

IIT G, RR Animal Healthcare develop indigenous COVID-19 diagnostic kits

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Indian Institute of Technology Guwahati and Hyderabad based RR Animal Healthcare Ltd. have been successful in jointly developing and delivering large quantities of affordable COVID-19 related diagnostic kits.

With this initiative, IIT Guwahati has become the first institute in the country to demonstrate an efficient model to develop import-substitute COVID-19 kits from lab-scale to prototype level, field/hospital testing and commercialising thereby saving valuable foreign exchange for the country, timely delivery and customising as per the needs of the user.

These kits, being developed presently at the Center of Nanotechnology, IIT Guwahati, are now supplied regularly in large quantities to the National Health Mission, Assam and several hospitals across the country.

The launch of these indigenously developed COVID-19 kits, by Minister of Finance, Health and Family Welfare, Assam Himanta Biswa Sarma, was held on 18 June 2020.

These included initially the ICMR approved “SPILD” Viral Transport Media (VTM) Kits. Over the past several months, with the lockdown being implemented across the country and with very less air connectivity, acquiring large quantities of COVID-19 kits became very difficult.

To overcome this crisis, the National Health Mission, Assam had approached Prof. T. G. Sitharam, Director, IIT Guwahati, with a request to develop Viral Transport Media (VTM) kits, RNA extraction kits and RT-PCR kits and help the state government in their efforts to overcome this shortage.

IIT Guwahati immediately took up this challenge and strategised to develop these kits in-house to meet the growing requirement of these kits during this time of COVID-19 pandemic.

More than 2.5 Lakhs VTM kits developed at IIT Guwahati have already been supplied to NHM, Assam. Several testing laboratories across the country have also started procuring these import substitute kits due to their high quality, affordable price and timely delivery schedules.

The performance of the indigenously developed RNA extraction kits have also been highly satisfactory as per the Guwahati

Medical College and Hospital (GMCH) and the Institute has started supplying these RNA extraction kits in large quantities to the state government. Similarly, the indigenously developed RT-PCR kits are being validated presently and the production, as well as supply, of these kits is likely to commence soon.

These affordable and sterile “SPILD” Viral Transport Media (VTM) kits, RT-PCR kits and RNA isolation kits have been developed at the Center for Nanotechnology, IIT Guwahati, jointly with RR Animal Healthcare Ltd. with inputs from GMCH by the research teams led by Prof. Parameswar Krishnan Iyer, Prof. Siddhartha Sankar Ghosh from IIT Guwahati and Dr. Labanyamoy Kole and Dr. Debashish Dutta of RR Animal Healthcare.