

# CSIR IN MEDIA



**CSIR**

**NEWS BULLETIN  
11 TO 15 JULY 2021**





## IIT-Hyderabad Makes Artificial Intelligence Powered COVID-19 Kit for Self Testing at Home

CSIR-CCMB

15<sup>th</sup> July, 2021

Scientists at the Indian Institute of Technology Hyderabad (IITH) have developed COVIHOME, an artificial intelligence-powered COVID-19 test that allows self-testing at home. On obtaining ICMR approvals, and after commercialisation, the kit developed by Prof Shiv Govind Singh, Department of Electrical Engineering, will be available in the market at an affordable price.

This test kit can produce results within 30 minutes for both symptomatic and asymptomatic patients. The major benefit of this testing kit is that it does not require RT-PCR (Reverse Transcription Polymerase Chain Reaction), an expert human resource, and a BSL 2 lab facility for the extraction of RNA, so it has the potential for one to take the test at home without expert supervision.

Explaining the benefits of the testing kit, Shiv Govind Singh said, "A major objective of the research team for the development of the COVIHOME Test Kit was to break the transmission chain through affordable testing. We have already filed a patent for the device and are now looking for industry partners for ToT of technology for mass production".

As per IITH, CSIR-CCMB has performed the validation of the rapid RNA electronic diagnostic device for detection of SARS-Cov-2 virus in the swab samples independently with the in-house samples and hospital samples as advised by ICMR. These samples were confirmed for their positivity or negativity by the RT-PCR method.

The validation report confirmed the kit's efficiency at 94.2%, Sensitivity 91.3% and Specificity 98.2%. While a test currently costs around Rs 400, the developers say that mass production of the testing kit will help to reduce the cost to around Rs 300 per test.



Speaking about the role of IIT Hyderabad in helping tackle the COVID-19 pandemic, Prof B S Murty, Director, IIT Hyderabad, said, "IITH has come up with many unique & novel socio-technological initiatives and delivered remarkable results during this pandemic. Prof Shiv Govind's "COVIHOME" is one such admirable milestone. I am confident it will play a significant role in the safe & fast diagnosis of COVID-19 and minimize its spread".

The COVIHOME testing kit was developed by the research team of Dr Suryasnata Tripathy, Supraja Patta, Swati Mohanty, and other students led by Shiv Govind Singh, Department of Electrical Engineering.

The initial clinical trial and testing of the device was performed at ESIC Medical College and Hospital in Hyderabad. "Dean ESIC, Prof Srinivas M, and his team Dr Imaran, Dr Swati, and Dr Rajeev have played a big role in the successful development of this novel kit", said Singh.

**Published in:**

[Weather](#)



## CLRI takes leather industry to Ladakh, encourages youth to turn entrepreneurs

CSIR-CLRI

15<sup>th</sup> July, 2021

Turtuk resident Mohammad Haneef (26) travelled over 200 km to Leh to learn about the leather industry, its scope and the possible entrepreneurship opportunities in Ladakh. Haneef was among the 45-odd youngsters, most of whom had never worked in the leather industry, who attended a day-long workshop ‘Entrepreneurship Opportunities in leather and allied products’



on Wednesday. It was organised jointly by the Industries and Commerce Department, Union Territory of Ladakh and CSIR-Central Leather Research Institute (CLRI), Chennai.

The first interaction between CLRI and youngsters of the region is being seen as the maiden move aimed at employment generation here in this field.

After Ladakh Union Territory (UT) was constituted in 2019, the Industries and Commerce Department here had inked an MoU with the Council of Scientific and Industrial Research (CSIR), under which a number of initiatives are planned for the UT.

“The idea is to create employment locally and share the potential of the leather industry in the region. The UT administration is very supportive and wants to undertake planned development,” KJ Sreeram, director, CLRI, who was at Leh, told The Indian Express.

A similar workshop is scheduled in Kargil on Friday for which more than 70 participants have enrolled.



“We received very good responses from the youngsters who are curious about the industry. We hope to provide supportive income to the locals. Though leather has been traditionally in use here, the effort is to turn it into an organised sector. With CLRI on board, we plan to refine the traditional products with newer designs as per market needs,” said Moses Kunzang, director, Industries and Commerce Department, Ladakh.

This region having a sizable meat consuming population has abundant availability of animal skin locally and such an industry, when supported by experts, could easily flourish.

“If the discarded animal skin remains can be collected, this can serve as raw material at small units or factory processing leather. This is the first time I got to learn so much about leather,” said Haneef, who is a final year MTech student pursuing Civil Engineering at NIT, Jalandhar.

Coming from a family involved in farming, Haneef hopes to gain as much knowledge about leather before turning to some kind of entrepreneurship in future.

Later this month, the Chennai-based institute will host a month-long training programme for Ladakh’s Self Help Groups to enhance their skills in this field. During the course, experts will impart training required for making leather products, besides engaging with traditional designers, helping retain the local flavour. The CLRI scientists have identified a local place, where they will use the existing tailoring facilities to offer training.

