

# CSIR IN MEDIA



CSIR

## NEWS BULLETIN 01 TO 05 DECEMBER 2021





## Omicron will be in major cities but with mild symptoms: Former CSIR institute Chief

CSIR-CCMB

05<sup>th</sup> December, 2021

The COVID-19 vaccines administered in India will be effective in the country's fight against the new variant of the virus Omicron and will provide a shield to vaccinated citizens of the country, according to a health expert.

Exclusively speaking to ANI, Director of Tata Institute for Genetics and Society and former Chief of Council of Scientific and Industrial Research-Centre For Cellular And Molecular Biology, Dr Rakesh Mishra talking about the effectiveness of Hybrid immunity said, "The results indicate that the hybrid immunity will be effective against the new variant. Scientific validation of these things is happening. People are conducting experiments for making pseudo virus and those things in the labs and testing. So I think it will take about 10 days, two weeks. But my feeling is that it should be protective, maybe a little bit less, but the vaccine will certainly be helpful to a great degree."

Three types of immunity against the virus are natural immunity coming from infection, vaccine immunity coming from vaccines and hybrid immunity, in which a person who has previously been infected also gets vaccinated.

Dr Mishra further explained the effect of Hybrid immunity on the vaccinated population and said that it is likely to give protection to people along with the Indian vaccines administered.

"I believe it will happen if people have natural infections plus vaccination. At least in major cities, maybe larger number of people have had the infection knowingly or without the knowledge because of being asymptomatic. A significant number will have hybrid immunity. Although the study about hybrid immunity is about vaccine mRNA vaccine, but there's no reason to think that the vaccine that we had Covishield and Covaxin will not have the same advantage of hybrid immunity on infected people," he said.



Asked about the reporting of Omicron cases in India as a "wake-up" call for the country, Dr Mishra said that it is call that the pandemic is not over and there is a need to take all the precautions, despite the country standing in a strong position against the virus with good number of vaccinations after the second wave that hit India in April 2021.

"It's a wake-up call to be aware that pandemic is not over yet. And that we are in a strong position with such a high sero positivity and vaccination in place, and our healthcare system much more enabled than it was during the first wave or second wave, so, we are in very strong position, but, but we should not squander our advantage by being careless and get into trouble," he said.

"This is the people's responsibility and people should cooperate with government and get vaccinated and government should keep surveying basically to figure out the spread and if there are new variants emerging or if same variant is in some places, it will be more infectious. So therefore, you can put some control, but there is no way that you can stop a variant from spreading from one country to the other. It has already spread," he added.

Talking about the traceable symptom of Omicron, the expert said that most of the people may be asymptomatic or have less severe symptoms and therefore mistake Omicron as a normal common cold.

"We have detected two and a few more and all that in the past few days, but how many are we sequencing? If we sequence 100 per cent, then you can be sure that how many people have this or not. Since we cannot sequence all, we can't even list all many people believe asymptomatic and spreading. So that is the problem of this infection that most people 70-80 per cent will not have any symptom when there is spreading and confusing with common cold. Symptoms are less severe. So people will mistake it as a common cold because there is no smell loss or oxygen problem. Infection will be there in all major cities where people have been travelling and now since if person has no contact with any person with travel history, means this is community spread," he told ANI.



Dr Mishra further said that Omicron may be more infectious than the Delta variant that brought the second wave in India earlier this year. However, he believed that the virus being less symptomatic is a good sign.

"It is more infectious than delta. So that must be happening. But we don't have to worry about those things. It's good that it is less symptomatic. And we are in a good position that I think India is maybe in the strongest position without sero positivity or in fact vaccination is in very good shape. Most people are getting vaccinated. We should hurry up and get most people vaccinated. But people should also cooperate and wear masks so that virus can be further contained. When we are in a strong position we should not lose that extent. Be more strong by wearing masks and getting vaccinated," he said.

Asked about the steps required to avoid the spread of Omicron, he suggested wearing masks, washing hands regularly and getting vaccinated as the "most important" ways to stop the spread of the virus. "There is no new step you need to take but the same steps: wear masks, avoid interacting in closed space, get vaccinated. Children will start getting vaccinated soon. And government's responsibility is to keep testing and surveying as much as possible," he said.

"If some sudden increase happens, we can cordon up that area restrict that particular part of the city to be able to operate in a regular manner, not a national level in this case, because situation is different in different places. And if we do that, see I don't foresee any big major problem or waiver those kinds of things. But what we need to do is to keep the people functional, keep the economy going, keep the schools open. All those things will happen only if we cooperate in terms of blocking the spread for which the most important thing is masks. Rest is handwash, avoiding clustering closed space. If you don't do this, that means you are helping the virus," he added.

Meanwhile, a total of four cases of Omicron have been reported in India so far: One from Gujarat, Maharashtra each and two from Karnataka. The first cases of Omicron were reported in Karnataka. A new variant of COVID-19 was first reported to the World Health



Organisation (WHO) from South Africa on November 25. Dr Anurag Agrawal, Director of CSIR-Institute of Genomics and Integrative Biology, New Delhi, said that a possible third wave of pandemic triggered by Omicron, the new variant of COVID-19, can be avoided if necessary precautions are taken.

Earlier on Friday, Dr Angelique Coetzee who chairs the South African Medical Association and who first flagged the new COVID variant, emphasised that vaccines will protect people against the disease at this stage because irrespective of age group and co-morbidities, she saw that people who have been inoculated against COVID-19 exhibited milder symptoms on being infected with Omicron.

