the premier B-school. Officials at IIMA said that while three years is the fixed tenure for any dean, he was given an extension of a year in September 2012 as he is considered to be very close to the current director Prof Samir Barua.

Incidentally, Prof Jajoo will be the second dean at IIMA who will be vacating the post. Earlier, another visiting professor from IIT-Bombay who was given charge of dean-alumni and external relations, Prof Atanu Ghosh, also completed his tenure. Prof Ghosh, also considered to be close to Prof Barua, went back to his parent institute IIT-Bombay. Both the deans' terms came to an end just before Prof Barua's five-year term is set to come to a close in October-end.



Speaking to DNA, Prof Jajoo confirmed that September is his last month as dean. "I will continue being a faculty at IIM-A for the next one-and-a-half years till my retirement. During my tenure as dean-institute- IIMA has achieved much," he said. PGP has been well ranked in 'Financial Times' and PGPX has also won acclaim. Also, many infrastructure projects were taken up - building 320-room dome complex, expansion of PGP batch from 280 to 430 students and building the new sports complex, to name a few, he added.

The current dean for faculty Prof Ajay Pandey will be officiating dean-institute. The new dean will be appointed by the new director when he takes over sometime in November.

The Hindu ND 27/09/2012 P-12

Fellowship scheme for scientists above 70 years

Special Correspondent

NEW DELHI: On the occasion of its 70th foundation day, the Council of Scientific and Industrial Research (CSIR) on Wednesday announced research fellowships for scientists aged above 70.

Under the scheme, scientists would be given Rs. 20 lakh a year for five years, if they remain active, guide students and publish research papers. They should have also won the Shanti Swarup Bhatnagar

award.

CSIR Director-General Samir Brahmachari said many scientists continued to be active even after 70 and "we want to take advantage of services of such people." Also, the fellowships would be available only to those who are not getting any support. Currently, there may be five to 10 scientists who would be eligible for the scheme.

Dr. Brahmachari also announced the winners of Bhatnagar award for 2012.

They include Shantanu Chowdhury of the CSIR-Institute of Genomics and Integrative Biology, Suman Kumar Dhar of the Jawaharlal Nehru University (Biological Sciences), Govindasamy Mugesh of the Indian Institute of Science, Gangadhar J. Sanjayan of the CSIR-National Chemical Laboratory [Chemical Sciences], Ravi Shankar Narayanan of the Indian Institute of Science and Shanti Pavan of the IIT,

Madras (Engineering Sciences).

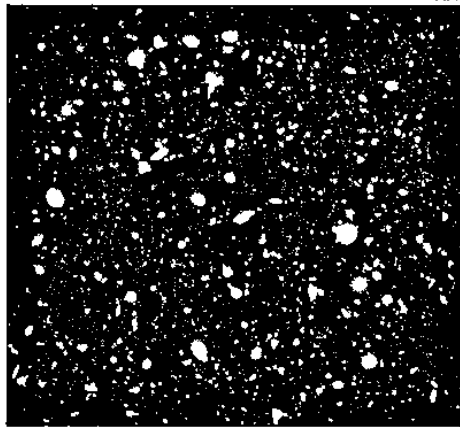
The other winners are: Siva Ramachandran Athreya and Debashish Goswami of the Indian Statistical Institute (Mathematical Sciences), Sandip Basu of the Bhabha Atomic Research Centre (Medical Sciences), Arindam Ghosh of the Indian Institute of Science and Krishendu Sengupta of the Indian Association for the Cultivation of Science (Physical Sciences).

A manned base beyond the Moon?

Washington: In a move that would send astronauts farther from the Earth than at any time in history, Nasa wants to build a manned 'gateway spacecraft' and 'park' it on far side of the Moon to function as a staging area for future missions to Mars. At 445,788 kilometres from Earth, the outpost would be far more remote than the current space station, which orbits a little more than 321 kilometres above Earth.

The distance raises complex questions of how to protect astronauts from the radiation of deep space — and of how to rescue them if something goes wrong, the Orlando Sentinel reported.

Nasa chief Charlie Bolden had briefed the White House earlier this month on details of the proposal, but it's unclear whether it has the administration's support. The price tag of the project is expected to run into billions of dollars. Documents obtained by the pa-



STELLAR VIEW: Astronomers using the Hubble Space Telescope have assembled a new image of the deepest-ever view of the universe, revealing the faintest and most distant galaxies ever seen. Dubbed the 'eXtreme Deep Field', the image was assembled by combining 10 years of observations taken of a patch of sky within the original Ultra Deep Field

per show that Nasa wants to build a small outpost — likely with parts left over from the \$100 billion International Space Station — at what's known as the Earth-Moon Lagrange Point 2, a spot about 61,155 kilometres from the Moon.

