CSIR IN MEDIA

CSIR

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Covid-19: CSIO products can help dentists reopen, make outing safer

CSIR-CSIO

10th July, 2020

Good news for dentists and those with toothache in the times of Covid-19. A local invention makes dental procedures safe from coronavirus.

It's called aerosol restricting canopy or ARC. Central Scientific Instruments Organisation (CSIO) in the city has combined with Oral Health Sciences Centre (ORHC) of the Post Graduate Institute of Medical Education and Research (PGIMER) to make it. They have transferred the technology to a Chandigarh company. Asked why this canopy was required, project's principal investigator Sanjeev Verma said: "Personal protective equipment (PPE) is used in emergency care but dental settings have additional infection control needs because oral surgery procedures use drills and ultrasonic devices that cause the release of aerosol (suspended fine droplets), which is a cause of infection in the dental clinic." Dental aerosols, which spread in 30-foot range, are among the most dangerous contamination carriers in the dental clinic. Not only is someone at the risk of inhaling infectious particles but also suspended particles settle on surfaces after a while and are often breathed in again. Dental procedures can increase the bacteria levels to almost 20 times. The prototype of this canopy for the dentist's chair was tested as useful for preventing even Covid-19. CSIR-CSIO director Sanjay Kumar said: "Face masks and face shields restrict the transfer of infectious aerosol from patient to doctor during procedures but do not stop the spread of aerosols to the atmosphere around the patient." CSIO senior scientist Vinod Karar said: "The ARC shields dentists and dental assistants from the patient's airway. The canopy covers the required area over the patient, while allowing the doctor a free movement of arms to perform all the tasks." The Safety-ARC can be fixed on a movable platform of adjustable height and moved in the desired direction. The system's sliding windows covered with disposable sheets reduce patient-to-patient infection and dependency on sterilization.

The optional feature of aerosol suction from the canopy used the dental chair's suction pump. The industry partner has manufactured the prototype and become ready for mass production. The CSIO has also developed a technology for precision manufacturing of safety goggles for healthcare professionals who treat high viral load patients of Covid-19. Project team leader Karar said: "The conjunctiva membrane located inside the eyelid for lubricating the eyeball is the only exposed mucous membrane of the human body. When we open the eyes, this membrane is also exposed, making it an important but often overlooked entrance for viruses. The protective goggles are designed ergonomically to cover the eye area fully and seal it efficiently. It protects health professionals from aerosols and other hazardous suspended particles." How protective are these for the health workers and general public? These safety goggles have a flexible frame for tighter sealing with the face skin, proper covering of the eyes and the surrounding areas, and even room for prescription glasses. The polycarbonate lens is sturdy, while an adjustable elastic strap makes it easy to wear. Project's senior scientist Neha Khatri said: "The goggles meet the ANSI/SEA Z87.1-2010 standards for use in varied environments without any fogging or fatigue."

Published in:
The Times of India

India Positive: CSIR-CMERI Develops Low Cost Ventilators For COVID-19 Patients

CSIR-CMERI

10th July, 2020

The CSIR-Central Mechanical Engineering Research Institute (CMERI), Durgapur, has developed a mechanical ventilator with indigenous technology which can be used for the treatment of COVID-19 patients and those experiencing breathing difficulty.

Portability and cost-effectiveness are the two most important features of the product, a senior official of the institute said. The mechanical ventilator developed by the institute will cost around Rs 90,000-1,00,000.

Published in:

News 18

48 acres allotted to CSIR-CCMB research centre

CSIR-CCMB

10th July, 2020

Orders issued delineating the land at Bommaipalli of Bhongir mandal

CSIR-Centre for Cellular and Molecular Biology (CCMB)'s long-awaited dream of having its own dedicated innovation centre to expand its research activities is on the verge of coming true with the government issuing orders delineating about 48 acres of land in Bommaipalli village of Bhongir mandal a few days ago. More than a decade ago, the then government had assured to allocate more than 100 acres for setting up a Council of Scientific & Industrial Research (CSIR) Innovation Centre. The land right opposite the upcoming All India Institute of Medical Sciences (AIIMS) at Bibinagar, when it was Nizam's Institute of Medical Sciences (NIMS) campus, was sought but before the allotment happened it got into litigation when a private party claimed ownership. It is not yet known if the fresh land allotment is nearby or if the earlier claim of about 40 acres being allotted to the premier lab is still valid. The request for exemption from application of the provisions of the Land Acquisition Act, however, was accepted by the government in the orders issued last week with the Collector of Yadadri-Bhuvanagiri district directed to take necessary action. CCMB main campus is beside CSIR-Indian Institute of Chemical Technology (IICT) where it started as a biochemistry division before becoming an independent lab in 1987. It has been in the forefront of combating COVID-19 with testing capability, validating kits, genome sequencing etc. Its first annexe is Laboratory for Conservation of Endangered Species (LaCONES) at Attapur and established in 2000 to study and develop advanced molecular biology tools for wildlife conservation. It also houses the National Genetic Resource Bank Facility to collect and store genetic material from deceased animals in zoos. A second annexe, Medical Biotechnology Complex, was established at Uppal in 2015 where about 20 start-ups are engaged in different sectors of life sciences. It has the Common Research and Technology Development Hub (CRTDH), Atal Incubation Centre-CCMB (AIC-CCMB) and the Meity Startup Hub. Whether all these will be integrated into a single campus when the entire land is allocated is not clear for now.

"We are working on the project slated to come up on 120 acres. We are having discussions with the government and will be able to give a better picture in a couple of weeks," said CCMB Director Rakesh Mishra, when contacted.

Published in:
The Hindu

Masks should be compulsory for all: CSIR DG after WHO confirms 'emerging evidence' of airborne COVID-19 spread

CSIR

10th July, 2020

As the World Health Organisation (WHO) confirms "emerging evidence" of airborne transmission of COVID-19, CSIR (Council of Scientific and Industrial Research) Director-General Dr Shekhar Mande on Thursday said that wearing masks has never been more important. "In my opinion, masks should be compulsory for everyone to wear, including in the rooms. If you are in the office it is important that the office is well ventilated. If you are in closed spaces, ventilate them, and if you are in open spaces, make sure you are wearing a mask always and maintain social distance," Dr Mande said. As per a CNN report on Wednesday, WHO confirmed that there is an 'emerging evidence' of airborne transmission of the deadly virus, following a letter signed by 239 scientists, urging the agency to be more forthcoming about the likelihood that people can catch the virus from air droplets. While explaining the difference between airborne and non-airborne, Dr Mande said that there is 'emerging evidence' in the world that when we speak, we emit aerosols - less than five microns in size. Since they are small, they remain suspended in the air.

"If they remain suspended in air, then in a crowded place even if one is infected, there is a potential risk that this individual will pass it on to many others. In closed rooms, where ventilation is not very good, suspended particles in the air are also a potential risk of infection," he said. Mande further said that social distancing, along with wearing masks, still remains to be the biggest tools of precautions against coronavirus.

Earlier, WHO Technical Lead for Infection Prevention and Control Dr Benedetta Alleganzi on Wednesday had said, "We acknowledge that there is emerging evidence in this field, as in all other fields regarding the COVID-19 and pandemic and therefore, we believe that we have to be open to this evidence and understand its implications regarding

the modes of transmission and also regarding the precautions that need to be taken." However, Alleganzi had added that more research needs to be done on the nature of COVID-19 transmission.

Published in:
Times Now

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9th July, 2020

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"We are working on the project slated to come up on 120 acres. We are having discussions with the government and will be able to give a better picture in a couple of weeks," said CCMB Director Rakesh Mishra, when contacted.

Published in:
The Hindu

Is Covid-19 airborne? Indian experts react to latest finding, say there is no need to panic

CSIR-CCMB

9th July, 2020

A state of panic has overtaken people after the World Health Organization, earlier this week, was approached with a group of scientists with their finding, supporting the possibility of Covid-19 virus to be airborne. However, experts at India's CSIR-Centre for Cellular and Molecular Biology (CCMB) say there is no need to panic. As per an expert, the latest finding could mean that the pathogen can be 'at least temporarily' in the air and does not mean it is flying all over and will infect everyone. "Those are good studies. Based on that, what is being communicated to WHO is that the virus can be at least temporarily airborne, which means it can travel in droplets of smaller size less than five micron which will mean that it will be hanging in the air for longer than bigger droplet which settles down in a few minutes," director of the CSIR-CCMB, Rakesh Mishra, told news agency PTI. Mishra calls for people to continue to take the same precautions and avoid close contact with people and large gatherings. The scientist said social distancing should be maintained at all cost and people must avoid rooms where multiple people are present, particularly those lacking aeration such as AC rooms. He added that very little is known about the virus and it would be too early to say that enough had been known about it. Over 230 scientists from 32 nations have written to the WHO, saying there is evidence that coronavirus is airborne and even smaller particles can infect people, a report in the New York Times stated. The global health body has long maintained that Covid-19 primarily spreads through coughs and sneezes and is not airborne. The virus has infected over 11 million across the globe while more than 5 lakh people have lost their lives to the deadly contagion worldwide.

