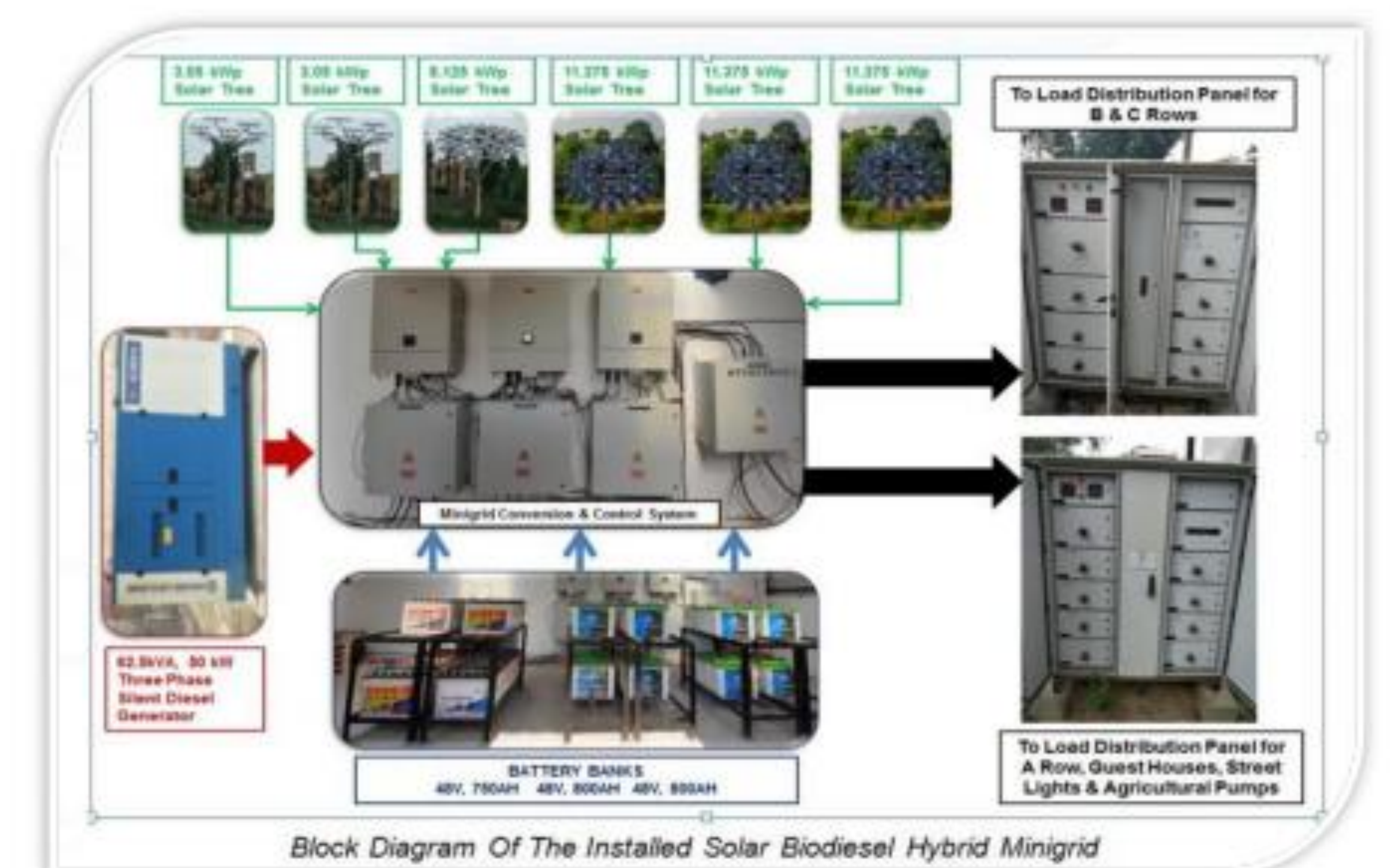


CSIR IN MEDIA



CSIR

NEWS BULLETIN 1 TO 5 FEBRUARY 2021



CSIR–IICT licenses novel fluorophores tech to Tokyo Chemical Industry

CSIR-IICT

5th February, 2021

Most of the raw materials used in the research made indigenously

The CSIR-Indian Institute of Chemical Technology (CSIR-IICT) has licensed the novel fluorophores technology to Tokyo Chemical Industry (TCI) CO Ltd, Japan. The technology has been developed by scientist Surya Prakash Singh's group at the CSIR-IICT. Singh works in the department of Polymers and Functional Materials and his major research focuses on the design and synthesis of various classes of sustainable dyes for their use in photonic devices, textiles, paints, and other biological applications. The IICT researchers, in collaboration with Dr Srigiridhar Kotamraju's laboratory at the Department of Applied Biology, CSIR-IICT, found that BODIPY-based novel fluorophores could be used for intracellular mitochondrial tracking.