“We will train participants in making leather-based products like wallets and purses. They will be introduced to different varieties of leather, their textures and applications in products, sewing and stitching techniques used on leather products and more,” added Sreeram.

Such initiatives, the experts believe, will additionally give a fillip to the region’s tourism. Safia Qusar (22) may be just in the second year of her undergraduate programme, but she is already thinking big in terms of reviving some of the lost leather-based products of Ladakh.



“There would be a number of leather-based musical instruments commonly found in Ladakh. But that is fast fading away. I want to learn about leather making and bring back these products before they vanish completely,” said the 22-year-old, whose father is a farmer.

Another Leh resident, Norbu Sponbo (24), recalled an instance when he was searching for a piece of leather for Daman, a pair of drums, played locally.

He said, “I went around the local markets and also visited butcheries. That is when I learnt that the animal skin is sent to Kashmir since there is no facility in Ladakh to process it into leather.”

Like Daman, the Ladakhis play Dramyin or Kopong, a six-stringed guitar also partly made of leather. Being a student of environment studies from Delhi University, Sponbo is also equally interested in exploring the environment-related aspects of the industry.

“Along with knowing about leather, I wanted to understand its scope and limitations, assess it with respect to the environment,” he said.

Kunzang, too, shared that setting up a tannery would pollute the pristine environment. Ladakh — the high-altitude, cold desert and hostile region, gives a tough test of survival for the non-localite visitors.

“Our biggest challenge will be to carry out all activities and training when there is favourable weather and access to this region, which is for about six months in a year,” the CLRI director said.



# एनएमएल ने ई कचरा से मूल्यवान धातुओं को निकालने की तकनीक कोलकाता की कंपनी को दी

जमशेदपुर : सीएसआईआर की प्रमुख प्रयोगशाला राष्ट्रीय धातुकर्म प्रयोगशाला ( एनएमएल) जमशेदपुर ने बुधवार को कोलकाता की रिसाइक्लिंग कंपनी मेसर्स मेटाओर रिसाइक्लर प्राइवेट लिमिटेड को ई-कचरा रीसाइक्लिंग की तकनीक का लाइसेंस दिया. इस तकनीक के लिए गत 5 मार्च को दोनों पक्षों के बीच समझौता ज्ञापन पर हस्ताक्षर हुआ था. उल्लेखनीय है कि एनएमएल ने कई तकनीकों को राष्ट्रीय और अंतरराष्ट्रीय उद्योगों और अनुसंधान संगठनों को हस्तांतरित किया है. मेसर्स मेटाओर रिसाइक्लिंग प्राइवेट लिमिटेड कोलकाता अलौह, मूल्यवान और कीमती धातुओं (कॉपर, निकेल, अल्युमिनियम आदि) को संसाधित करेगा और इसमें मौजूद सभी सामग्रियों को शून्य कचरे के आधार पर रीसायकल करेगा. पूर्वी भारत में मेटाओर रीसाइक्लिंग प्लांट पहला प्लांट होगा, जो जीरो वेस्ट कॉन्सेप्ट



पर काम करेगा और यह कोरोना महामारी के बाद समाज के लिए एक बड़ा तोहफा होगा. मौके पर एनएमएल के निदेशक डॉ इंद्रनील चट्टोराज, प्रोजेक्ट लीडर डॉ मनीष कुमार झा, डॉ झुमकी हैट, सीनियर प्रिंसिपल साइंटिस्ट, शोधकर्ता डॉ

पंकज कुमार चौबे, रेखा पांडा की ओर से समझौता ज्ञापन पर हस्ताक्षर किया गया. डॉ. अंजनी कुमार साहू ने समाज में ई-अपशिष्ट पुनर्चक्रण प्रौद्योगिकी के विज्ञापन और प्रसार के लिए मीडिया के साथ एनएमएल को पाटने के लिए हमेशा सक्रिय

रूप से भाग लिया. मेसर्स मेटाओर रीसाइक्लिंग प्राइवेट लिमिटेड के संस्थापक और प्रबंध निदेशक सौरभ रूंगटा, चाईबासा से हैं। उन्होंने अपने व्यवसाय का विस्तार करने के लिए ई-कचरा रीसाइक्लिंग के व्यवसाय में प्रवेश किया है.

**Published in:**

Uditvani, Chamakta Aaina, Dainik Bhaskar, Hindustan, Prabhat Khabar,



## Explained: What is UV-C technology, and how does it work on coronavirus?

CSIR-CSIO

15<sup>th</sup> July, 2021

Union Minister of State for Science and Technology Dr Jitendra Singh has said that Ultraviolet-C or UV-C Disinfection Technology will soon be installed in Parliament for the “mitigation of airborne transmission of SARS-COV-2”. The UV-C air duct disinfection system was developed by CSIR-CSIO (Central Scientific Instruments Organisation). CSIR-CSIO mentioned in a



release that the system is designed to fit into any existing air-ducts and the virucidal dosages using UV-C intensity and residence time can be optimised according to the existing space. The release adds that the virus is deactivated in any aerosol particles by the calibrated levels of UV-C light. It can be used in auditoriums, malls, educational Institutions, AC buses, and in railways.

