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News Bulletin
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Covid-19 samples to be tested at AIIMS-Rishikesh, IIP-Dehradun

CSIR -IIP 25 March, 2020

DEHRADUN: The testing of Covid-19 samples will now also be done at AIIMS Rishikesh and Indian Institute of Petroleum Dehradun. Till now, the testing of the samples was being done only at Government Medical College Haldwani. The new testing facilities were announced by the state government after an approval by the Centre.

Meanwhile, the health department announced that reports of 22 suspected Covid-19 patients were received on Tuesday and all of them tested negative. Around 31 new samples were sent for Covid-19 test on March 24. So far, 237 samples have been sent for testing of which 180 samples were found negative while four have tested positive and results of the rest are awaited.

The department has further announced that maternity and women wing of Government Doon Medical College and Hospital (GDMCH) would be shifted to Gandhi Shatabdi Hospital.

The health department will also be identifying two hotels near GDMCH which would be used as rest houses by the doctors treating Covid-19 patients at the hospital.

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Times Of India

Lucknow: NBRI's herbal sanitiser; IITR to hand over 10,000 units to administration

CSIR –NBRI,IITR

24 March, 2020

LUCKNOW: Two Lucknow-based institutes under the Council of Scientific and Industrial Research have began manufacturing sanitisers for the public and for people working in essential services.

The National Botanical Research Institute (NBRI) has made an alcohol-based, herbal hand sanitiser that has been clinically tested and found to be "highly effective" against surface microbes. Its impact lasts for about 25 minutes and it prevents the skin from dehydrating, scientists said. The product, to be available commercially, will be moderately people.The other product is by the Indian Institute of Toxicology Research (IITR), which will distribute sanitisers manufactured by it among people in essential services. The institute will hand over 10,000 bottles of 50ml each to the district administration by the end of the week.

In clinical trials done on the pathogen Staphylococcus epidermidis, a dominant bacteria present on surfaces, NBRI scientists found their formula to be extremely effective.

The pathogen, they said, is very harmful to human skin.

Senior principal scientist at NBRI Sharad Srivastava also clarified that though the product has been developed in the wake of Covid-19 outbreak by NBRI under its CSR initiative, the institute does not claim that it is effective against coronavirus.

The sanitiser does have its advantages. The

moisturising agent and essential oils it impact lasting and soothing to the skin.

NBRI had distributed samples of the product among people and received good response.

The technology has now been transferred to a Kanpur-based pharmaceutical firm. It is expected to hit the market within a week.

IITR, meanwhile, has prepared sanitisers at its centre for innovation and translational research as per WHO guidelines. The first batch will be ready by the weekend for distribution among workers in essential services and production will continue till required, said IITR director Alok Dhawan.

Two Delhi-based companies had provided the institute with support under corporate social responsibility.

"The hand-rub sanitisers have been prepared by a team headed by our scientist Parthasarthi Ramakrishnan," said Dhawan.

The institute also plans to request the Indian Council of Medical Research (ICMR) to allow it to begin testing facilities for Covid-19.

IITR has written to the microbiology department of KGMU, also a nodal agency of ICMR, to train three scientists of the institute in the testing technique.

"After training, we will ask ICMR to recognise IITR as a testing centre and provide kits required for the purpose," he added.

IITR has issued strict instructions to ensure safety at the institute. Hand sanitisers are kept

entry points of all departments and offices, entry of outsiders has been restricted, awareness posters and instructions have been displayed across the campus and research groups have been divided into batches to work in shifts.

Published in:
Times Of India

Hope floats for COVID-19 patients

CSIR -CCMB 23 March, 2020

More testing to be taken up at five designated labs, says CCMB director

There is some hope on the horizon for COVID-19 patients. The Indian Council of Medical Research (ICMR) is likely to allow hydroxychloroquine drug on high-risk patients for now following good results in United States.

"It is showing promising results and could be used for both treatment and prevention, but to begin with, the government may allow it for only treatment purposes," said CSIR-Centre for Cellular and Molecule Biology (CCMB) director Rakesh Mishra on Monday.

Dr. Mishra, who has been supervising training programme for the scientific lab personnel to take up the proposed mass testing of those affected with coronavirus, took time off to explain that at least 25 of them will be ready for conducting the testing at the five designated labs in a couple of days. The batch of dozen candidates having undergone training at the facility here in Habsiguda have been sent to the respective test centres.

The labs where the COVID-19 testing will be done include NIMS, Gandhi Hospital, Osmania General Hospital, Sir Ronald Ross Institute of Tropical & Communicable Diseases or the Fever Hospital and the Warangal Hospital. The Centre for DNA Finger Printing and Diagnostics (CDFD) is also likely to be added to this group, he said.