Cellular powerhouses

“Most of the raw materials used in making such novel fluorophores are indigenously made, thus supporting government's initiatives on Atmanirbhar Bharat,” the Hyderabad-based IICT said in a release. These results were patented and published in *American Chemical Society* journal. The other members of the team include Dr Gayathri Thumuganti and Dr Santosh Karnewar. Mitochondria are considered to be the cellular powerhouses that supply energy for cellular needs. In addition, mitochondria play a major role in the survival and death of cells.

In this context, it would be important to track the fitness of mitochondria in various disease conditions. To assess the health of the mitochondria, currently, charged fluorophores are being employed. These mitochondria-selective fluorophores are permanently charged molecules and require special storage conditions. These permanently charged cationic molecules induce cellular toxicity by imposing mitochondrial membrane depolarisation, leading to unwarranted biological responses. Exploration of such fluorophores is highly needed for better understanding of mitochondrial diseases.

Published in:
[Business Line](#)

COVID-19: CSIR-CFTRI to conduct sero surveillance

CSIR-CFTRI

5th February, 2021

In continuation of COVID-19 related activities, the CSIR-Central Food Technological Research Institute (CFTRI), Mysuru, is carrying out Phase 2 Pan-CSIR study on sero surveillance on the contagion. It is being conducted in collaboration with CSIR-Institute of Genomics and Integrative Biology (IGIB), New Delhi. The study aims at covering the large population size across CSIR laboratories to assess the sustained immune status of an individual and the extent of herd immunity achieved.

“The outcome of the study shall help in formulating the COVID-19 vaccine guidelines across the country. This sero-surveillance is being conducted over a period of four days from February 4, at the Institute, and is open to all the CFTRI students, staff, and their family members,” a release said here on Friday. Sridevi Annapurna Singh, Director, CSIR-CFTRI, inaugurated the programme on Thursday. The project leader, Prakash M Halami; members, Muthukumar S.P., Ravindra P.V., and Gopinath M.; CFTRI’s doctor Avilash S. Rani; and a group of volunteers were present.

The CSIR-CFTRI had recently completed 1.20 lakh swab tests at its COVID-19 testing centre. The CSIR-CFTRI came forward to support the Mysuru district administration in the fight against the pandemic by setting up the COVID-19 testing centre and carrying out RT-PCR tests since testing was key for containing the spread of the disease.

This was the third testing centre set up in Mysuru for carrying out RT-PCR tests after the one at the Microbiology Department (on the premises of K R Hospital) in Mysore Medical College and Research Institute (MMCRI) and another at the JSS Hospital.

Published in:

[The Hindu](#)

After FELUDA, CSIR develops paper test 'RAY' to identify Covid variants within an hour

CSIR-IGIB

5th February, 2021



which spreads faster than the original SARS-CoV-2 variant. The team of researchers — including those from CSIR-Institute of Genomics & Integrative Biology in Delhi and the Academy of Scientific & Innovative Research (AcSIR) in Ghaziabad — shared their findings in a paper, published Wednesday, that is yet to be peer-reviewed.

“Over the last year or so, as the virus has moved from person to person, it has picked up a lot of mutations — some of which ‘might’ have made the virus more fit. Some of them ‘might’ also become resilient to immune system attacks. There are possibilities that the variants ‘might’ respond less against the ‘vaccines developed, although such studies are still being done. All of these mean that is important to track the variants early and effectively,” Dr Debojyoti Chakraborty, scientist at CSIR-IGIB, told ThePrint. “While it is common for viruses to mutate, it is important to track mutations that are possibly more dangerous,” he added. Chakraborty led the work along with Dr Souvik Maiti, also a scientist at CSIR-IGIB.