### What is UV?

Ultraviolet (UV) is a type of light or radiation naturally emitted by the Sun. It covers a wavelength range of 100-400 nm. The human visible light ranges from 380–700 nm.

UV is divided into three bands: UV-C (100-280 nm), UV-B (280-315 nm) and UV-A (315-400 nm).

UV-A and UV-B rays from the Sun are transmitted through our atmosphere and all UV-C is filtered by the ozone layer. UV-B rays can only reach the outer layer of our skin or epidermis and can cause sunburns and are also associated with skin cancer. UV-A rays can penetrate the



middle layer of your skin or the dermis and can cause aging of skin cells and indirect damage to cells' DNA. UV-C radiation from man-made sources has been known to cause skin burns and eye injuries.

### **So, can UV-C kill coronavirus?**

UV-C radiation (wavelength around 254 nm) has been used for decades to disinfect the air in hospitals, laboratories, and also in water treatment. But these conventional germicidal treatments are done in unoccupied rooms as they can cause health problems.

A paper published in June 2020 in Scientific Reports noted that UV-C radiation can destroy the outer protein coating of the SARS-Coronavirus. They showed that 222-nm, known as 'far-UVC light', efficiently kills airborne human coronaviruses – alpha HCoV-229E and beta HCoV-OC43. This is different from SARS-CoV-2 virus. There is very limited data on the required wavelength and duration needed to inactivate SARS-CoV-2.

An in-vitro experiment conducted by Hiroshima University researchers showed that 99.7% of SARS-CoV-2 viral culture was killed when exposed to 222 nm UV-C irradiation at 0.1 mW/cm<sup>2</sup> for 30-seconds. The study was published in September 2020 in the American Journal of Infection Control.

Another study published in Scientific Reports in March 2021 noted that UV-C irradiation was highly effective in inactivating SARS-CoV-2 replication. "A complete inactivation at all viral concentrations was observed with 16.9 mJ/cm<sup>2</sup>. These results are important for the development of novel sterilising methods to contain SARS-CoV-2 infection," write the authors.

### **Is it safe for humans?**

Researchers from the Indian Institute of Technology-Kanpur, who developed a portable disinfectant device that used UV-C radiation (222-254 nm), noted that the device was



specifically developed to disinfect non-living things. “UV-C radiation used in this device could be harmful to the skin and eyes of the living beings, therefore the operator of the device must use spectacles with UV-C radiation protection and use this device safely,” noted the paper published in June 2020.

The release from our Ministry of Science and Technology does not state the wavelength or duration used, but mentioned that the product was tested for more than 99% disinfection.

Dan Arnold, who works for UV Light Technology, a company that provides disinfecting equipment to hospitals, pharmaceutical companies across the UK, told [bbc.com](http://bbc.com): “UV-C is really nasty stuff – you shouldn’t be exposed to it...It can take hours to get sunburn from UV-B, but with UV-C it takes seconds. If your eyes are exposed... you know that gritty feeling you get if you look at the sun? It’s like 10 times, just after a few seconds.”

But few studies have shown that far-UVC light (207–222 nm) does not harm mammalian skin. “Far-UVC light has a very limited range and cannot penetrate through the outer dead-cell layer of human skin or the tear layer in the eye, so it’s not a human health hazard. But because viruses and bacteria are much smaller than human cells, far-UVC light can reach their DNA and kill them,” explained David J. Brenner, director of the Center for Radiological Research at Columbia in a release. His team has demonstrated in 2018 that far-UVC light can help control the spread of airborne-mediated microbial diseases.

**Published in:**  
[Indianexpress](http://Indianexpress)



## IIT survey to study impact of weather on Amber Fort

CSIR-CBRI

14<sup>th</sup> July, 2021

Jaipur: The 16th century Amber Fort will undergo the first-ever ‘geological assessment survey’ to study the impact of all-weather phenomena on its structures including the watchtower where lightning claimed 11 lives on Sunday night.

The survey will be conducted by the Council Of Scientific And Industrial Research–Central Building Research Institute (CSIR–CBRI), which is supported by IIT-Roorkee. “It is a coincidence that a lightning struck at a time when we are planning a major assessment,” said Mugdha Sinha, secretary of art, literature, culture and archaeology, adding it was very important to know impact of summer, winters, rain, lightning and humidity on the structure. “Other factors such as geology of the site to better understand how to conserve the fort,” said Sinha. The survey is likely to start soon.

