



INDIA SCIENCE AND INNOVATION WEEKLY

Ask the right questions, and nature will open the door to her secrets.

- Dr. C.V. Raman, The Nobel Prize in Physics 1930

IISc researchers uncover new evidence on DNA radiation

Researchers at the Indian Institute of Science (IISc) Bengaluru have shown that regions of the genome rich in four-stranded deoxyribonucleic acid (DNA) made of guanine nucleotide base - G-quadruplexes (G4-DNA) - are more resistant to irradiation. The study helps to understand potential evolution of G-quadruplex (G4) DNA structures.

Micro-cooling for chips research at IIT

Researchers from the Indian Institutes of Technology (IIT) at Madras have provided insights that water droplets transport heat absorbed from microchip surfaces by generating nano-range hydrothermal waves. The study helps in engineering nano waves, which will enhance heat dissipation in integrated electronic chips.

Delhi-based Healthcare startup raises seed money

BeYouPlus, a Delhi-based healthcare startup has raised USD 3.2 million in Series A funding from IvyCap Ventures. The startup offers various skin treatments such as laser skin toning at a fixed price, which can be availed by customers by visiting the partnered skin clinic.

Deeptech startup raises funds

Mumbai-based deeptech startup peAR Technologies has raised an undisclosed amount of seed funding from capital venture firm Venture Catalysts. The tech-startup empowers restaurants to show their entire menu in 3D, using the group's own smartphone mobile app.

IIT Delhi does more scientific research

Indian Institute of Technology, Delhi (IIT Delhi) bagged INR 765 crore of research projects in last two years. Even on academic side, the IIT Delhi is now focusing more on post graduate and doctorate course than undergraduate courses.

5th edition of IISF 2019

The four-day science extravaganza at the India International Science Festival (IISF) in Kolkata concluded on November 8, 2019, bridging gaps between scientists and commoners and making science more interesting and understandable to students. According to Union Minister of Science and Technology, Health and Family Welfare and Earth Sciences, Dr. Harsh Vardhan, a prominent outcome of the festival was igniting the spirit of *Jigyasa* or questioning among students. Three Guinness world records were set during the course of the 5th edition of the India International Science Festival (IISF). The first record was set on the opening day of the four-day program when 1,598 school students attended a class on astrophysics and assembled working models of spectrometers using nothing but discarded CDs and ordinary cardboard boxes. The event was dedicated to renowned scientists Dr. Meghnad Saha and Dr. CV Raman. The second record was set when 268 students successfully assembled radio kits from scratch. This feat was dedicated to eminent scientist Sir Jagadish Chandra Bose. The third record was set when a group of 415 school students came together to form the largest ever human image of a chromosome. The event was designed to inculcate the spirit of discovery in young minds to start their own explorations in the world of science and technology.

Infosys Prize award

The Infosys Science Foundation (ISF) announced the winners of the 11th edition of the Infosys Prize 2019 in six categories — Engineering and Computer Sciences, Humanities, Life Sciences, Mathematical Sciences, Physical Sciences and Social Sciences. Ms. Sunita Sarawagi, Chair Professor of computer science & engineering in IIT Bombay won the prize in the Engineering and Computer Science category for her research in data mining. Dr. Manjula Reddy, chief scientist, Centre for Cellular and Molecular Biology, Hyderabad won the award in the Life Sciences category for her discoveries concerning the structure of cell walls in bacteria. In Physical Sciences, the prize was awarded to Professor G. Mugesh, professor of inorganic and physical chemistry at Indian Institute of Science for his work in the chemical synthesis of small molecules and nanomaterials for biomedical applications. This year, the prize received 196 nominations.

Special Update: National Institute of Plant Genome Research

The National Institute of Plant Genome Research (formerly known as National Centre for Plant Genome Research) is an autonomous institution aided by the Department of Biotechnology, Government of India. The Institute started to function in the year 1998.

NIPGR is poised to contribute towards frontier areas of Plant Biology such as, Computational Biology, Genome Analysis and Molecular Mapping, Molecular Mechanism of Abiotic Stress Responses, Nutritional Genomics, Plant Development and Architecture, Plant Immunity, Molecular Breeding, Transgenics for crop improvement and other emerging areas based on plant genomics. The research programme aims to contribute to the understanding of the structure, expression and function of genes along with arrangement of genes on plant genomes and manipulation of plant genes / genomes to breed improved varieties of food and industrial crops for high yields and of better quality products.

Further details can be found at:
http://www.nipgr.ac.in/about_us/institute.php