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By Heena Kausar in New Delhi

campaign

By Heena Kausar in New Delhi BJP prime ministerial candidate Narendra Modi has found an ardent support-base in the corridors of the hub of India's techie geniuses, IIT-belhi. A group of around 200 students of the premier institute have come together to campaign for the Gujarat Chief Minister as the general elec-tions draw near. "It was around six months ago that five fellow students and I discussed channelling the strong support wave for Modi prevalent in the institute. That's when the idea to form a stu-dent group to campaign for Modi struck. We also formed a Facebook group for students like us," said a core group member requesting anonymity.

group for students like us," said a core group member requesting anonymity. The group, which calls itself 'IITians support MODI', says while they sup-port the man himself, it does not nec-essarily translate into support for his party, the BJP. The Facebook group boasts of 381 members, and includes IITians from Kharagpur as well. Being IIT students, members feel, gives them an edge when they try to convince people to vote for Modi. "We are independent of the BJP and have no alliance with them. We intro-duce ourselves as IIT students and not BJP supporters because then we will not be considered neutral," said Sahil Aggarwal, a final year Mechanical Engineering student, whose mobile ringtone is a song in Modi's praise. The group holds weekly meetings to decide their plan of action As of prov

ringtone is a song in Modi's praise. The group holds weekly meetings to decide their plan of action. As of now the group is focusing on its campaign on social media, for which each member has to devote at least 3-4 hours daily. The work involves updating the status message, story links and replying to comments on various online groups.

HT Chandigarh

Not sniffer dogs, IIT-Bombay's 'electronic nose' to smell danger

HT Correspondent

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CHANDIGARH: The investigative agencies in the country are soon likely to get electronic devices called 'electronic nose' which will help them detect explosive materials with almost same accuracy as of sniffer dogs, courtesy Indian Institute of Technology (IIT), Bombay.

Faculty of department of electrical engineering at IIT Bombay and principal investigator of the project, V Ramgopal Rao said, "Scientists have developed 10 prototypes of electronic noses and these are being tested at various levels. The project is being carried out in some other institutes of the country as well," he said. Rao was delivering a lecture on nanotechnology at Chandigarh Science Congress being held at Panjab University.

The work on the project was started in 2008.

Rao added that for places like airports and Metros, electronic nose device would be of the size of a hand-held metal detector for manual use and for other public transport systems like buses, it could be as small as a tablet with a sensor network. The electronic device can be installed in different rooms of a building as well with a sensor network and could be monitored from a central server. "Generally a dog's sniffing capacity is 10 million times better than humans. However, the device's capacity will be slightly lesser than sniffer dogs. But it will be able to identify

'OBESITY MORE INJURIOUS TO HEALTH THAN ALCOHOL'

CHANDIGARH: For human liver. obesity was worse than the alcohol, said SK Sarin, director of Institute of Liver and Biliary Disease, New Delhi, in his lecture at Children Science Congress at Panjab University on Wednesday. Sarin said weight reduction was the key to improve liver functions, better heart, avoid diabetes and keep blood pressure under control. He added that obesity lead to fatty liver and many other diseases such as diabetes, hypertension and heart diseases. "Prevalence of obesity and fatty liver in United States of America is among 33%

people. In India, 30% adults and 25% children are overweight, 25% people have fatty liver and 5% have fatty liver disease,"Sarin said in his address. "Treatment of fatty liver helps prevent diabetes and heart disease as liver fat preceded diabetes and heart disease. In this way, fatty liver was an alarm for the specialists,"he added. He also referred to the rapid increase in the number of liver cancer patients in India, which he said had increased more than four times in past four years. HTC



one molecule of a type among one billion of similar size molecules," Rao said. He added that the device reduces the huge costs incurred by security and other agencies in training dogs for sniffing. "As per THE DEVICE WILL REDUCE HUGE COSTS INCURRED BY SECURITY AGENCIES IN TRAINING DOGS. V RAMGOPAL RAO, faculty, IIT-Bombay

current estimates, for commercial use, its price should be around ₹50,000 for hand-held devices and ₹5,000-10,000 in case of tablets for use of sensor network in buses."

IIT professor creates 'E-dog' to sniff bombs

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CHANDIGARH: On its way to developing an ultra-sensitive low cost explosive detector, Indian Institute of Technology, Mumbai, will soon unveil an "e-nose" that will be several times stronger than a dog's olfactory power.

This device, which is also informally called 'E-dog' by the developing team, will find out traces of RDX that existing machines fail to point out. It will be able to detect RDX from 1.5 feet.

The e-nose, which uses a sensor coated with nano materials, is currently under development. V Ramgopal Rao, chair professor at the department of electrical engineering, IIT-Bombay and principal investigator at the institute's centre of excellence in nano-electronics, spoke about the device on the sidelines of the 8th Chandigarh Science Congress (CHASCON) at Panjab University on Wednesday.

CHASCON is being organized by PU in collaboration with various leading educational and research

institutions of the Tricity.

The Electronic Nose, or E-dog, is the result of five years of hard work by Rao and his team. The E-nose is made from cantilevers, each of which is the main nano sensor element that is 200 times thinner than a strand of human hair. Rao said the E-Nose has been patented and will be available in markets within two years.

