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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

DBT researchers look to find cure for rabies

Research team from Department of Biotechnology (DBT)-Institute of Life Sciences has used a recently developed advanced quantitative proteomics approach to identify proteins in the dog brain that may be involved in rabies infection. The molecular pathophysiology involved in this infection, was helpful to understand more about molecules involved in rabies virus infection and also aid in designing strategies to combat this viral infection in both humans and animals.

MoES launches integrated web-based digital ocean platform

Ministry of Earth Sciences (MoES) launched a new web-based application, called Digital ocean, to integrate and enhance the accessibility and utility of oceanographic data in India by aiding in the analysis, visualisation, fusion, management, and faster dissemination on a user-friendly interface. The portal will benefit several stakeholders, including disaster management authorities, industries, navy and coast guards, and the public, especially coastal communities.

India gets its highest Meteorological Centre in Leh

The Ministry of Earth Sciences (MoES) launched India's highest meteorological centre, at 3500 meter above sea level in Leh, Ladakh. Along with the 28 meteorological centres spread across India, the meteorological center in Leh will serve to provide accurate and timely weather-related information to India Meteorological Department (IMD), which is the principal agency responsible for meteorological observations and weather forecasting in the country.

Raman Effect

In 1925, Dr. C.V. Raman had observed the frequency-shifted scattered light in more than 50 liquids and by 1927, Dr. Raman noticed that the scattered light was polarized, which he described as modified scattering light in the journal Nature, that was later to called the Raman effect.

Bharat Biotech gets approval for emergency use of Covaxin

Bharat Biotech has received approval from Drug Controller General of India (DCGI) on restricted emergency usage of its COVID-19 vaccine Covaxin, as it has generated excellent safety data from approximately 1,000 subjects in Phase I and Phase II clinical trials with robust immune responses to multiple viral proteins that persist. While this vaccine addresses an unmet medical need during this pandemic, the goal of the biotech company is to provide global access to populations that need it the most. Covaxin is being indigenously developed by Bharat Biotech in collaboration with the Indian Council of Medical Research (ICMR) - National Institute of Virology (NIV). It is a highly purified and inactivated 2 dose SARS-CoV2 vaccine, manufactured in a Vero cell manufacturing platform with an excellent safety track record of more than 300 million doses.

India's first indigenous pneumonia vaccine by SII launched

The first indigenous vaccine against pneumonia, developed by the Serum Institute of India (SII), was launched by Union health minister Dr. Harsh Vardhan. The vaccine would be sold under the name 'Pneumosil' and would be available either as a single dose in a vial and pre-filled syringe or as multidose in vials at affordable prices. The pneumococcal conjugate vaccine (PCV) would be used to treat pneumonia in children and has been developed by SII in collaboration with other partners like the Bill and Melinda Gates Foundation. Pneumosil has been extensively evaluated in 5 randomized controlled clinical trials and has demonstrated comparable safety and immunogenicity against licensed pneumococcal vaccines across diverse populations of India and Africa, where Pneumosil was administered to adults, toddlers and infants using different vaccination schedules.

PM Shri Narendra Modi launched India's first driverless metro in Delhi

The Delhi Metro Rail Corporation (DMRC) entered the elite league of 7 per cent of the world's metro networks that can operate without drivers, with the launch of the country's first 'driverless' train on the 38 kilometre long Magenta Line in the national capital, Delhi. The driverless metro train will be fully automated, requiring minimum human intervention during Driverless Train Operation (DTO) mode, where trains can be controlled entirely from the three command centres of the DMRC, without any human intervention. At the command centres, information controllers have been created to handle the passenger information system and a system to monitor the crowd.

Special Update: Indian SARS-CoV-2 Genomic Consortium

Ten regional laboratories have been identified by the Centre where states will send five per cent of their Covid-19 positive samples for genome sequencing to detect the new coronavirus variant that has emerged in the United Kingdom at the end of 2020. The health ministry has also established the Indian SARS-CoV-2 Genomics Consortium (INSACOG) for laboratory and epidemiological surveillance and expand whole genome sequencing of the coronavirus in the country, aiding in the understanding of how the virus spreads and evolves. The viral genome sequencing data generated will be analysed by the respective centres and sent to the National Centre for Disease Control (NCDC), Delhi, for collation and integration.

Further details can be found at:
https://www.mohfw.gov.in/