**Published in:**

[Timesofindia](https://timesofindia.com)



सराहनीय

आइएचबीटी पालमपुर ने हासिल की सफलता, कुल्लू जिले से की शुरुआत

# देश में पहली बार होगी मांक फल की खेती

मधुमेह रोगी भी ले सकेंगे मीठे स्वाद का स्वाद, गन्ने व चीनी से 300 गुना मीठा है मांक फल से बना मिश्रण सुक्रोज

संवाद सहयोगी, पालमपुर : हिमालय जैवसंपदा प्रौद्योगिकी संस्थान (आइएचबीटी) पालमपुर ने भारत में पहली बार मांक फल की खेती में कामयाबी हासिल की है। अब इस खेती को व्यवसायिक तौर पर विकसित किया जाएगा। संस्थान ने इसकी शुरुआत कुल्लू जिले से की है और प्रगतिशील किसान मानव खुल्लर के साथ समझौता हस्ताक्षरित किया है।

12 जुलाई को कुल्लू के रायसन में लगाए हैं पौधे : आइएचबीटी के निदेशक डा. संजय कुमार ने बताया कि 12 जुलाई को कुल्लू जिले के रायसन में प्रगतिशील किसान (मानव खुल्लर) के खेत में मानक फल की पौध लगाई गई है। भविष्य में इसके अच्छे परिणाम देखने को मिलेंगे।



कुल्लू में मांक फल का पौधा रोपते किसान व अन्य ● जागरण

## 2018 में चीन से मंगवाए थे बीज

आइएचबीटी के निदेशक ने मानक फल की खेती के लिए अथक प्रयास किए हैं। मार्च 2018 को आइसीएआर-एनबीपीजीआर नई दिल्ली के माध्यम से

चीन से देश में पहली बार मांक फल के बीज मंगवाए थे। इसके बाद डा. प्रोबीर कुमार पाल प्रधान विज्ञानी और संस्थान से उनके सहयोगियों ने गुणवत्तापूर्ण रोपण सामग्री, खेती के लिए बुनियादी कृषि संबंधी सूचना, फल की तकनीक और कटाई के बाद की तकनीक के

लिए प्रौद्योगिकी विकसित की है। वर्तमान में अच्छी गुणवत्ता वाले फलों की उपज के साथ खेत की परिस्थितियों में मानक फल सफलतापूर्वक उगाया जा रहा है। हिमाचल प्रदेश इस फल की बड़े पैमाने पर खेती के लिए उपयुक्त पाया गया है।

## क्या है मांक फल

मांक फल दुनियाभर में तीव्र मीठे स्वाद के लिए जाना जाता है। इसे गैरकैलोरी प्राकृतिक स्वीटनर के रूप में उपयोग किया जाता है। इस फल का मीठा स्वाद मुख्य रूप से कुकुर्बिटेन-प्रकार ट्राइटरपीन ग्लाइकोसाइड के समूह की सामग्री से होता है और इसे मोग्रोसाइड्स कहा जाता है। मोग्रोसाइड्स का निकाला गया मिश्रण सुक्रोज या गन्ना व चीनी से लगभग 300 गुना मीठा होता है। शुद्ध किए गए मोग्रोसाइड्स को जापान में एक उच्च तीव्रता वाले मीठे एजेंट तथा संयुक्त राज्य अमेरिका में गैर-पोषक स्वीटनर स्वाद बढ़ाने और खाद्य सामग्री के रूप में मान्यता प्राप्त है। अंतरराष्ट्रीय बाजार में मांक फल की मांग धीरे-धीरे बढ़ रही है। उच्च मांग के बावजूद इसकी खेती केवल चीन में ही की जाती है।

**Published in:**

Dainik Jagran, Amar Ujala, Dainik savera, Divya hlmachal,



CSIR-NGRI

13<sup>th</sup> July, 2021

## MLA Congratulations to the NGRI Scientist

ఎన్జిఆర్ఐ శాస్త్రవేత్త తాన్వి ఆరోరాకు సత్కారం



ఎన్జిఆర్ఐ శాస్త్రవేత్త డా.తాన్వి ఆరోరాను సత్కరిస్తున్న ఎమ్మెల్యే బేతి తదితరులు ఉప్పల్, జూలై 12 ప్రభాతవార్త : ప్రతిష్ఠాత్మక క్రైయిగ్ జె బీస్లి అవార్డుకు ఎంపికైన ఎన్జిఆర్ఐకి చెందిన శాస్త్రవేత్తను సోమవారం ఉప్పల్ ఎమ్మెల్యే బేతి సుభాష్ రెడ్డి ఘనంగా సత్కరించారు. హబ్బిగూడ క్యాంపు కార్యాలయంలో జరిగిన కార్యక్రమంలో శాస్త్రవేత్త డా.తాన్వి ఆరోరాను శాలువతో సత్కరించారు. ఈ సందర్భంగా ఆయన మాట్లాడుతూ అమెరికాలోని సోసైటీ ఆఫ్ ఎక్స్పర్ట్స్ జియోపిజిస్టి సంస్థ భూగర్భ జలాల అన్వేషణలో ఆమె చేసిన కృషిని అభినందిస్తూ అవార్డు అందజేయడం హర్షనీయమన్నారు. అధ్యయన విభాగంలో ఆమె ఎంతో పరిశోధనలు చేశారని, ఆమె పరిశోధనలు దేశానికి ఎంతో ఉపయోగపడుతాయన్నారు. ఈ సందర్భంగా స్వీట్లు తినిపించారు. ఈ కార్యక్రమంలో టిఆర్ఎస్ నాయకులు గరిక నుధాకర్, మహేందర్ రెడ్డి, లక్ష్మినారాయణ, శ్రీధర్, గిల్వర్ట్, కె.కుమార్, శివ, శంకర్, లింగనాయక్, రవినాయక్, కృష్ణవేణి, భాగ్యమ్మ, శ్రీవాణి తదితరులు పాల్గొన్నారు.