As per the WHO, the first known confirmed B.1.1.529 infection was from a specimen collected on November 9 this year. On November 26, the WHO named the new COVID-19 variant B.1.1.529, which has been detected in South Africa, as 'Omicron'. The WHO has classified Omicron as a 'variant of concern'.



## Dr Mantu Bhuyan nominated fellow of NASI in Doomdooma

CSIR-NEIST

04<sup>th</sup> December, 2021

DOOMDOOMA: Dr Mantu Bhuyan, Principal Scientist, CSIR- NEIST (Council for Scientific and Industrial Research - North East Institute of Science and Technology), Jorhat has been nominated fellow of the prestigious National Academy of Sciences, India (NASI) this year.

Renowned scientist Prof. Meghnad Saha was the founder of this institution. Dr Bhuyan, who is an active member of Assam Science Writers' Association (ASWA), was congratulated by popular Science writer and founder

president, ASWA, former Director, CSIR-NEIST, Dr Dinesh Chandra Goswami on being nominated fellow of NASI.





## 'Largest faction of population has best immunity': CSIR Director's ray of hope amid Omicron threat

CSIR-IGIB

03<sup>rd</sup> December, 2021

People with best immunity against virus are people with hybrid immunity: Anurag Agrawal on Omicron

"Children have always been at risk for infection": Anurag Agrawal, Director, CSIR

"Children will be at low risk for severe disease, but some will always develop severe disease"



As the fear of Omicron looms the country after two cases found in Karnataka, and multiple across the nation are suspected to test positive for the new Covid-19 variant, Anurag Agrawal, Director, CSIR Institute of Genomics & Integrative Biology gave a ray of hope on Friday. Stating that the people with the best immunity against the virus are the people with a hybrid immunity, Anurag Agrawal said, India's largest population has the immunity.

"A small fraction of the population has never been vaccinated, we must get them vaccinated. We must give healthcare workers an appropriate way of protecting themselves with a booster shot of the vaccine," he added.

"Children have always been at risk for infection. India's data show that children have got infected at almost the same rate as adults. Children will continue to be at low risk for severe disease, but given enough number of infections, some will always develop severe disease," the CSIR Director added.

**Published in:**

[India Tv News](#)



## Union Transport Minister Suggests Use Of AI-driven Tech To Improve Road Safety In India

CSIR-CRRI

03<sup>rd</sup> December, 2021

Minister of Road Transport & Highways Government of India, Nitin Gadkari, at the second edition of Intel's all.ai 2021 summit, talked about how he envisions amalgamating technology with road transport. Gadkari said road safety is the topmost priority of the Indian government, which is endeavouring to reduce road accidents by 50% by 2024.



Commenting on newer technologies, the minister said there are opportunities aplenty for the application of AI-driven technologies in the transport sector, which removes human interference and the possibility of errors, thereby improving efficiencies and safety in traffic movement.

“My vision is to use AI for enforcement purposes and specifically where State government machinery is falling short due to a variety of reasons. AI can be used to combine data from all of the above-mentioned applicable sources and the data used to make suitable changes at the policy level. The private sector can extend its cooperation and can provide technical assistance to engineering students and third-party agencies to study and submit an Accident Analysis report using AI-based technologies,” said Gadkari.

Gadkari further added saying, “Being the transport minister and an admirer of innovative technology, I am very much supportive towards application of world's best and most advanced technologies for transport-related issues. I encourage AI usage for enforcement of urgent and pressing areas such as:



Enforcement of lane discipline on national highways, especially for trucks,  
Detection of over-speeding and seat-belt usage in vehicles,  
Forensic post-crash investigation,  
The pattern of accidents on black spots,  
Fatigue indicators and sleep detectors for drivers, and  
Advanced vehicle collision system.”

As per the current global scenario, AI is one of the most advanced emerging technologies applied everywhere, from speech and image recognition to space exploration. In a definite sense, AI integrates humans and technology, making the machines think, act, and perform beyond human capacities. This technology can help solve problems efficiently, bringing comfort, reliability, and safety while improving knowledge sharing and bringing transparency. This will improve communications that are critical to improving the delivery systems.

Mr Gadkari also talked in detail about iRASTE, an Artificial Intelligence-powered project, on a pilot basis in Nagpur in Maharashtra, with the aim of reducing accidents by 50 per cent in Vidarbha's biggest city. This is a collaborative effort between the government, Intel, INAI, IIT-Hyderabad, CSIR-CRRI (Central Road Research Institute), Mahindra & Mahindra and Nagpur Municipal Corporation (NMC). The project will focus on vehicle safety, mobility analysis and road infrastructure safety to move towards a “Vision Zero” accident scenario.



## Consortium of national labs to upscale genome sequencing

CSIR-CCMB, IGIB, NCL

03<sup>rd</sup> December, 2021

A consortium of national laboratories across four city clusters of Bengaluru, Hyderabad, New Delhi and Pune performing genomic surveillance of coronavirus is in the process of upscaling the work as part of the national efforts led by Indian SARS-CoV-2 Genomics Consortium (INSACOG), said top scientist Rakesh Mishra, the former director of Centre for Cellular and Molecular Biology (CCMB) on Friday.

Dr. Mishra, who is now the director of Tata Institute for Genetics and Society and is continuing to conduct research at his lab here, said the consortium is “continuously monitoring the situation in all the four cities and has upscaled its efforts to sequence as many samples as possible”.