"Sensors will be the next big thing in nanotechnology, which is being used in developing real explosive sensor networks for buses and trains and is equivalent to multiple sniffer dogs," Rao said. A real dog's nose is considered to be 10 million times more sensitive than humans. The E-Nose has an ultra-sensitive nano-electro-mechanical sensor, with a year's maintenance free operation and easy to install like wireless a?? simple plug and play. It uses a rechargeable Li-Po battery.

"India is the first country that will be using this technology and the prototype to detect RDX/TNT has been developed at IIT Bombay with the help of NanoSniff Technologies. The prototypes demonstrated possibility of fabricating handheld systems for explosive detection," Rao added. He said that the systems had shown very positive results in laboratory experiments and match up with commercially available products such as FIDO, which is based on the Fluoresce Quenching Principle.

IIT-B distances itself from professor's view on cell tower radiation, says his opinion personal

http://indianexpress.com/article/cities/mumbai/iit-b-distances-itself-from-professors-view-on-cell-tower-radiation-says-hisopinion-personal/

Distancing itself from the views expressed by IIT Bombay Prof Girish Kumar on the issue of cell phone towers, the institute said that those are his personal opinion. "The views expressed by Prof Kumar are personal and are not endorsed by IIT Bombay," said an official spokesperson of IIT Bombay.

A recent report by a committee set up by the Department of Telecommunications (DoT) has criticised Kumar, a professor in the electrical engineering department of IIT Bombay, for blowing out of proportion the effects of cell phone tower radiation on humans and on the other hand, promoting his daughter's business of products claiming to reduce the impact of such radiation.

Kumar, one of the 13 members of the committee, said he had send repeated emails to the panel, pointing out that several members were pro-DoT norms.

"...out of 13 members, eight are known to favour DOT norms (high radiation). Based on my prior experience, I do not want to attend this closed door meeting, where my view-points will be outnumbered. I can come only if it is an open door meeting, where media and concerned people are invited, who have suffered due to high cell tower radiation, and then everybody's viewpoints are noted and recorded," he wrote in an email last year.

Subsequently, in January this year, he emailed the committee with detailed comments on observations in the final report and marked the same to judges of the Allahabad High Court, so that they could see "both sides of the coin".

"Merely 12 members cannot decide the fate of 120 crore people in the country. They have ignored my comments and suggested solutions, which would ensure cell phone connectivity as well as safety of people," said Kumar.

On the issue of his daughter Neha Kumar's usage of IIT Bombay's name in her brochures, stating that "all our products are tested and certified by Antenna Lab, IIT Bombay" as well as the company (NESA Radiation Solutions Pvt Ltd) website, Prof Kumar said he will look into the issue.

Meanwhile, actor Juhi Chawla, who has been advocating for better norms and regulations on cell phone towers along with South Mumbai resident Prakash Munshi, said as a concerned citizen, she has used the shielding solutions offered by the company, run by Kumar's daughter. "I am treading on the line of caution. Also, the cellular operators are running a massive business, so whose vested interest are they talking about when they say that there is no evidence to show that electromagnetic field limits are safe and there's no impact on human health?" said Chawla.

Munshi, who called the report "character assassination", said that Prof Kumar has repeatedly called for reduced transmitted power. "If the radiation levels go down, his daughter will have to close down her business. This shows that there is no conflict of interest. So what point is being made by the DoT and other IIT professors, who were part of the committee?" he questioned.

A blood test to predict death risk Biomarkers That Can Tell If End Will Come Within 5 Years Found

Kounteya Sinha TNN

London: Researchers from Finland and Estonia have found four biomarkers that can help identify people at high risk of dying from any disease within five years. This was done after screening blood samples from over 17,000 healthy people for over 100 different biomolecules. The health status of these study volunteers was followed for several years. The researchers looked for measures in the blood that could reflect who had died within the following five years after blood samples were taken.

"What is especially interesting is these biomarkers reflect the risk for dying from very different types of diseases such as heart disease or cancer. They seem to be signs of a general frailty in the body. Next we aim to study whether some kind of connecting factor between these biomarkers can be identified," said researcher Johannes Kettunen. In a study published in PLOS Medicine, researchers describe identification of four such



biomarkers of death. Of these, albumin was the only one previously linked with mortality. All these molecules are normally present in everyone's blood.

The novel biomarkers helped detect individuals at much higher risk of dying during five-year follow-up. The measures were independent of well-known risk factors such as age, smoking, drinking, obesity, blood pressure and cholesterol. The result did not change even when only apparently healthy people were examined. "We believe that in the future these measures can be used to identify people who appear healthy but in fact have serious underlying illnesses and guide them to proper treatment. More studies are, however, needed before these findings can be implemented in clinical practice," Kettunen said.

3D implant to warn you of heart attack

new 3D printed implant that can deliver treatment or predict an impending heart attack before a patient shows any physical symptoms has been developed. Researchers used an inexpensive 3D printer to develop the custom-fitted, implantable device with embedded sensors that could transform heart treatment and prediction of cardiac disorders. The 3D elastic membrane is made of a soft, flexible, silicon material that is precisely shaped to match the heart's outer layer of the wall. The team can print tiny sensors onto the membrane that can precisely measure

temperature, mechanical strain and pH, among other markers, or deliver a pulse of electricity in cases of arrhythmia. Those sensors could assist physicians with determining the health of the heart, deliver treatment or predict an impending heart attack before a patient exhibits any physical signs. AGENCIES