The Council of Scientific & Industrial Research (CSIR) has developed a new Covid-19 test that can identify the variant of the virus identified in the United Kingdom within an hour. The new test is called RAY (Rapid variant AssaY), in an homage to legendary Bengali filmmaker and author Satyajit Ray. It has been created by the same CSIR team that, in April last year, had designed ‘FELUDA’, a paper-based Covid test named after the fictional detective that Ray had created. The RAY test has been developed at a time when countries across the world are actively surveilling international travellers for new variants of the Covid-19 infection, such as the variant identified in the UK,

RAY test faster than genome sequencing

The variant with the mutation N501Y, identified in the UK, has worried health authorities across the world, since it transmits much faster. To prevent the spread of this variant in India after it was reported from 23 countries, a consortium of genome sequencing labs was set up last month. Samples from all travellers who test positive for Covid-19 have to be subsequently sequenced to check for the mutation. CSIR-IGIB has also set up a kiosk at the Delhi airport to collect samples for sequencing.

Genome sequencing — a method used to ‘decode’ the genetic code of the virus — is an extensive process and currently the only way to identify a new mutation. It requires a lot of dedicated machines and manpower. It also generates results only after 36-48 hours. “Genome sequencing also generates a lot of data, which also requires storage space. During an ongoing pandemic, it is next to impossible to genetically sequence all samples to look for mutations,” Chakraborty said. The paper strip-based RAY test relies on a protein called Cas-9, that can recognise and bind to a particular segment of the viral genome. If there is even a single point change in the genome segment, the protein will not bind, which will generate a negative read-out. “The test gives a positive or negative readout within an hour, and the cost involved is several times lower,” Chakraborty said.

Together, he added, the FELUDA and RAY tests can track and trace new variants early. Another advantage of the FELUDA-RAY tests is that if a new mutation is identified in the future, it will just take two to three weeks to modify RAY to identify the mutation. In their paper, the researchers reported that the three SARS-CoV-2 variants with the common mutation, N501Y, from UK, South Africa, and Brazil can be identified within an hour using the paper strip test.

Chakraborty said the CSIR is currently making the test available for the healthcare authorities for immediate use, but the team hopes that the test is widely used soon.

Published in:

[The Print](#)

CSIR plans study to assess effectiveness of Covid vaccines

CSIR-IICB

4th February, 2021

CSIR, the country's premier research and development body, is launching a multi-centre study to assess the effectiveness of the massive anti-Covid-19 vaccination programme. The study will check at regular intervals on the progress of around 6,000 volunteers who have received the vaccine. The study, which will continue for up to two years, will measure whether the vaccines are creating the desired levels of immunity and whether their effect lasts for a sufficiently long time. "The vaccine will have to last at least six months. Otherwise, it will be a failure. Six months is enough to break the (infection) chain," says Dipyaman Ganguly, who's physician, scientist and immunologist at the CSIR-Indian Institute of Chemical Biology, Calcutta.

Ganguly will serve as the project leader for the immune monitoring programme. The scheme is a CSIR initiative with the Tata Medical Centre. Specifically, the study will check if the vaccines produce sufficient antibodies to counter Covid-19. It will also check for the presence of memory T-cells that can recognise the coronavirus. The CSIR (Council of Scientific and Industrial Research) is looking at enrolling about 1,000 volunteers at each of its six centres in different parts of the country. Follow-up studies of the effectiveness of vaccines being developed around the world are essential because they have been created in record time and have been given emergency clearances by national pharmaceutical regulatory authorities.

In the US, for instance, the Food and Drug Administration (FDA) has granted what is called Emergency Use Authorization (EUA). The FDA says the authorization "is intended to remain in effect only for the duration of the public health emergency related to COVID-19." Emergency clearances have been granted to Covid vaccines in different parts of the globe, including India, because of the urgent need to halt the pandemic in its tracks. Bharat Biotech's Covaxin, for instance, has only completed its Phase Two trials and has

been given emergency clearance to start its vaccination programme. People who receive the vaccine have to sign consent forms that they are aware of this. Similarly, under normal circumstances, the Serum Institute of India (SII), manufacturing and distributing the Oxford/AstraZeneca vaccine, would have carried out Phase Three trials in India before distributing the British-Swedish jab. That is because immunological responses can vary from one nation to another and different population groups.

