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*Nano Newsflash*, the monthly e-mail news service, brings you latest news and developments in the nanotechnology sector in the region. The service is prepared by TERI, an autonomous, not-for-profit research institute working in the areas of energy, environment, and sustainable development, with support from IDRC under the project **Nanotechnology in South Asia – Building Capabilities and Governing the Technology**.

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#### **New innovative nano sized metallic semi-conductor**

PR.com, 13 February 2013

Indian researchers have developed a new metallic semiconductor. The group, based at Centre for Research and Post Graduate Department of Physics, Ayya Nadar Janaki Ammal College comments that to the best of their knowledge, “this is the first demonstration of semiconducting nature of lead nanopowder (Pb). So far, lead metal has been known as a good / super conductor”. This research has been published in arXiv of Cornell University.

<http://arxiv.org/abs/1302.1456>

<http://arxiv.org/abs/1212.5795>

<http://www.pr.com/press-release/472054>

#### **Two-day symposium on nano-science from February 20**

The Times of India, 18 February 2013

National Institute of Engineering, Mysore will host a two-day Indo-Canadian symposium on 'Nano-science and technology' from February 20. The event will be held in association with McMaster University (Canada), Ministry of Human Resource Development, World Bank's

Technical Education Quality Improvement Project and the Department of Science and Technology, Government of India.

<http://timesofindia.indiatimes.com/city/mysore/Two-day-symposium-on-nano-science-from-Feb-20/articleshow/18549532.cms>

### **Nano India conference begins on 19 February**

The Hindu Business Line, 18 February 2013

A two-day national conference on nano science and technology, 'Nano India', will begin in Thiruvananthapuram on 18 February 2013. National Institute for Interdisciplinary Science and Technology under Council for Scientific and Industrial Research (CSIR-NIIST) and Department of Science and Technology are organizers.

<http://www.thehindubusinessline.com/news/science/nano-india-conference-begins-on-tuesday/article4428568.ece>

### **Nanotech can develop drugs inside body**

The Times of India, 23 February 2013

Renowned biomedical engineer and IIT Kharagpur professor Dr Sujoy Guha said that with the help of nanotechnology drugs required for a disease can be developed inside the human body from the raw materials available in the body itself. Such drugs would be more acceptable to body and the chances of curing the disease would increase manifold. Inaugurating a two-day national seminar on 'Role of nanotechnology in the development of Bihar' organized by Aryabhata National Knowledge University in Patna, Dr Guha said this system of producing drugs inside human bodies has been developed in India and it has also been patented. Other countries were now having a trial of this mechanism. He observed that nanotechnology can also be applied in the site-specific use of nutrients and pesticides in plants, thus boosting agricultural production and conserving natural environment.

[http://articles.timesofindia.indiatimes.com/2013-02-23/patna/37256910\\_1\\_nanotechnology-economic-development-mahavir-cancer](http://articles.timesofindia.indiatimes.com/2013-02-23/patna/37256910_1_nanotechnology-economic-development-mahavir-cancer)

### **Zinc oxide nanoparticles hold hope for diabetics**

The Times of India, 23 February 2013

In a breakthrough discovery, scientists at the Agharkar Research Institute have shown that zinc oxide nanoparticles could be used for treating both non-insulin dependent (Type I) and insulin dependent (Type II) diabetes. What's more important is that the drug is patient-friendly as just one pill a day will keep blood sugar levels under control. The scientists have successfully carried out laboratory tests on rats and the study has been published in the renowned medical journal Nanomedicine on February 21.

[http://articles.timesofindia.indiatimes.com/2013-02-23/science/37256993\\_1\\_zinc-oxide-nanoparticles-blood-sugar-levels](http://articles.timesofindia.indiatimes.com/2013-02-23/science/37256993_1_zinc-oxide-nanoparticles-blood-sugar-levels)

### **First nanochemistry lab of Pakistan to be set up at Karachi University**

The Express Tribune, 26 February 2013

The country's first ever nanochemistry laboratory is slated to open at Karachi University next year. A ceremony to mark the beginning of the construction of the facility, called Latif Ebrahim Jamal Research Institute of Nanotechnology, was held at the institution recently. The first-of-its-kind research centre in the country will be a part of the university's International Centre for Chemical and Biological Sciences (ICCBS) and receive Rs 50 million worth of funds from the Husein Ebrahim Jamal Foundation. The new centre will be housed in a two-storey building with ten large laboratories, a central instrument room, dedicated library, a central workshop, a pilot plant and faculty, seminar and meetings rooms.

<http://tribune.com.pk/story/512455/first-nanochemistry-lab-of-pakistan-to-be-set-up-at-ku/>

### **Experts develop nanoparticles for tumour-targeted response**

Hindustan Times, 27 February 2013

In a major scientific breakthrough, Indian researchers have collaborated to develop peptide nanoparticles that may be used as vehicles for targeted drug delivery for tumours. The study -- *Modified dipeptide based nanoparticles: Vehicles for targeted tumour drug delivery* -- published in the journal *Nanomedicine* says that different nanoparticles have been investigated to deliver chemotherapeutic agents but complex synthetic procedures and biocompatibility issues raise concerns in developing them for safe human usage. The research was done collectively by the scientists at the International Center for Genetic Engineering and Biotechnology, Institute of Nuclear Medicine and Allied Sciences and National Center for Cell Science, Pune.

<http://www.hindustantimes.com/India-news/Bangalore/Experts-develop-nanoparticles-for-tumour-targeted-response/Article1-1018586.aspx>