**Published in:**

Vaaritha



## MLA Congratulations to the NGRI Scientist

CSIR-NGRI

13<sup>th</sup> July, 2021

MLA Bheti Subhash Reddy on Monday felicitated and congratulated NGRI scientist Dr. Tanvi Arora, who was nominated for the prestigious Craig J. Baseley Award, in the camp office. On the occasion, the MLA said that it is a matter of pride that Dr. Tanvi was nominated for the Award of Institute of Exploration Geophysics, a prestigious institution in the United States for her research carried out as a part of the study on groundwater. TRS leaders Garike Sudhakar, Mahender, Shiva, Laxminarayan, Sridhar, Gilbert, Suram Shankar, Krishnaveni Yadav and others participated in the event. Capra Division President Sudugu Mahender Reddy, General Secretary Gilbert and Garike Sudhakar were present.

Subhash Reddy honors NGRI scientist

**Published in:**

Andhra Jyoti



## Dr. Shekhar Mande, DG-CSIR visits J&K; takes stock of CSIR's Lavender Cultivation at Pulwama

CSIR-IIIM

12<sup>th</sup> July, 2021

Dr Shekhar C. Mande, Director General, CSIR and Secretary, DSIR, visited the CSIR-Indian Institute of Integrative Medicine's (CSIR-IIIM) Branch Lab in Srinagar and the Institute's Field Station in Pulwama and took stock of the ongoing activities. Interacting with the women self-help groups and entrepreneurs associated with Lavender farming, Dr Shekhar Mande expressed satisfaction that the adoption of Lavender farming has brought a substantial enhancement in their income and employment generation.



Dr Mande assured the farmers and entrepreneurs that scientific and technological advisory and support would be provided for further expansion of the crop, its processing, value addition and marketing to achieve self-sufficiency.

He further emphasized the need for integration of apiary with aromatic crop production for maximizing farm productivity and profitability. Dr D Srinivasa Reddy, Director CSIR-IIIM, Jammu, while highlighting the significance of the Field Station, Pulwama informed that the station had been the epicentre of industrial farming, especially Lavender for enhancing farmers income and women empowerment in the Union Territory of J&K.

He also informed that CSIR-IIIM, intends to extend the different industry-oriented crops on a mass scale for the production of value-added products and other raw materials. Dr Shahid Rasool, Scientist In-charge of Bonera Farm in Pulwama, informed that a sustained approach



through different projects, mission programmes, practical training and skill for producing and processing different crops are imparted.

Farmers are hand-held for the commercial production of different crops through the supply of free quality planting, facilities for distillation of the harvested crop produce, market linkages and technical advisory.

DG, CSIR and the Director CSIR-IIIM met Manoj Sinha, Lt Governor of J&K and apprised him about the introduction of Lavender and other high-value cash crops by CSIR in J&K.

The DG-CSIR also informed the Lt Governor about the other CSIR S&T initiatives in J&K and offered implementation of the CSIR Technologies relevant to the J&K especially for societal development and rural empowerment.

The Lt. Governor appreciated the CSIR initiatives and also emphasized on scientific and industrial training of the talented youths of J&K.

The Lt Governor desired that the information with regards to all the readily available technologies of CSIR may be shared with the J&K UT Government to have further brainstorming to explore possibilities of their implementation.

For more than 35 years, CSIR-IIIM has been carrying out R&D studies on Lavender's agro-and processing technologies for achieving higher productivity and quality indices. A high oil yielding variety known as RRL-12 was developed by CSIR-IIIM. The Institute has been carrying out several State and Centrally sponsored mission mode projects like CSIR-Aroma Mission for mass scale cultivation of the crop.

It is reported that the farmers cultivating Lavender achieve 5-6 folds more income (Rs 4.00 – 5.00 lakh per hectare) than the traditional crops.



The lavender crop cultivation area in the UT has seen a surge in the past ten years due to various initiatives taken and implemented by CSIR-IIIM, Jammu.

Lavender is being grown in J&K over an estimated area of 900 acres with an annual production of 3000 Kgs of Lavender oil.