"With this combined strength, we can test up to 1,500 samples a day and it has become necessary to check whether we have been able to control the pandemic in the past one week. The compulsory clampdown of the cities has become necessary, otherwise it would have been increasingly difficult to control the spread of the contagian. We will know in another week to

10 days if we have been really able to arrest the spread or if it has spread even further," he added.

He pointed out that the ICMR has also revised the guidelines and directed the State governments to take up mass testing, including those not showing any symptoms of the virus but were known to have been in contact with the COVID-19 patients.

Mapping the spread

"We need to go for testing because we can then easily map in which way the virus has been spreading, where the infected people are and whether our efforts in the past few days have borne fruit or not. At the moment, we do not have any clue so far in these aspects. We will also know in the next few days if we have been quick enough with our preventive steps," explained Dr. Mishra.

The CCMB director said a lot of scientific research activity is currently under way in both public and private sector with multiple institutions getting involved in "doing something effective before the virus spreads further".

Published in:
The Hindu

CSIR-IITR

23 March, 2020

आईआईटीआर सैनिटाइजर देगा

लखनऊ। आवश्यक सेवाओं में जुटे नगर निगम और अन्य विभाग के कर्मचारियों को कोरोना वायरस के प्रकोप से बचाने के लिए भारतीय विष विज्ञान अनुसंधान संस्थान (आईआईटीआर) ने कमर कस ली है। वह महापौर संयुक्ता भाटिया को सेनेटाइजर की दस हजार बोतलें मुहैया कराएगा। साथ ही उन्हें रीफिल करने की सुविधा भी देगा। इस सप्ताह के अंत तक सेनेटाइजर उपलब्ध करा दिया जाएगा।

मौजूदा समय में सेनेटाइजर की बढ़ी मांग के कारण बाजार में कमी हो गई है। जबकि जरूरी सेवाएं मुहैया कराने में जुटे कर्मचारियों के पास बार-बार हाथ धुलने का वक्त नहीं है। आईआईटीआर के निदेशक प्रो. आलोक धवन ने कहा कि विश्व स्वास्थ्य संगठन की गाइड लाइन के तहत सेनेटाइजर बनाया है।

Published in:
Hindustan

'Need lucrative career options in science'

CSIR -CDRI

22 March, 2020

Niti Kumar, a recipient of this year's SERB Women Excellence Award, talks about her research on the malaria parasite and women in STEM

Senior scientist Niti Kumar, 38, says receiving the prestigious SERB Women Excellence Award for 2020 came as a "total surprise". Kumar, who works as an independent group leader at the Council of Scientific and Industrial Research's Central Drug Research Institute (CDRI) in Lucknow, was one of the three recipients of the prestigious award at this year's National Science Day celebrations in the Capital.

The award is presented to women scientists below the age of 40 who have been recognized by other national science academies. Recipients of the award are also given a grant of ₹5 lakh per annum for three years by the Science and Engineering Research Board (SERB), which falls under the government's department of science and technology. Kumar, in this instance, was eligible for the SERB award since she had been recognized as an Indian National Science Academy (Insa) "Young Scientist" in 2010.

Kumar's research group at CDRI is trying to understand the protein quality control machinery in the human malaria parasite to explore alternative drug targets for malaria intervention. She is also involved in anti-malarial screening for the identification of scaffolds (implants or injects used to deliver drugs into the body) effective against drug-resistant malaria.

"We still don't know how the parasite is able to fool the immune system and how it is able

to live in different organs in the body," says Kumar, who received her PhD from CSIR's Institute of Genomics and Integrative Biology, Delhi, and was a postdoctoral fellow at the Max Planck Institute of Biochemistry, Munich, Germany, from 2009-13. "The idea is to understand parasite biology so that we can look for alternative drug targets or explore alternative targets for drug intervention. We are doing this because we would like to tackle the resistant malaria cases which are emerging in our population, apart from the infection cases," she says on the phone.

According to the World Health Organization's World Malaria Report 2019, 19 countries in sub-Saharan Africa and India carried almost 85% of the global malaria burden in 2018. "We have co-infection (cases) with dengue sometimes, and the Japanese encephalitis virus.... So, the idea is to deal with drug resistance in co-infection cases as well," she adds.

A Unesco Institute for Statistics (UIS) factsheet in 2019, with a special focus on women in science, revealed that women account for a minority of the world's researchers overall. According to data from the UIS, the UN's depository for global statistics in the fields of education, science and technology, culture and communication, less than 30% of the world's researchers are women.