Published in:

Hindustn Times

IIT Alumni Council ropes in CSIR-IGIB for COVID-19 patient data analysis

CSIR-IGIB

9th July, 2020

The IIT Alumni Council has signed an agreement with the CSIR Institute of Genomics and Integrative Biology (CSIR-IGIB) to jointly conduct research on COVID-19 and patient data analysis. It may be noted that the council is setting up the world's largest molecular diagnostic lab 'MegaLab Mumbai'. According to a statement issued yesterday, the council handed over imaging data of over 8,500 patients, who were admitted at the COVID Care Facility at Worli's National Sports Club of India. IIT Alumni Council President Ravi Sharma has said that this partnership will not only create a world-leading testing and treatment ecosystem but also establish global data leadership. Late May, the Council had announced the launch of the world's largest virology lab testing centre with a capacity of conducting one crore tests. The first phase, with a capacity to carry out 10 lakh tests, will be ready by the end of this month.

The IIT Alumni Council is the largest body of alumni, students and faculty from all the 23 Indian Institutes of Technology and partnering Technical Institutes of Excellence and was formed last year to carry out projects of social importance.

Published in:
All Indian Radio

Coronavirus | Hyderabad-based pharma firm ties up with CSIR to take up COVID-related drug trials

CSIR-IICT,IIIM

8th July, 2020

CSIR said that the unique combinatorial strategy (antivirals and HDTs) with repurposed drugs having complementary, additive and synergistic role, has been adopted to increase options for COVID-19 treatment.

Hyderabad-based Laxai Life Sciences Private Limited, in association with the Council of Scientific & Industrial Research (CSIR), has sought regulatory approval to undertake four-arm randomized controlled phase III clinical trial on July 8. The clinical trial named MUCOVIN is to be carried out in partnership with Medanta Medicity in Delhi and will include a total of 300 patients in four groups of 75. The trials will be held over 17 to 21 days, including screening and treatment. The design principle of the study is to rationally combine and repurpose antivirals — viral-entry and replication inhibitors — and Host-Directed Therapies (HDTs) addressing the disease-spread and pathology simultaneously and to determine safety and efficacy of the three combination drugs — Favipiravir+Colchicine, mifenovir+Colchicine and Nafamostat+5-aminolevulinic acid — and a control arm with the standard of care in COVID-19 patients

CSIR Director-General Dr. Shekhar C. Mande said that this unique combinatorial strategy (antivirals and HDTs) with repurposed drugs having complementary, additive and synergistic role, has been adopted to increase therapeutic options for COVID-19 treatment and help patients recover faster. The partner CSIR institutes in this important clinical trial are the CSIR-Indian Institute of Chemical Technology (IICT), Hyderabad and CSIR-Indian Institute of Integrative Medicine (IIIM), Jammu. "The study aims to target viral proteins essential for its replication as well as host factors that play crucial role in the viral life cycle and contribute to the cytokine storm", said Laxai Life Sciences

CEO Dr. Ram S. Upadhayaya. “The co-sponsorship of this study by Laxai Life Sciences highlights the company’s commitment in bringing life-saving therapies in the service of humanity,” said MD Vamsi Maddipatla. Specifically, the organisations decided to work for synthesis of drugs being used in the fight against coronavirus with focus on Umifenovir, Remdesivir and a key intermediate of Hydroxy Chloroquine (HCQ). The 'MUCOVIN' clinical trials, if successful, will provide more options for treatment of COVID-19, a CSIR release said.