The Institute is up scaling the acreage under the crop. It intends to cover an area of 1500 hectares in the next 2-3 years for achieving a sustainable production regime to meet the increasing demand for Lavender oil nationally and internationally.

**Published in:**

[Newsonair](#)



## **‘Pocket outbreaks’ of Delta as 11 more samples test positive in Nagpur**

CSIR-NEERI, CCMB

12<sup>th</sup> July, 2021

NAGPUR: Experts are calling them ‘pocket outbreaks’ after the Delta variant (B1.617.2) was found in samples of two Kolhapur returnees and nine more Covid positive patients through genome sequencing by CSIR-NEERI, in association with CCMB Hyderabad. Amid the Delta Plus (AY.1 variant) warnings, Nagpur Municipal Corporation (NMC) had started tracing and placing suspected cases in institutional quarantine since last month.

So far, it has quarantined around 18 persons who had tested Covid positive, along with their family members. Only saline gargle RT-PCR samples are being used for the study. CSIR-Neeri environmental virology lab, led by Krishna Khairnar, has developed the saline gargle RT-PCR method.

The NMC’s move came following the district administration requesting CSIR-Neeri to conduct genome sequencing of eight samples of the Umred family whose members tested positive in quick succession last month. As Neeri-CCMB delivered results within a week, local authorities are now relying on the institutions for aggressive genomic surveillance. This is also helping them take immediate containment policies.

Municipal commissioner Radhakrishnan B told TOI that it was a big relief that none of the suspected patients had tested positive for Delta Plus. “Since Covid cases are less, we are detailing the travel history of groups of people if all of them test positive. In case they have been to Delta Plus-affected areas, we treat them as suspected cases and place them in institutional quarantine even if they have isolation facility at home,” he said.

Radhakrishnan added that genome sequencing is another precaution taken by NMC. “CSIR-Neeri is helping study the samples along with CCMB,” he said.



“Wherever the need arises, we will go for institutional quarantine. We may not give the opportunity of home isolation. Only exceptional cases like pregnant women, children or elderly will be allowed home isolation,” the civic chief said.

TOI asked experts about the significance of Delta variant still infecting groups of people in the district.

Dr Shailesh Mundhada, a pathology and immunology expert, said it is the way a virus evolves. “We may say it is prevalent in a pocket like a family, a building or an area. It is because of local virulence of the strain,” he said.

Pulmonologist Dr Ravindra Sarnaik said the original strain has now been replaced. “It is assumed that whatever infection happened in second wave was due to the Delta variant. Delta is still prevalent. These are local spurts which can get converted into third wave too, due to Delta strain itself,” he said.

Infectious diseases specialist Dr Ashwini Tayde doubted if there can again be an outbreak due to Delta variant. “Those not immune will be at risk and need to take precautions keeping in mind its high infectivity factor. Some new variants (mutations) cropping up and causing trouble can’t be discounted,” she said.

**Zika alert: Admin keeps close watch**

The local administration is keeping a close watch on patients with fever and other symptoms akin to Zika virus. The district is witnessing a spike in dengue cases too. The administration has started sending some samples of these dengue cases for genome sequencing to NIV Pune to check for zika virus, officials said.

**Published in:**

[Timesofindia](https://timesofindia.com)



# Sero survey at CFTRI to cover kids

First-of-its-kind longitudinal study across CSIR labs in the country

EXPRESS NEWS SERVICE @Mysuru

WITH debate ringing around large number of children getting infected with the pandemic, Mysuru-based Central Food Technological Research Institute engaged in food research, has started sero surveillance exercise which will also measure Covid sero prevalence among children aged between five and 18.

The surveillance is part of the nationwide survey among CSIR sister labs among its staff, retirees and relatives considering them as a sample group to measure sero prevalence or a measure of total number of people that have been infected through the presence of pandemic antibodies in them.

CFTRI along with other 38 CSIR sister labs had conducted such surveys three times since the onset of pandemic last year already by collecting blood samples from its students, staff, retirees and their family members.

Significantly, according to Dr



The third phase of Covid-19 sero surveillance launched in CSIR - Central Food Technological Research Institute in Mysuru on Friday | EXPRESS

Ravindra P V of CFTRI, since they are already in possession of the data on antibody of the same population from past three such surveys, this will be a first of the kind longitudinal study that measures the change in antibody levels throughout the first wave of pandemic and the recent spike in cases.

However, this time, uniquely they will measure the presence of antibodies among children aged between five and 18 also helpful in finding out the spread of pandemic among children and their level of antibodies against the pandemic.

Notably, since most of the staff at CFTRI and other CSIR

institutes are already vaccinated, the survey will also provide data on vaccine efficacy and presence of antibodies among those vaccinated as well as information on the status of antibody levels after long period of vaccination.

According to them, the study will also co-relate comorbidities of the people surveyed to identify connections between the pandemic prevalence.