Also, if conditions were normal, the two firms currently distributing Covid vaccines in India, SII and Bharat Biotech, would be conducting the post-vaccination studies. But the CSIR believes the companies already have enough on their plates to produce and distribute the vaccines and keep supply chains operational.

The CSIR study will, most probably, enrol doctors and health-workers who have already received the vaccine. They would be an ideal survey group as they would be well-informed and would be able to report any after-effects or other issues they have faced.

Regular RT-PCR tests will also be conducted every month on the volunteers to check if they are getting reinfected again after receiving the vaccine. Says Ganguly: "We have to follow-up with repeat RT-PCR tests. Otherwise, we won't find if they are getting reinfected." The tests would also look into whether people who have got vaccinated develop Covid-19 but remain asymptomatic.

The need for the post-vaccination study has become particularly urgent due to the swift pace of events since the pandemic was first reported in Wuhan in December 2019. Vaccine development began almost immediately and Pfizer BioNTech became the first Western company to announce it had been successful on December 2. No vaccine has ever been created so swiftly. The fastest before this was the mumps vaccine developed over four years in the 1960s.

The sheer speed at which the vaccines have been developed and brought to market have created an entirely different set of problems. Says one scientist: “We know the vaccine is effective for three months because that is how long it has been in the market. We do not know what happens over a longer time-frame.”

The findings about how long the antibodies and T-cells stay active could help determine how frequently the Covid vaccinations might need repeating. Some researchers suggest that Covid vaccines could become routine, like annual flu shots.

Published in:
[The Telegraph](#)

BEML teams up with CSIR-NAL to develop 2 seater trainer aircraft

CSIR-NAL

4th February, 2021



BEML Limited, a defence public sector undertaking, has signed a Memorandum of understanding (MoU) with Council of Scientific and Industrial Research (CSIR)-National Aeronautics Laboratory (NAL) to take up R&D in the areas of advance composite and autoclaves, mini unmanned aerial vehicles, design and analysis of aircraft structure and systems.

The company also has teamed up with NAL for joint development of two seater trainer aircraft through Technology of Transfer (ToT) route. At Aero India 2021, AK Srivastav, Director Defence & Aerospace exchanged the MoU copies with R Venkatesh, Director Business Development, NAL in the presence of MV Rajasekhar, CMD, BEML. “This will help BEML to increase its footprint in the aerospace sector,” said Rajasekhar.

At the Aero India, Chief of the Army Staff Gen MM Naravane visited the BEML Stall. Gen Naravane was briefed by Rajasekhar and AK Srivastav, Director Defence on BEML’s ongoing projects related to aerospace and defence business.

Published in:

[Busines Line](#)

Airific Systems' UV-based air disinfectant for central AC gets ICMR-CSIR nod

CSIR-CCMB

4th February, 2021



UVHeal SafeAir, a UV-based air disinfectant for central air conditioning systems, is India's first UVGI System tested and certified by ICMR-CSIR, Virology Lab (CCMB) for 99 per cent disinfection for SARS-CoV-2 that causes COVID-19. It is developed by Delhi-based start-up Airific Systems.

Ankit Sharma, Director, Airific Systems Pvt Ltd said, "We are pleased to share with you all that our UVGI systems- UVHeal SafeAir- have been tested by an ICMR accredited lab for COVID-19 disinfection." These systems are available for offices, hospitals, schools, industries, cinema halls, retail stores, and other such areas. The main objective is to help bring back people to their respective workplaces in the safest manner.

Published in:
[Bio Spectrum](#)

Governor visits Bowenpally green power plant

CSIR-IICT

3rd February, 2021



Prime Minister had mentioned about the innovative biogas plant in his radio address 'Mann Ki Baat'

Governor Tamilisai Soundararajan has congratulated and felicitated the entire scientific team of CSIR-Indian Institute of Chemical Technology (IICT), TS department of marketing and Ahuja Engineering Services for executing the 'vegetable waste to gas plant' at the Dr. B.R. Ambedkar Agriculture Market in Bowenpally here on Tuesday. The Governor visited the plant along with IICT Director S. Chandrasekhar, TS agriculture secretary B. Janardhan Reddy, chief scientist A.G. Rao and others, following the Prime Minister Narendra Modi mentioning

