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

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

IIT-enabled startup develop fuel-efficient scooter

IIT-enabled startup from Delhi, named Geliose Mobility, has launched an affordable internet-connected electric scooter, named Hope, with a portable charger and a portable Li-ion battery and is one of the first companies to introduce a pedal assisted scooter to the market, allowing the riders to easily switch between pedaling and throttle mode while driving. Geliose Mobility is collaborating with logistics and delivery companies to cater to hyperlocal delivery requirements in food, e-commerce, grocery, essentials, and other delivery applications.

DBT scientist develop technique to detect Oxytetracycline

Researchers from Department of Biotechnology-National Institute of Animal Biotechnology (DBT-NIAB) develop an affordable and high-quality testing kit to detect presence of antibiotic Oxytetracycline (OTC), known for its broad-spectrum antimicrobial activity, in milk samples, to hinder serious health complications like development of hepatotoxicity, teratogenicity, reduced growth and metabolism. The kit has sensitivity to detect 5 ng/ml of OTC in cow, buffalo, and goat milk within 10 minutes and tests can be performed at the doorstep of farmers, at the level of dairy organizations or milk collection centres or by the consumers themselves.

IIT celebrates world water day

Indian Institute of Technology (IIT) Roorkee commemorated World Water Day in collaboration with the National Institute of Hydrology (NIH) on 22 March to focus on the importance of fresh water.

IIT researchers develop AI-based system to process sanskrit

Researchers at the Indian Institute of Technology (IIT) Kharagpur have developed a digital infrastructure for the efficient processing of Sanskrit texts using a proposed artificial intelligence (AI)-based system, in conjunction with interactive tools such as the Sanskrit Heritage reader, that can aid the users in the easier analysis of Sanskrit manuscripts with word-by-word analysis and translation, the relation between words, poetry to prose conversion, search and question answering, etc.. The proposed framework is based on Energy-based models and it enables the encoding of relevant linguistic information as constraints, which makes use of a generic graph-based framework that takes advantage of the free word-order nature of the language.

CSIO-Chandigarh develop UV duct to help contain Covid spread

Scientists at Central Scientific Instruments Organisation (CSIO) Chandigarh have invented Ultraviolet (UV) ducts that can help kill the virus in the air along with air sampling and viral load testing techniques that can check the viral load in the air. UV-C Air Duct Disinfection System -V1.06 is designed as a retrofit into existing air ducts. It consists of a slide mechanism, regulated UV light source, and sensors. The sampler works by sucking air at calibrated flow rates and entrapping particles, virus or bacteria inside the filter. The sampler is fitted with a gelatin tube where the virus is trapped. This can be used to check the presence of the virus, which can then be killed with use of ducts. The UV ducts system will be installed in the existing AC ducts and that is how it will disinfect the air. The system can be deployed in hospitals, markets, schools, bus stands, railway stations etc..

Indian experts contribute to study Einstein's wave from monster black holes

The Indian Pulsar Timing Array (InPTA) has joined the International Pulsar Timing Array (IPTA) to search for nanohertz Gravitational waves. This consortium of mainly Indian researchers, which regularly employs the upgraded Giant Metrewave Radio Telescope (uGMRT), situated near Pune, became a full member of the international effort to discover and study very low-frequency gravitational waves, known as Einstein's waves, which occur when monster black holes go around each other in orbit. The unique frequency range of the uGMRT, which is the largest steerable radio telescope at low radio frequencies, is helping to improve the precision of IPTA to detect nanoHz gravitational waves (GWs). When discovered, these waves will refine evolutionary models of the universe as well as masses and orbits of members of the solar system.

Special Update: National Bureau of Fish Genetic Resources

Indian Council for Agricultural Research-National Bureau of Fish Genetic Resources (ICAR-NBFGR) was established in December 1983 under the aegis of Indian Council of Agricultural Research to undertake research related to the conservation of fish germplasm resources of the country. The mandate of the Institute includes collection, classification and cataloguing of fish genetic resources of the country, maintenance and preservation of fish genetic material for conservation of endangered fish species and evaluation and valuation of indigenous and exotic fish species. The ICAR-NBFGR is an International Standard Organisation (ISO) 9001: 2008 certified organization and has been awarded with the Sardar Patel Best Institute Award for the year 2011 by the ICAR, New Delhi.

Further details can be found at:

<https://www.nbfg.res.in/>