



NEWS ALERT

Forum for Indian Science Diplomacy

RIS's Science Diplomacy News Alert is your fortnightly update on Indian and global developments in science research, technological advancements, science diplomacy, policy and governance. The archives of this news alert are available at <http://fisd.in>. Please email your valuable feedback and comments to science.diplomacy@ris.org.in

GLOBAL

[Space telescope Kepler dead after discovering more than 2600 planets](#)

NASA's premier planet-hunting telescope has reached the end of its service life because of fuel exhaustion. The mission served the space agency for 9.5 years, discovering around 2720 exoplanets.

[Signs of lead exposure in Neanderthals revealed in a new study](#)

Earliest recorded evidence of lead exposure has been discovered in the molars of two young Neanderthals found in south-east France. This chemical analysis provides more insights about the environment our ancient relatives lived in.

[Mega project on quantum technologies launched by EU](#)

The European Union has announced the launch of Euro 1 billion quantum research project in bid to leapfrog progress in the US and China. It aims to develop quantum computers that are exponentially more powerful than today's supercomputers.

[NASA and ESA celebrate 18 years of life on the International Space Station](#)

The European Space Agency and NASA commemorated 18th anniversary of humanity's permanent presence in space by releasing 8K ultra high-definition video with footage of astronauts working in ISS. This video is a collaborative project between ESA and NASA.

[New field of nanotech research emerges](#)

Physicists from Nanyang Technological University, Singapore and University of California, Riverside have proposed a completely new subfield of research called Electron Quantum Metamaterials, based on the engineered manipulation of structures to produce materials with completely new properties. This is seen as a marriage of quantum physics and nanostructures and is being considered as a promising field with potential for many new applications and products..

[Cell Phone based diagnostic tool to detect HIV developed](#)

A team of researchers from the Brigham and Women's Hospital, Boston have designed a cell-phone based novel platform that can detect HIV virus with 99.1 percent specificity. This portable and low cost mobile diagnostic tool utilises cell-phone and nanotechnology.

[India's AstroSat and NASA's Chandra X-ray observatory finds a black hole that spins near maximum possible rates](#)

A study led by the astronomers from the Tata Institute of Fundamental Research (TIFR) have found a black hole in 4U 1630-47 that spins very rapidly. The study is a first joint AstroSat- Chandra collaboration between India and the US.

[Researchers from IIT Roorkee find a new solution in tamarind seeds to treat Chikungunya](#)

A research team led by Shailly Tomar from the Department of Biotechnology at IIT Roorkee have discovered that a protein found in tamarind seeds reduces the infectivity of chikungunya virus by 64%. The research team is now planning to test this TCELL protein on animals and have also filed for a patent.

[Vice President's visit boosts technology cooperation with Zimbabwe](#)

Vice President Venkaiah Naidu visited Zimbabwe on 2-4 November, marking the first high-level visit from India in 22 years. The visit witnessed signing of MoUs in the fields of Geology, mining and mineral resources, action plan on information and communication technology and cooperation in the field of traditional medicine and homeopathy.

[Breakthrough in filter technology for artificial kidneys](#)

Researchers from Drexel, the University of California Los Angeles, Brighton University in England, Guangxi Medical University and Huazhong University of Science and Technology in China, and **Symbiosis International University in India**, have reported that MXene materials could be a candidate for removing urea from blood in wearable artificial kidney applications. MXene materials are composed of nanometre-thin layers whose chemical composition and spacing can be tailored to make them very selective filters

[Space Technology Park to be set up in Kerala by June 2019](#)

The State Government of Kerala is set to build a park with technical assistance from the Indian Space Research Organisation which would be functional by June 2019. The space tech park will function as a manufacturing hub for small satellites and rocket launch equipment.

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