about the innovative biogas plant in the market yard in his Sunday radio address 'Mann Ki Baat'. CSIR-IICT has developed and patented the technology to convert the waste to wealth, based on 'Anaerobic Gas lift Reactor (AGR) for generation of methane-rich biogas and nutrient-rich bio-manure. The plant was installed as a 'Swachh Bharat Mission' initiative jointly funded by the Department of Biotechnology (DBT) and TS marketing department. It has a capacity to treat 10 tonnes of market and vegetable waste every day generating 400-500 units of electricity, and replace about 30 kg of LPG on a daily basis. About 1,400 tonnes of market and vegetable waste has been used for generation of 34,000 m³ of biogas converted to 32,000 units of electricity. More than 600 kg of LPG has been replaced and about 700 kilolitres of bio manure was produced from the plant which is made available to the farmers for use. Average electricity bill of the agricultural market committee got reduced to ₹1.5 lakh from ₹3 lakh per month, explained innovator Dr. Rao. DBT has

sanctioned another project for installation of five more plants — while a 500 kg/day capacity has already been commissioned at Erragadda vegetable market, remaining four plants at Gudimalkapur (5 tonne/day), Gaddiannaram (5 tonne/day) , Alwal (500 kg/day) and Saroornagar (500 kg/day) market yards are underway. CSIR-IICT is now making efforts to install biogas-based CNG plants for replacement of conventional vehicular fuel with renewable green fuel, he added.

Published in:

[The Hindu](#)

Research on Various Aspects of Medicinal Plants

CSIR

2nd February, 2021

The National Medicinal Plants Board (NMPB), Ministry of AYUSH, under its Central Sector Scheme on 'Conservation, Development and Sustainable Management of Medicinal Plants' is supporting research & development projects on various aspects of medicinal plants to government as well as private universities/research institutions/organizations across the country.

In addition, Research Councils viz. Central Council for Research in Ayurvedic Sciences (CCRAS), Central Council for Research in Homoeopathy (CCRH) Central Council for Research in Unani Medicine (CCRUM) and Central Council for Research in Siddha (CCRS), autonomous organizations under the Ministry of AYUSH are also engaged through its research institutions / centre / units in research & development activities on medicinal plants used in concerned system of medicine.

Besides, some premier research institutions under Council for Scientific and Industrial Research (CSIR) like Central Institute of Medicinal and Aromatic Plants (CIMAP), Lucknow; Indian Institute for Integrative Medicines (IIIM), Jammu; Institute of Himalayan Bioresource Technology (IHBT), Palampur; National Botanical Research Institute (NBRI), Lucknow; North East Institute of Science and Technology (NEIST), Jorhat and CSIR-Central Drug Research Institute (CDRI), Lucknow are engaged in research on various aspects of medicinal plants. Directorate of Medicinal and Aromatic Plants Research (DMAPR), Anand, Gujarat under Indian Council for Agricultural Research (ICAR) conducts basic, applied and adaptive research on medicinal plants. In addition, a programme on Translational Research for Developing Products and Processes from Medicinal and Aromatic Plants is implemented by the Department of Biotechnology (DBT) for study on various aspects of medicinal plants and aromatic plants.

Researches undertaken at Central Council for Research in Ayurvedic Sciences under Ministry of AYUSH have developed 24 new drugs. In addition, Council of Scientific & Industrial Research (CSIR) has developed herbal formulations by their supported researches at CSIR-CIMAP, CSIR-NBRI and CSIR-CDRI and technology has been transferred to industry for its commercialization. And, ICAR- DMAPR is also focusing on researches and plant genetic resources/quality planting material. Institutes who are engaged towards developing new medicines can take the advantage of such quality planting material.

Ministry of AYUSH under its Central Sector Scheme for promotion of International Cooperation, (IC Scheme), undertakes various measures to promote & propagate AYUSH systems of medicine including Ayurveda across the globe; and to promote Ayurvedic medicine globally. In addition, the Central Council for Research in Ayurvedic Sciences, Ministry of AYUSH has signed various Agreements/Memorandum of Understanding for promotion of Ayurveda/Ayurvedic Medicines Internationally.

The Minister of State (The Ministry of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homeopathy), Sh. Kiren Rijiju (Additional Charge) stated this in a written reply in the Rajya Sabha here today.