Apart from being a quantitative sero surveillance, the survey will also identify the percentage of IgG and IgM antibodies which explains much about the pandemic prevalence like the former hinting recent infection.

The camp was inaugurated by CFTRI director Dr Sridevi Annapoorna Singh in the presence of Dr Prakash M Halami, Dr Muthu Kumar, Dr Ravindra P V, Dr Gopinath and CFTRI medical officer Dr Avilash S Rani on Friday and will run for three days. On the first day, 850 individuals participated in it.

**Published in:**

The Indian Express, Star Of Mysore, The Hindu



## Pan-CSIR Sero survey held at CFTRI from 7th -9th July.

ಕೋವಿಡ್-19 ಮೂರನೇ ಅಲೆ ಸಂಭವ ಹಿನ್ನೆಲೆ

# ಸಿಎಫ್ ಟಿಆರ್ ಐನಲ್ಲಿ ಆಂಟಿಬಾಡಿ ಪತ್ತೆ ಸಮೀಕ್ಷೆ

ಮೈಸೂರು: ಕೋವಿಡ್-19 ಎರಡನೇ ಅಲೆಯ ನಂತರ ಮೂರನೇ ಅಲೆ ಆರಂಭವಾಗುವ ಮುನ್ನೂಚನೆ ಇರುವ ಹಿನ್ನೆಲೆಯಲ್ಲಿ ಮೈಸೂರಿನ ಸಿಎಫ್ ಟಿಆರ್ ಐನಲ್ಲಿ ಪಾನ್-ಸಿಎಸ್ ಐಆರ್ ಫಿನ್‌ನೋಮ್ ಇಂಡಿಯಾ ಸಂಸ್ಥೆಯು ಆಂಟಿ ಬಾಡಿ ಪತ್ತೆ ಸಮೀಕ್ಷೆ ಹಮ್ಮಿಕೊಂಡಿದೆ.

ಕಳೆದ ಬುಧವಾರದಿಂದ ನಡೆಯುತ್ತಿರುವ ಮೂರು ದಿನಗಳ ಸಮೀಕ್ಷೆಯಲ್ಲಿ ಸಿಎಫ್ ಟಿಆರ್ ಐನ ಸಿಬ್ಬಂದಿ, ವಿದ್ಯಾರ್ಥಿಗಳು, ಕುಟುಂಬಸ್ಥರು ಮತ್ತು 5ರಿಂದ 18 ವರ್ಷದೊಳಗಿನ ಬಾಲಕರು ಪಾಲ್ಗೊಂಡಿದ್ದರು. ಈ ಸಮೀಕ್ಷೆಯು ಮೈಸೂರು ಸೇರಿದಂತೆ ರಾಷ್ಟ್ರದ 38 ಸಿಎಸ್ ಐಆರ್ ಪ್ರಯೋಗಾಲಯಗಳಲ್ಲಿ ನಡೆಯುತ್ತಿದೆ. ಮೈಸೂರಿನ ಸಿಎಫ್ ಟಿಆರ್ ಐನಲ್ಲಿ ನಡೆದ ಸಮೀಕ್ಷೆಯಲ್ಲಿ ಇದುವರೆಗೆ 838 ಮಂದಿ ಪರೀಕ್ಷೆಗೆ ಒಳಗಾಗಿದ್ದು, ಹೆಚ್ಚುವರಿಯಾಗಿ ಶನಿವಾರವೂ ಪರೀಕ್ಷೆ ನಡೆಯುವುದರಿಂದ 100 ಮಂದಿ ಭಾಗವಹಿಸುವ ನಿರೀಕ್ಷೆ ಇದೆ.

**ಎನಿಂದು ಆಂಟಿ ಬಾಡಿ ಪತ್ತೆ ಸಮೀಕ್ಷೆ?:** ಕೋವಿಡ್-19 ಮೂರನೇ ಅಲೆಯು ನೇರವಾಗಿ ಮಕ್ಕಳ ಮೇಲೆ ಪರಿಣಾಮ ಬೀರಲಿದೆ ಎಂಬ ಮುನ್ನೂಚನೆಯಿಂದ ಆಂಟಿ ಬಾಡಿ ಪತ್ತೆ ಕಾರ್ಯ ನಡೆಸಲಾಗುತ್ತಿದೆ. ಅದರಲ್ಲೂ ಬಾಲಕರನ್ನೇ ಆಯ್ಕೆ ಮಾಡಿಕೊಳ್ಳಲಾಗಿದೆ. ಈ ಹಿಂದೆಯೂ ಇಂತಹ ಸಮೀಕ್ಷೆ ಎರಡು ಬಾರಿ ನಡೆದಿತ್ತು. ಆಗ ಸೋಂಕಿತರಿಗೆ ಲಸಿಕೆ ನೀಡಿರಲಿಲ್ಲ. ಲಸಿಕೆ ನೀಡುವ ಮುನ್ನ ಮತ್ತು ಲಸಿಕೆ