Apart from the CCMB and the National Centre for Biological Sciences (NCBS) in Bengaluru, the consortium includes CSIR-Institute of Genomics and Integrative Biology in New Delhi, and the Pune Knowledge Cluster-Indian Institute of Science Education and Research, Pune, and CSIR-National Chemical Laboratory, also in Pune.

Such an intensified effort enabled the NCBS, also a member-laboratory of INSACOG, in collaboration with the Strand Life Sciences and the Bruhat Bengaluru Mahanagara Palike to detect, rapidly sequence and verify the existence of the Omicron variant in samples from two coronavirus-infected individuals on Thursday.

NCBS's Satyajit Mayor conveyed the information to local and national authorities, and the Central government released a statement within four days of receiving the samples. Both the SARS-CoV-2 genomes have also been uploaded to the global repository for SARS-CoV-2 sequences, GISAID, so that they can be publicly available to the scientific community, he said.



“This will aid in rapid response to contain the spread of variants of concern,” said Dr. Mishra. The consortium was established four months ago with support from The Rockefeller Foundation’s Pandemic Prevention Institute, and is led by the CCMB, said a press release.



## Omicron chase set to change genome sequencing game plan

CSIR-NEERI

03<sup>rd</sup> December, 2021

PUNE: Research centres across the country are advising genome sequencing of positive samples detected using the RT-PCR kit that uses the 'S' gene target failure (SGTF) strategy.

“This will reduce the scope of our search for Omicron and make it more focused,” Nagpur-based CSIR-NEERI scientist Krishna Khairnar, a key researcher in Covid diagnostics in India, told TOI.

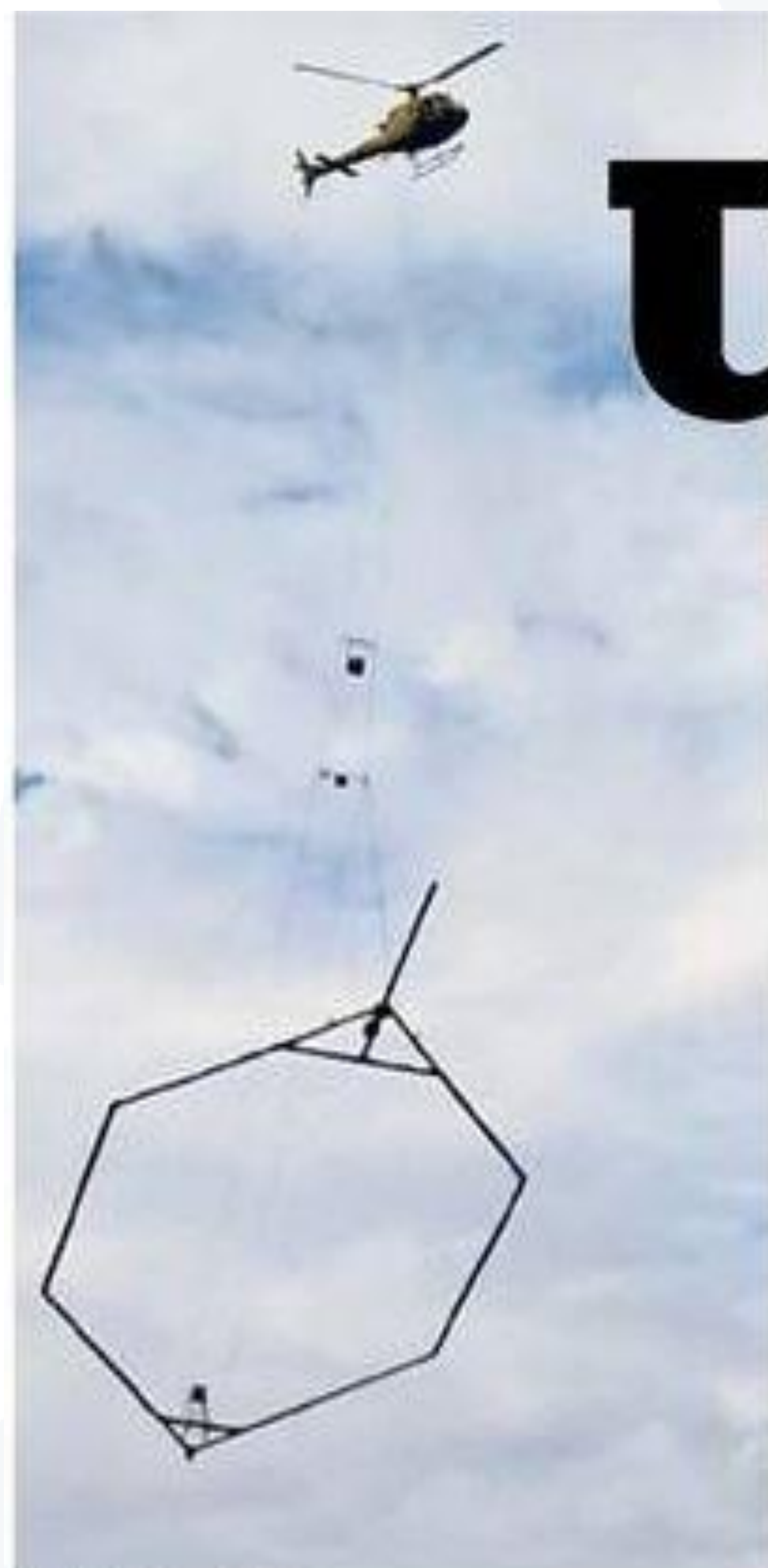
There are only a handful of test kits that target 'S' gene.

