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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

Tata Sons and CSIR sign MoU for COVID 19 Test Kit

Tata Sons has signed a memorandum of understanding (MoU) with the Council of Scientific and Industrial Research (CSIR) for the licencing of 'knowhow' of a paper test kit for Covid-19, called FNCAS9 Editor Linked Uniform Detection Assay or 'Feluda'. The kit has been developed by CSIR's constituent lab Institute of Genomics and Integrative Biology (IGIB), New Delhi. The license shall include the transfer of the knowledge for scaling up the 'knowhow' in the form of a kit that can be deployed for Covid-19 testing on ground as early as the end of May'

Scientists figure out how plants use microbes to grow

A team of researchers at the New Delhi-based National Institute of Plant genome Research (DBT-NIPGR)'s Department of Biotechnology found that an ion channel called CNGC19 (cyclic nucleotide gated channel 19) in the plants could be playing a decisive role in helping the plants to benefit from a good microbe. The scientists used a model plant called Arabidopsis thaliana and a growth-promoting fungus named Piriformospora indica for their study, to show how CNGC19 acted as a gatekeeper in regulating the immunity of the plant and in the colonization by the fungus.

IIT-Delhi startup launches reusable antimicrobial mask

An IIT Delhi startup, Nanosafe Solutions, has launched an antimicrobial and washable face mask "NSafe", which is reusable up to 50 launderings. NSafe mask has 99.2% bacterial filtration efficiency (at 3 microns) and complies with ASTM standards of breathability and splash resistance.

CSIR-CMERI develop touch-free soap-cum-water dispenser

Durgapur-based Central Mechanical Engineering Research Institute (CMERI), an institution under the Council of Scientific and Industrial Research (CSIR), has developed a sensor-based contactless soap-cum-water dispensing unit, which can help to avoid coronavirus infection. These units can be used in hospitals, shopping malls, banks, stadiums etc.

CSIR provides 53 Genome Sequences to GISAID

Amid concerns that the novel coronavirus (SARS-Cov-2) may have undergone a mutation and the new strain maybe even more contagious, the Council for Scientific and Industrial Research (CSIR) has submitted 53 genome sequences of the novel coronavirus (COVID-19) to the GISAID [Global Initiative on Sharing All Influenza Data], a move that may help in better understanding the virus and developing a vaccine. The country's premier research and development organisation is also planning to submit the data of another 450 genome sequences of the virus by May 15. The CSIR's Institute of Genomics and Integrative Biology (IGIB), Delhi, the Centre for Cellular and Molecular Biology (CCMB), Hyderabad, and the Institute of Microbial Technology, Chandigarh, are currently sequencing the genomes of the novel coronavirus. Besides CSIR, the National Institute of Virology, Pune (under the Indian Council of Medical Research) and the Gujarat Biotechnology Research Centre, a State Institute, have also submitted genome sequences of the coronavirus to the GISAID database.

Compendium of Indian Technologies for Combating COVID-19

A 'Compendium of Indian Technologies for Combating COVID-19 (Tracing, Testing and Treating)', prepared by National Research Development Corporation (NRDC), was launched on 5 May. The Compendium carries information about 200 COVID-19-related Indian technologies, ongoing research activities, technologies available for commercialisation, initiatives and efforts taken by the Government of India, categorised under 3Ts of Tracking, Testing and Treating. Technologies presented in the Compendium include a digital and molecular surveillance database, COVID-19 rapid testing kit, Surveillance system to fight COVID-19 through a unique tracking mobile application, Real-time PCR test, an antimicrobial fabric, Minus Corona UV Bot to disinfect hospitals, a Bio Body Suit and herbal products to boost the immune system. The information presented in the compendium is sourced from various government bodies and premier academic institutions.

Special Update: Institute of Himalayan Bioresource Technology, Palampur

CSIR-IHBT is the only laboratory of the Council of Scientific and Industrial Research (CSIR) in the State of Himachal Pradesh (H.P.), India. It has a focused research mandate on bioresources for catalysing bioeconomy in a sustainable manner. The institute has state-of-the-art laboratories; remote sensing and mapping facilities; internationally recognised herbarium; animal house facility; pilot plants in nutraceuticals, essential oil and herbals; farms and polyhouses. Promoting industrial growth through technological interventions is a constant endeavour and several technologies developed by the institute have been transferred to industries. For socio-economic upliftment, regular training programmes and advisory services are rendered to farmers, floriculturists, tea planters and small entrepreneurs involved in food processing sector.

Institute has been recognised as one of the Incubation Centres, including in the area of Affordable Health Care. Institute encourages industries to share the technological problems faced by them so that efforts could be made in developing a viable solution. Work on plant adaptation studies and high altitude medicinal plants are further strengthened by the field lab Centre for High Altitude Biology (CeHAB) situated at Ribling, Lahaul & Spiti. Through this Centre, the Institute disseminates technologies by way of trainings and demonstrations that could transform the economy of the region and help in solving unique challenges faced by them.

Further details can be found at:

<https://www.ihbt.res.in/en/>