When it comes to the gender gap in science and lack of diversity in the STEM (science, technology, engineering and mathematics) workforce, Kumar says the representation of women in STEM in India may be little, but their participation in mathematics and engineering is even more limited. "We find more females in (the field of) biology, in comparison to men," she adds. The problem, she believes, starts in school, when children start developing an interest for a specific field of study. "We have to start working at the school and home levels," says Kumar. "A lot of overhauling is required for the schools and for the parents so that they allow their girl children, or any children, to pursue careers in science."

Kumar believes India could take a leaf out of the global playbook. For instance, project managers with a science background or grant writers can be helpful for principal investigators and institutes. She believes people with a science background are needed everywhere, including business development units. “We need more lucrative career options and other alternatives, which may not be a full-time research job, but something that is related to science; it could be science journalism or science and theatre, science communication, science educator.... If we have options in these areas, then people will continue their education in science," she adds.

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Livemint

Pune coronavirus updates: IISER, NCL step in, make their own sanitisers for in-house staff

CSIR -NCL

22 March, 2020

The expertise of these two research institutions could come in handy at this crucial time, when medical stores in the city are fast running out of hand sanitisers (Representational)

EVER SINCE the coronavirus outbreak, hand sanitisers have been flying off the shelves. Rising to the occasion with their expertise, chemists at Indian Institute of Science, Education and Research (IISER), Pune, and CSIR-National Chemical Laboratory (NCL) have produced sanitisers at their own laboratories and have been using them for in-house purposes.

Both the institutes have been using self-made sanitisers in, as per standard norms prescribed by World Health Organization (WHO).

The expertise of these two research institutions could come in handy at this crucial time, when medical stores in the city are fast running out of hand sanitisers. Besides, those available are being sold at exorbitant rates, ranging from Rs 250 to Rs 450 for different brands and capacities.

"In this hour of need, we could put together required ingredients and have produced about 25 liters of hand sanitiser, so far. They have been bottled and kept at the institute's wellness center. This center has distributed the bottles within the campus," H N Gopi, head, department of chemistry at IISER, Pune, told The Indian Express. This is the first time that IISER has mass-produced hand sanitisers.

The institute has also expressed its willingness

to provide hand sanitisers to all those in need, given that personal hygiene is paramount in guarding against the spread of coronavirus.

"If anybody requires sanitisers, the institute is willing to provide them free of cost," added Gopi. Neighbouring NCL too has produced their own sanitisers and recently gave them away to its own staff. All those who require to continue with their work have been provided with them, officials said.

"Our staff requested sanitisers, so we distributed bottles to 70 to 80 of them till last week," said an NCL official.
While the process of producing hand sanitiser is not new, having the right ingredients and expertise are key in producing those which kill germs right away.

"It takes about an hour to prepare the sanitiser mixture, but it needs to be kept aside for at least 24 hours before it is actually utilised," Gopi said.

Asked if NCL could help if needed, he said, "It will be definitely considered by senior NCL authorities, if such a request is made."

Published in:
Indian Express

2 scientists barred from duty

CSIR -IHBT 22 March, 2020

Palampur: The CSIR IHBT (Institute of Himalayan Bio Technology) has refused to allow two scientists, who had travelled to Covid-19 affected countries recently, to join duty. Both scientist have been advised by the IHBT authorities to remain in quarantine, as per the directions of the Central Government.

Published in:
Tribune India

NEIST formula to produce hand sanitiser : Lack of material impedes production

CSIR -NEIST 22 March, 2020

Principal Scientist cum Principal of CSIR-North East Institute of Science & Technology (NEIST), Huidrom Birkumar Singh has conveyed that even though CSIR has the ability and the know-how to produce herbal hand sanitizers, lack of raw ingredients has posed a great challenge.

Speaking to media persons at CSIR-NEIST complex at Lamphelpat today, Birkumar explained that the hand sanitizers made by the institute contains ethyl alcohol, aloevera, turmeric, hydrosol and citronella essential oil.

Alcohol is the main ingredient in producing hand sanitizers but currently, CSIR-NEIST Lamphelpat does not have ample stock of the required alcohol to produce the liquid.

The institute is also facing shortage of aloevera, he added.

He continued that most of the hand sanitizers sold in the market are chemical based and such liquids often result in dry hands after use.

On the other hand, the hand sanitizers produced by CSIR-NEIST Lamphelpat contains citronella essential oil which has antimicrobial properties.

The other ingredient, turmeric, is also used as an antiseptic.

Birkumar then said that of all the ingredients, the one with the most germicidal properties is alcohol.

However, alcohol cannot be used alone on the skin as it can lead to skin burn which is why aloevera is added to soothe the skin, he explained.

CSIR-NEIST Lamphelpat is producing 50 ml bottles of the hand sanitizer and some bottles will be taken by MP Dr RK Ranjan to Delhi during his trip tomorrow so also introduce it to others.

Many Government Departments have ordered around 50-100 bottles of the hand sanitizer.