Published in:

[Indian Education Diary](#)

New Security Ink for Protection Bank-Cheques Against Counterfeiting

CSIR-NPL

2nd February, 2021



after removal from a light source). The MICR code in the cheque is printed with a special ink that has ferromagnetic properties; however, they do not have the light exciting security features like a currency note. MICR means Magnetic Ink Character Recognition, which makes the cheques machine-readable. The researchers have formulated a high-security anti-counterfeiting ink by synthesizing a pigment having phosphorescence, luminescent as well as magnetic properties in it. They synthesized a compound pigment that emits intense orange (580 nm wavelength) and red (660 nm wavelength) when put under ultraviolet (UV) light of 351 and 980 nm wavelength, respectively. The ink also reacts under a magnetic field making it machine-readable like the cheques used today. The new ink developed by the NPL researchers, is more secure as they have a multi-stage excitable luminescent pigment-based pattern that emits two different encrypted wavelengths when excited with two distinct wavelengths. The current inks, used even in

Counterfeiting a banknote containing multiple security features is rather difficult. But counterfeiting a bank cheque is not that tough because of a lack of security features. To fix this problem a group of researchers from the Council of Scientific and Industrial Research- National Physical Laboratory (CSIR-NPL) has developed a new security ink for bank cheques that is difficult to replicate. Banknotes contain a security pigment that appears white under ambient light, and red under UV light and after removal of UV illumination, in green. That is the pigment used for this security feature has both phosphorescence (shining in a colour under a light) and fluorescence (radiating light in a particular colour

currency notes shine only in one colour under say UV light. However, this ink shines at two colours when excited with two different wavelengths of light. This technology of single unit emitting dual-colour when exposed to different wavelengths is not easy to duplicate. Thus, with this pigment ink, the cheques will become even more difficult to counterfeit.

The research team comprised Dr Bipin Kumar Gupta, Dr Kanika, Dr Garima Kedawat and Dr Satbir Singh. The research findings have been published in the journal *Advanced Material Technologies*.

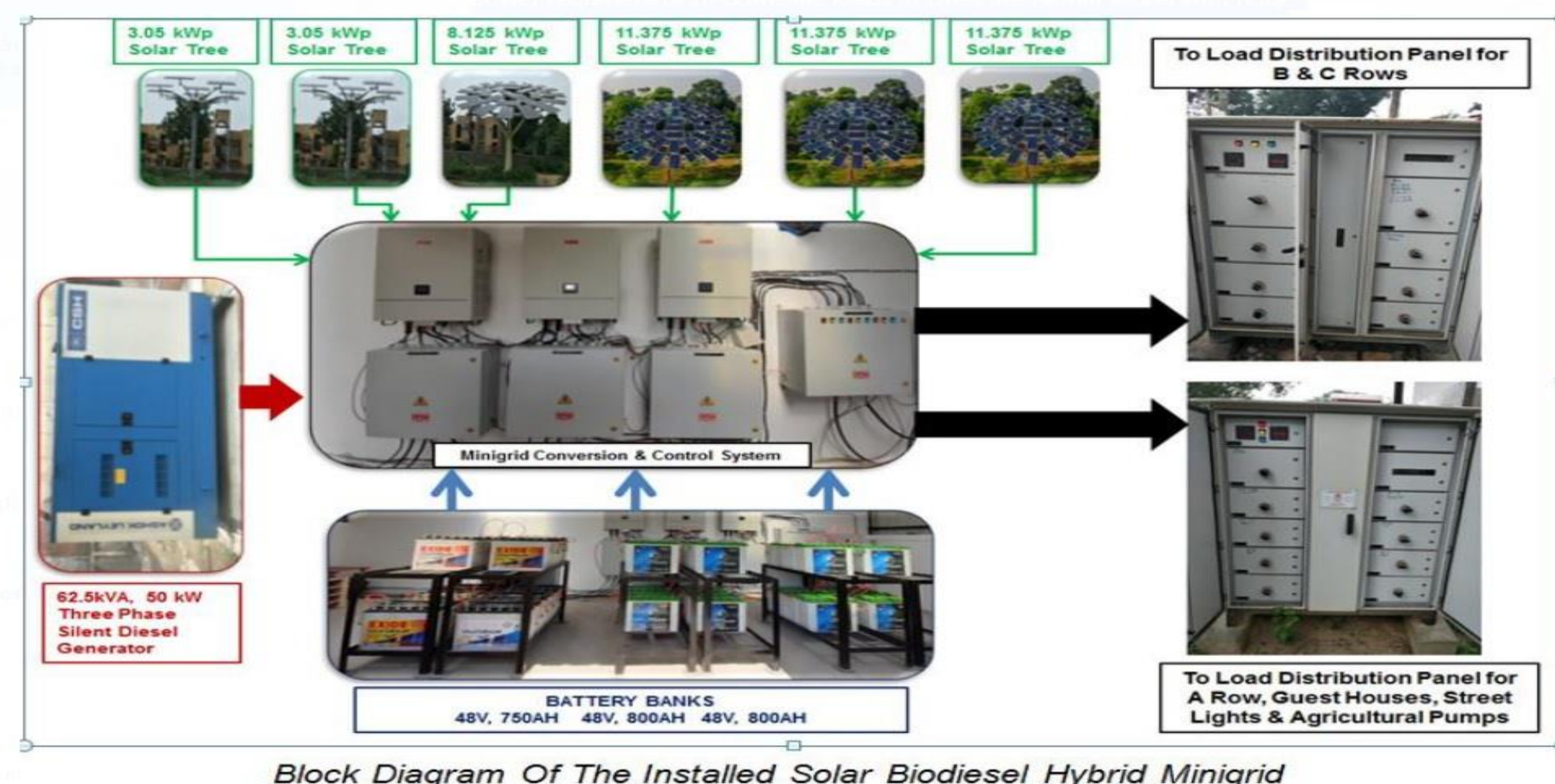
Published in:

[EET India](#)

CSIR – CMERI dedicates Solar-Biodiesel Minigrid System to nation

CSIR-CMERI

2nd February, 2021



CSIR-CMERI-Centre of Excellence for Farm Machinery has developed Off-grid Solar Biodiesel Hybrid Minigrid of 50kW peak capacity system for providing 24X7 power to CoEFM Residential Colony. Prof. (Dr.) Harish Hirani, Director, CSIR - CMERI inaugurated the system on 1st February 2021. Speaking on the occasion Prof. Hirani said that Currently major share of the installed power capacity of our country is from fossil fuel sources like coal, diesel etc., which have serious implications on country's energy security and environmental pollution. These high power centralized generation systems also warrant investment on expensive Transmission & Distribution infrastructure leading

to higher transmission losses. In this scenario, localized region specific distributed generation systems like Minigrids with small scale Renewable Energy Sources can be potential generators of electricity near load centres and can help in addressing energy needs of local communities. These type of systems can be a unique solution for uninterrupted power in remote areas, villages, hilly area etc. In addition Solar Biodiesel Hybrid Minigrid system developed at CSIR-CMERI also has applications in Smart city projects, because of its inherent smart features with respect to integration of different sources. Unlike in rural areas, power requirement of domestic loads in cities are higher along with huge fluctuations due to varied usage patterns making the power balancing a challenging issue. Experiments were conducted in the CoEFM residential colony during different times of day, month and different seasons to understand the performance of the developed system under different conditions of loading, solar radiation etc. Both Solar Photovoltaics and

Biodiesel are renewable in nature and can help in reducing pollution. Solar PV systems installed on different capacities of Solar Trees (2 Nos of 3.05kWp, 1Nos of 8.125kWp & 3 Nos of 11.375kWp) use less land space which is of great advantage in urban areas. Prof. Hirani also informed that recently developed Fully Automatic Biodiesel Plant of capacity 1 ton per day (8 hours) which can produce Biodiesel from any feedstock (waste vegetable oil, Used Cooking oil, Animal Tallow etc.) is being used to produce necessary fuel for running generators.

He further added that these type of systems also help in employment generation. This developed system is not only lighting the residential colony but also being used to run 10hp & 5hp agricultural pumps. Future plan is to increase its capacity through addition of more number of Solar Trees and Battery Banks. Other sources of energy like wind energy and Biogas can also be integrated into this system.

This type of development empower many of the local communities in rural and urban areas to become self reliant in energy and move India one step forward towards “Atmanirbhar Bharat”.