At that location, the combined gravities of the Earth and moon reach equilibrium, making it possible to "stick" an outpost there with minimal power required to keep it in place. To get there, Nasa would use the massive rocket and space capsule that it is developing as a successor to the retired space shuttle.

A first flight of that rocket is planned for 2017, and construction of the outpost would begin two years later, according to Nasa planning documents. Potential missions include the study of nearby asteroids or dispatching robotic trips to the Moon that would gather lunar rocks and bring them back to astronauts at the outpost. **PTI**

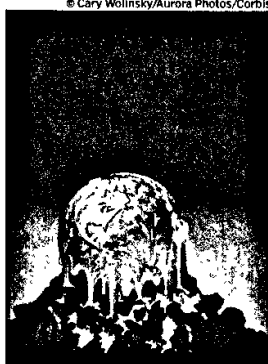
Times of India ND 27/09/2012 P23

Climate change risk: 100m deaths by '30

Developing Countries To Bear The Brunt If The World Fails To Act Fast, Says Study

London: More than 100 million people will die and global economic growth will be cut by 3.2% of gross domestic product (GDP) by 2030 if the world fails to tackle climate change, a report commissioned by 20 governments said on Wednesday. As global average temperatures rise due to greenhouse gas emissions, the effects on the planet, such as melting ice caps, extreme weather, drought and rising sea levels, will threaten populations and livelihoods, said the report conducted by humanitarian organization DARA.

It calculated that five million deaths occur each year from air pollution, hunger and disease



THE HEAT IS ON

as a result of climate change and carbon-intensive economies, and that toll would likely rise to six million a year by 2030 if current patterns of fossil fuel use continue.

More than 90% of those deaths will occur in developing countries, said the report that calculated the human and economic impact of climate change on 184 countries in 2010 and 2030.

It was commissioned by the Climate Vulnerable Forum, a partnership of 20 developing countries threatened by climate change. "A combined climate-carbon crisis is estimated to claim 100 million lives between

now and the end of the next decade," the report said.

It said the effects of climate change had lowered global output by 1.6% of world GDP, or by about \$1.2 trillion a year, and losses could double to 3.2% of global GDP by 2030 if global temperatures are allowed to rise, surpassing 10% before 2100.

It estimated the cost of moving the world to a low-carbon economy at about 0.5% of GDP this decade. Responding to the report, Oxfam International said the costs of political inaction on climate were "staggering".

"The losses to agriculture and fisheries alone could

amount to more than \$500 billion per year by 2030, heavily focussed in the poorest countries where millions depend on these sectors to make a living," said executive director Jeremy Hobbs.

British economist Nicholas Stern said earlier this year investment equivalent to 2% of global GDP was needed to limit, prevent and adapt to climate change. His report on the economics of climate change in 2006 said that without any action to tackle climate change, the overall costs and risks of climate change would be equivalent to a cut in per-capita consumption of perhaps up to 20%. **REUTERS**

पचास लाख हाथों में 'आकाश' देने की तैयारी

नेशनल व्यूरो | नई दिल्ली

दुनिया के सबसे सस्ते टैबलेट आकाश-1 को लेकर हुई गड़बड़ी के बाद अब सरकार बड़े स्तर पर 'आकाश-2' को लांच करने की कवायद में जुटी है। जल्द ही कैबिनेट के समक्ष एक साथ 50 लाख 'आकाश' टैबलेट हासिल करने का प्रस्ताव भेजने

की तैयारी की जा रही है। ऐसे समय जब आर्थिक और अन्य मोर्चों पर सरकार बुरी तरह धिरी हुई है, उसकी यह पहल काफी अहम मानी जा रही है। चूंकि अधिकतर 'आकाश' टैबलेट विश्वविद्यालय और कॉलेज छात्रों को दिए जाने हैं, ऐसे में माना जा रहा है कि सरकार इसके माध्यम से छात्रों में अपनी छवि सुधारने की

कवायद भी कर रही है। यही वजह है कि उसने ऐसे विकट समय में एक साथ 50 लाख टैबलेट हासिल कर छात्रों को बांटने का निर्णय किया है। सूत्रों के मुताबिक केंद्रीय मानव संसाधन मंत्री कपिल सिब्बल ने अधिकारियों से कहा है कि वे 50 लाख 'आकाश' के लिए कैबिनेट के समक्ष प्रस्ताव जल्द प्रेषित करें।

Times of India ND 27/09/2012 P23

By 2015, a driverless car for an accident-free ride

Washington: Ever dreamt of riding a car that drives by itself? The fantasy may turn into a reality by 2015.