“If a person tests positive using such an RT-PCR kit, we can take his or her sample for whole genomic sequencing on priority. The chances of the variant detection rise manifold. This will save a lot of time and resources as genome sequencing is costly,” he said.



CSIR-NGRI

03<sup>rd</sup> December, 2021



**हेली-बोर्न तकनीक** | हेली-बोर्न भूभौतिकीय मानचित्रण तकनीक सीएसआईआर एनएजीआरआई हैदराबाद ने विकसित की है। शुष्क क्षेत्रों में उप-सतह के लिए जमीनी स्तर से 500 मीटर नीचे की गहराई तक हाई-रिज़ॉल्यूशन 3डी तस्वीर उपलब्ध करती है। एक सर्किल के आकार का गोला घेरा में ख़ास कैमरे लगे हैं।

## पानी की तलाश: केंद्रीय जलशक्ति मंत्रालय और भूजल बोर्ड ने शुष्क भूजल प्रबंधन और संरक्षण के लिए सोजत से शुरू करवाया सर्वे हेली बोर्न तकनीक से 500 मीटर तक गहरा झांक रहा हाई-रिज़ॉल्यूशन कैमरा, 3-डी इमेज बता रहा है पानी राजस्थान में 60 हजार वर्ग किमी में होगा सर्वे, विलुप्त जलधाराओं की तलाश

भारत न्यूज | खेजल

सर्किल के आकार का गोला घेरा लेकर उड़ता हेलीकॉप्टर गुरुवार को क्षेत्र में आश्चर्य का विषय रहा। दरअसल हाई-रिज़ॉल्यूशन कैमरों और एक्सपर्ट टीम के साथ यह हेलीकॉप्टर हेली बोर्न सर्वे यानी भूजल स्तर की तलाश कर रहा है। पाली जिले में भू-गर्भ में पानी की गुणवत्ता, उपलब्धता सहित अन्य व्यापक जानकारी जुटाने के लिए केंद्रीय जल शक्ति मंत्रालय की ओर से यह सर्वे शुरू करवाया गया है। सामान्य

खारिश की श्रेणी में आने वाले पाली जिले में भूजल स्रोतों का पता लगाने व उनके संरक्षण के लिए हेली बोर्न का कार्य सोजत हवाई पट्टी से शुरू किया गया है। एक्सपर्ट टीम 1 महीने तक जिलेभर में प्रतिदिन हेलीकॉप्टर से सर्वे कर केंद्रीय जल संसाधन मंत्रालय को फीडबैक देगी। हेलीकॉप्टर एक राउंड में 10-15 किमी तक 500 मीटर नीचे तक भू-गर्भ में पानी की उपलब्धता पता लगा लेता है। बता दें कि पहले फेज में जैसलमेर जिले में इसका कार्य पूर्ण हो चुका है।

केंद्रीय जल शक्ति मंत्रालय ने खासतौर से भारत के शुष्क क्षेत्रों में जिनमें राजस्थान, हरियाणा और गुजरात के कुछ इलाके शामिल कर इसके लिए दो योजनाएं बनाई हैं। पहले फेज में राजस्थान के मरुस्थलीय क्षेत्र में जैसलमेर, खाड़मेर, जोधपुर, गंगानगर, बीकानेर, जालोर, पाली जैसे इलाके में सर्वे हो रहा है, जहां कम वनस्पति से मानसून की बेसखी रहती है। केंद्रीय जल शक्ति मंत्रालय पाली की जवाई पर निर्भरता कम करना चाह रहा है। मकसद है कि पौराणिक समय में जो नदियां इस क्षेत्र में बहती रहीं उनकी कुछ जल धाराएं और भंडार आधुनिक विज्ञान की तकनीक के जरिए विभाग के सामने आते हैं तो पानी के लिए प्लान बी भी विभाग के पास रहे।

### 45 करोड़ का प्रोजेक्ट, दूसरे चरण में गुजरात-हरियाणा में भी होगा सर्वे

पिछले दिनों जलशक्ति मंत्री शेखावत और सूचना तकनीक मंत्री जितेंद्रसिंह और सूचना और प्रौद्योगिकी मंत्री डॉक्टर जितेंद्रसिंह इसका उद्घाटन किया था। शुष्क क्षेत्रों में भूजल का पता लगाने के लिए बनाया गया यह प्रोजेक्ट 45 करोड़ रुपए का है। ने किया था। मार्च 2021 में पहली क्रिस्ट के रूप में 4 करोड़ रुपए हेली बोर्न करने वाली कंपनी को जारी किए गए। फलस्वरूप मार्च, 2022 तक पूरा करना है। उसके बाद दूसरा फेज गुजरात और हरियाणा में शुरू होगा। जहाँ पानी की तलाश की जाएगी।

### पानी के लिए वैकल्पिक जल स्रोत की अभी से तलाश

पूरे जिले में पानी का सबसे बड़ा स्रोत जवाई बांध है। इस बार खारिश कम होने के कारण जवाई बांध में पानी की आवक कम हुई है। वर्तमान में भी जवाई में उपलब्ध जल को लेकर आने वाले कुछ समय बाद जिलेभर में पेयजल के लिए विकट स्थिति उत्पन्न होने के आसार हैं। ऐसी स्थिति में विभाग के पास पानी मिलने का एक और विकल्प रहे इसके लिए यह सारी कवायद की जा रही है।