ಮೈಸೂರಿನ ಸಿಎಫ್ ಟಿಆರ್ ಐ ನಿರ್ದೇಶಕಿ ಡಾ. ಶ್ರೀದೇವಿ ಅನ್ನಪೂರ್ಣ ಸಿಂಗ್ ಅವರು ಆಂಟಿ ಬಾಡಿ ಪತ್ತೆ ಪರೀಕ್ಷೆಗೆ ಒಳಗಾದರು. ಡಾ.ಪ್ರಕಾಶ್ ಎಂ.ಹಲಾಮಿ, ಡಾ.ಮುತ್ತುಕುಮಾರ್, ಡಾ.ಪಿ.ವಿ.ರವೀಂದ್ರ, ಡಾ. ಗೋಪಿನಾಥ್, ಡಾ.ಅವಿಲಾಶ್ ಎಸ್.ರಾಣಿ ಚಿತ್ರದಲ್ಲಿದ್ದಾರೆ.



ಒಂದು ವೇಳೆ ಮಕ್ಕಳಲ್ಲಿ ಆಂಟಿ ಬಾಡಿ ಕಾಣಿಸಿಕೊಳ್ಳದಿದ್ದ ಪಕ್ಷದಲ್ಲಿ ಅಂತಹವರನ್ನು ಗುರುತಿಸಿ ಪೌಷ್ಟಿಕ ಆಹಾರ ನೀಡಿ ರೋಗ ನಿರೋಧಕ ಶಕ್ತಿ ಹೆಚ್ಚಿಸಲು ಈ ಸಮೀಕ್ಷೆ ಪೂರಕವಾಗಲಿದೆ. ಲಾಂಗಿಟ್ಯೂಟಡನಲ್ ಸ್ಟಡಿ ಮುಖಾಂತರ ಮೂರನೇ ಅಲೆಗೆ ಸಿದ್ಧವಾಗಲು ಸಿಎಫ್ ಟಿಆರ್ ಐ ಇಂತಹ ಕಾರ್ಯಕ್ರಮ ಹಮ್ಮಿಕೊಳ್ಳುತ್ತಿದೆ. -ಡಾ.ಪರಗಿ ರಮೇಶ್‌ಕುಮಾರ್, ಸಿಎಫ್ ಟಿಆರ್ ಐನ ಮಾಹಿತಿ ಮತ್ತು ಸಂಪರ್ಕಾಧಿಕಾರಿ.

ನೀಡಿದ ನಂತರದೇಹದಲ್ಲಿ ಆಂಟಿಬಾಡಿ ಪತ್ತೆಯಾಗಿವೆಯೇ ಎಂಬುದನ್ನು ಪತ್ತೆ ಹಚ್ಚಲು ಮೂರನೇ ಬಾರಿಗೆ ಸಮೀಕ್ಷೆ ನಡೆಸಲಾಗುತ್ತಿದೆ.

**ಈ ಸಮೀಕ್ಷೆಯಿಂದ ಏನು ತಿಳಿಯುತ್ತದೆ?:** ಲಸಿಕೆ ಪಡೆದವರಲ್ಲಿ ಅದು ಎಷ್ಟರ ಮಟ್ಟಿಗೆ ಪರಿಣಾಮಕಾರಿಯಾಗಿ ಕಾರ್ಯನಿರ್ವಹಿಸಬಲ್ಲದು, ಲಸಿಕೆಯ ಸತ್ವ ಎಷ್ಟು ದಿನ ಇರುತ್ತದೆ ಎಂಬುದನ್ನು ಪತ್ತೆ ಮಾಡಲಾಗುತ್ತಿದೆ.

ಮೂರನೇ ಅಲೆಯು ಬಾಲಕರನ್ನೇ ಟಾರ್ಗಟ್ ಮಾಡಬಹುದಾದ್ದರಿಂದ ಮುಂಜಾಗ್ರತೆ ವಹಿಸಲು ಈ ಸಮೀಕ್ಷೆ ನಡೆಯುತ್ತಿದೆ. ಒಂದು ವೇಳೆ ಸೋಂಕಿತ ಪೋಷಕರಿಂದ ಮಕ್ಕಳಲ್ಲಿ ಸ್ವಾಭಾವಿಕವಾಗಿ ಸೋಂಕು ಅಥವಾ ಆಂಟಿ ಬಾಡಿ ಕಾಣಿಸಿಕೊಂಡಲ್ಲಿ ಆಗ 3ನೇ ಅಲೆಯ ಭೀತಿ ಕಡಿಮೆಯಿರಲಿದೆ. ಆಸ್ಪತ್ರೆಗೆ ಹೋಗದೆಯೂ ಕೋವಿಡ್ ಸೋಂಕಿನಿಂದ ಗುಣಮುಖರಾಗಬಹುದು ಎಂಬ ಅಂಶ ತಿಳಿದು ಬರಲಿದೆ.





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