Published in:
The Hindu

Without safety protocol, factories turn tinderboxes

CSIR-CLRI

8th July, 2020

Violation of maintenance protocols, shortage of staff, outdated technology and overworked units are among the barrage of shortcomings cited as reasons behind the two deadly boiler blasts that took place within a month at the thermal power plant at Neyveli. On May 7, a styrene vapour leak in a chemical factory at Visakhapatnam killed 12 people at a time when industries were gradually resuming operations after the lockdown. Citing the frequent accidents at industrial plants, experts say it's high time the authorities prioritised safety standards, procedures and practices. The accidents have turned the spotlight on the importance of adhering to industry specific standard operating procedures (SOPs) and safety norms at a time when many factories and industrial units are restarting after prolonged closure. Experts said companies need to adopt and follow stringent pre-start protocols and carry out a process hazard analysis to identify vulnerable areas as a result of the lockdown. In addition, the government should give plants time to wind down safely and allow manpower for essential upkeep during the shutdown. "Shutdown and start-up due to the present lockdown cannot be a reason for accidents, there must have been some negligence in implementing the pre-start up procedures. Many of our enforcement organisations have issued procedures for restarting the plants post lockdown. These are general SOPs. I urge industry associations to ponder over the pre-start up safety review/protocols required for their cluster to avoid accidents," said M Surianarayanan, senior principal scientist and head of cell for industrial safety and risk analysis, CSIR-CLRI. The present closure should not be a new activity as industries routinely conduct shutdown and startups for maintenance. "The difference between the annual turn around and

CSIR

SAFETY CHECK

Here are some of the minimal checks required at industrial plants

THERMAL POWER PLANTS

- Air/ fuel level required for complete combustion
- Condition operation of explosion vents, valves, interlocks and fan drives
- Beware dust explosions in confined spaces due to carry over of heat and coal dusts
- Coal should be added slowly when there is no fire
- Furnace should be purged before firing
- Thermal power plants should keep pace with latest technologies and periodically dismantle units that have exceeded shelf-life

PETROLEUM INDUSTRIES

- Adequate fire protection necessary to quench any fire at the initial stage itself. Emergency drills should be conducted regularly
- Warning systems should be provided to intimate process deviations, which should be reviewed
- Periodical operational hazard assessment by well-known techniques such as HAZOP
- Mechanical integrity of equipment and pipelines to be tested

CHEMICAL INDUSTRIES

- Daily safety inspection to identify hazardous situations should be noted and suitable corrective actions taken
- Required information, instructions and training for employees
- Suitable software tools should be used to improve safety
- Chemical industries must have contact with hospitals and know the procedure to protect people around the facility in case of a leak. For example, a wet handkerchief could protect from toxic inhalations

the shutdown due to lockdown is that now only essential maintenance work was being carried out instead of the normal maintenance work. Hence, a thorough safety review is required before starting the plants after the lock down," said Perumal Manoharan, president, Safety Engineers Association. "Governments also should give sufficient time to shut and restart plants in a safe manner. Sufficient manpower should be allowed to work during the lockdown period to ensure upkeep of the machinery, which is more important for process industries and industries where operations are carried out continuously. A sudden lockdown, giving minimum time to stop operations might have been one of the reasons behind some of the recent accidents," he said. According to National Crime Records Bureau data, 582 factory and machine accidents were reported in the country in 2017, it rose to 696 the following year, which accounted for about 0.1% and 0.2% of the total accidental deaths. Tamil Nadu has nearly 165 factories under major accident hazard categories like LPG, fertilizer, petrochemical, distilleries and breweries, iron and steel, military ammunition and industrial explosive units. As for NLC, experts said the immediate requirement is a third-party safety audit to identify vulnerable areas and measures required for safe daily operations. The lack of upgradation of decades old industrial units — NLC plants have been in operation since the 1960s — lead to chances for failures and accidents. However, experts say major accidents mostly follow after several indicators. "There must be a combination of failures that culminates into fires and explosions. Failure to recognise such warnings and bypassing them is the main reason. When there is a change in management, the change should be as per the original equipment manufacturer, just because one spare is not available, we should not hurry to replace it with a locally manufactured one. This will increase the accident vulnerability," said Surianarayanan. Human factor plays a major role in most industrial accidents. Professor R Saravanan, chemical engineering department, Annamalai University, who has conducted research on the contribution of human error behind accidents, said 78% of the industrial accidents are due to human factors. Around 12% are due to unsafe conditions prevailing in the work area and 10% due to natural calamity. "They could be psychological factors that may be due to issues at the workplace or at home. They could also be taking shortcuts. All these could contribute to accidents," he said.

One of the ways to prevent accidents due to human error, experts said, is adopting artificial intelligence and Internet of Things to monitor, collect and analyse data. "These digital systems alert on deviations that may happen, like rupture. Right now, they are monitored through control rooms. But in the future, we could bring them to our smartphones," said Saravanan.