## CSIR-IIIM organizes training programme on cultivation, marketing of Aromatic plants at Bandipora

CSIR-IIIM

02<sup>nd</sup> December, 2021

CSIR-Indian Institute of Integrative Medicine (IIIM), Jammu and Kashmir in collaboration with District Administration Bandipora on Thursday organised a day-long Awareness cum Training programme on Cultivation, Processing and Marketing of Medicinal and Aromatic plants. The Deputy Commissioner (DC) Bandipora, Dr Owais Ahmad inaugurated the programme while



Vice-chairperson District Development Council Bandipora Kounser Shafeeq, DDC members, Joint Director Planning, Chief Horticulture Officer Bandipora, Chief Agriculture Officer, District Floriculture Officer, Bandipora, District Officer ISM, Principal Scientist Dr. Qazi Parvaiz Hassan, Dr. Shakir P Sultan, Dr. Shahid Rasool and other senior officers of the district were present on the occasion. Speaking on the occasion, the DC appreciated the efforts of CSIR-IIIM with special mention of Director, CSIR - IIIM, Dr. D. Srinivasa Reddy for conducting such training programmes to develop skill and interest among the poor farming community.

He urged the farmers to take advantage of such training programmes to improve and polish their skills so that they can produce more crops with less but focused efforts. He highlighted the role of CSIR-IIIM in promotion and development of medicinal and aromatic plant cultivation and processing sector in J&K. Vice Chairman Kounser Shafeeq said such events are of high importance which have direct bearing on their livelihood and economic prospectus and stressed on farmers to have such programmes in future also for awareness and promotion of this sector. More than 170 participants including faculty members, growers, farmers, entrepreneurs and local youth from different villages/ zones participated in the



programme. On the occasion Dr. Qazi Parvaiz presented an overview of CSIR and highlighted the role of IIIM in detail especially towards society development through cultivation of high value Aromatic crops. He apprised the participants about the Aroma Mission with main objectives and focus of the event regarding promotion of medicinal and aromatic crop cultivation for augmentation of income to marginal farmers and employment generation particularly in Jammu & Kashmir. Dr. Shakir P Sultan gave a detailed presentation highlighting Cultivation and Processing of Aromatic crops in J&K and its importance for cultivation of medicinal and aromatic plants for better returns and income generation. Dr. Shahid Rasool, Incharge, Field station, Bonera, Pulwama gave a detailed description of cultivation methodologies of high value Aromatic crops and highlighted the Role of IIIM in promotion of Aroma sector in J&K.



## CFTRI lab to handle bulk of RT-PCR tests

CSIR-CFTRI

02<sup>nd</sup> December, 2021

With the COVID-19 testing target in Mysuru increased from 3,000 to 5,000 a day amid Omicron scare, the bulk of RT-PCR tests are now being handled by the lab at the CSIR-Central Food Technological Research Institute (CFTRI) with the Microbiology Department's Viral Research and Diagnostic Laboratory (VRDL) facility on the premises of K.R. Hospital shut for restoration.

The VRDL facility, which has been in the forefront of COVID-19 testing since April 2020, is not in operation since the last few days over a short-circuit incident and the structure housing the lab requires immediate repairs due to leakage from the roof.

Now that the scare of a new variant has triggered an alert and the government has asked the districts to ramp up testing to deal with any rise in COVID-19 numbers, the Mysore Medical College and Research Institute (MMCRI) has resolved to shift some of the staff from VRDL and the RT-PCR testing equipment to the CFTRI lab for the time being for handling the testing load until the VRDL gets ready for resuming tests.

MMCRI Dean and Director C.P. Nanjaraj told The Hindu that the VRDL had become non-functional after the roof of the lab started leaking and the short-circuit incident. "Hopefully, in the next few days, the lab will be ready to resume RT-PCR tests as the issue has been brought to the notice of the Deputy Commissioner."

The MMCRI Testing Centre (Viral Research and Diagnostic Laboratory) and the CSIR-CFTRI Testing Centre are the two public institutions that have been providing services to the public free of cost since the outbreak. The CSIR-CFTRI came forward to support the district administration in the fight against the pandemic by setting up the testing centre and carrying out RT-PCR tests since testing was key for containing the spread of the disease.



VRDL is a part of a network of labs established across the country by the Department of Health Research, Government of India. The rise in the number of viral outbreaks and the resultant mortality from them had been cited as key reasons for the launch of a network of such hi-tech labs. The National Institute of Virology, Pune and the National Centre for Disease Control, Delhi will be the top laboratories for the network while the National Institute of Epidemiology, Chennai will be supervising the data generated by the network of labs.



## National Workshop On “Anti-Microbial Resistance In Food Chain” Held At CFTRI

CSIR-CFTRI

02<sup>nd</sup> December, 2021

Mysore/Mysuru: A two-day National workshop on “Anti-Microbial Resistance (AMR) in Food Chain” was held at the Department of Microbiology and Fermentation Technology, CSIR-Central Food Technological Research Institute (CSIR- CFTRI) on Nov. 25 and 26. This workshop was sponsored by Department of Health Research, Indian Council of Medical Research (ICMR), New Delhi, under its Human Resource Development programme.



The workshop was virtually inaugurated by Dr. Abdul Gaffur Professor, Apollo Hospital & Coordinator – AMR, Chennai Declaration in the presence of Dr. M.N. Sumana, Professor and former Head of Microbiology Department, JSS Hospital and Medical College, Mysuru, Dr. V.S. Chauhan, Chief Scientist and Head, Plant Cell Biotechnology Department, CFTRI and Dr. Prakash M. Halami, Organising Secretary and Head of MFT Department, CSIR-CFTRI. Dr. Abdul Gaffur, in his inaugural address, stressed on judicious use of antibiotics and proper stewardship programme in combating anti-microbial resistance in food chain.

