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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

CSIR-CFTRI make high-protein biscuits for COVID-19 patients

The Mysuru-based CSIR-Central Food Technological Research Institute (CFTRI) supplied 1000kg worth of high-protein biscuits and rusks to COVID-19 recovering patients in the Dietetics department of All India Institute of Medical Science (AIIMS), New Delhi. The protein-enriched products are as per FSSAI regulations.

Scientists make herbal-sanitiser

Researchers of the National Botanical Research Institute (NBRI) have developed an alcohol-based herbal sanitizer, which contains Tulsi essential oil, strong antimicrobial agent and isopropyl alcohol for killing germs. The sanitizer has been clinically tested.

IITians develop magnetic RAM to improve storage and speed

Researchers at Indian Institute of Technology (IIT) Mandi have developed a faster, more energy-efficient and higher storage-capacity magnetic Random Access Memory (RAM). The team uses the Spin-transfer torque (STT) technology of having the electron spin to transmit information and process information.

IITians aid in social distancing

IIT Bombay members have developed a platform, named World Wide Help (WWH) to connect people seeking medical help with doctors. Also, to ensure physical distancing, the IITians have found a system to generate e-tokens to be deployed in local markets.

Cost-effective coating for PPE developed by IIT Guwahatians

Team of researchers at IIT-Guwahati have developed an affordable antimicrobial spray-based coating for Personal Protective Equipment (PPE) and 3D printed Ear Guard for healthcare workers to safeguard them against COVID-19. The concepts have been developed by Department of Biosciences and Bioengineering, IIT Guwahati.

CDRI's effort to combat novel coronavirus

The Central Drug Research Institute (CDRI), has inked a MoU (Memorandum of Understanding) with King George's Medical University (KGMU) in Uttar Pradesh to sequence the virus strains obtained from COVID-19 patients in Uttar Pradesh. Initially, the Lucknow-based lab will sequence the virus strains from the samples of a few patients. This activity will be taken up under the first vertical 'digital and molecular surveillance'. As of now, eight different variants of the virus are known to be causing the COVID-19 infection. Therapeutics or repurposing of drugs to fight against COVID-19 is the second vertical where CDRI is getting involved. The institution has a diverse library of molecules and these have been screened using in silico approaches against a panel of drug targets from SARS-CoV-2 under the third vertical, target-based screening system. The identified hits will be evaluated in a preliminary drug-target-based screen (primary screen).

CDRI gets Good Laboratory Practice certification

Lucknow-based Central Drug Research Institute (CDRI), under the Council of Scientific and Industrial Research (CSIR) has received certification for its Good Laboratory Practice (GLP) for drug discovery and research. CDRI became the first laboratory to have GLP-certified safety pharmacology facility and the third government laboratory to get this GLP certification. CDRI becoming GLP certified is significant as the drug development data generated by the institute will now have acceptability in all countries of the Organisation for Economic Co-operation and Development (OECD), including USA.

NAL develops cost-effective personal protective suits

The National Aerospace Laboratories (NAL), Bengaluru along with MAF Clothing Private Limited, Bengaluru has developed cost-effective and quality-certified fabric-based personal protective suits to safeguard health-care workers deployed in COVID-19 treatment clinics. It is made of polypropylene spun-laminated, multi-layered non-woven fabric. CSIR-NAL and MAF, Bengaluru, have plans to augment the production capacity to about 30,000 units per day within a period of four weeks.

Special Update: Central Food Technological Research Institute (CFTRI)

CSIR-Central Food Technological Research Institute (CFTRI), Mysore (a constituent laboratory of Council of Scientific and Industrial Research, New Delhi) came into existence during 1950 with the great vision of its founders, and a network of inspiring as well as dedicated scientists who had a fascination to pursue in-depth research and development in the areas of food science and technology. Research focus of CSIR-CFTRI revolves broadly around the following areas:

- Engineering Sciences
- Technology Development
- Translational Research
- Food Protection & Safety

Further details can be found at:

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