Published in:
The Times of India

MUCOVIN: CSIR seeks nod for clinical trial to check efficacy of three-drug-combination on COVID-19 patients

CSIR

8th July, 2020

The Council of Scientific & Industrial Research (CSIR), in collaboration with Laxai Life Sciences Pvt Ltd, Hyderabad, has sought regulatory approval to undertake controlled phase III clinical trial using a combination of three different drugs to treat COVID-19 patients, a statement said on Tuesday. The purpose behind the clinical trial is to rationally combine and repurpose antivirals and determine safety and efficacy of the three combination drugs (Favipiravir+Colchicine,mifenovir+Colchicine and Nafamostat+5-ALA). The clinical trial named MUCOVIN, to be carried out in partnership with Medanta Medicity, will include a total of 300 patients in four different groups of 75 each.

The trials will be conducted for 17 to 21 days including screening and treatment, the statement said. Shekhar Mande, director general of the CSIR, said each group of patients will be administered one set of drugs. This unique combinatorial strategy (antivirals and HDTs) with repurposed drugs having complementary, additive and synergistic roles, has been adopted to increase therapeutic options for COVID-19 treatment and help recover patients faster, he said. On CSIR's part, its two institutes — Indian Institute of Chemical Technology, Hyderabad and Indian Institute of Integrative Medicine, Jammu — are part of the exercise. Ram S Upadhayaya, CEO, Laxai Life Sciences said the study aims to target viral proteins essential for its replication as well as host factors that play a crucial role in the viral life cycle and contribute to the cytokine storm. Since the outbreak of the COVID-19 pandemic, the CSIR has been repurposing several drugs to check their efficacy for treating the coronavirus patients.

Published in:

Financial Express

CSIR-CIMAP

8th July, 2020

मेश्नर मुकेश मेश्राम ने गुरुवार को सीमैप का निरीक्षण कर परिसर में लगे औषधीय पौधों की जानकारी ली। • हिन्दुस्तान

बंजर जमीनों पर होगी औषधीय खेती

कमिश्नर बोले

लखनऊ | प्रमुख संवाददाता

पिकनिक स्पॉट रोड स्थित केन्द्रीय औषधि एवं सगंध पौधा संस्थान में कमिश्नर मुकेश मेश्राम की अध्यक्षता में एक बैठक हुई। इसमें सीमैप के निदेशक डॉ. प्रबोध कुमार त्रिवेदी और सीडीओ मनीष बंसल भी मौजूद रहे।

कमिश्नर ने कहा कि मंडल के जिलों में ऊसर, बंजर और परती जमीनों को मनरेगा से उपयोगी बनाया जा सकता है। साथ ही औषधीय पौधों की खेती शुरू की जा सकती है। कमिश्नर ने कहा कि किसानों का प्रशिक्षण कराकर उनको उन्नत किस्म के पौध वितरण किया जाए। जीवामृत का उपयोग कराते हुए कृषि कार्य किया जाए। औषधीय कृषि उत्पाद को प्रोसेसिंग कराने के बाद सही दाम पर बाजार में पहुंचाया जाए।

गौशालाओं से जीवामृत लेकर उससे खाद बनाने का निर्देश भी कमिश्नर ने दिया। उद्यान विभाग, आयुष और ग्राम्य विकास विभाग इस दिशा में सीमैप के साथ मिलकर कार्य करेंगे। मंडल के सभी छह जिलों में पायलट परियोजना के तहत कार्य होगा। बैठक के बाद कमिश्नर ने नर्सरी, मानव उपवन आदि का निरीक्षण किया।

स्टार्टअप उद्यमियों को जोड़ेंगे : जीवामृत के उपयोग से तैयार औषधीय पौधों के उत्पाद पेशेवर तरीके से बाजार में उतारे जाएंगे। इससे स्टार्टअप के उद्यमियों को जोड़ा जाएगा। एमएसएमई, खादी ग्रामोद्योग, वन, उद्यान, ग्राम विकास विभाग और डूडा को इसके लिए मिलकर कार्य करने को कहा है।

लेमन ग्रास व सहजन को बढ़ावा देंगे

कमिश्नर ने निर्देश दिया है कि किसानों और स्वयं सहायता समूह की महिलाओं की मदद से लेमन ग्रास और सहजन की नर्सरी विकसित की जाए। सीमैप एक रुपए में यह पौधा उपलब्ध करा सकता है। तालाबों के बधों पर लेमन ग्रास मिट्टी का ठहराव बनाए रखने के लिए महत्वपूर्ण है।