Published in:

[Doordarshan](#)

Efforts on to produce nutraceutical from pineapple

CSIR-NIIST

1st February, 2021



VAFPC ventures hold out bright prospects for pineapple farmers

The Vazhakkulam Agro and Fruit Processing Company (VAFPC), jointly owned by the State government and pineapple farmers, is exploring the possibility of producing a Bromelain-enriched nutraceutical as well as pineapple leaf-based biodegradable, disposable cutlery, and plates with technical support from the Agro Processing Technology Division of CSIR National Institute for Interdisciplinary Science and Technology, Thiruvananthapuram. Detailed project reports are ready for the ventures that hold out prospects of a bright future for

over 5,000 pineapple farmers in the State, who have brought around 18,000 hectares under the crop. The company was established in 1998 with the support of the European Union. The basic mandate of the company, set up in the heart of pineapple business in the State, was to add value to the produce and support farmers through procurement. VAFPC managing director Shibu Kumar said the proposed projects would be a major diversification for the company that now produced fruit pulp and the Jive brand of fruit drink. The company is also coming up with its brand of bottled drinking water soon and will also commission a bottle-moulding unit for packing the drink. Bromelain has therapeutic applications and is a natural mixture of proteolytic enzyme. It can be extracted from the fruit or the stem of the plant. The extract is found to reduce the side effects of antibiotics. Consumption of Bromelain also increases immunity. It has anti-cancerous properties and is anti-inflammatory. The cream produced from Bromelain is used to treat burns and remove damaged

tissues from wounds and has great business potential in the rapidly growing nutraceutical market. Mr. Shibu Kumar said pineapple leaves were now considered mostly as waste, though a small quantity of them is used as cattle feed. The massive accumulation of waste from the use of one-time plastic products can be addressed by turning waste from pineapple plantations into disposable plates and cutlery. Once approved by the State government, the projects are expected to get support under the Centre's Rashtriya Krishi Vikas Yojana.

Meanwhile, the fruit processor has also sought permission from the State government to produce wine from pineapple, Mr. Shibu Kumar said. The project for wine production is now under the government's consideration, he added. Early in January, the company had decided to procure three tonnes of pineapple each from registered farmers at ₹15 a kg to help them tide over a steep fall in price.

The processing unit is expected to be fully operational in February after a shutdown of around two years. The fruit extraction plant for pulp production as well as the aseptic filling machine will restart operations soon.

Published in:

[The Hindu](#)

Coronavirus can be transiently air-borne but preventive measures can keep one safe: Study

CSIR-CCMB, IMTECH

1st February, 2021



The virus can be transiently air-borne but preventive measures like wearing masks can keep one safe, said a study on the air-borne nature of coronavirus. (ANI) lifestyle

Coronavirus can be transiently air-borne but preventive measures can keep one safe: Study

The virus can be transiently air-borne but preventive measures like wearing masks can keep one safe, said a study on the air-borne nature of coronavirus. The study was conducted by the city-based CSIR-Centre for Cellular and Molecular Biology (CCMB) and CSIR-Institute of Microbial Technology (IMTech), Chandigarh.

They released their data on the air-borne nature of coronavirus, SARS-CoV-2. Scientists have worked with hospitals, 3 in Hyderabad and 3 in Chandigarh to find if the virus particles can be found in air samples in the hospital wards, the CCMB said in a release on Tuesday. They used an air sampler that can collect the virus particles, and then looked for their presence using RT-PCR. “In this study, the virus was found in air samples from Covid-19 wards from hospitals but not from non-Covid-19 wards. This suggests that the demarcation of hospital zones has been an effective strategy,” it said. The study also showed the chances of picking up SARS-CoV-2 in air is directly related to a number of Covid-19 positive cases in the room, their symptomatic status and the duration of exposure. When patients spent longer hours in a room, coronavirus is found in the air for more than 2 hours even farther than 2 metres from their seating places. “But for asymptomatic cases, they showed the virus does not spread farther from them when they are seated in a room

without perceived air flow due to a fan or AC,” it said. CCMB Director Rakesh Mishra said that all these findings do show that the coronavirus can stay in the air for some time, but they also strengthen the importance of Covid-19 preventive guidelines that are already in place to curb the pandemic. “If we ensure that we follow hygiene protocols such as regular handwashing, using masks effectively and preventing symptomatic people from public mixing, we can start getting back to normalcy more comfortably. Detecting and isolating the positive cases early on can help prevent the spread among other family members in a home setting too,” he said.

“Till the vaccines are available, social vaccine i.e.wearing mask is the best prevention,” Sanjeev Khosla, Director of IMTech said.

Published in:
[Hindustan Times](#)

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