### Chennai Declaration

In his subsequent lecture, he highlighted the importance of Chennai Declaration, National action plan enforcement by Government of India for combating anti-microbial research and its implementation in the country.

The major threat caused by colistin resistance in food chain was seriously reviewed by Dr. Gaffur through his own scientific evidences and he advised the rational usage of antibiotics in



veterinary, fishery and poultry field. Dr. Sumana highlighted the importance of general awareness to combat the spread of anti-microbial resistance among public. She spoke about the initiative taken by her research group in combating anti-microbial resistance through molecular studies and one health approach.

Dr. I Karunasagar, Retired FAO Expert, spoke about antimicrobial reservoir in fishery involvement. Dr. Anand Kumar, Professor and Head, Veterinary Microbiology, NTR College of Veterinary Science, Gannavaram, Andhra Pradesh, gave an overview about development of anti-microbial resistance in food chain through animal feed.

### **Panel discussion**

A panel discussion was organised in the topic to deliberate how AMR can be stopped especially with reference to its growing menace in food chain. The experts from different parts of country joined online to participate in panel discussion. Views by each panellist were shared on the topic and the questions raised by the participants were discussed.

Practical session was organised to give hands-on experience to all the participants. In addition, demonstration on simpler AMR evaluation in bacteria, anti-microbial residue analysis was also organised during the two-day workshop. In the poster presentation session, participants had opportunity to present their research findings. Out of 35 registered participants, 25 were physically present during the workshop which coincided with WHO's programme on World Antimicrobial Awareness Week.

Certificates and prizes were distributed to poster presenters.



## IIIM celebrates Foundation day

CSIR-IIIM

02<sup>nd</sup> December, 2021

JAMMU, Dec 1: CSIR-Indian Institute of Integrative Medicine, Jammu, a constituent of Council of Scientific and Industrial Research (CSIR), under Union Ministry of Science and Technology, celebrated its 81st Foundation Day here today. An impressive programme was held at IIIM auditorium in this connection, which was largely attended by eminent scientists, faculty members of research and educational institutions, entrepreneurs, invited dignitaries, guests and members of CSIR-IIIM.



Prof Sandeep Verma, Secretary, Science and Engineering Research Board (SERB), Department of Science & Technology, Govt. of India was chief guest. In his welcome address Dr D Srinivasa Reddy, Director, IIIM Jammu introduced the chief guest to the audience and described him as a decorated and renowned Chemical Biologist. His work has been recognized by the Goyal Prize, JC Bose Fellowship, Shanti Swarup Bhatnagar Prize, DAE-SRC Outstanding Investigator Award, Swarnajayanti Fellowship, BM Birla Science Prize.

Prof Verma in his address referred to the subject, “Strategies in Gaseous neurotransmitter release and New Antibiotics”. He eulogised the composite research platform established at IIIM, Jammu right from the times of its founder Director, Col Sir Ram Nath Chopra till time, he said IIIM has been bestowed with lot number of opportunities in the area of drug development from plants. With all expertise in the area of Natural Products Chemistry, Synthetic Chemistry and Biology are available under one roof, IIIM is a rich resource base for plant-derived drug discovery though numerous challenges are there, including procurement



and authentication of plant materials, implementation of high-throughput screening bioassays and scale-up of bioactive lead compounds, said Prof. Verma.

He said there are opportunities for India as it is rich in genetic resources and traditional knowledge, which are key components for bioprospecting and value-addition and these are required to be tapped and scientifically studied.

The chief guest also distributed prizes for different activities on the occasion. Among others Prof Bechan Lal, Vice Chancellor, Cluster University, Jammu, Dr DM Mondhe, Chief Scientist & Head, Pharmacology Division, Abdul Rahim, Chief Scientist & Head RMBD&IST Division, Dr Gurdarshan Singh, Sr. Principal Scientist & Head, PK-PD Toxicology and Dr Zabeer Ahmed, Sr Principal Scientist & Head IIIM Branch, Srinagar were also, present on the occasion.

Dr Deepika Singh conducted the proceedings while Rajneesh Anand, Chief Scientist & Head of Quality Management & Instrumentation Division, presented vote of thanks.



## CIMFR initiates a jewellery-making project with CSIR

CSIR-CIMFR

01<sup>st</sup> December, 2021

With the objective of providing sustainable source of income to people living in and around colliery areas by imparting them necessary skills of producing jewellerys of coal, through value addition of waste coal available in abundance at Jharkhand, Dhanbad based Central institute of Mining and Fuel Research (CIMFR), a premiere research laboratory of Council of Scientific and Industrial Research (CSIR) is working on a project to develop jewellery from coal.



Initial training of a group of local residents has already been conducted in this regard by the Renewable Energy and Biotechnology section of the institute led by its principal scientist, Dr Vatrivel A Selvi, who is also the project leader.

Talking to the Telegraph Online, Selvi said, “Many people prefer ethnic and black colour jewellerys and we need to just carry out a value addition by ensuring shining and polishing of waste coal to mould it into the shape of jewellerys like necklace, pendant as abundant amount of coal is otherwise of no use in the mining areas and also creates the problem of solid waste management, if lying unutilized.”

Elaborating more over the project, Selvi said, “The two-year project funded by Central Institute of Mining and Fuel Research is aimed at proving a permanent source of income to large number of farmers living in the mining areas by providing training to them as farming is not done around the year work and requires full time involvement for only three months while for the rest of the year the farmers remain idle.”