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Dainik Jagran

CSIR-CIMAP

8th July, 2020

औषधीय पौधों की होगी खेती

लखनऊ। कोरोना के कारण विश्व स्तर पर प्रतिरोधक क्षमता बढ़ाने के लिए आयुर्वेदिक पद्धति की लोकप्रियता बढ़ी है। इसीलिए अब ऊसर, बंजर व परती जमीनों को मनरेगा से उपयोगी बनाकर उन पर औषधीय पौधों की खेती कराने की कार्ययोजना शुरू की जा रही है। ग्रामीण क्षेत्रों में सीमैप के सहयोग से किसानों को उन्नत खेती के लिए प्रशिक्षण दिया जाएगा। यह जानकारी मंडलायुक्त मुकेश कुमार मेश्राम ने दी। वह बृहस्पतिवार को केंद्रीय औषधीय एवं सगंध पौधा संस्थान (सीमैप) में आयोजित बैठक की अध्यक्षता कर रहे थे।

Published in:
Amar Ujala

CSIR-IMTECH

7th July, 2020

अब इमटेक उपलब्ध कराएगा देश भर में रिसर्च के लिए कोविड के सैंपल

पेशेंट का स्वैब ही नहीं मेडिकल और पर्सनल हिस्ट्री भी बायो रिपॉजिटरी में उपलब्ध रहेगी

ननु जोगिंदर सिंह | चंडीगढ़

सीएसआईआर-इमटेक (इंस्टीट्यूट ऑफ माइक्रोबियल टेक्नोलॉजी) अब कोविड-19 के सभी मरीजों का रिकॉर्ड रखेगा और अभी चल रही व भावी रिसर्च के लिए जरूरत अनुसार सभी रिसर्च इंस्टीट्यूट्स को ये सैंपल उपलब्ध कराएगा।

पेशेंट का स्वैब ही नहीं ब्लड, यूरिन, स्टूल आदि का भी रखा जाएगा। इसके अलावा पेशेंट की मेडिकल व पर्सनल हिस्ट्री भी इन कोविड की बायो रिपॉजिटरी में उपलब्ध रहेगी। नॉर्थ इंडिया में डीबीटी की ये एकमात्र लैब नॉर्थ में है हालांकि आईसीएमआर समेत कुल पांच लैब हैं जिनमें इसी तरह की रिपॉजटरी बनेंगी। इसमें अब तक करीब 300 सैंपल उपलब्ध हैं और बाकियों को जमा कराने के लिए सभी अस्पतालों को अपडेटेड मैमोरंडम ऑफ अंडरस्टैंडिंग भेजा गया है। इस बायोरिपॉजटरी के जरिए वैज्ञानिकों को कोविड-19 का फैलाव रोकने के लिए सहायता मिलेगी। इसके साथ ही बीमारी की गंभीरता और इम्युनोपैथाजीनेसिसस आदि को समझना आसान होगा। इसके सैंपल अकेडमिया के अलावा इंडस्ट्री से शेयर करने का अधिकार भी इमटेक के पास सुरक्षित है।

देश भर में कुल 16 लैब को बायो रिपॉजटरी बनाने के लिए चुना गया है। इसके तहत लैब में जो भी सैंपल आएगा, उस सैंपल व मरीज का रिकॉर्ड रखा जाएगा। इस रिकार्ड के लिए मरीज की सहमति लेना अस्पताल की जिम्मेदारी रहेगी। मरीज का सैंपल लेते समय उसके सभी हेल्थ रिकॉर्ड व पता भी इमटेक के पास रहेगा। इस समय इमटेक में चंडीगढ़ के अलावा पंजाब, हरियाणा और उत्तराखंड के सैंपल चेक किए जा रहे हैं। उत्तराखंड सरकार के साथ एमओयू करते समय इस रिकॉर्ड वाले हिस्से को जोड़ लिया गया था लेकिन बाकी सरकारों व अस्पतालों के साथ इसके लिए एमओयू अपडेट किए जा रहे हैं। इन एमओयू को अपडेट करने के बाद ज्यादा सैंपल रिकॉर्ड में रखे जा सकेंगे। अब तक करीब 7500 सैंपल इमटेक में टेस्ट किए जा चुके हैं। इससे पहले इमटेक में माइक्रोबियल टाइप कल्चर कलेक्शन एंड जीन बैंक (एमटीसीसी) भी हैं जो देश का सबसे बड़ा सेंटर है।