Even NABARD and IMC staff are asking for the liquid.

The demand is huge but the stock is limited as only around 150 more bottles of the hand sanitizers can be produced.

He clarified that many interested parties have approached the institution for the formula behind the hand sanitizers but the institution has declined such offers as it wants to discuss the issue with the head quarters and produce the liquid as a form of social service.

Huidrom Birkumar conveyed that CSIR-NEIST Lamphelpat is producing its hand sanitizers mainly for those working in the medical sector and those who are at high risks.

However, if adequate stock of the much needed ingredients is available, then the institute will be able to mass produce the formula, he concluded.

Published in:
E-pao

Telangana govt forms committee to study measures to control coronavirus

CSIR –CCMB,IICT 21 March, 2020

Hyderabad: The State government has constituted a five-member expert committee to study the measures needed to control incidences of Covid-19. The committee members include Centre for Cellular and Molecular Biology (CCMB) Director Rakesh K Mishra, Kaloji Narayana Rao University of Health Sciences (KNRUHS) Vice-Chancellor B Karunakar Reddy, Indian Institute of Chemical Technology (IICT) Director S. Chandrasekhar, Nizam's Institute of Medical Sciences (NIMS) professor T Gangadhar and Health Management and Research Institute (HMRI) former founder, Balaji Utla.

The committee would study measures taken by various countries in the world to combat the virus and also study the impact of control measures. The committee will suggest the measures to the State government to based on successful models from across the world.

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CCMB permitted to test samples

CSIR -CCMB 21 March, 2020

PM issued orders, says CM

Chief Minister K. Chandrasekhar Rao announced that Prime Minister Narendra Modi on Saturday issued orders permitting the use of facility at Centre for Cellular and Molecular Biology here to test samples of infection by coronavirus.

He said the State government will make use of the facility, which has a capacity to test 1,000 samples a day. The permission to access CCMB equipment was raised by Mr. Rao at Friday's video conference of Mr. Modi with chief ministers of various States.

Published in:
The Hindu

CCMB to start diagnostic tests for Covid-19

CSIR –CCMB,IICT 21 March, 2020

Hyderabad: The high-end genetic laboratories at the Centre for Cellular and Molecular Biology (CCMB) are all set to start diagnostic tests for the novel strain of coronavirus, following the green signal to carry out such clinical testing from the Empowered Committee for Covid-19 Response set up by the Centre.

The CCMB laboratories have a capacity to conduct clinical diagnostic tests of anywhere between 700 and 800 samples (scalable up to 1,000 if the need arose) at one go. Moreover, the highly trained genetic researchers at CCMB also have the ability to give the results of such a large group of diagnostic tests within 7 to 8 hours.

"We are all set to contribute from our side to fight against the coronavirus in India. The CCMB is one of the foremost genetic research institutions in the country and our researchers are capable of conducting the tests quickly and very precisely. We are ready to go and start the diagnostic checks as soon we start receiving the samples," Director, CCMB, Dr RK Mishra told *Telangana Today*.

Hyderabad-based CCMB is known for its high-quality basic research and training in modern biology and also for promoting the concept of having centralised facilities for new and modern techniques in the areas of biology. Initially, it started as a semi-autonomous centre in 1977 with the Biochemistry Division of the then Regional Research Laboratory (at present, Indian Institute of Chemical Technology [IICT]) forming its nucleus and Dr P M Bhargava heading the new centre. By 1982, the CCMB received the status of a full-fledged national laboratory.

The CCMB is involved in work related to a number of incurable genetic disorders through

molecular diagnosis, carrier detection, genetic counselling, pre-pregnancy monitoring, pre-implantation genetic diagnosis and prenatal diagnosis for these disorders. It is also known for popularising DNA Fingerprinting and setting up of Centre for DNA Fingerprinting and Diagnostic, which was spearheaded by past CCMB Director Dr Lalji Singh

Labs to culture the virus

The Empowered Committee for Covid-19 Response has allowed state-of-the-art laboratories of Council of Scientific and Industrial Research (CSIR) to start culture of the novel strain of coronavirus and serve as additional testing and validation sites for research, based on self-assessment of their laboratory facilities. State health officials will now coordinate with the national laboratories like CCMB for clinical samples collections.

Earlier, on Friday in a video conference with Prime Minister Narendra Modi, Chief Minister K Chandrashekhar Rao requested that the CCMB be allowed to take up coronavirus diagnostic tests.

On Saturday, DG, (CSIR), Dr Shekhar C Mande tweeted that 'In addition to helping Telangana in testing, CCMB will also train technicians to scale-up and develop faster Covid-19 tests. CCMB's real expertise is in deeper scientific questions on Covid-19, which is already on'.

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