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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

ARI Scientists Developed Patented Diagnostic Tool for Aquaculture Pathogen to Boost Shrimp Cultivation

Scientists at Agharkar Research Institute (ARI), an autonomous institute of the Department of Science and Technology (DST), have developed a newly patented diagnostic tool for aquaculture pathogen to boost shrimp cultivation. ARI scientists informed that the handy diagnostic tool detects an aquaculture pathogen known as the White Spot Syndrome Virus (WSSV), an Infection caused which results in huge loss of crop. Scientists further quoted "Our data indicates high specificity (100%) and sensitivity (96.77%) of the assay, early detection from hemolymph, highly reproducible results with a time-to-result of only 20 minutes.". The research has been published in Applied Microbiology & Biotechnology and Journal of Molecular Modelling.

Second Successful Flight Test of Indigenously Developed Anti-Tank Guided Missile 'HELINA'

Indigenously-developed Anti-Tank Guided Missile 'HELINA' by Defence Research and Development Organisation (DRDO), successfully completed its second flight test from Advanced Light Helicopter. DRDO added that the Anti-Tank Guided Missile 'HELINA' engaged the simulated tank target accurately. 'Helina' is the third generation, fire and forget Anti-Tank Guided Missile that can engage targets both in direct hit mode as well as top attack mode.

DRDO Successfully Flight Tested Pinaka Mk-I Rocket System & Pinaka Area Denial Munition Rocket Systems

Defence Research and Development Organisation (DRDO) and Indian Army successfully flight-tested Pinaka Mk-I (Enhanced) Rocket System (EPRS) and Pinaka Area Denial Munition (ADM) rocket systems. A total of 24 EPRS rockets were fired which achieved the required accuracy and consistency, meeting all trial objectives satisfactorily. The Pinaka rocket system has been developed by Armament Research and Development Establishment, Pune supported by High Energy Materials Research Laboratory, another Pune-based laboratory of DRDO. DRDO further updated that with these trials, the initial phase of technology absorption of EPRS by the industry has successfully been completed and the industry partners are ready for user trials/series production.

IICT Scientists Designed Hybrid Materials & Processes for Carbon Capture and Utilization

Scientists from Indian Institute of Chemical Technology (IICT), Hyderabad computationally designed a hybrid material & processes for carbon capture and utilization could show new light for global warming challenge. The hybrid material could absorb greenhouse gas methane, converting it to clean Hydrogen and scientists also simulated a process of capturing carbon dioxide in-situ and converting it to high purity hydrogen from non-fuel grade bioethanol. Further, IICT Hyderabad also designed a facility that could test such materials & help further carbon capture research.

Special Update: Indigenous Intelligent Transportation Systems (ITS) Solutions for Indian Traffic Scenario Launched

Ministry of Electronics and Information Technology (MeitY) under its initiative of Intelligent Transportation System Endeavor for Indian Cities Phase-II, launched the indigenous Onboard Driver Assistance and Warning System – ODAWS, Bus Signal Priority System and Common Smart IoT Connectivity (CoSMiC) software. The product was developed as a joint initiative by Centre for Development of Advanced Computing (CDAC) and Indian Institute of Technology Madras (IIT-M). ODAWS incorporates vehicle-borne sensors for monitoring driver propensity and vehicle surroundings to deliver acoustic and visual alerts for driver assistance and ODAWS algorithm is used to interpret sensor data and offer real-time notifications to the driver, boosting road safety.