इनके साथ शेयर किए जा सकेंगे सैंपल

- वायरस की जीनोम सीक्वेंसिंग करने वाले वैज्ञानिक।
- अलग-अलग उम्र के मरीजों पर इसके प्रभाव को परखने वाले।
- कोविड 19 के डायग्नॉज पर काम करने वाले।
- वायरस की दवा को परखने के लिए।
- वायरस के लिए वैक्सीन तैयार करने के लिए।

यहां पर भी बनेगी बायोरिपॉजटरी.. आईसीएमआर के नौ इंस्टीट्यूट हैं। एनआईवी पुणे, एनआईवी बैंगलौर, एनआईवी केरला, एनआईसीईडी कलकत्ता, एनआईओ अहमदाबाद, आरएनसीडी जोधपुर, एनआईएआर दिल्ली, एनआईई चेन्नई, आरआरएच उप्पल इसमें शामिल हैं। डीबीटी के एनसीआर बायोटेक कलस्टर फरीदाबाद हरियाणा, आईएसओ भुवनेश्वर,आईएम्पस्टम बैंगलौर, आईएलबीए न्यू दिल्ली के अलावा सीएसआईआर के आईजीआईबी नई दिल्ली, सीसीएमबी हैदराबाद और इमटेक चंडीगढ़ इस लिस्ट मे हैं।

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CFTRI Signs MoU With Schevaran Labs

CSIR-CFTRI

7th July, 2020

CSIR-Central Food Technological Research Institute (CFTRI), Mysuru, has signed an MoU with Schevaran Laboratories Pvt. Ltd., Mysuru, recently making way forward for collaborative avenues towards the development of personal hygiene, cleaning and related industrial products and solutions. In the post-**COVID** scenario, both the organisations have felt the need to have more efficient environment-friendly and cost-effective quality products in the market and the partnership would be highly beneficial in meeting the emerging challenges. During the lockdown period, CSIR-CFTRI delivered over 30 tonnes of ready-to-eat (RTE) food supplements and flavoured water to the migrant workers across the country in mitigating the sufferings of the people. Further, hand sanitisers prepared in the lab as per WHO guidelines were distributed to District Administration and others. The Institute is also planning innovative solutions to promote rural entrepreneurships with the involvement of FPOs, NGOs, Women Self Help Groups and to address reverse migration to the country side. Though the primary focus will be supporting sustainable food enterprises, CFTRI is also exploring the potential of quality disinfectants and affordable sanitisers based on plant extracts for employment generation. Mysuru-based Schevaran Labs was established in 1988 at a time when India was still at infancy or primitive in the area of clean environment as well as think of quality cleaning and hygiene products. Drawing parallel with today's scenario, when Sam Cherian started Schevaran Labs, in a way, it was a true start-up of the present market scenario, but with no support as of today. A steady progress over the past 32 years has bracketed Schevaran as India's leading and largest manufacturer of hygiene and cleaning products with success in B2B and

B2C sectors. Requisite R&D support is provided by Schevaran Innovation Centre. Besides the CSR activity with Personal Hygiene School Campaign, Schevaran has moved ahead in the combat against COVID-19 by providing large quantities of sanitisers to the local District Administration for use by frontline warriors. With pride, it can be said that the thought process of Schevaran initiated 32 years back has become a reality today with 'Cleaning and Hygiene' being given top priority by the Union Government along with emphasis on 'Make in India and Self Reliance.' Speaking on the occasion, Dr. Raghavarao, Director, CSIR-CFTRI, said that CFTRI would be keen to involve industry from the early stages of product development while fulfilling the customer's aspiration and industrial viability. He also said that co-branding is one of the promising routes for successful commercialisation of innovation directly from lab to market.

Sam Cherian, MD, Schevaran Labs, said that the partnership with the National Laboratory would help building a robust platform to promote innovations and enable the diverse industry sectors towards achieving cleaning and hygiene in its true form. In reality, the impact will be more in food industry sector that would usher in better hygienic standards through customised formulations.

The MoUs were exchanged in the presence of Dr. T.N. Bhavanishankar, Director, Schevaran Innovation Centre, Dr. K.N. Gurudutt, Dr. M.C. Varadaraj and Anna Cherian from Schevaran along with Scientists from CFTRI, according to a press release.