“People in hinterland of Jharkhand are very skilled in tribal art which is quite unique, so under the project they will be utilizing their artistic skills on waste coal by polishing and refining it to make beautiful jewellery which will have ethnic look,” said Selvi, a resident of Tamil Nadu and added that the idea of initiating jewellery making project from coal came into her mind last year while visiting a mine where she saw huge amount of waste coal lying unutilized.

“Coal usually is used as fuel due to its combustion property and recently its other usage like liquefaction and gasification has also started but under the present project we are carrying out value addition of coal by its processing which includes its hardening, moulding, shining etc,” said Selvi and added that more rounds of training are also to be carried out under the project but due to guidelines they could not hold more round for training for the beneficiary common people of the project.

Notably, the processing of coal for production of jewellery involves holding pieces of coal and coal dust together through a binder and thus after production the jewellery can be sold at Rs 500 per gram. The coal jewellery besides being durable and light are also lightweight. The marketing of coal made jewelleryes will be carried out through CIMFR’s e Portal, Gramin Market.

PK Singh, director of Central Institute of Mining and Fuel Research said, “The project, besides ensuring innovative utilization of coal, will also ensure sustainable source of employment for the local people of mining areas.”



## Nava Bharat inks pact with CSIR-IICT for 'Jigyasa' in Kothagudem

CSIR-IICT

01<sup>st</sup> December, 2021

Kothagudem: With the objective of attracting students towards the study of science, Paloncha-based NBVL signed a Memorandum of Understanding (MoU) with CSIR-IICT, Hyderabad.

The MoU aims at implementing 'Jigyasa,' a student outreach programme in the district. As part of the initiative, scientists from CSIR-IICT will conduct Jigyasa virtual lab activities to strengthen scientific acumen among high school students.

Speaking to Telangana Today, Nava Bharat Ventures Limited (NBVL) vice president Y Srinivasa Murthy said Nava Bharat proposed to establish a Science Centre at Paloncha with the support of IICT. The initiative is aimed at popularising science, technology and innovation to inculcate scientific temper among government school students by following broad activities covered under CSIR's Jigyasa programme, he said.

CSIR launched the programme to promote scientific temper through the student-scientist connect programme. The scope of the programme is to extend classroom learning by focusing on well-planned research laboratory-based learning, Murthy explained.

He said NBVL, as part of its Corporate Social Responsibility (CSR) initiative, has been operating mobile science labs since 2011. Resource persons have been engaged to offer hands-on knowledge to government school students through science experiments based on the school syllabus.

As many as 3,000 students studying sixth to the tenth standard in 22 government schools in the Kothagudem district are being covered under the programme. The MoU with CSIR-IICT for implementing Jigyasa will augment the NBVL's ongoing science labs initiative, he noted.



Deputy Manager (CSR activities) M Srinivas Rao informed that Union Science and Technology Minister Dr Jitendra Singh has on Nov 23 launched a Virtual Laboratory at Nava Bharat High School, Paloncha.

A team led by CSIR-IICT scientist Dr D Shailaja will visit the district in the second week of December for field-level interaction with teachers and students and conduct innovative science experiments.

As part of Jigyasa, a continuous programme, competitions, scientific webinars, workshops, community-based events, citizen science, boot camps and outreach programmes will be conducted, he added.



## Country gained its freedom through Indian scientific plans: Dr Jitendra Singh

CSIR-NPL. NIScPR

01<sup>st</sup> December, 2021

Indian scientists not only played an important role in obtaining freedom for the country but continue to play a crucial role in the country's development, said Dr Jitendra Singh, Union Minister of State (Independent Charge) Ministry of Earth Sciences, Science and Technology. Dr Jitendra Singh was the Chief Guest of the two-day National Conference on 'Indian Independence Movement & the Role of Science'.



The Union Minister also said that India's subjugation was designed through the colonial scientific plans, and the country also gained its freedom through Indian scientific plans. He further elaborated on the role of scientists during the freedom movement and said that even people who were not involved in science used the scientific means to fight for freedom. He cited that the greatest scientist warrior was none other than Mahatma Gandhi and his non-violence and satyagraha was a scientific resistance to British rule. The Minister also recalled the contributions of Sir JC Bose on his birth anniversary.

Prof. B.N. Jagatap of Indian Institute of Technology, Bombay said that science was an instrument for development, awakening and freedom during the independence movement. "We need to reflect on the contributions of our scientists," said Prof. Jagtap. He stressed that it was a challenging job to practice science during the colonial period with limited resources and our scientists have created many institutions during such adverse times. He considered them as visionaries who could sense future needs.



The program which concluded on Tuesday had an outreach lecture delivered by Shri Jayant Sahasrabudhe. He spoke about the upcoming India International Science Festival (IISF) 2021 at Panaji, Goa. He said that the IISF this year has been conceptualized based on five objectives shared by Prime Minister Shri Narendra Modi for Azadi Ka Amrit Mahotsav. IISF 2021 reflects those five objectives that include our freedom movement, imaginations for a better future, achievements of the last 75 years, planning and pledges for the future.

Dr Ranjana Aggarwal, Director, CSIR- National Institute of Science Communication and Policy Research (CSIR-NIScPR), said that the conference is an effort to celebrate Azadi Ka Amrit Mahotsav in a diverse way as it focuses on the role of scientists in the freedom movement. More than 1500 participants have registered for the event and about 250 abstracts, poetries and scientoons were received.