American auto maker General Motors is in the final stages of developing a semi-autonomous car that can stay in its lane, steer away from danger, apply breaks when needed, completely on its own, nearly eliminating the possibility of an accident.

The company expects the technology to be in cars as early as the 2015 model year.

"The vehicle can take

complete control and take you to your destination — in comfort, and safety, and security," Don Butler, vice president of marketing for Cadillac told the 'ABC News'.

"We can foresee the day when vehicles will be able to completely avoid collisions," he said. It's been a carmaker's dream since George Jetson, a fictional character from the animated television series, sat in his driverless, flying car. Now, it is just years away.

"I think it's highly likely that before the end of this dec-

ade, we'll be in driving modes that will be semi autonomous," Butler said.

"Steering will be controlled by the vehicle. Speed will be controlled by the vehicle. Your direction will be controlled by the vehicle," he added. The prototype for the new SuperCruise feature uses radar, cameras and GPS to drive itself with a push of a button. Motorists use the car with no hands on the steering wheel and feet off the pedals, and are essentially able to look away entirely. ❧



FANTASY GETS WHEELS

© C. Lyttle/Corbis

'Loud music causes hearing problem'

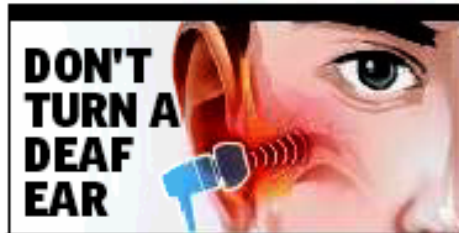
TIMES NEWS NETWORK

Mumbai: Doctors blame the hearing problems on a favourite habit of youngsters: hanging on to their phones and music players at loud volumes for several hours a day.

The World Health Organization has said that noise above 85 db is damaging to human ears and a 3 dB rise above this reduces by half the time needed to cause damage.

But another doctor, Nishit Shah, said rapid hearing loss is only caused by viral infections. "Hearing loss occurs over years," he said, adding that the only exception would be instances of terror victims turning deaf on exposure to loud sound.

But Prof Hetal Marfatia of KEM Hospital said an angiogram would be a definite way of understanding if hearing loss is caused by noise pollution, be it exposure to sound in the environment or personal music players. A study from Tel Aviv University has shown that youngsters who listened to over four hours of music on their MP3 players or iPods could be damaging their hearing. Dr Prabhat remembers a 38-year-old businessman from Surat who suffered complete hearing loss



> Long hours on phone, listening to loud music affects hearing, say docs

> Today, youngsters hit by ear issues for long associated with those in their 60s

> Listening to sounds over 80 decibels for four hours will damage ear, warns WHO

> Activists say noise pollution must be considered a health problem and awareness created

in one of his ears due to mobile use. "He confessed he was on the phone from morning to evening. It definitely had a result," he said.

Sumaira Abdulali of Awaaz Foundation, which works on creating awareness about noise pollution, said, "The levels of noise we are exposed to could turn us into a nation of deaf people. It's high time noise pollution was considered a health problem and solutions worked out accordingly."

Single med entrance test for PG from '13

New Delhi: Admission to all postgraduate courses in medical colleges across India from next year will be through a common entrance test to be conducted by National Board of Examination from November 23 to December 6, 2012.

The test will be applicable for PG seats of all the 350 medical colleges across India, which account for close to 20,000 seats, except the three institutes setup by acts of Parliament — AIIMS, PGI Chandigarh and JIPMER, Puducherry.

In a statement issued on Wednesday, the health ministry said the new system would help promote transparency and streamline admission to post graduate medical and dental courses.

“The government has decided to introduce a single entrance examination to be known as National eligibility-cum-Entrance Test (NEET)

from the next academic year ie 2013-2014.

“The National Board of Examination (NBE) will conduct NEET-PG for admission to MD/MS/PG Diploma course courses offered by all medical colleges/institutions coming under the ambit of the Medical Council of India,” the health ministry said.

The first NEET-PG in 2013-

14 will be held online by NBE from November 23 to December 6, 2012 at various centres in 34 cities of the country. Details of NEET-PG for medical courses are

available at www.nbe.gov.in/neetpg. The NEET-PG for dental courses will be conducted by the AIIMS for admission in MDS courses offered by all the dental colleges/institution coming under the ambit of the Dental Council of India.

AIIMS will notify the dates of the examination in due course of time. #11