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Star Of Mysore

‘Set up CoE to probe cause of major chemical incidents’

CSIR-NEERI

7th July, 2020

Set-up a Centre of Excellence (CoE) in India to investigate the root cause of major chemical incidents to protect people and the environment. said JP Gupta, chairman of EAC-Industry II, MoEFCC Ministry of Environment, Forest and Climate Change, in a webinar organized by CSIR-National Environmental Engineering Research Institute (CSIR-Neeri) on ‘Development in methodology and tools for impact analysis and risk assessment’. The objective of the webinar was to proliferate methodological tools for environmental impact and risk assessment and improve the effectiveness of the use of environmental impact analyses in decision-making. Around 900 representatives from industries, academics, authorities, research institutes etc participated in the webinar. The other expert panellists were Deepak Apte, chairman of EAC-Infrastructure, Ministry of Environment, Forest and Climate Change (MoEFCC), Prof Sharad Jain, chairman of EAC-River Valley & Hydroelectric, MoEFCC; Vijay Kulkarni, executive vice-president, Shapoorji Pallonji & Company Pvt Ltd, Prof AK Gosain, IIT Delhi, MV Ramana Murthy, EAC member-infrastructure, MoEFCC; JS Sharma, EAC, member-Industry II, MoEFCC; Rakesh Kumar, director of CSIR-Neeri; M Suresh Kumar, chief scientist and head, rnvironmental impact and sustainability division (EISD), CSIR-Neeri and Santosh Ghuge, senior scientist, CSIR-Neeri. Ghuge illustrated that a 3D model has a number of advantages over traditional 2D approaches to risk assessment for industrial safety. Apte expressed concern over environmental impact assessment (EIA) of the proposed Navi Mumbai Airport, as it harbours extensive bird diversity. Prof Gosain pointed out that without accurate, authentic and enough data it is difficult to run mathematical models to meet the standard desired in EIA.

Jain exhorted that the studies concerning assessment of river valley projects should rely more on primary data gathered through field surveys, satellites, drones, GIS etc. Sharing his international experience on EIA studies, Kulkarni stated that currently there are no specific guidelines for deciding the study area and sampling locations while conducting EIA studies. Bherwani highlighted the methodologies by which environmental damages can monetarily be estimated. Sharma advised to link the risk assessment study of a particular industry or plant with social impact assessment, climate change and biodiversity index. Murthy focused on the need to develop automated sensors for coastal environmental monitoring.

Earlier, in his inaugural address, Rakesh Kumar briefed about the preventive risk assessment and auditing to develop a system that allows processing of information for analysis and industrial risk management. M Karthik proposed a vote of thanks. Santosh Ghuge and M Karthik coordinated the workshop.

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Coronavirus Not Really Airborne, Can Go Just A Few Feet: Scientist

CSIR

6th July, 2020

Coronavirus is not an airborne disease, going by textbook definition, but the virus can travel in air for a few feet in the form of aerosol, Shekhar Mande, the Director General of Council of Scientific & Industrial Research told NDTV today. The virus can sometimes spread as aerosol through cough or sneeze of a patient, he said as concerns about coronavirus being airborne have surfaced again. Airborne diseases are where the pathogen -- disease-causing virus or bacteria -- can travel and spread through air, like chickenpox, measles or influenza. Aerosol form is when minute respiratory droplets can float in the air for a while but this does not "travel with the wind" and "quickly settles", Dr Mande said.

The New York Times has reported that 239 scientists from across 32 nations have outlined evidence that small airborne particles carrying the virus can infect people. They have also written an open letter to the World Health Organsation flagging the issue and plan to publish it in a scientific journal next week. Quoting scientists, the NYT report said the virus -- carried by large droplets that can either zoom through the air after a sneeze, or gliding the length of a room through exhaled droplets -- can infect people who inhale it.

Such concerns were raised earlier too, but the WHO said there is not enough evidence to say the virus is airborne, like influenza or measles. The respiratory droplets which spread through air can infect people only within enclosed spaces and close range, the agency had said. "We are not writing to the WHO at the moment. The WHO is looking at the scientific evidence and will issue guidelines after consideration. If need be, they can release new guidelines by looking at this research," Dr Mande said. For now, people should be careful as the fear of such spread increases "within closed office spaces", he added. But in these circumstances, face covers should work. For health workers, N-95 masks are a must, he added.

The guidelines making face masks mandatory for everyone was issued after concerns were raised in late March about the virus being airborne. Initially masks were said to be necessary only for infected people. But later, the WHO said for an uninfected person, a mask means an extra layer of protection and made it mandatory for all.

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CSIR

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