Dr Nakul Parashar, Director, VigyanPrasar proposed the votes of thanks. CSIR-NIScPR, Vigyan Prasar and Vijnana Bharathi are jointly organizing the two-day National Conference of Science Communicators and Teachers in the hybrid mode from the CSIR-National Physical Laboratory (CSIR-NPL) Auditorium.



CSIR-CSMCRI

01<sup>st</sup> December, 2021

The awareness/outreach program for IISF-2021 at CSMCRI, Bhavnagar

## સેન્ટ્રલ સોલ્ટ દ્વારા ઈન્ડિયા ઇન્ટરનેશનલ સાયન્સ ફેસ્ટિવલ વિદ્યાર્થીઓ અને સંશોધનકારોએ વિજ્ઞાનને એક ઉત્સવ તરીકે ઉજવવા ડૉ. શ્રીનિવાસનનો અનુરોધ

ભાવનગર | 30 નવેમ્બર

સી.એસ.આઈ. આર.-સી. એસ.એમ.સી.આર.આઈ. દ્વારા તા. 30 નવેમ્બર નાં રોજ સંસ્થા ખાતે હાઈબ્રિડ ( ઓનલાઈન અને ઓફલાઈન) માધ્યમથી 7મા ઈન્ડિયા ઇન્ટરનેશનલ સાયન્સ ફેસ્ટિવલ 2021 ના પ્રી-ઈવેન્ટનું આયોજન કરવામાં આવ્યું હતું. આ ફેસ્ટિવલનો મુખ્ય ઉદ્દેશ તા. 10 થી 13 ડિસેમ્બર ના રોજ પણજી, ગોવામાં યોજનારા ઈન્ડિયા ઇન્ટરનેશનલ સાયન્સ ફેસ્ટિવલ (IISF 2021) ને લોકપ્રિય બનાવવાનો તથા આત્મનિર્ભર ભારત બનાવવાનો છે. આ વર્ષની થીમ “વિજ્ઞાન અને ઇનોવેશનમાં જિજ્ઞાસાને પ્રેરિત કરવા અને શિક્ષણને વધુ લાભદાયી બનાવવા માટેનો છે”.

આ કાર્યક્રમમાં સમગ્ર ગુજરાત તથા ભારતભર માંથી વિવિધ સંસ્થાના ના સદસ્યો તથા સ્કૂલ ના શિક્ષકગણ, વિદ્યાર્થીમિત્રો MS-TEAMS ના વિડીયો કોન્ફરન્સ દ્વારા ઉપસ્થિત રહ્યા હતા. કાર્યક્રમ સવારના 10:30 કલાકે શરૂ થયો હતો. જેમાં મુખ્ય અતિથિ ડૉ. આર. વી. ઉપાધ્યાય, પ્રોવોસ્ટ, ચાર્સેટ યુનિવર્સિટી, તથા સેન્ટ્રલ

સોલ્ટ નાં ડાયરેક્ટર ડૉ. કન્નન શ્રીનિવાસન, સિનિયર મોસ્ટ સાયન્ટિસ્ટ ડૉ. બિશ્વજિત ગાંગુલી, પ્રિન્સિપાલ સાયન્ટિસ્ટ ડૉ. ડી. આર. ચૌધરી, સંસ્થાના વૈજ્ઞાનિકો ડૉ. મોનિકા કાવલે તથા બિપિન વ્યાસ ઉપસ્થિત રહ્યા હતા. ડૉ. ચૌધરીએ આઝાદીના અમૃત મહોત્સવના ભાગરૂપે અલગ અલગ 12 કાર્યક્રમોને વડાપ્રધાન નરેન્દ્ર મોદી ના માર્ગદર્શન હેઠળ નક્કી કરેલ છે, જેવા કે નવા ભારત માટે વિજ્ઞાન અને પ્રૌદ્યોગિકી યોજના, સ્વતંત્રતા સંગ્રામને લગતા વિચાર તથા આત્મનિર્ભર ભારત બનાવવા માટેની યોજનાઓ.

સંસ્થાના ડાયરેક્ટર ડૉ. કન્નન શ્રીવાસને કાર્યક્રમમાં ઉપસ્થિત રહેલ દરેક સદસ્યોનું અભિવાદન કર્યું. તથા તેમણે જણાવ્યું હતું કે આ સાયન્સ ફેસ્ટિવલ માં કુલ 05 પ્રવૃત્તિઓને પ્રાધાન્ય આપવામાં આવ્યું છે. તેમણે જણાવ્યું કે ભારત એ ઉત્સવોનો દેશ છે. ઉત્સવ એ સમાજના દરેક વ્યક્તિને જોડતી કડી છે. તેમણે જણાવ્યું કે વિજ્ઞાનને એક ઉત્સવ તરીકે ઉજવવું એ વિદ્યાર્થીઓ, સંશોધનકારો, ઇનોવેટર્સ, કલાકારો અને જાહેર જનતાને એક સાથે લાવવાનું દેશનું સૌથી મોટું એક પ્લેટફોર્મ છે.

Published in:

Saurashtra Samachar



## Please Follow/Subscribe CSIR Social Media Handles



[CSIR INDIA](https://www.youtube.com/CSIRINDIA)



[CSIR\\_IND](https://twitter.com/CSIR_IND)



[CSIR India](https://www.facebook.com/CSIRIndia)



[CSIR India](https://www.linkedin.com/company/CSIR-India)



[csirindia](https://www.instagram.com/csirindia)